REMEDIAL INVESTIGATION REPORT
BUELL AUTOMATICS SITE
SITE #C828114
INDEX #B8-0576-00-04A
381 BUELL ROAD
ROCHESTER, NEW YORK

December 2007 (Revised)

VOLUME 1

Prepared for:

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
6274 EAST AVON-LIMA ROAD
AVON, NEW YORK 14414

Prepared on Behalf of:

BUELL AUTOMATICS, INC.
381 BUELL ROAD
ROCHESTER, NEW YORK

Prepared By:

STANTEC CONSULTING SERVICES INC.
2250 BRIGHTON-HENRIETTA TOWN LINE ROAD
ROCHESTER, NEW YORK 14623-2674

Stantec

December 5, 2007

Mr. Bart Putzig, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, New York 14414

RE: Remedial Investigation Report - Revised **190500033**
Buell Automatics Site
Site #C828114, Index #B8-0576-00-04A
381 Buell Road, Rochester, New York

Dear Bart:

On behalf of Buell Automatics Inc., please find enclosed the Revised Remedial Investigation Report for the Buell Automatics Site located in the Town of Gates, Monroe County, New York. This report is submitted pursuant to the Brownfield Cleanup Agreement (BCA) for the Buell Automatics site that was executed by the New York State Department of Environmental Conservation (Department) on December 22, 2003. All activities conducted as part of this Remedial Investigation were performed in accordance with the Department approved Investigation Work Plan, except where Department approved modifications occurred as noted in this report.

This Revised Report is submitted in response to the Department's October 25, 2007 comments on the August 6, 2007 RI Report. The revisions incorporated in this submittal include revisions to the text, figures and tables presented in Volume 1 of the report and, as noted in the revised text, additions to the Appendices that were presented in Volume 2 of the August submittal. This submittal therefore includes the following:

- Revised Volume 1, presented in a 3-ring binder. Please discard the Volume 1 binder (and its contents) from the August submittal.

- Additions to Volume 2, presented unbound but punched and ready for insertion in the Volume 2 binder from the August submittal. Please insert the enclosed loose pages in the Volume 2 binder from the August submittal as follows:

  - use the enclosed new cover page and spine label to replace those on the outside of the Volume 2 binder;
  - insert the two-page addition to Appendix C at the end of Appendix C; and
  - add new Appendices K, L, and M at the back of Volume 2.

Should you have any questions, please contact me.

Sincerely,

Michael P. Storonsky
Managing Senior Associate

Peter H. Smith
Senior Hydrogeologist

Thomas D. Wells
Senior Geologist

Enclosure

c: Frank Sowers, P.E. (NYSDEC – Avon)
Joseph Albert (MCDOH – Rochester)
Debby McNaughton (NYSDOH – Rochester)
Richard Lawton (Buell)
Jerry Greenfield, Esq. (Chamberlain, D'Amanda, Oppenheimer and Greenfield)
File

Executive Summary

On behalf of Buell Automatics, Inc. (Buell), Stantec Consulting Services Inc. (Stantec) has performed a Remedial Investigation (RI) on the Buell Site (Site) located at 381 Buell Road in the Town of Gates, NY (Figure 1). This RI was completed pursuant to Buell's Brownfield Cleanup Agreement (BCA) for the Site (Index #B8-0576-00-04A) that was executed by the New York State Department of Environmental Conservation (Department) on December 22, 2003, and a preceding Voluntary Cleanup Agreement (VCA) executed on February 22, 2002.

Soil Contamination

Results of the RI indicate that there are three source areas of subsurface contamination at the Site. The three areas are located under or adjacent to the western half of the older (southern) section of the facility manufacturing building.

- **Former Trench Drain Area** - This area is located inside the southwest portion of the building in the area of a former trench drain. Interior borings completed in the vicinity of the former trench drain revealed elevated concentrations of the chlorinated volatile organic compound (VOC) trichloroethene (TCE) and related chlorinated VOCs in soil. Based on these findings, 123.4 tons of grossly-impacted soil and associated concrete were removed from a 20 ft. by 25 ft. by 6- to 7- ft. deep excavation inside the building and disposed off-site as part of an Interim Remedial Measure (IRM) performed in December 2003-January 2004.

  Structural considerations prevented the removal of additional soil; however, the RI data indicate that the extent of significant remaining soil contamination is relatively minor. The RI data indicates that the most highly contaminated material was removed and that the contaminated soil that remains in place is found primarily on the south and east sides of the IRM area. Significant contamination was not detected in floor, sidewall, or boring samples collected in and around the north half of the excavation. In the south half of the excavated area, contaminated soil extends 2 to 3 feet below the bottom of the excavation backfill (from 7 to 10 feet below grade). Along the south and southeast walls of the excavation, contaminated soil was left in place where it was inaccessible beneath foundation grade beams; however, RI data indicates that significant levels of contamination do not extend laterally more than a few feet beyond the excavation limits. Borings located 3 to 5 feet to the south of the excavation limits did not encounter significant contamination. At borings located 2 to 5 feet from the east and west sides of the southern end of the IRM area, relatively low levels of contamination are present in soil in the interval from 5 to 6.5 feet below grade. Relatively low concentrations of contaminants were also detected in the interval from 6 to 8 feet below grade at a boring located approximately 20 feet to the east of the southeast corner of the excavated area.

Indications of petroleum impacts, including observations of staining or sheen in the samples, the presence of ethylbenzene, toluene, and xylene, and relatively high levels of tentatively-identified non-target VOCs and SVOCs (TICs), were noted in boring and sidewall and bottom samples from along the south wall and on the west side of the IRM area. These indications correlate fairly strongly with levels of chlorinated VOCs. It is suspected that the presence of petroleum constituents in the IRM area is a consequence of past releases from the Former Trench Drain Area rather than an overlap of impacts from the Petroleum Impacts Area (see below) located to the northeast of the IRM area.

- **Former Loading Dock Area** - This area is located outside the former loading dock area on the west side of the facility. This source area is estimated to cover an area of approximately 45 ft. by 65 ft. and extends approximately 8 feet deep. Contaminants in this area include TCE and related chlorinated VOCs. The most highly contaminated soil is found in the top 2 feet of soil in the center of the area. Impacted soil extends less than 20 feet off-site to the west onto the adjacent Five Star Tool Co. (Five Star Tool) parcel at 383 Buell Road.

  In the southeast part of the Former Loading Dock Area, the area of chlorinated VOC impacts is overlapped by an adjacent area of impacts from release of petroleum. As described below, an oily product was observed at the water table in monitoring well MW-10, which is located in the area of overlap.

- **Petroleum Impacts Area** – This area is located under the manufacturing building northeast of the Former Trench Drain Area and east of the Former Loading Dock Area. Low levels of petroleum-related VOCs and higher concentrations of tentatively-identified compound (TIC) VOCs are present. The contamination in this area is believed to have originated from petroleum solvent use. Cutting oil, as evidenced by the presence of total petroleum hydrocarbons (TPH) and tentatively identified semi-volatile organic compounds (SVOCs) and observations of petroleum sheen or, at a few locations, thin horizons of oil-saturated soil, is also present in this area of the facility. An oily light non-aqueous phase liquid (LNAPL) layer was detected at the water table in the groundwater monitoring well (MW-10) located immediately downgradient of this area, but is not present at other Site wells. TCE contamination of soil was detected at a relatively low level at one location (B-19) in the petroleum impacts area.

No other areas or types of soil contamination were identified at the Site. No PCB, pesticide or metal impacts were observed in soil or groundwater. With the exception of SVOCs in soil at B-8, which were removed as part of an Interim Remedial Measure (IRM), no other noteworthy target SVOCs were noted during the RI.

Groundwater Contamination

To investigate the extent of chlorinated VOC impacts in groundwater from the Former Trench Drain and Former Loading Dock areas, a series of monitoring wells were completed to evaluate soil and groundwater downgradient from the site. The RI data indicates that the extent of petroleum and oil impacts is restricted to the Site. However, groundwater impacts from the chlorinated VOC contamination at the Site extend off-Site approximately 120 to 200 feet to the southwest.

South of the Former Trench Drain Area, chlorinated VOCs that exceed groundwater standards extend downgradient onto the adjacent 385 Buell Road property (former All-Around Travel). Buell is in the process of acquiring title to this property. West of the Former Loading Dock Area, low-level chlorinated VOC impacts were found to extend from the former loading dock source area onto the 383 Buell Road property. A limit to the extent of downgradient impacts was established by the absence of impacts in groundwater observed at monitoring well MW-17, which is located on the 1166 Brooks Avenue property.

Sub-Slab Soil Vapor Surveys

A building survey of the former All-Around Travel building, located south of the subject property at 385 Buell Road, was completed under the VCA work plan. As a result of a leaking underground fuel oil storage tank beneath the building, this structure has been vacant since March 2003 and indoor and sub-slab air sampling was deferred pending re-occupation of the building. Following completion of their on-going acquisition of the 385 Buell Road property, Buell intends to raze this building and replace it with an asphalt parking surface. Assuming this scenario occurs, it is understood that the sub-slab soil vapor and indoor air sampling program will not be needed.

Three additional building surveys, including indoor and sub-slab air sampling, were conducted in adjacent and/or downgradient structures:

- Comfort Inn, 395 Buell Road, where no further action was required by Buell but a separate BCA was executed by the owners of that property to address separate tetrachloroethene (PCE) impacts.

- Five Star Tool, 383 Buell Road, where Site-related chlorinated VOCs were reported beneath the slab and one compound was reported at a trace concentration within the building. The RI results indicate that vapor intrusion is not currently causing an adverse impact on conditions in the Five Star Tool building. However, the concentration of TCE detected in the sub-slab sample is above the NYSDOH guidance value that suggests the need for mitigation to protect against potential vapor intrusion.

- Marketing Squad Inc., 1166 Brooks Avenue, where no Site related impacts were reported. Low level PCE impacts were reported on the west side of the building (the far side of the building away from the Buell Site); these appear to be unrelated to the Buell Automatics Site.

Conclusions

The findings of the RI indicate that soil impacts exceeding applicable standards are present on Site, site-related groundwater impacts exceeding applicable standards are present on and downgradient of the Site, and Site-related soil-vapor impacts are present off-Site on the adjacent Five Star Tool property located at 383 Buell Rd. Remedial measures are needed to address the identified Site-related impacts.

An Alternatives Analysis Report will be prepared to evaluate remedial alternatives for addressing the Site-related impacts. The AA Report will take into account the current industrial use and zoning of the Site, the proposed continued industrial use of the Site, current industrial and commercial uses and future uses in the surrounding area, the pending acquisition of the adjacent downgradient property (385 Buell Road), and the presence of other unrelated off-Site soil and groundwater impacts that exist in the area.

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

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1.0 Introduction

On behalf of Buell Automatics, Inc. (Buell), a Remedial Investigation (RI) was performed by Stantec Consulting Services Inc. (Stantec), formerly The Sear-Brown Group, Inc. (Sear-Brown) on the Buell Site (Site), located at 381 Buell Road in the Town of Gates, Monroe County, NY (Figure 1). This RI was completed pursuant to Buell's Brownfield Cleanup Agreement (BCA) for the Site (Index #B8-0576-00-04A and Site Number V00330-8) that was executed by the New York State Department of Environmental Conservation (Department) on December 22, 2003. A significant portion of the RI investigation tasks were completed between March 2002 and December 2003 under a preceding Voluntary Cleanup Agreement (VCA) executed by the Department on February 22, 2002 (Index #B8-0576-00-04).

Field investigation activities were completed in September 2006. All activities conducted as part of the RI were performed in accordance with the September 2001 Voluntary Investigation Work Plan, the November 2003 Interim Remedial Measure Work Plan and the May 2005 Remedial Investigation Work Plan Addendum (collectively the Work Plan), except where Department approved modifications occurred as noted in this report. Descriptions of Site activities, including supporting figures and data tables, were routinely submitted throughout the project in monthly, bi-monthly or quarterly VCA and BCA progress reports.

1.1 PROJECT OBJECTIVES

As specified in the Department-approved public fact sheet, the Buell RI was designed to accomplish the following objectives:

- Evaluate surface drainage features and underground utilities to determine if they may have contributed to contaminant migration;
- Test subsurface soils on-Site and off-Site;
- Install and sample groundwater monitoring wells on-Site and off-Site to determine the extent of groundwater contamination; and
- Evaluate the potential for people to come in contact with chemicals from the Site.

1.2 SCOPE OF WORK

The following scope of work was completed pursuant to the Work Plan under the VCA from March 2002 to December 2003:

- Compilation and evaluation of utility record maps;
- Assessment of pre-existing monitoring wells MW-1, MW-2 and MW-5 installed by others;

- Completion of new on-Site and off-Site monitoring wells MW-2D, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14 and MW-15;
- Completion of Geoprobe borings B-8 through B-34, and GP-1 through GP-10;
- Monitoring well elevation surveys;
- Well development and groundwater sampling from all new and existing wells; and
- Hydraulic conductivity testing.

Following transfer of the Site into the BCA program, the following work was completed from December 2003 to September 2006:

- Implementation of an Interim Remedial Measure (IRM) involving removal of significantly impacted soils from the former trench drain area (B-8 and B-26) beneath the southwest portion of the building;
- Submittal of a Remedial Investigation Work Plan Addendum;
- Indoor air and sub-slab soil vapor sampling at the Comfort Inn (395 Buell Road);
- Indoor air and sub-slab soil vapor sampling at Five Star Tool (383 Buell Road);
- Completion of Geoprobe borings B-35 through B-44 in the vicinity of B-23 to the west of the Buell building;
- Completion of on-Site and off-Site monitoring wells MW-16, MW-17 and MW-18;
- Indoor air and sub-slab soil vapor sampling at 1166 Brooks Avenue;
- Groundwater sampling of new and existing wells;
- A complete round of water levels; and
- An elevation survey of new wells.

1.3 MODIFICATIONS TO THE WORK PLAN

The following modifications to the Work Plan were requested and approved by the Department.

July 2002

In response to the proximity of proposed boring locations to utilities and/or the trichloroethene (TCE) findings in MW-8, the relocation of proposed wells MW-6, MW-9 and MW-11 was requested and approved by the Department.

MW-9 was relocated approximately 15 ft. to the north in order to avoid existing utilities. Given the anomalous conditions present in MW-8, the possible catch basin to its west, and various utilities located within the right-of-way between 381 and 385 Buell Road which limited the originally proposed well placements, MW-6 and MW-11 were moved to areas south and west of MW-8. These changes were implemented after obtaining permission from Mr. Webb, the owner of the 385 Buell Road property, to install MW-6 and MW-11 on his adjacent property. The new locations were 75± ft. southwest of MW-8 for MW-11 and 100 ft. west of MW-8 for MW-6. These locations were selected to provide further definition of the apparent low water level that existed at MW-8 and also to provide further delineation of the extent of the volatile organic compounds noted in the split spoon soil samples collected 14-20 ft. below ground surface (bgs) at MW-8.

September 2002

Due to the preliminary findings from interior Geoprobe borings, it was requested in September 2002 that the September groundwater sampling program be modified to delete the monitored natural attenuation (MNA) parameters from the analytical program. These changes were approved by the Department. In addition, the Department allowed the use of low flow techniques for collection of Target Analyte List (TAL) metals in groundwater.

November 2002

In November 2002, it was proposed to delay the schedule for conducting the indoor air sampling program at 385 Buell Road, former All-Around Travel, until Mr. Lawton took title to the property. A purchase offer for this parcel had previously been accepted by the Owner. In addition, based upon results collected to date, it was proposed that the analytical parameter list for future groundwater sampling, including MW-11, be reduced to volatile organic compounds (VOCs) only.

December 2002

A technical meeting was held at the Department's Region 8 office in Avon, NY on December 20, 2002. The purpose of the meeting was to review the current status of the project; discuss indoor air assessment options for 385 Buell Road; and discuss the options for moving the project forward to the next phase.

Given Mr. Lawton's proposed acquisition of 385 Buell Road and its continued occupancy, the discussion of indoor air sampling included two options: indoor ambient air and sub-slab soil gas. Mr. Crua, New York State Department of Health (NYSDOH), noted that if indoor ambient air sampling was implemented, this program would need to be conducted quarterly for one year and periodically thereafter to verify that indoor air quality conditions were not changing. Conversely, it was noted that if clean results were attained during sub-slab monitoring, and if the slab were not penetrated or disturbed for any reason in the future, additional air sampling would not be required.

Due to the construction of the building in two parts, one (1) soil gas sample from each area would be needed. The sampling methodology would include Summa canisters or other approved methods capable of attaining low-level detection limits. Specific sampling guidance and risk-based standards were to be forwarded to Stantec from NYSDOH via Frank Sowers (Department). A general review of sub-slab remedial options was also presented.

The discussion of the future direction of the project and changes to the Work Plan included potential elimination of the second round of groundwater sampling called for in the Work Plan; downgradient plume delineation with two new wells on the Five Star Tool property (383 Buell Road); further definition of the source areas within the Buell building near the tanks and former trench drain with shallow small-diameter soil borings; and discussion of potential interim remedial measures (IRMs). Given the elevated contaminant levels in the former trench drain source area beneath the Buell building, the Department suggested that a source area IRM be considered.

Based upon the technical meeting, the following changes to the Work Plan were presented for consideration and approved by the Department:

- Eliminate the second round of groundwater sampling; and
- Relax the monthly Progress Report requirement to a bi-monthly schedule.

February 2003

The occupants of the All-Around Travel office located at 385 Buell Road were scheduled to vacate the premises in early to mid-March 2003. Given this change in occupancy, it was proposed that air sampling of the 385 Buell Road building not be performed. If the building at 385 Buell Road were to be leased in the future to new tenants, the Revised Adjacent Building Survey Work Plan would be implemented at that time. In addition to modifications to the Adjacent Building Survey Work Plan, the installation of two additional off-site monitoring wells downgradient from MW-10 was presented to the Department and approved contingent on obtaining access from the adjacent property owner, Five Star Tool (383 Buell Road).

A February 21, 2003 Supplemental Work Plan, which proposed installation of wells MW-14 and MW-15, downgradient from MW-10, was approved by the Department.

May 2003

A letter from the Department dated May 27, 2003 requested additional off-site groundwater characterization and an indoor air quality assessment of the Comfort Inn (395 Buell Road). The Department's letter requested that a work plan addendum for the additional off-site investigations be submitted by June 30, 2003.

July 2003

A meeting was held at the DEC Region 8 office in Avon on July 8, 2003 with representatives of Buell, the Department and the NYSDOH. During the meeting, it was agreed that a sub-slab soil gas sampling program would be performed at the Comfort Inn, located at 395 Buell Road and that a Work Plan should be submitted to Department, NYSDOH, and Monroe County Department of Health (MCDOH) for review and approval prior to proceeding. As a follow-up, a conference call occurred on July 15, 2003 with Mr. Frank Sowers (Department), Mr. Joe Crua (NYSDOH) and Messrs. Peter Smith and Mike Storonsky of Stantec to discuss the preparation of the Work Plan for Sub-Slab Soil Gas Sampling at 395 Buell Road. During that call, it was agreed that the sub-slab soil gas-sampling program could initially be limited to 395 Buell Rd. Mr. Crua indicated he would forward a procedural example of a sub-slab soil gas investigation program for use by Stantec. As discussed with Mr. Sowers, preparation of the Work Plan for the Sub-Slab Soil Gas Sampling Program was temporarily put on hold awaiting receipt of the referenced document.

In order to facilitate preparation of the Remedial Investigation Work Plan Addendum, and the associated additional investigation of the Site, Mr. Paul Sylvestri, environmental counsel for the owner of the Former All Around Travel property at 385 Buell Road, was contacted. Stantec contacted Mr. Sylvestri to gain access to two (2) groundwater monitoring wells that were installed on behalf of the owners of the 385 Buell Road property to evaluate petroleum impacts from a leaking underground fuel oil storage tank. The two wells were situated in close proximity to the property boundary with the Comfort Inn, 395 Buell Road, and its basement utility room, which would be sampled as part of Stantec's Sub-Slab Soil Gas Survey. Mr. Sylvestri requested an access agreement prior to allowing the wells to be sampled. This access agreement was subsequently executed.

November 2003

During a November 4, 2003 telephone conversation with Mr. Sowers, the scope of the sump water sampling program at the Comfort Inn was reduced from Analytical Service Protocols (ASP) to EPA Method 8260.

On November 17, 2003 Stantec notified the Department of Buell's intention to transfer this project into the new Brownfield Cleanup Program. A letter was issued to the Department dated November 19, 2003 formally requesting the transfer.

December 2003-January 2004

On December 10, 2003 Buell signed the BCA and forwarded it to the Department for counter signature. On December 22, 2003, the Department countersigned the BCA.

The December 2003 Revised IRM Work Plan (IRMWP) was approved by the Department on December 19, 2003. The IRM was performed during a two week period in late December 2003 and early January 2004 to address the TCE source area in the vicinity of the former interior trench drain. Unanticipated field conditions resulted in the following modifications to the Revised IRMWP. The Department was notified of each of the following modifications prior to proceeding:

1. The proposed retaining wall for excavation support was not installed. A secondary concrete pad and asphalt were encountered at the western limits and in the northern portion of the proposed excavation area. Additionally, eastern and southern footer walls appeared to extend to depths greater than 5 feet. As a result, the approach to the excavation process was modified. The southern portion of the proposed excavation area was dug to safe removal limits, sampled and backfilled prior to investigation and potential removal of the northern secondary concrete slab and underlying soil.

2. Since trenching for construction of a concrete retaining wall was not conducted, confirmatory sidewall samples (Figure 5) were collected during the course of the excavation activities instead. Additional sidewall and bottom samples were taken as deemed necessary to appropriately characterize shallow and deep soil conditions based on contaminant impacts observed in the field.

3. Impacted soil transportation methods from the excavation area to roll-offs on the west side of the Site were re-evaluated by Stantec and the Department due to practicality and equipment tracking issues. The Department approved the removal of the poly sheeting, filter fabric, and plywood lined pathway; contingent on scraping the asphalt area of residual ice/snow accumulation and monitoring and maintaining the pathway throughout the duration of the IRM soil/concrete removal activities.

4. Due to the presence of the secondary concrete slab at the northern portion of the proposed IRM excavation area, Geoprobe soil borings GP-1 through GP-4 were conducted and samples selected for expedited analytical turnaround to evaluate the underlying soils (Figure 5).

5. The northern and northeastern extents of the proposed IRM excavation area were sloped slightly towards the center of the IRM excavation area based on field observations and preliminary soil sample laboratory analytical results from soil borings conducted on 12/24/03.

6. Additional soil was removed beyond the southwest limits of the proposed IRM excavation area as requested by the Department.

7. Two, six-inch diameter stainless steel wells were installed in the excavation area for use as potential recovery wells or as future avenues for treatment or deeper borings. Locations of the wells (Figure 5) were selected by the Department.

8. Additional Geoprobe borings GP-5 through GP-10 (Figure 5) were conducted within the southern portion of excavated area on 12/31/03 to evaluate the vertical extent of impacts below the excavated depth. Eleven (11) soil samples were submitted for laboratory analysis.

9. Rusmar was substituted for Biosolve for mitigation of volatile organic vapors due to its better applicability in treating vapors from chlorinated VOCs.

10. Construction water management was not required due to a lack of appreciable free-product or water accumulating in the excavation during the course of the IRM activities.

The December 31, 2003 Work Plan for Sub-Slab Soil Gas Survey, Comfort Inn, 395 Buell Road was approved by the Department on January 15, 2004.

March 2004

A Citizen Participation Plan (CPP) was forwarded to the Department and the other involved agencies on March 12, 2004. Following the Department's review and approval of the document, a copy of the CPP was forwarded to Ms. Judy MacKnight at the Gates Public Library on March 18, 2004 in order to establish a public repository for project documents.

April 2004

Given the number of activities that had been completed over the previous four months, including conversion of the project to the Brownfield Cleanup Program; preparation of the IRM Work Plan; completion of the IRM; preparation of the IRM Field Engineering Report; preparation of the Comfort Inn Sub-Slab Soil Gas Survey Work Plan; completion of the Comfort Inn soil gas survey; preparation of the Comfort Inn Sub-Slab Soil Gas Survey Report; and preparation of the Citizen Participation Plan, Buell requested that the Department provide a time extension. Following completion of the sampling of monitoring wells MW-3 and MW-4 (All Around Travel, 385 Buell Road), receipt of the resultant laboratory data, and forwarding of that data to the Department, Buell was granted a six month delay to allow them to catch up with their accrued expenses. To that end, it was proposed that sampling of monitoring wells MW-3 and MW-4 on the 385 Buell Road property would occur in May after an access agreement was executed. Following receipt and compilation of the laboratory data in June, it was proposed that the results be submitted to the Department in July as part of a three-month progress report. At that time, Buell would then obtain a hiatus until the end of 2004 before they would be required to submit the Remedial Investigation Work Plan Addendum. Following approval, the necessary additional investigation activities would be initiated.

May 2005

A Remedial Investigation Work Plan Addendum (Addendum) was submitted to the Department on May 12, 2005. The scope contained in the Addendum was approved on July 23, 2005. In addition to the various field activities, provisions for progress reports were reduced from monthly to quarterly following resumption of the field program, with data to be submitted to the department as soon as they became available.

December 2005

On December 13, 2005, Mr. Frank Sowers (Department) granted permission to defer slug testing and the well elevation survey on newly installed wells until the Spring 2006 groundwater-sampling event.

2.0 BACKGROUND

2.1 SITE DESCRIPTION

Buell operates its facility and employs approximately 60 individuals to manufacture automatic screw machines and machined parts. Prior to the 1950s, the Site was reportedly used for agriculture. The Site building was originally constructed in 1957 on a 0.67-acre parcel. Additions to the structure were completed in 1981 and 1983. A second parcel was acquired (which was a portion of a former bowling alley property to the north) and a 12,000 square foot building addition was completed in 2000.

A Site Plan is presented as Figure 2. Buell and all surrounding properties are zoned General Industrial. The current Site is identified as tax parcel # 135.05-1-36.1 and consists of 1.985 acres with an approximate total building area of 25,000 square feet located within an industrial and commercial area. Buell expects to increase its land holdings once it completes the on-going acquisition of the adjacent former All-Around Travel property located to the south of the Site at 385 Buell Road.

A revised metes and bounds description for the Site which excludes the footprint of the 2000 building addition is presented in Appendix A. The outline of the area proposed for removal from the Site is shown on Figure 2. With the 2000 building addition excluded from the definition of the Site, the Site will comprise 1.67 acres with a building footprint of approximately 13,000 square feet. In its June 23, 2005 approval of the May 2005 RI Work Plan Addendum, the Department indicated that its approval of the removal of the building addition from the Site definition would be granted pending receipt of a metes and bounds description that shows the area to be excluded. The revised metes and bounds description presented in Appendix A is hereby submitted for the Department's approval to satisfy that requirement.

2.2 PREVIOUS INVESTIGATIONS

Previous investigations that were completed at the Buell Site, prior to implementation of the VCA, included the following:

- Soil Gas Investigation (February 1989)
- Solvent Tank Removal and Excavation of Trench Documentation (June 1989)
- Phase I ESA Report – Airport Lanes property (January 1998)
- Phase I ESA Report – Buell Automatics property (January 1998)
- Phase II ESA Report (July 1999)
- Phase II Confirmation Testing (September 1999)

2.2.1 Soil Gas Investigation - February 1989

As a result of an August 1988 Phase I ESA performed by Lozier Architects/Engineers (Lozier), a soil gas survey was performed in the vicinity of stained soils observed in the driveway area at the south side of the existing building. Based on the information obtained from the survey, it was determined that VOCs were present in the soil along the base of an outside building wall. Lozier concluded that further remediation would be required and that the two solvent above ground storage tanks (ASTs) located in this area would need to be relocated to facilitate excavation of soil along with the soil in the trench area. A copy of the Soil Gas Investigation Report was presented as an Appendix to the September 2001 Voluntary Investigation Work Plan.

2.2.2 Solvent Tank Removal and Excavation of Trench Documentation (June 1989)

According to information provided to Stantec, Madalena Construction Corp. removed two solvent ASTs from the south side of the facility in the spring of 1989. Marcor of New York, Inc. (Marcor) subsequently excavated soil from an adjacent trench (approximately 3 ft. x 3 ft. x 75 ft). Analysis of a soil sample taken on June 6, 1989, indicated that the material was not hazardous and it was disposed in a sanitary landfill. A copy of the Solvent Tank Removal and Excavation of Trench documentation was presented as an Appendix to the September 2001 Voluntary Investigation Work Plan.

2.2.3 Phase I ESA Report – Airport Lanes (January 1998)

As a routine step in the process of obtaining financing for a building expansion, NFCS, Inc. (NFCS) completed a Phase I ESA of the proposed expansion site (Airport Lanes, adjacent property to north of Buell) on behalf of Marine Midland Bank. Based on the information reviewed, NFCS indicated that further investigation was not warranted. A copy of the Phase I ESA Report was presented as an attachment to Stantec's October 24, 2000 letter to the Department.

2.2.4 Phase I ESA Report – Buell Automatics (January 1998)

As a routine step in the process of obtaining financing for a building expansion, NFCS completed a Phase I ESA of the Buell Site on behalf of Marine Midland Bank. Based on the information reviewed, NFCS recommended further investigation. A copy of the Phase I ESA Report was presented as an Appendix to the September 2001 Voluntary Investigation Work Plan.

2.2.5 Phase II ESA Report (July 1999)

As a result of the NFCS Phase I ESA, C and O Technologies, Inc. (C&O) performed a Phase II ESA on behalf of HSBC Bank USA (formerly Marine Midland Bank), which involved the installation of seven soil borings (B-1 through B-7) and five groundwater-monitoring wells (MW-1 through MW-5) as shown on Figure 4.

Soil samples collected from 3 to 9 feet below ground surface during the installation of MW-3 (north side of the building in the vicinity of cutting oil tanks) were noted to have petroleum odors and staining. In addition a slight petroleum odor was noted from the samples collected from 3 to 5 feet below ground surface during the completion of soil borings B-2, B-3, and B-4. A composite soil sample analyzed from MW-3 did not show detectable levels of VOCs, however several SVOCs were detected at slightly elevated concentrations. TCE and several breakdown compounds were detected in groundwater samples analyzed from MW-2 along the south side of the building. C&O concluded that soil and groundwater sampling in the former solvent tank area and trench area exceeded the Department's guidance values and standards. C&O also concluded that groundwater was migrating to the southwest in the vicinity of MW-2. Given the proximity of the property line, they noted the potential existed for off-site TCE migration to the southwest and recommended further evaluation. A copy of the Phase II ESA Report was presented as an Appendix to the September 2001 Voluntary Investigation Work Plan.

2.2.6 Phase II Confirmation Testing (September 1999)

Groundwater was sampled by Stantec on August 10, 1999 from existing well MW-2 and three temporary wells, GP-1, GP-2, and GP-3 along the southern property line. The results from analysis of groundwater at MW-2 confirmed that chlorinated volatile organics were present at concentrations above groundwater standards. The distribution of constituents suggested that the material had been present for some length of time, due to the presence of the breakdown (daughter) products of TCE. These daughter products included 1,1-dichloroethene, trans 1,2-dichloroethene, 1,1-dichloroethane and vinyl chloride.

Results from analyses of groundwater from the temporary wells showed that chlorinated organics were below detection limits at the most easterly well GP-3, while TCE was present above the Department's groundwater standard at wells GP-1 and GP-2 to the southwest and south, respectively. It was notable that the breakdown products of TCE were largely absent in groundwater from wells GP-1 and GP-2. The presence of tetrachloroethene (PCE) in the sample from GP-2 appeared anomalous, since it had not been detected at nearby well MW-2 or elsewhere on the site. Therefore, its presence at GP-2 was suspected to indicate an analytical error or a separate source area. Given the southwesterly groundwater gradient identified by C&O, the TCE present at the locations of GP-1 and GP-2 appeared to represent migration from the suspected source area previously located near well MW-2.

As a result of the findings, it was recommended that the extent to which the source area (drainage trench) was removed in 1989 be further investigated. It was also recommended that a series of soil borings be conducted under and around the former tank and drainage trench.

The presence of significant degradation byproducts of TCE in groundwater at well MW-2 indicated that natural dechlorination was occurring. Therefore, it was recommended that additional testing at well MW-2 be conducted for parameters identified in the Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water (EPA/600/R-98/128, September 1998).

Since TCE was detected above the Department's groundwater standard at wells GP-1 and GP-2, the need for potential additional evaluation at the southern property boundary, and/or further downgradient (offsite) was also identified. A copy of the Phase II Confirmation Testing Report was presented as an Appendix to the September 2001 Voluntary Investigation Work Plan.

2.2.7 Additional Information

Buell indicated that no soil removal activities occurred during the conversion of the cutting oil storage tanks from outdoor tanks to enclosed tanks with secondary containment. However, during construction of the building addition, approximately 1,800 cubic yards of soil was removed from the site for general Site earthwork balancing purposes. Based on information provided by the trucking contractor, RVA Trucking, there were no indications of impacts to the soil that was removed.

3.0 FIELD PROGRAM

The various elements of the RI field program were completed between March 2002 and September 2006. In accordance with the VCA Work Plan and the subsequent BCA Work Plan Addendum, documentation of the field efforts and resultant lab data was presented in periodic VCA and BCA progress reports.

3.1 UTILITY RIGHT-OF-WAY (ROW) INVESTIGATION

The utility ROW investigation included a compilation and review of utility drawings; a boundary and topographic survey; and assessment of existing monitoring wells.

3.1.1 Compilation and Review of Available Documents

Acquisition of utility mapping for the utility right-of-way (ROW) investigation was undertaken to assist in evaluating the potential for buried utilities to provide preferential pathways for contaminant migration. This involved the compilation and review of available design/construction documents (i.e., record maps and drawings) for the utilities at the property and in the surrounding ROWs. It focused on the relationship between known utility inverts and the depth to the water table beneath the Site.

The list of record maps that were obtained included the following:

- Gates-Chili-Ogden Sewer District. Sanitary sewer as-built for Buell Road, Buell Road Outlet Sewer and Brooks Avenue/Cross-Lot Sewer North From Brooks. 3/18/58.
- Costich Engineering. Sanitary sewer as-built for Liberty Tool and Die, 350 Buell Road. 11/5/95.
- Town of Gates. Storm sewers for Buell Road, Plan Profile and Tables, Sheet 5 of 6 and Sheet 6 of 6. 1966.
- Sear-Brown, PC. Sanitary sewer as-built for National Car Rental, DWG. No. 2600Z-04. 12/2/85.
- Sear-Brown. As built for Site, Utility and Grading Plan SE-2, Buell Automatics. 5/4/98.
- Passero Associates. Re-Subdivision of 351, 381 and 383 Buell Road. 2/24/98.
- Monroe County Water Authority. Water Service for Buell Road and Surrounding Area, Plate No.'s 190 and 210. Revised 2/9/00.
- Day Engineering. Potential Spillage Flow Diagram, SPCC Plan, Buell Automatics. 10/23/89.

In April 2002, a meeting and Site walkover with agency representatives was completed in order to review the potential influence of utilities and their associated bedding on groundwater flow direction and modify proposed drilling locations, as needed. The site walkover occurred on Tuesday, April 30, 2002 with Mr. Frank Sowers of the Department, Mr. Joe Albert of MCDOH, Mr. Steve DiLaura of Nothnagle Drilling, Messrs. Richard Lawton and Donald Corwin of Buell, and Messrs. Mike Storonsky and Peter Smith of Stantec.

As noted during the Site meeting and walkover, a Monroe County Pure Waters Sanitary Sewer largely encircles the project area and discharges to the east at a location in front of the Site along Buell Road. The invert elevation for that sewer indicates a drop of approximately 12-13 feet before crossing under Buell Road. Given its depth, this utility was identified as having the potential to influence groundwater flow direction on the east side of the Site. A portion of that sanitary sewer drawing is included as Appendix B.

Storm sewer record mapping for catch basins on private property to the south and west of Buell were not available. However, storm sewer outfalls that are shown on record maps along Brooks Avenue are in approximate alignment with the observed privately owned catch basins on properties generally located between the Site and Brooks Avenue. Given the absence of catch basis on the Site, and the shallow depth (~ 2-3 feet) of the catch basins on the adjacent properties, the storm sewers were not expected to influence local groundwater flow direction.

Gas and water services for Five Star Tool, 383 Buell Road, were relocated several years ago, from the north side of the Buell building to the south side into the right-of-way between 381 and 385 Buell Road, during the Buell building expansion. Rochester Gas and Electric Corporation would not release record maps identifying specific depths or locations of the installed gas services to 381, 383 and 385 Buell Road. Water service record mapping for private properties is not kept by Monroe County Water Authority (MCWA). As a result, the depths to the water and gas services in the right of way are not certain. However, gas services are typically installed 2-3 feet below ground surface (bgs) and were not expected to influence local groundwater flow direction.

A drawing containing design details, which was located after the site walkover, indicated the proposed water line for 383 Buell Road was to be installed at least 6 ft. bgs in areas of pavement. In addition, a supplemental 6-inch diameter water pipe was installed within the right of way and capped at both ends to accommodate future building expansion, if needed. Given that the depth to groundwater was historically reported at approximately 4 ft. bgs, it was considered possible that the bedding around the water service and the supplemental pipe leading to 383 Buell Road could act as a preferential pathway during higher water table conditions.

As requested during the Site walkover, a utility stakeout was called in for the Site and the adjoining southerly property. As discussed during the Site walkover, the locations of wells MW-6, MW-9 and MW-11, which were proposed in the right of way, were revised as needed to avoid impacting the underground gas and electric lines and overhead electric utility lines.

3.1.2 Boundary and Topographic Surveys

Property boundary and topographic surveys of the subject property were completed by Passero Associates. This mapping has been used as the base map for this investigation.

In discussions with the Department regarding approval of the Work Plan Addendum, it was agreed that the property containing Buell's 12,000 sq. ft. building addition, which was completed in 2000, would be removed from the BCA given that Buell did not want to penetrate the new floor with investigation activities. As described above in Section 2.1, it was agreed that a metes and bounds survey of this area would be provided in the Remedial Investigation Report to define the property that was covered by the BCA. A copy of the Passero boundary and topographic survey is included in Appendix A.

Monitoring Well Surveys

A licensed Stantec survey crew surveyed vertical elevations for new and existing wells on various dates throughout the project including May 31, 2002; August 29, 2002; January 13, 2004 and May 3, 2006. The horizontal datum is NAD 27 and the vertical datum is NGVD 29, both taken from existing mapping by Passero, and corresponding well location coordinates and elevation data are summarized on Table 3. (Table 3 also presents locations and elevations referenced to the NAVD 88 datum and NAD 83 UTM Zone 18 (NYTM) coordinate system.) Monitoring well locations are shown on Figure 3.

3.1.3 Assessment of Existing Monitoring Wells

Pre-existing monitoring wells MW-1, MW-2 and MW-5 installed during a July 1999 Phase II ESA were inspected and found to be in good working order. MW-1 is located in the lawn at the front of the property and MW-2 and MW-5 are situated in the driveway between 381 and 385 Buell Road. MW-3 and MW-4 had been previously abandoned during construction of the Buell building expansion.

3.2 SOIL BORING AND MONITORING WELL INSTALLATIONS

Several rounds of soil boring and monitoring well installations were completed throughout the project. Drilling methods included Geoprobe, hollow stem auger and wet rotary bedrock borings. Drilling locations included interior, exterior and off-Site locations. Drilling and well installations procedures followed the 2001 Voluntary Investigation Work Plan, except where noted.

3.2.1 Well Installations – May 2002

The first round of monitoring well installations was completed from May 20 to May 22, 2002 and included auger drilling, soil sampling and well construction at four locations (MW-7, MW-8, MW-12 and MW-13). Monitoring well installations were performed by Nothnagle Drilling, Scottsville, NY. These monitoring well locations are presented on Figure 3.

Soil conditions at individual boring locations were variable. Individual boring logs are presented in Appendix C. The first water-bearing interval consisted primarily of brown, saturated silty fine sand. This fine sand sequence was occasionally interbedded with denser, varved silt seams and ranged in total depth from 13.4 ft. below ground surface (bgs) at MW-7 to 27.8 ft. bgs at MW-13. These saturated sands were generally underlain by a compact gray till, which in turn became clay-rich with depth. This lower, clay-rich till unit was interpreted to be the “clay” layer that was identified by C&O Technologies during their previous Phase II investigation.

Soil samples were screened for the presence of organic vapors using a calibrated photo-ionization detector (PID) equipped with an 11.8 eV lamp. Selections of sample intervals to be submitted for analytical testing were based on PID readings and were reviewed with Mr. Frank Sowers of the Department prior to submittal. No visual or olfactory evidence of impacts were noted at the time of sampling. Boring MW-8 exhibited low-level PID readings in the 14 - 20 ft. bgs interval. A summary of PID headspace readings is presented in Table 1.

One soil sample set from each boring, plus Quality Assurance/Quality Control (QA/QC) samples was submitted to Columbia Analytical Services, Inc., Rochester, NY for analysis. Soil samples submitted for analysis are summarized in Table 2.

Two-inch diameter PVC, flush-mount overburden monitoring wells were installed at the top of clay at each location. Well construction details are summarized in Table 3. Well completion reports are presented with boring logs in Appendix C.

A complete round of water levels from new and existing wells was collected on May 31, 2002. A water level summary is presented in Table 4. With the exception of MW-8, the water table was present within 1.3 to 3.3 ft. bgs. The shallow depth to water appeared to be reflective of seasonal high water table conditions. The reason for the lower water level in MW-8 was unclear but was suspected to be related to the presence of a lower sand interval that was documented below the till at this location.

3.2.2 Interior and Exterior Geoprobe Borings - August 2002

Eleven (11) interior and exterior Geoprobe borings (B-8 through B-18) were completed from August 8 to August 12, 2002. Geoprobe borings were performed by Nothnagle Drilling. These Geoprobe boring locations are presented on Figure 4.

Shallow soils beneath the building consisted primarily of brown, saturated silty fine sand that was underlain by sandy till. Individual boring logs are presented in Appendix C.

Soil samples were screened for the presence of organic vapors using a calibrated PID equipped with an 11.8 eV lamp. With the exception of B-14, soils from each Geoprobe boring exhibited elevated PID readings. A summary of PID headspace readings is presented in Table 1. Maximum PID readings exceeding 3,400 ppm were encountered at B-8, which was located immediately adjacent to the former trench drain. In addition, visual and olfactory evidence of impacts were noted at B-8, B-9, B-11, B-15, B-16, B-17, and B-18. A trace to moderate amount of apparent petroleum-related free product was noted in soils from B-15, B-16, B-17 and B-18.

Based on these observations, a spill report was called in to the Department and spill file number was #0205034 was assigned to the site.

One soil sample set from each boring (plus QA/QC samples) was submitted to Columbia Analytical Services, Inc., Rochester, NY for analysis. Sample intervals were selected based on PID readings and reviewed by Mr. Sowers (Department) prior to submittal. Soil samples submitted for analysis are summarized in Table 2.

Groundwater samples were also collected from seven temporary well points installed in open Geoprobe borings using small diameter disposable bailers. Four of the eleven borings did not yield sufficient groundwater for sampling. Groundwater samples submitted for analysis are summarized in Table 6.

3.2.3 Well Installations – August 2002

The August 2002 round of monitoring well installations included auger drilling, soil sampling and well construction at five locations (MW-2D, MW-6, MW-9, MW-10 and MW-11) from August 5 to August 8, 2002. Monitoring well installations were performed by Nothnagle Drilling. Monitoring well locations are presented on Figure 3.

Soils observed in the soil borings consisted primarily of brown, saturated silty fine sand. These saturated sands were generally underlain by a compact gray till, which in some locations became increasingly clay-rich with depth. Individual boring logs are presented in Appendix C.

Soil samples were screened for the presence of organic vapors using a calibrated PID equipped with an 11.8 eV lamp. The deep boring for MW-2D exhibited the highest PID readings of the monitoring well installations with 117 ppm in the 0-2 ft. bgs interval and 23 ppm in the 8-10 ft. bgs interval. A summary of PID headspace readings is presented in Table 1.

One soil sample set from each boring (plus QA/QC samples) was submitted to Columbia Analytical Services, Inc., Rochester, NY for analysis. Sample intervals were selected based on PID readings and reviewed by Mr. Sowers (Department) prior to submittal. Soil samples submitted for analysis are summarized in Table 2.

Two-inch diameter PVC, flush-mount monitoring wells were installed at the top of clay at each overburden well location. At MW-2D, an overburden/bedrock interface well was installed. Well construction details are summarized in Table 3. Well completion reports are presented with boring logs in Appendix C.

The horizontal and vertical coordinates for the new wells was surveyed by a licensed Sear-Brown survey crew on August 29, 2002. The top of casing (i.e. reference) elevations established by this survey are presented in Table 3.

A complete round of water levels from new and existing wells were collected on August 20, 2002. A water level summary is presented in Table 4.

3.2.4 Well Installations – February 2003

A round of monitoring well installations conducted in February 2003 involved auger drilling, soil sampling and well construction at two locations. Wells MW-14 and MW-15 were completed on February 25, 2003. Monitoring well installations were completed in accordance with the February 21, 2003 Supplemental Work Plan. The purpose of this round of well installations was to assist in the delineation of the downgradient groundwater plume on the adjacent Five Star Tool property at 383 Buell Road. Monitoring well installations were performed by Nothnagle Drilling. Monitoring well locations are presented on Figure 3.

Soils from MW-14 and MW-15 consisted of brown, saturated silty fine sands that were underlain by clay-rich till. At each location, a dry well sorted fine sand was encountered within the till layer at depth. Individual boring logs are presented in Appendix C.

Soil samples were screened for the presence of organic vapors using a calibrated PID equipped with an 11.7 eV lamp. No elevated PID readings were noted in soil samples collected from the two boring locations. A summary of PID headspace readings is presented in Table 1.

One soil sample from each boring was submitted to Columbia Analytical Services, Inc., Rochester, NY for analysis. Blind field duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples were also included for QA/QC purposes. Sample intervals to be submitted for analytical testing were selected in consultation with Mr. Sowers. Soil samples submitted for analysis are summarized in Table 2.

Two-inch diameter PVC, flush-mount overburden monitoring wells were installed at the top of clay at the MW-14 and MW-15 locations. Well construction details are summarized in Table 3. Well completion reports are presented with boring logs in Appendix C.

Reference elevations for wells MW-14 and MW15 were surveyed on March 31, 2003. The top of casing (i.e. reference) elevations established by this survey are presented in Table 3.

A complete round of water levels from new and existing wells was collected on March 31, 2003. A water level summary is presented in Table 4.

3.2.5 Interior Geoprobe Borings – May 2003

A round of interior Geoprobe soil borings was conducted in May 2003 and included Geoprobe drilling, soil sampling and groundwater sampling from temporary wells. This program was completed in accordance with the April 10, 2003 Supplemental Interior Boring Work Plan and the April 30, 2003 DEC approval letter. The information gathered during this program was used to assist in the formulation of a source area IRM. Geoprobe drilling was performed by SLC, Lockport, NY. These Geoprobe boring locations are presented on Figure 4.

The Supplemental Interior Boring program was performed on May 3 and May 5, 2003 and included a total of 16 Geoprobe borings that were designated B-19 through B-34. Six additional borings, beyond the 10 borings prescribed in the Supplemental Interior Boring Work Plan, were added to the scope of the program based upon modifications requested in the Department approval letter and the field findings. All fieldwork was performed in the presence of Mr. Sowers.

Soil samples were screened for the presence of organic vapors using a calibrated PID equipped with an 11.8 eV lamp. A summary of PID headspace readings is presented in Table 1.

A total of 16 soil samples and three groundwater samples were submitted to Columbia Analytical Services for laboratory analysis. QA/QC samples were also submitted for analysis. Soil samples submitted for analysis are summarized in Table 2. Total petroleum hydrocarbon (TPH) analyses were not included in the Supplemental Interior Boring Work Plan but were added for B-20, B-27 and B-32 due to observed impacts to soils from what appeared to be cutting oil and petroleum-related solvents. Given the addition of six soil samples to the program, it was agreed that the three proposed Toxicity Characteristic Leaching Procedure (TCLP) VOC samples in the Supplemental Interior Boring Work Plan would not be analyzed.

Locations of interior Geoprobe borings were established from field ties to interior walls. Copies of field tie measurement records are presented at the end of Appendix C.

3.2.6 IRM Boring and Well Installations – December 2003

Due to the presence of the secondary concrete slab at the northern portion of the IRM excavation footprint, four Geoprobe borings (GP-1 through GP-4) were advanced through the secondary concrete slab to evaluate underlying conditions in that area prior to proceeding with the removal of the secondary concrete slab. The Geoprobe boring locations are shown on Figure 5.

The soil samples were submitted to Columbia Analytical Services for expedited analysis of TCL VOCs and TICs. Preliminary analytical results were provided and indicated that impacts from chlorinated VOCs were limited at the northern extent of the excavation footprint both horizontally and vertically. As a result, the northern limit of the original IRM soil excavation footprint was slightly modified as approved by the Department.

At the completion of the IRM excavation activities, six (6) additional Geoprobe borings (GP-5 through GP-10) were advanced within the southern portion of the excavated area to evaluate the vertical extent of impacts below the excavated depth. Five (5) soil samples were submitted to Columbia for laboratory analysis from these borings. The boring locations are shown on Figure 5.

On December 30, 2003, SLC installed two, six-inch stainless-steel wells in the IRM excavation area for use as potential recovery wells or as future avenues for treatment or deeper borings. At the direction of the Department, wells RW-1 and RW-2 were placed at the northwestern and southeastern extent of the excavated area, respectively. The IRM Geoprobe boring locations, confirmatory soil sample locations and monitoring well locations are presented on Figure 5.

Wells were installed with a backhoe during construction at the bottom of the excavated area (~6.5-7 ft. below floor surface). Well construction details are summarized in Table 3. Well completion reports are presented with boring logs in Appendix C.

Reference elevations for wells RW-1 and RW-2 were surveyed on January 13, 2004. The top of casing (i.e. reference) elevations established by this survey are presented in Table 3.

3.2.7 B-23 Geoprobe Borings – September 2005

A round of exterior Geoprobe soil borings was conducted in September 2005 and included Geoprobe drilling and soil sampling. This program was completed in accordance with the May 2005 Remedial Investigation Work Plan Addendum. The purpose was to investigate impacted soils in the Former Loading Dock Area around the location of test boring B-23 . The B-23 area is located between the loading dock and the property line at the west side of the facility. Geoprobe borings were completed by Nothnagle Drilling. These Geoprobe boring locations are presented on Figure 4.

The B-23 area soil investigation at Buell was conducted on Monday, September 19, 2005. Mr. Sowers and Mr. Bob Long (Department) were present to observe the investigation activities.

Ten (10) Geoprobe soil borings were completed and designated B-35 through B-44. Two borings, B-41 and B-44, were completed on the adjacent Five Star Tool property, 383 Buell Road.

Soil samples were screened for the presence of organic vapors using a calibrated PID equipped with an 11.8 eV lamp. PID soil vapor headspace readings ranged from non-detect to 405 ppm. Impacts were found predominantly in the 2 to 8 ft. bgs interval within a radius of approximately 20 ft. from soil boring B-23. A summary of PID headspace readings is presented in Table 1. Individual boring logs are presented in Appendix C.

Soil samples from each boring were submitted to Columbia Analytical Services, Inc. for analysis. A blind field duplicate and MS/MSD were also included. Sample intervals submitted for analytical testing were selected in consultation with Mr. Sowers. A total of fifteen (15) soil samples were submitted for volatile organic analysis and four (4) samples were submitted for semi-volatile organic analysis. Soil samples submitted for analysis are summarized in Table 2.

3.2.8 Well Installations – November 2005

The last round of monitoring well installations was conducted in November 2005 and included auger drilling, soil sampling and well construction at three locations. This program was completed in accordance with the May 2005 Remedial Investigation Work Plan Addendum. The purpose was to investigate impacted groundwater in the B-23 area and to define the downgradient extent of the groundwater plume. Monitoring wells were completed by Nothnagle Drilling. These monitoring well locations are presented on Figure 3.

Source area well MW-16 and downgradient wells MW-17 and MW-18 were installed on November 21 and 22, 2005. Messrs. Frank Sowers and Bob Long, Department, were present to observe the investigation activities.

Continuous samples were collected at each soil boring location. Due to significant impacts to soil at shallow depths, boring location MW-16 was terminated at a depth of 10.0 ft. bgs. Individual boring logs are presented in Appendix C.

Soil samples were screened for the presence of organic vapors using a calibrated PID equipped with an 11.7 eV lamp. Elevated headspace readings, staining, and odors were observed in boring MW-16. The highest headspace readings (1,600 ppm peak; 360 ppm sustained) were observed at boring MW-16 in the 0.5 to 2.0 ft. bgs interval, directly under the concrete surface. MW-16 is approximately 7 ft. south of B-23. Low level PID readings were noted in MW-17 and the PID readings from MW-18 were consistent with background conditions. A summary of PID headspace readings is presented in Table 1.

Based on field observations, Stantec selected two (2) samples from boring MW-16 (shallow and deep) and one (1) sample each from borings MW-17 and MW-18 to submit to Columbia Analytical Services. A blind field duplicate and MS/MSD were also included. Sample intervals submitted for analytical testing were selected in consultation with Mr. Sowers. Soil samples submitted for analysis are summarized in Table 2.

Two-inch diameter PVC, flush-mount overburden monitoring wells were installed at the top of clay at the MW-17 and MW-18 locations. As previously noted, MW-16 was installed to a shallower depth of 10 feet, given the observed near-surface impacts. Well construction details are summarized in Table 3. Well completion reports are presented with boring logs in Appendix C.

Reference elevations for wells MW-16, MW-17 and MW-18 were surveyed on May 3, 2006. The top of casing (i.e. reference) elevations established by this survey are presented in Table 3.

3.3 SOIL VAPOR SAMPLING

Three rounds of soil vapor sampling were completed during the RI. Sampling locations included the Comfort Inn (395 Buell Road); Five Star Tool Company (383 Buell Road); and the Marketing Squad, Inc. (1166 Brooks Avenue). Sampling procedures followed site-specific work plans and when available the February 2005 NYSDOH Guidance for Evaluation of Soil Vapor Intrusion in the State of New York, Public Comment Draft. Copies of individual soil vapor sampling reports are presented in Appendix D.

A vapor intrusion study of the Buell building has not been performed since TCE is used at the facility. Although its use was discontinued at one time, one of Buell's customers requested that the use of TCE be reinstated to clean a product line. Therefore, OSHA regulations presently govern allowable occupational exposure levels for TCE within the building. The current use of TCE involves maintaining one 55-gallon drum which lasts approximately two months before it needs to be replaced. Precautionary measures have been instituted to minimize the potential for future TCE releases to occur. It is understood that the Site Management Plan (SMP) for post-remedial-action monitoring of the Site will include a provision for annual reporting on the continued use, or discontinuation of the use, of TCE and petroleum solvents at the Site. It is further understood the SMP will need to include a provision for assessment of the need for performance of a vapor intrusion assessment of the Buell facility should the use of these materials be significantly reduced (less than 5 gallons maintained on-Site) or eliminated.

3.3.1 All-Around Travel

Based upon the potential for off-site migration of contaminants, the Voluntary Investigation Work Plan included an Adjacent Building Survey for the building immediately south of the subject property. Stantec conducted a site visit at 385 Buell Road (All-Around Travel) on August 19, 2002 to gather information requested by the Department in an August 15, 2002 letter. Ms. Colleen Thompson, manager of All Around Travel, the tenant at 385 Buell Road, provided access. A small office staff employed by All-Around Travel occupied the front (eastern) half of the building. The back (western) half of the building was unoccupied.

No walls or partitioning existed within the office. The building is comprised of a slab on grade construction with one HVAC system for the entire building. The utility room was located in the approximate center of the building. There were no sumps observed in the building.

Underground utilities enter the property from the east along Buell Road and access the front half of the building along the northerly and southerly walls. Gas and sanitary sewer service enters along the northeast side of the building. Water service enters the building along the southeast side of the building. Electric and telephone services enter the building via overhead lines at the back of the building.

On December 3, 2002, a tank tightness test was performed on the 500-gallon fuel oil tank at 385 Buell Road. This test was conducted on behalf of Mr. Richard Lawton (Buell) in preparation for the proposed purchase of the property. The tightness test, performed by Mr. Steven Wade of Certified Tank Testing, Corning, New York, did not pass. As a result, Mr. Wade reported the test failure to the NYSDEC spill hotline and the incident was assigned Spill #0209109. Mr. Wade noted during the test that the location of the fuel oil tank was unknown and that it may be under the 385 Buell building. As described in Section 3.5, a Subsurface Tank Investigation was subsequently performed. Neither the tank tightness test nor the subsequent activities described in Section 3.5 were conducted as part of the VCA or BCA remedial investigation.

Based upon the findings of the site visit and a December 20, 2002 technical meeting with the Department, a Revised Adjacent Building Survey Work Plan was submitted to the Department in February 2003.

The plan proposed that an initial round of ambient indoor air monitoring be conducted within the 385 Buell Road building. Assuming that the outcome of that testing did not identify a concern with the air quality in that building, Buell would conduct either sub-slab soil vapor testing or continue with ambient indoor air quality testing. It was understood that if indoor ambient air sampling was continued, this program would need to be conducted quarterly for one year and periodically thereafter to verify that indoor air quality conditions were not changing.

Stantec was subsequently informed that the tenants of the 385 Buell Road building, All-Around Travel, were scheduled to vacate the premises in March 2003. It was understood this was due to a lack of heat in the building associated with the leaking fuel oil tank and the inability of the landlord to correct that situation. There were no new tenants planned for the building. Therefore, it was requested that the air-sampling program be delayed until such time that a new tenant, who was not related to Buell's operations, was identified, as discussed at the December 20, 2002 technical meeting. It was agreed that if and when the building at 385 Buell Road were leased to new tenants, who were not related to Buell's operations, the Revised Adjacent Building Survey Work Plan would be implemented at that time.

All-Around Travel, the tenants at 385 Buell Road, terminated their lease and vacated the building on March 15, 2003. The building has remained unoccupied since that time. As discussed further in Section 3.5, it is understood the Department has recently issued a letter indicating that no further remedial measures will be required to address the petroleum impacts at this time. As a result, Mr. Lawton is pursuing acquisition of this property pursuant to his previously accepted purchase offer.

It is understood that, should plans develop for this building to become occupied, a vapor intrusion evaluation in accordance with NYSDOH guidance would be needed prior to occupation. However, it is anticipated that the building will be razed and the area will be covered with an asphalt parking lot. Based on correspondence with Mr. Mike Zamiarski, the Department's Project Manager for the petroleum spill file, no additional remedial measures will be needed if the building is razed and replaced with an impervious parking area. Should a new building be constructed in this area, it is understood that the Department, NYSDOH and MCDOH will need to be consulted regarding potential additional measures.

3.3.2 Comfort Inn

A meeting regarding on-going investigation-related activities and findings was held at the Department's Region 8 office in Avon on July 8, 2003 between representatives of Buell, the Department and the NYSDOH. As a follow-up to the investigation tasks completed and the findings thereof, it was agreed that a sub-slab soil gas survey would be performed at the Comfort Inn, located at 395 Buell Road and that a Work Plan should be submitted to the Department and NYSDOH for review and approval prior to proceeding. A work plan was submitted for comment to the Department on September 15, 2003.

On October 27, 2003, Stantec contacted Mr. Christopher Burns, Executive Vice-President of Hudson Hotels Corporation, to schedule the Sub-Slab Soil Gas Survey at the Comfort Inn. With the assistance of Mr. Burns, Stantec coordinated an initial site walk-through with Mr. Sowers, Mr. Joe Albert (MCDOH), Mr. Gary Lawton (Buell) and the hotel manager, Ms. Carmen Medina (Comfort Inn). The walk-through occurred on October 30, 2003.

Based upon subsequent comments received from the Department, a revised work plan for a Sub-Slab Soil Vapor Survey at the 395 Buell Road (Comfort Inn) property was submitted on December 31, 2003. The sub-slab soil vapor survey, involving the collection of two sub-slab samples, two indoor air samples, one background air sample, and two sump water samples, was performed from January 26 to January 28, 2004.

The methods and findings for the sub-slab soil gas survey at the Comfort Inn were reported on March 10, 2004. A copy of that report, which was also provided to the owner, is provided in Appendix D.

3.3.3 Five Star Tool and Die

On January 5, 2005, a meeting was held at the Department offices in Avon to discuss the scope of additional work and the schedule for completing the BCA site investigation, including a request for soil vapor sampling at Five Star Tool, 383 Buell Road. On March 25, 2005 a Work Plan for a Sub-Slab Soil Gas Survey at the Five Star Tool building, was submitted to the Department. This Work Plan addressed comments and suggestions that Stantec received at the January 5, 2005, meeting and during a site visit that was performed on March 24, 2005.

A vapor intrusion study was completed at the Five Star Tool building during March 2005 in cooperation with the Department, MCDOH and NYSDOH. The study was similar to the program performed at the Comfort Inn in January 2004. The study included one sub-slab vapor sample, one indoor vapor sample and one outdoor vapor sample.

The methods and findings for the sub-slab soil vapor sampling program at Five Star Tool were submitted to the Department on May 9, 2005. A copy of that report, which was also provided to the owner, is provided in Appendix D.

3.3.4 1166 Brooks Avenue

A May 2005 Work Plan Addendum proposed to collect one soil vapor sample from beneath a gravel covered area immediately east of the 1166 Brooks Avenue building.

Access was requested and obtained from the owner of 1166 Brooks Avenue to conduct investigation activities on their parcel. Two shallow soil borings were completed at the east end of 1166 Brooks Avenue in an attempt to install a soil vapor point on September 19, 2005. However, shallow groundwater was encountered at 2 to 3 ft. below ground surface and therefore a soil gas monitoring point was not installed. Further attempts were made in November. A soil vapor implant was installed adjacent to the south side of 1166 Brooks Avenue on November 28, 2005. This location was suggested by the Department due to the high groundwater table in borings drilled previously on the east side of the building. This attempt was also unsuccessful and an alternate approach was developed.

A February 23, 2006 Work Plan for a Sub-Slab Soil Gas Survey at 1166 Brooks Avenue was subsequently developed based on comments provided by the Department in a letter dated March 3, 2006.

The soil gas survey was completed on March 23, 2006. The study included two sub-slab vapor samples, two indoor vapor samples, one outdoor vapor sample and one sump water sample.

The methods and findings for the sub-slab soil vapor sampling program at 1166 Brooks Avenue were reported to the Department in BCA Progress Report #7. In addition, a Sub-Slab Soil Vapor Monitoring Report was submitted to Mr. Scott Dean, owner of 1166 Brooks Avenue, on August 22, 2006. A copy of that report is provided in Appendix D.

3.4 INTERIM REMEDIAL MEASURES – DECEMBER 2003

On November 3, 2003, Stantec contacted Mr. Sowers to inform the Department that Buell was interested in moving forward with an IRM involving a source removal program in the vicinity of the former trench drain (shipping and receiving area) within the Buell building during their scheduled holiday shutdown period between December 20, 2003 and January 4, 2004. To this end, Stantec indicated they would be submitting an IRM Work Plan to the Department for their review and comment within approximately two weeks.

As discussed during a November 4, 2003 phone conversation, Mr. Sowers indicated that the Department would be willing to allow Buell to proceed with the IRM source removal program in the shipping area. He indicated that the Department would not need to undertake a 30-day public notice process for the IRM activities in this area. He also indicated that both the Department and DOH would be able to review and respond in a timeframe to allow the IRM program to proceed as discussed.

During the month of December 2003, the Interim Remedial Measures Work Plan (IRMWP), which was submitted to the Department on November 20, 2003, was reviewed and commented on by the Department, and implemented during Buell's two-week holiday shutdown period.

Site preparation activities were performed satisfactorily to facilitate the excavation of TCE-impacted soils in the vicinity of the B-8 source area (see Figure 5). Approximately 105 cubic yards (123.44 tons) of concrete and impacted soil was excavated and disposed of off-Site and two stainless-steel wells were installed within the excavation footprint to facilitate potential product recovery and/or groundwater monitoring/treatment efforts in the future. Based on the confirmatory analytical results (see Section 4.2.1 and Appendix E), the excavation program achieved its intended goal of removing the most affected source area soils given the limitations imposed by the building and its related structural components. Maximum soil concentrations were reduced by at least two orders of magnitude as a result of the IRM.

Due to limitations posed by structural considerations, it was understood prior to implementation of the Revised IRMWP that the remedial excavation activities would not serve as the final remedy for Site related impacts. The IRM Final Engineering Report was forwarded to the Department and the other involved agencies on April 7, 2004.

3.5 SUBSURFACE TANK INVESTIGATION – 385 BUELL ROAD

As described in Section 3.3.1, a tank tightness test was performed on a 500-gallon fuel oil tank at 385 Buell Road on December 3, 2002. This test was conducted on behalf of Mr. Lawton in preparation for the potential purchase of this adjacent property. The tightness test, performed by Certified Tank Testing, Corning, New York, did not pass.

A follow-up investigation was approved by the owner of 385 Buell Road, Mr. Michael Webb, to evaluate the location and condition of the tank. On January 13, 2003, a one-day soil-boring program was performed by Stantec at 385 Buell Road. The soil-boring program involved the installation of two small diameter Geoprobe soil borings inside the building (B-385-1 and B-385-2) and one small-diameter Geoprobe soil boring (B-385-3) outside the building. Based upon field observations, which confirmed the presence of petroleum impacts to soil (including elevated PID headspace readings and visually stained soils), Stantec submitted one soil sample (B-385-1, 3.5 – 4 ft.) for laboratory analysis. Although elevated concentrations of petroleum-related compounds were reported in the soil sample, none of the chlorinated solvents that had previously been identified during Stantec's investigation of the Buell Site were identified in the sample.

The Subsurface Tank Investigation Report was submitted to Mr. Michael Zamiarski, P.E., (Department) Bureau of Spill Prevention and Response on February 17, 2003.

In April 2003, Labella Associates P.C., (LaBella) on behalf of the owner Mr. Webb, conducted a Phase II Environmental Site Assessment (ESA) and an IRM at 385 Buell Road. The IRM involved the removal of a 500-gallon UST including approximately 150 gallons of home heating oil. Labella also performed a Supplemental Phase II Investigation in August 2003.

A Corrective Action was subsequently performed by Labella in July 2004. Approximately 60 tons of petroleum-impacted soil was removed and disposed at Mill Seat Landfill. Closure sampling by Labella indicated that m,p-xylene in the south and east walls and o-xylene in the south wall were present at levels above Recommended Soil Cleanup Objectives (RSCOs) in the Department's Technical and Administrative Guidance Memorandum 4046 (TAGM 4046). Groundwater samples from wells selected by Labella for analysis were non-detect for Spill Technology and Remediation Series (STARS) VOCs.

The Department requested an additional monitoring well MW-5 be installed and sampled in the vicinity of well MW-1 that was near the tank and was removed during excavation. Although the results of sampling MW-5 in January 2006 were significantly less than levels reported previously for MW-1, they remained at concentrations in excess of Department groundwater standards. Based on the demonstrated reductions in soil and groundwater concentrations, Labella requested that spill file #0209109 be closed. It is understood that the Department has issued a no further action letter. As a result, Mr. Richard Lawton (Buell) is pursuing the acquisition of this property pursuant to his previously accepted purchase offer.

Neither the tank tightness test nor the subsequent investigation and remedial activities that addressed the former fuel oil UST at 385 Buell Rd. were conducted as part of the VCA or BCA remedial investigation for the Buell Automatics Site.

3.6 GROUNDWATER SAMPLING

Several rounds of groundwater sampling was completed during the RI. Sampling methods included use of disposable bailers for Target Compounds List (TCL) Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs) and Pesticides/PCBs

(Pest/PCBs). Low-flow purging with a peristaltic pump was used for sampling Target Analyte List (TAL) metals. Purging and sampling procedures followed the 2001 Voluntary Investigation Work Plan, except where noted. Newly installed wells were developed prior to purging and sampling. All groundwater samples were submitted to Columbia Analytical Services, Rochester, NY, for analysis by ASP, OLM and EPA 8260 methods, where noted.

3.6.1 August 2002

Seven Geoprobe borings were sampled during the August 2002 sampling event: B-11, B-13, B-14, B-15, B-16, B-17 and B-18. Geoprobe boring locations are presented on Figure 4.

Groundwater was collected from each boring using disposable polyethylene bailers. Geoprobe groundwater samples were collected for analysis of TCL VOCs by ASP 95-1 and submitted to Columbia Analytical Services. The groundwater samples submitted for analysis are summarized in Table 6.

3.6.2 September 2002

Ten wells were sampled during the September 2002 sampling event: MW-1, MW-2, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-12 and MW-13. Monitoring well locations are presented on Figure 3.

The development of new wells MW-6, MW-7, MW-8, MW-9, MW-10, MW-12 and MW-13 was completed prior to purging and sampling. Following development, each new well was allowed to equilibrate for approximately 3 weeks prior to purging and sampling.

Purging and sampling of each well was performed on September 10, 11 and 12, 2002. Mr. Sowers was present to observe portions of the groundwater sampling event. The wells were purged with disposable polyethylene bailers. Field parameters were recorded during purging and are summarized in Table 5. Groundwater samples were collected for analysis of TCL VOCs by ASP 95-1, TCL SVOCs by ASP 95-2, and TCL Pest/PCBs by ASP 95-3, and TAL Metals by ASP 1995 protocol, and submitted to Columbia Analytical Services (CAS). The groundwater samples submitted for analysis are summarized in Table 6.

Monitoring well MW-1 was dry after 1.5 volumes but recovered and was sampled the following day. MW-11 was dry after approximately 1 volume was removed and did not recover upon inspection the following day. Monitoring well MW-2D was dry and was not purged or sampled. Therefore, monitoring wells MW-2D and MW-11 were not sampled during this round. It was anticipated that sufficient groundwater would be available during seasonal high water table conditions in May 2003 in order to allow sampling to occur at that time.

Following purging and collection of samples for VOCs, SVOCs and Pest/PCBs, the purging and sampling for TAL metals was performed with a low flow peristaltic pump and dedicated polyethylene tubing for the following wells: MW-2, MW-5, MW-8 and MW-13. Low flow sampling was a departure from the Work Plan. This departure from the approved Work Plan was allowed by the Department. Water quality field parameters (turbidity, pH, specific conductance and temperature), water levels and purge rates are summarized in Table 5.

3.6.3 March 2003

Development of wells MW-11, MW-14 and MW-15 was completed on February 28, 2003. Following development, each well was allowed to equilibrate for approximately 2 weeks prior to purging and sampling. Purging and sampling of MW-11, MW-14 and MW-15 was performed on March 13, 2003. Each well was purged for the collection of VOCs with a disposable polyethylene bailer. Water quality field parameters (turbidity, pH, specific conductance and temperature) were recorded during purging. These data are summarized in Table 5. Groundwater samples were collected for analysis of ASP 95-1 VOCs immediately following purging and submitted to Columbia Analytical Services. The groundwater samples submitted for analysis are summarized in Table 6.

3.6.4 May 2003

Two interior Geoprobe borings were sampled during the May 2003 sampling event: B-19 and B-27. Geoprobe boring locations are presented on Figure 4.

Groundwater was collected from each boring using a disposable polyethylene bailer. Geoprobe groundwater samples were collected for analysis of TCL VOCs by ASP 95-1 and submitted to Columbia Analytical Services. The groundwater samples submitted for analysis are summarized in Table 6.

3.6.5 January 2004

Two interior remedial monitoring wells, RW-1 and RW-2 were sampled on January 13, 2004. These wells were installed during the IRM program. Remedial monitoring well locations are presented on Figures 3 and 5.

Groundwater was collected from each well using disposable polyethylene bailers. Geoprobe groundwater samples were collected for analysis of TCL VOCs by ASP 95-1 and submitted to Columbia Analytical Services. The groundwater samples submitted for analysis are summarized in Table 6.

3.6.6 August 2004

Seven wells were sampled during the August 2004 sampling event: MW-3 and MW-4 (installed by Labella at 385 Buell Road), MW-6, MW-7, MW-11, MW-14 and MW-15. Monitoring well locations are presented on Figure 3.

Each well was purged with disposable polyethylene bailers. Field parameters are summarized in Table 5. Groundwater samples were collected on August 24, 2004 for analysis of TCL VOCs by EPA Method 8260 and submitted to Columbia Analytical Services. The groundwater samples submitted for analysis are summarized in Table 6.

3.6.7 May 2006

A complete round of groundwater samples from new and existing wells was performed on May 1 and 2, 2006. New wells included MW-16 and MW-17. Existing wells included MW-2, MW-3 (385 Buell), MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, RW-1 and RW-2. New well MW-18 was dry and therefore, was not sampled. Monitoring well locations are presented on Figure 3.

A complete round of water levels was collected from all wells prior to sampling. Water levels are summarized in Table 4. Each well was purged with disposable polyethylene bailers. Field parameters are summarized in Table 5. Samples were collected from each well using disposable polyethylene bailers. Groundwater samples were collected for analysis of TCL VOCs by OLM 4.2 from each well and TCL SVOCs by OLM 4.2 from wells MW-10 and MW-16. Mr. Bob Long (Department) was present on May 1, 2006 to observe the groundwater-sampling program and collected split samples for VOCs from new wells MW-16 and MW-17. Groundwater samples were submitted to Columbia Analytical Services and are summarized in Table 6.

3.6.8 September 2006

Two monitoring wells, MW-16 and MW-17 were sampled on September 15, 2006. Monitoring well locations are presented on Figure 3.

Groundwater was collected from each well using disposable polyethylene bailers. Each well was purged with disposable polyethylene bailers. Field parameters are summarized in Table 5. Groundwater samples were collected for analysis of TCL VOCs by EPA Method 8260 and submitted to Columbia Analytical Services. The groundwater samples submitted for analysis are summarized in Table 6.

3.7 SLUG TESTS

On October 30, 2002, Stantec completed rising and falling slug tests at MW-2, MW-8 and MW-9. Monitoring well locations are presented on Figure 3.

Slug tests were not performed at MW-2D and MW-10 as specified in the Work Plan. Bedrock well MW-2D was dry and MW-10 contained a thin non-aqueous floating product layer. The brown, oily product at MW-10 was subsequently measured to be approximately 0.03 ft. thick. The presence of free product was noted in August 2002 during the drilling and soil sampling in the AST oil storage area located to the northeast of MW-10. However, no floating product had been previously observed during well development or sampling of MW-10, or any other well at the Site.

On November 26, 2002, Stantec completed rising and falling slug tests at MW-6 and MW-7. Pursuant to a discussion with Mr. Sowers, hydraulic conductivity testing of MW-6 and MW-7 was conducted as replacements for MW-2D and MW-10, which were not subjected to slug testing due to the absence of water and the presence of the thin LNAPL layer, respectively.

Rising and falling slug tests were performed on MW-17 on April 28, 2006. Slug tests were performed using a solid PVC slug, a transducer and data logger. Monitoring well MW-18 was dry; therefore, no slug tests were performed.

3.8 DISPOSAL OF INVESTIGATION-DERIVED WASTES

All investigation-derived wastes, including waste soil, purged groundwater, decontamination rinses, disposable sampling equipment and personal protective equipment (PPE), were handled and disposed of in accordance with applicable regulations. Records documenting disposal of investigation-derived wastes are presented in Appendix K.

4.0 RESULTS

4.1 HYDROGEOLOGY

The site is located in the Erie-Ontario Lowlands physiographic province. It is characterized by proglacial lake sediments underlain by Paleozoic sedimentary rocks. Soils on the subject property are mapped in the Monroe County Soil Survey as loamy fine sand. The site lies at the western end of the Cobbs Hill Moraine, an east-west ridge of silty fine sand. Glacial sediments are underlain by the Lockport Dolomite Formation, with bedrock outcrops in the New York State Barge Canal ¼ mile to the east of the site.

4.1.1 Site Geology

Based on penetrative investigations conducted by Stantec, the interpreted units at the site, in descending order, include:

- Fill;
- Lacustrine Sand;
- Lacustrine Silt and Clay;
- Glacial Till; and
- Dolomitic limestone.

The thickness of individual overburden units varied across the site. This variability is depicted on geologic cross-sections as presented on Figures 6, 7 and 8. A stratigraphic summary is presented in Table 7. The stratigraphic summary was assembled from individual boring logs in Appendix C. Geotechnical laboratory results are presented in Appendix F.

Surficial fill thicknesses ranged from 0.0 to 3.0 ft. and averaged 1.6 ft. across the site. Typical fill material was asphalt road base and consisted of dry to moist, gray, coarse to fine sand and gravel, with some silt.

Fill was underlain by a saturated lacustrine sand sequence. The brown silty fine sand deposits ranged from 0.4 to 19.2 ft. and averaged 6.4 ft. across the site. Lacustrine sands were occasionally interbedded with denser, varved silt seams at depth.

A summary of grain size data is presented in Table 8. Based upon grain size samples from MW-2D and MW-8, lacustrine sands consist of 0.0% gravel, 53.2-64.9% sand, 34.0-46.1% silt and 0.7-1.1% clay.

Lacustrine sands were typically underlain by clay or compact gray till. However, thin lacustrine sand intervals were also encountered on occasion within the upper few feet of the underlying clay. This condition was first noted in boring MW-8 and then subsequently identified in borings MW-2D, MW-6, MW-12, MW-13, MW-14, MW-15, MW-17 and MW-18. Based on grain size analysis, lacustrine silts and clay consist of 0.0-2.4% gravel, 6.2-31.5% sand, 47.2-81.7% silt and 0.1-46.6% clay. Glacial till consists of 24.5% gravel, 47.2% sand, 27.4% silt and 0.9% clay.

Bedrock was encountered in MW-2D at a depth of 37.3 ft. bgs. Rock was cored to a depth of 42.3 ft. bgs using wet rotary methods. Rock core from MW-2D was described as a gray, vuggy, dolomitic limestone.

4.1.2 Groundwater Flow

The surficial geology provides for a low permeability hydrogeologic setting characterized by a shallow water table, low hydraulic conductivities and low average linear velocities of groundwater flow. Unconfined, water table conditions exist within the shallow lacustrine sand unit. Based upon the presence or absence of individual soil types as described above, borings that contained dry sand lenses at depth exhibit perched water table conditions.

Water levels collected during the RI are summarized in Table 4 and were used to construct groundwater contour maps of the site. As depicted on Figure 9, groundwater data collected on August 20, 2002 represents a seasonal low water table condition. The depth to groundwater in the overburden across the site in August 2002 ranged from 2.98 to 15.99 ft. bgs and averaged 7.6 ft. bgs.

As shown on Figures 10 and 11, groundwater contour maps were created from complete rounds of groundwater data collected on May 2, 2006 and September 15, 2006, respectively. The depth to groundwater across the site ranged from 1.66 to 10.15 ft. bgs on May 2 and from 0.34 to 11.96 ft. bgs on September 15.

4.1.3 Hydraulic Conductivity

Grain Size Estimates

Eight soil samples were submitted for geotechnical laboratory analyses to 3rd Rock Geotechnical Laboratory. Discrete and composite samples from boreholes B-29, MW-2D and MW-8 included the following three stratigraphic units: lacustrine sand, silt and clay and glacial till. A summary of the results is presented in Table 8.

The grain size data were used to define key hydrostratigraphic units and calculate hydraulic conductivity using the Hazen Method. As shown in Table 8, the hydraulic conductivity for the lacustrine sand unit ranged from 4.93×10^{-4} to 3.46×10^{-4} cm/sec; hydraulic conductivity for the silt and clay unit ranged from 3.50×10^{-4} to 9.22×10^{-5} cm/sec; and hydraulic conductivity for the glacial till unit was 2.59×10^{-4} cm/sec.

Slug Test Results

Slug tests were performed on six wells: MW-2, MW-6, MW-7, MW-8, MW-9 and MW-17. A summary of slug test results is presented in Table 9. Slug test calculations are presented in Appendix G.

Results from both rising head and falling head slug tests yielded hydraulic conductivity values of the monitored intervals ranging between 7.2 x 10^{-4} cm/s and 1.05 x 10^{-4} cm/s.

4.1.4 Monitoring for the Potential Presence of LNAPL

Soil with traces of or thin horizons of saturation by oily petroleum product was noted in five borings at the Site: B-16, B-17, B-20, B-28 and B-30. As shown on Figure 12, these borings are located within the footprint of the facility building in the area where soil appears to be impacted by contamination from petroleum solvent and/or cutting oil.

A layer of oily light non-aqueous phase liquid (LNAPL) was detected at the top of the water column in monitoring well MW-10 during three of the four groundwater-level monitoring events in which MW-10 was monitored during the RI. As shown on Figure 12, MW-10 is located just to the west of the building in the Former Loading Dock Area, west of and downgradient of the Petroleum Impacts Area borings in which oil-saturated soil was observed. LNAPL was not encountered in other Site wells located further to the north, west or south of MW-10.

4.2 SOIL SAMPLE ANALYSIS RESULTS

Results of laboratory analyses of soil samples for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), TCL Pesticides and PCBs (Pest/PCBs), Target Analyte List (TAL) metals, cyanide, and Total Petroleum Hydrocarbons (TPH) in soil are summarized in Tables 10 – 15. Analytical laboratory reports are provided in Appendix H.

The various progress reports issued to document results and data collected during implementation of the RI (and the IRM) compared soil analysis results to TAGM 4046 Recommended Soil Cleanup Objectives. With the issuance of 6 NYCRR Part 375 in December 2006, the soil analysis results are in this report compared to Part 375.6 Soil Cleanup Objectives (SCOs). In particular, the soil results are compared to Industrial Use SCOs given the industrial use of the site and the industrial zoning of the site and the surrounding properties. In addition, given that some off-site migration of VOCs has been documented, the soil results were also compared to SCOs established for the protection of groundwater even though there is no documented use of groundwater for drinking water purposes in the immediate vicinity of the site.

4.2.1 Summary

VOCs, SVOCs and various metals were detected in soil samples from the Site at reportable concentrations. VOCs were detected above groundwater protection SCOs in samples from each of three apparent contamination source areas present at the Site: the Former Trench

Drain Area (the area of the IRM soil removal), the Former Loading Dock Area, and the Petroleum Impacts Area. The only significant detection of SVOCs that exceeded Industrial Use or Protection of Groundwater SCOs were reported in a sample interval from test boring B-8 which was excavated as part of the Former Trench Drain Area IRM, and therefore no significant SVOCs remain above Industrial Use SCOs. None of the reported metals concentrations exceeded Industrial Use or groundwater protection SCOs. No PCBs, pesticides or cyanide were reported at detectable concentrations in soil.

On- and off-Site locations where soil samples were found to be contaminated at levels that exceed Part 375 SCOs are shown on Figure 12. Figure 12 also shows the approximate extent of soil contamination in each of the three apparent source areas. Figures 12A, B, and C present detailed information on the nature and extent of soil contamination in the Former Trench Drain Area, the Former Loading Dock Area, and the Petroleum Impacts Area, respectively. Figures 12A, B, and C each present a summary of sample analysis results for compounds that exhibited an exceedance of SCOs and a summary of field screening, visual observation, odor and laboratory data concerning the presence of grossly-contaminated soil.

4.2.2 Volatile Organic Compounds

TCL VOC soil results from RI monitoring well borings and test borings are summarized in Tables 10 and 11, respectively. Sample analysis results summary tables for IRM samples are presented in Appendix E.

The chlorinated solvent VOC trichloroethene (TCE) and its related biodegradation product cis-1,2-dichloroethene (DCE) were the primary VOC contaminants detected. These and other related chlorinated VOC biodegradation products were detected above groundwater protection SCOs in many samples from both the Former Trench Drain Area and the Former Loading Dock Area. TCE and DCE were also found to slightly exceed groundwater protection SCOs in one sample from test boring B-19 in the Petroleum Impacts Area.

TCE was found above Industrial Use SCOs in one sample each from the center of both the Former Trench Drain Area and the Former Loading Dock Area (at test borings B-8 and B-23, respectively). In the Former Trench Drain Area, the B-8 sample interval that exceeded the Industrial Use SCO was removed with surrounding soil during the IRM excavation.

The chlorinated solvent compound 1,1,1-trichloroethane (TCA) was also found above groundwater protection SCOs in samples from the Former Loading Dock Area. Minor exceedances of groundwater protection SCOs by the VOCs TCA, tetrachloroethene, ethylbenzene, toluene and xylene were also found in some samples from the Former Trench Drain Area.

A summary of the extent of contamination indicated by the RI results in each of the three source areas is presented below.

- **Former Trench Drain Area** (refer to Figure 12A)

123.4 tons of grossly-impacted soil and associated concrete were removed from the 20 ft. by 25 ft. by 6- to 7- ft. deep IRM excavation. The RI data indicates that the most highly contaminated material was removed from this area by the IRM and that the contaminated soil that remains in place is found primarily on the south and east sides of the IRM area. As shown on Figure 12A, significant contamination was not detected in floor, sidewall, or boring samples collected in and around the north half of the excavation. In the south half of the excavated area, contaminated soil extends 2 to 3 feet below the bottom of the excavation backfill (from 7 to 10 feet below grade). Along the south and southeast walls of the excavation, contaminated soil was left in place where it was inaccessible beneath foundation grade beams; however, RI data indicates that significant levels of contamination do not extend laterally more than a few feet beyond the excavation limits. Borings B-13 and MW-2D, located 3 to 5 feet to the south of the excavation limits, did not encounter significant contamination. At borings B-9 and B-24, located 2 and 5 feet from the east and west sides of the southern end of the IRM area, relatively low levels of contamination are present in soil in the interval from 5 to 6.5 feet below grade. Relatively low concentrations of contaminants were also detected in the interval from 6 to 8 feet below grade at a B-11 located approximately 20 feet to the east of the southeast corner of the excavated area.

Indications of petroleum impacts, including observations of staining or sheen in the samples, the presence of ethylbenzene, toluene, and xylene, and relatively high levels of tentatively-identified non-target VOCs and SVOCs (TICs), were noted in boring and sidewall and bottom samples from along the south wall and on the west side of the IRM area. These indications correlate fairly strongly with levels of chlorinated VOCs. It is suspected that the presence of petroleum constituents in the IRM area is a consequence of past releases from the Former Trench Drain Area rather than an overlap of impacts from the Petroleum Impacts Area (see below) located to the northeast of the IRM area.

- **Former Loading Dock Area** (refer to Figure 12 B)

This source area is estimated to cover an area of approximately 45 ft. by 65 ft. The most highly contaminated soil is found in the top 2 feet of soil in center of the area, although SCO exceedances were found to depths of up to 8 ft. The RI data indicates that impacted soil may extend off-Site to the west onto the adjacent Five Star Tool parcel at 383 Buell Road; however, the off-Site impacts appear to be limited to less than 20 feet from the western Site boundary.

In the southeast part of the Former Loading Dock Area, the area of chlorinated VOC impacts is overlapped by the adjacent area of impacts from release of petroleum. As described below, an LNAPL layer was observed at the water table at monitoring well MW-10. Oily soil samples were observed at adjacent borings B-16 and B-17 located to the east of the Former Loading Dock Area.

- **Petroleum Impacts Area** (refer to Figure 12 C)

  Low levels of petroleum-related VOCs at concentrations that do not exceed SCOs are present. Higher concentrations of tentatively-identified compound (TIC) VOCs were observed in many samples, however, and the contamination in this area is believed to have originated from use of petroleum solvent and/or cutting oil. The petroleum product impacts are also evidenced by detections of tentatively identified semi-volatile organic compounds (SVOCs, see Section 4.2.3 below) and total petroleum hydrocarbons (TPH, Section 4.2.6) and by observations of petroleum sheen or, at a few locations, thin horizons of oil-saturated soil in this area of the facility. As noted above, TCE and DCE were detected at a relatively low level at one location (B-19) in this area.

  The soil contamination in this area was observed in the horizon between 2 and 7 feet below the floor of the Buell facility. As shown on Figure 12C, the relatively minor contamination by VOCs and petroleum products is for the most part limited to an area beneath the building footprint, although the area of soil contamination does extend approximately 20 feet beneath the parking lot north of the facility oil tank room, and, as indicated in Section 4.1.4 above, the presence of LNAPL at the water table was indicated downgradient of this area at monitoring well MW-10.

A detailed description of the laboratory VOC analysis results for RI and IRM samples is presented in Appendix L, which presents the results in the chronological order in which the various sampling programs were conducted at the Site.

4.2.3 Semi-Volatile Organic Compounds

A total of 21 soil samples were submitted for analysis of TCL target SVOCs by ASP method 95-2. An additional four samples were submitted in September 2005 for analysis of TCL SVOCs by EPA method OLM 4.2. TCL SVOC results are summarized in Table 12.

As shown in Table 12, except for test boring B-8, no target SVOCs were reported above Industrial Use or Protection of Groundwater SCOs. The area surrounding and including B-8 was excavated during the Former Trench Drain Area IRM, and therefore the soil containing SVOCs at levels exceeding SCOs was removed from the Site.

Concentrations of total SVOC TICs above100,000 ug/kg were reported in five borings. The locations included B-8 (soils excavated and removed during the IRM), B-9, and B-10 in the Former Trench Drain Area, MW-10 in the Former Loading Dock Area, and B-17 in the Petroleum Impacts Area. No SCOs have been promulgated by the Department for TICs.

4.2.4 Pesticides and PCBs

A total of six samples were submitted for analysis of TCL Pesticides and PCBs by ASP method 95-2 in May 2002 and August 2002. An additional five samples were submitted for analysis of PCBs only in August 2002. TCL Pesticide and PCB results are summarized in Table 13.

As shown in Table 13, no Pesticide or PCB compounds were reported above detection limits.

4.2.5 TAL Metals and Inorganics

A total of 11 samples were submitted for analysis of TAL metals and inorganics in May and August 2002. TAL Metals and inorganics results are summarized in Table 14. As shown in Table 14, all analytes were reported at concentrations below the SCOs for industrial use and the protection of groundwater.

4.2.6 Total Petroleum Hydrocarbons (TPH)

TPH data in soil are summarized in Table 15. Four samples were analyzed for TPH by NYSDOH Method 310-13. These data were collected from Petroleum Impacts Area soil borings (B-20, B-27 and B-32) at which indications of the presence of free petroleum product were noted in soil samples.

The sample analysis results were compared to laboratory standards of #2 Fuel Oil/Diesel Fuel, Gasoline, Kerosene and Lube oil as well as three samples supplied to the laboratory of raw materials in use at Buell. The laboratory results indicated that TPH detected in each soil sample was most similar to N-Dodecane, a long chain hydrocarbon. None of the chromatograms of the four soil samples matched the laboratory standards for petroleum products or the samples of Site petroleum products.

TPH concentrations detected ranged from 6,600 to 19,000 mg/kg. No standards have been promulgated by the Department for TPH.

4.3 GROUNDWATER SAMPLE ANALYSIS RESULTS

Groundwater samples were collected from monitoring wells and Geoprobe borings during several rounds of sampling. Groundwater sample analysis results, which were compared to 6 NYCRR Part 703 Groundwater Standards and TOGS Memo 1.1.1, are summarized in Tables 16-20.

4.3.1 Volatile Organic Compounds

Reported concentrations of VOCs in groundwater samples from monitoring wells and Geoprobe borings are summarized in Tables 16 and 17, respectively.

4.3.1.1 Conditions in Chlorinated VOC Source Areas and the Downgradient Plume

As shown in Table 16, chlorinated VOCs were reported to exceed groundwater standards in 13 of the 19 monitoring wells. The highest concentrations of chlorinated VOCs were detected in monitoring wells MW-10 and MW-16 located within the Former Loading Dock source area, wells RW-1 and RW-2 located within the footprint of the Former Trench Drain Area IRM excavation, and wells MW-2 and MW-8 located south and immediately downgradient of the Former Trench Drain Area. The primary chlorinated VOCs present in groundwater include TCE and its breakdown products cis-1,2-DCE, 1,1-dichloroethane (DCA) and vinyl chloride. 1,1,1-TCA was also detected at elevated concentrations at MW-16 in the Former Loading Dock Area.

Contour plots of total chlorinated compounds in groundwater from September 2002 and May 2006 are presented on Figures 13 and 14, respectively. The contour plot from September 2002 represents groundwater conditions prior to the IRM soil excavation activities and installation of the subsequent RI monitoring wells. The contour plot from September 2006 represents conditions approximately 3 years after the IRM and uses the complete network of wells.

4.3.1.2 Upgradient Conditions and Limits of the Downgradient Plume

Traces of chlorinated VOCs were detected at upgradient monitoring wells MW-12 and MW-13 when those two wells, located at the northern site boundary, were sampled in September 2002. (The concentrations of tetrachloroethene and TCE detected in the MW-12 sample were slightly above groundwater standards.) The source of the traces of VOC contaminants detected in these two wells is presumed to be located off-Site to the north. Potential off-site sources of groundwater contamination in the area north of the site include various industrial and commercial facilities (including manufacturing, trucking, and car-rental operations) located along Buell and Ajax Roads.

The six wells that did not exhibit chlorinated VOC contraventions included MW-1, MW-3, MW-4, MW-5, MW-13 and MW-17. Upgradient well MW-13 was discussed in the previous paragraph; the other wells establish the limits of the plume on the east, southeast and southwest. Monitoring well MW-17, located southwest of the Buell Site on the 1166 Brooks Avenue property, was installed to define the downgradient limits of the chlorinated VOC plume at Buell. No chlorinated compounds were reported to be present in the groundwater sample collected from MW-17 and no VOCs were detected in the MW-17 split sample submitted by the Department. Therefore, MW-17 defines the downgradient limits of the groundwater plume.

4.3.2 Semi-Volatile Organic Compounds

Reported concentrations of SVOCs in groundwater samples are summarized in Table 18. Only three SVOCs were detected in groundwater above their respective groundwater standards. 4-Nitroaniline and Nitrobenzene were reported to be present at concentrations that slightly exceed their respective groundwater standards of 5 ppb and 0.4 ppb, respectively, from MW-1 along Buell Road. Given their location and their low concentrations, these SVOCs are not considered to be reflective of environmental concerns at the Site.

Naphthalene was reported to be present in MW-16 at 27 ug/l, which exceeds the Class GA groundwater standard of 10 ug/l.

4.3.3 Pesticide and PCB Compounds

A total of five groundwater samples were submitted for analysis of TCL Pesticides and PCBs by ASP method 95-2 in September 2002. TCL Pesticide and PCB results are summarized in Table 19.

As shown in Table 19, no Pesticide or PCB compounds in groundwater were reported above detection limits.

4.3.4 TAL Metals and Inorganics

Reported concentrations of TAL Metals and inorganics in groundwater samples are summarized in Table 20. With the exception of aluminum, iron, magnesium and manganese, all other metals and inorganic analytes were reported at concentrations below groundwater standards. The four metals with elevated concentrations are all naturally occurring and are not considered to be an environmental concern.

4.4 ANALYTICAL AIR RESULTS

4.4.1 Comfort Inn

Analytical soil gas, ambient air and sump water sample results from the Comfort Inn are summarized in Table 21.

Three of the five air samples (SG-1, SG-2A and BA-2A) were reported to contain detectable concentrations of target VOCs. No detectable concentrations of target compounds were reported for indoor air sample BA-1 and outdoor ambient air sample BK-1. At the time this testing was performed, guidance values for sub-slab air quality and ambient air quality data were under review and the reported occurrences of target VOCs were evaluated on a case-by-case basis.

A total of four VOCs were reported in the air samples that were submitted for analysis: PCE, TCE, cis-1, 2-DCE; and trans-1, 2-DCE. PCE was reported at the highest concentration. PCE was reported in both soil gas samples and also in the ambient air sample BA-2A from the basement. The concentration of PCE in sub-slab soil gas was reported to range from 0.79 micrograms/cubic meter (ug/m3) in SG-1, collected beneath Room 124, to 21,000 ug/m3 in SG-2A, collected beneath the basement utility room. PCE was reported in ambient air in BA-2A in the basement utility room at 1.1 ug/m3.

TCE was reported in both sub-slab soil gas samples. The concentration of TCE in sub-slab soil gas was reported to range from 4.3 ug/m3 in SG-1, collected beneath Room 124, to 9,900 ug/m3 in SG-2A, collected beneath the basement utility room. Cis-1, 2-DCE and trans-1, 2-DCE were reported to be present in only the basement utility room sub-slab soil gas sample SG-2A.

No TCE was reported above detection limits in either of the building air samples.

Three TCL VOCs were reported in both of the basement utility room sump water samples submitted for analysis: PCE, TCE and trans-1,2-DCE. The three compounds were reported at concentrations ranging from 67 micrograms per liter (ug/l) to 120 ug/l. Each of the reported concentrations of the three compounds were higher than their respective groundwater standards (5 ug/l for each compound).

The most abundant compound reported in the sump water was PCE (100-120 ug/l), a dry-cleaning solvent. PCE has not been reported originating in groundwater at Buell. TCE, although the predominant compound present at the Buell site, also is commonly found as a breakdown product of PCE. Similarly, trans-1,2-DCE, is also commonly found as a breakdown product of PCE, and has only been reported at very low levels in groundwater at the Buell site.

Based upon the product inventory for the Comfort Inn, it did not appear that the products and chemicals that were stored in the basement at the Comfort Inn were the source of the PCE. It should also be noted that the higher concentrations were reported in sump water sample BU-SW-2-W which was collected from Sump #2, located in the southwest corner of the utility room along an interior wall. Lower concentrations were reported from Sump #1 located in the stairwell leading to the utility room along the exterior north wall.

In summary, with the exception of the reported presence of cis-1, 2-DCE, the sub-slab soil gas data reflected the contaminants that were reported in the basement sump water samples. Similar to the sump water data, it appeared that a source of PCE unrelated to the Buell site resulted in the impacts observed beneath, and within the basement utility room. The Department concurred and Comfort Inn subsequently entered into a separate BCA to investigate the source of the findings at their Site.

4.4.2 Five Star Tool Company

Summaries of the laboratory analytical results for the sub-slab vapor; indoor air and outdoor air samples for Five Star Tool are presented in Table 22. Included in these tables are available NYSDOH and USEPA guidance values.

The sub-slab vapor sample (32905-1) and indoor air sample (32905-2) were reported to contain detectable concentrations of target VOCs. No detectable concentrations of target VOCs were reported for the outdoor air sample (32905-3). As shown in Table 22, three VOCs were reported for the sub-slab vapor sample:

- 1,1-DCA (4.2 µg/m3);
- cis-1,2-DCE (9.1 µg/m3); and
- TCE (340 µg/m3).

As shown on Table 22, only one target VOC, cis-1,2-DCE, was reported to be present in the indoor air sample. Its concentration in indoor air (1.6 µg/m3) as well as its sub-slab concentration were both below applicable NYSDOH guidance values that indicate a potential need for further action. These results and the absence of TCE and 1,1-DCA in the indoor air sample indicate that vapor intrusion is not currently causing an adverse impact on conditions in the Five Star Tool building. However, the concentration of TCE detected in the sub-slab sample (340 µg/m3) is above the NYSDOH guidance value that suggests the need for mitigation to protect against potential vapor intrusion.

4.4.3 1166 Brooks Avenue

Summaries of the laboratory analytical results for the sub-slab vapor; indoor air; outdoor air and sump water samples for 1166 Brooks Avenue are presented in Table 23, including available NYSDOH and USEPA guidance values.

The sub-slab vapor samples collected at 1166 Brooks Avenue were reported to contain low-level, but detectable concentrations of four target VOCs: PCE, TCE, cis-1, 2-DCE and 1,1-DCA. One compound, PCE, was reported from BU-1166-SS-1 on the east side of the building. Four compounds, PCE, TCE, cis-1, 2-DCE and 1,1-DCA, were reported from BU-1166-SS-2 on the west side of the building. No compounds were reported above the method reporting limit for either of the two indoor, or one outdoor (ambient), air samples and no VOCs were reported to be present in the sump water at 1166 Brooks Avenue.

PCE has not been reported at the Buell Site at any appreciable concentrations. Given the presence of the greatest concentrations of PCE on the west side of the 1166 Brooks Avenue building furthest from Buell, and the reported presence of TCE, cis-1, 2-DCE, and 1,1-DCA only on the west side of the building, it did not appear that the Buell Site, located to the east of the building, is the source of these findings. Furthermore, according to the NYSDOH Guidance “Soil Vapor / Indoor Air Matrices 1 and 2”, the concentrations of cis-1, 2-DCE, PCE and TCE in the sub slab vapor samples, combined with the non-detect concentrations in indoor air samples, did not warrant any further action.

5.0 QA/QC EVALUATION

5.1 DATA USABILITY REPORTS

Laboratory reports received from Columbia Analytical Services for the soil and groundwater samples were forwarded to Ms. Judy Harry of Data Validation Services, Inc. for preparation of Data Usability Summary Reports (DUSRs). Copies of the DUSRs are provided in Appendix I. The results from these DUSRs have been incorporated into the various tables presented in this report.

5.1.1 Data Usability Summary Report for CAD Sub Nos. R2212007, R2213195 and R2213646

The data packages generated by Columbia Analytical Services which pertain to samples collected 5/20/02 through 9/12/02 at the Buell Site. Five aqueous and five soil samples were processed for full TCL/TAL analytes. Thirteen aqueous samples were processed for TCL volatiles; six of those were also analyzed for TCL semi-volatiles. Ten soil samples were processed for TCL volatiles and TCL semi-volatiles and two of those were analyzed for PCBs. Three soil samples were processed for full TCL/TAL without pesticides and three other soil samples were processed for full TCL/TAL without pesticides or PCBs. Rinse, trip and cooler blanks were also analyzed. Methodologies used were those of the NYSDEC ASP 1995.

In summary, most sample analyte values/reporting limits were usable as reported, or with minor qualification as estimated (“J” qualifier) due to processing or matrix effects. No data were rejected.

5.1.2 Data Usability Summary Report for CAS SDG Nos. R231842, R2316048 and R2316744

The data packages generated by Columbia Analytical Services that pertain to samples collected on 2/25/03, 3/13/05, 5/3/03 and 5/5/03 at the Buell Site included eighteen soil and seven aqueous samples processed for TCL volatiles by NYSDEC ASP CLP method 95-1. Two of those soils and two other soils were also analyzed for TPH by NYSDOH Method 310-13. Trip and cooler blanks were also processed.

In summary, the DUSR indicated sample analyte values and reporting limits were usable as reported or usable with qualification as estimated (“J” qualifier) due to typical processing or matrix effects.

5.1.3 Data Usability Summary Report for CAS SDG Nos. R2319595, R2319657, R2319774 and R2419875

The data packages generated by Columbia Analytical Services that pertain to IRM samples collected from 12/23/03 through 1/13/04 at the Buell Site included twenty soil (including one field duplicate) and two aqueous samples processed for TCL volatiles by NYSDEC ASP CLP method

95-1. Six additional soil samples were processed by USEPA Method 8260B, in order to meet expedited turnaround requirements required for the IRM. Trip and cooler blanks were also processed.

In summary, the DUSR indicated sample analyte values and reporting limits were usable as reported, or usable with minor qualification as estimated (“J” qualifier) due to typical processing or matrix effects.

5.1.4 Data Usability Summary Report for CAS SDG. Nos. R2631499

The data package generated by Columbia Analytical Services that pertains to samples collected on 5/1/06 and 5/2/06 at the Buell Site included twelve aqueous samples and a field duplicate on processed for TCL volatiles. Two of the samples and a field duplicate were also processed by TCL semivolatiles. Trip and cooler blanks were also analyzed. The laboratory methodologies involved USEPA CLP OLM04.2.

In summary, the DUSR indicated the results were usable as reported or usable with minor qualification due to sample matrix or to typical processing outliers.

6.0 Qualitative On-Site and Off-Site Exposure Assessments

6.1 QUALITATIVE ON-SITE & OFF-SITE HUMAN HEALTH EXPOSURE ASSESSMENT

6.1.1 Human Health Exposure Setting

6.1.1.1 Human Health Conceptual Site Model

The Human Health Conceptual Site Model (CSM) developed and relied upon for this assessment is provided in Figure 15. This model was prepared based on the current and proposed industrial use of the Site and incorporates information on Site characteristics and environmental conditions outlined in the previous sections. The Human Health CSM is a graphical representation of the exposure pathways considered for this qualitative exposure assessment.

6.1.1.2 General Exposure Considerations

The Site is located in an area with industrial and commercial uses. The Site is bounded to the north by a remote airport parking lot, to the east by Buell Road and a remote airport parking lot, to the south by the vacant, former All-Around Travel building which is in the process of being acquired by Mr. Richard Lawton and Buell, and to the west by the Five Star Tool industrial facility. The nearest residential building is located approximately 1,500 feet to the northwest.

Buildings occupy roughly 29% of the Site, while the remaining surface area is covered with asphalt parking lots and access roads.

The primary human health concern at the Site stems from the two identified source areas of chlorinated VOC impacts in subsurface soil in the Former Trench Drain Area and the Former Loading Dock Area and the Site-related chlorinated-VOC-contaminated groundwater originating from these two source areas.

6.1.1.3 Potential Receptors

Considering that current light industrial activities at the Site are expected to continue for the foreseeable future and that remedial work is anticipated on-site, the construction worker/trespasser, and occupational worker have been identified as the most appropriate potential human receptors.

Exposures to the construction worker may occur during remediation, construction and other activities that involve intrusive activities at the Site or at its periphery, including potential work to repair or modify utilities along the easement between 381 and 385 Buell Road. Exposures to the occupational worker at the Buell facility could occur during normal facility operations due to the ongoing use of TCE at the site, potential vapor intrusion into the building, by way of exposure to soil vapor and groundwater during in-situ remediation system operation, as well as during any excavation activity that may take place on or around the Site in the impacted areas.

Exposure to occupants of nearby buildings could potentially occur during remediation work at the Site through dispersion of particulates of contaminants and volatilization of VOC contaminants from soil, groundwater or soil vapor. Exposure of occupants of nearby buildings to VOCs could potentially occur from vapor intrusion.

The Five Star Tool building is the only nearby building that appears to represent a significant potential for exposures to occupants from Site-related VOC contaminants. Factors that will affect the potential for exposures to Site-related contaminants to occupants of the Five Star Tool building include the following:

- the proximity of the western edge of the Site-related groundwater contaminant plume to the east end of the Five Star Tool building;
- the presence of TCE in sub-slab soil vapor beneath the Five Star Tool building at concentrations above NYSDOH guidance values;
- the thickness and competency of the building floor slab;
- the presence of crawl-space areas;
- the operation of the heating and ventilation system for the building, and whether the system maintains a constant positive air pressure relative to the sub-slab environment;
- remedial actions that my be implemented at the Site;
- future use of the building and the Five Star Tool property;
- background levels of Site-related contaminants and other VOCs in air; and
- other, non-Site-related potential sources of volatile chemicals in air.

6.1.2 Human Health Exposure Pathway Analysis

The pathway analysis identifies possible exposure routes through which on-Site and off-Site receptors may come into contact with the contaminants of concern present on the Site. Based on the Human Health CSM (Figure 15) those exposure routes include:

- Inhalation of vapors released from volatile substances present in subsurface soils (occupational worker and construction worker/trespasser);
- Inhalation of substances contained in particulates from subsurface soils (all potential receptors);

- Ingestion and dermal contact of substances in subsurface soils (occupational worker and construction worker/trespasser); and

- Ingestion, inhalation and dermal contact with substances present in groundwater (occupational worker and construction worker/trespasser).

Because of the specific conditions encountered at and near the Site, the following pathways have been reviewed, but do not represent important pathways of exposure:

- Direct exposure to contaminants via groundwater discharge to the Barge Canal, the nearest surface water body, is unlikely. The Barge Canal is located hydraulically upgradient and there is no analytical data available to demonstrate that contaminants are migrating to the Canal.

- Nearby businesses utilize a public drinking water supply. Discussions with Mr. Joe Albert at MCDOH and the MCWA indicate there are no known drinking water wells in the vicinity of the Site. Exposure to chemicals through ingestion of, or dermal contact with, groundwater used as a water supply is therefore not a concern at the Site or in the surrounding area.

- Surface soil contamination is not a concern at the Site. The absence of accessible surface soil is attributable to the presence of buildings and impervious asphalt and/or concrete surfaces on top of contaminated areas. Inadvertent ingestion or dermal exposure through direct contact with chemicals at the undisturbed surface therefore is not a concern at the Site.

- Inhalation of suspended particles in air is not considered a significant risk unless subsurface soils are excavated and exposed to dispersion mechanisms. Mandatory measures would be adopted to control soil tracking, soil erosion and dispersion of dust during excavation and remediation work.

- No residential buildings are situated within or near the area affected by soil, groundwater or soil vapor impacts. Therefore, exposure through soil vapor intrusion into residential buildings is not a concern.

6.1.3 Human Health Exposure Assessment Summary

Results of the interior boring, soil sampling and groundwater sampling program suggests the potential presence of a vapor inhalation exposure pathway for occupational workers. However, TCE continues to be used at the Site, therefore, potential TCE exposure would be subject to OSHA regulations. Exposure pathways involving inhalation of contaminants suspended in air in soil particles or volatilized from subsurface soils and groundwater during remediation work would be expected to be temporary and would be controlled through good engineering practices.

It is understood that the Site Management Plan for post-remedial-action monitoring of the Site will include a provision for annual reporting on the continued use, or discontinuation of the use, of TCE and petroleum solvents at the site and a provision for assessment of the need for performance of a vapor intrusion assessment of the Buell facility should the use of these materials be significantly reduced (less than 5 gallons maintained on-Site) or eliminated.

At the adjacent, off-Site Five Star Tool facility, the RI results indicate that vapor intrusion is not currently causing an adverse impact on conditions in the Five Star Tool building. However, the concentration of TCE detected in the sub-slab sample is above the NYSDOH guidance value that suggests the need for mitigation to protect against potential vapor intrusion.

Direct on-site exposure by way of ingestion, inhalation or dermal contact with contaminated soils or groundwater will also be transient in nature and will be restricted to periods of remediation work. Remediation of on-Site contamination will allow continued industrial use of the property in accordance with institutional controls and a Site Management Plan.

Source removal and control of contaminant migration through implementation of groundwater remediation measures will mitigate the off-Site migration of the contaminated groundwater plume.

6.2 QUALITATIVE ON-SITE AND OFF-SITE FISH AND WILDLIFE EXPOSURE ASSESSMENT

6.2.1 Fish & Wildlife Exposure Setting

6.2.1.1 Fish and Wildlife Conceptual Site Model

The Fish and Wildlife Conceptual Site Model (CSM) developed and relied upon for this assessment is provided in Figure 16. This model was prepared based on the current and proposed urban industrial use of the Site and incorporates information on Site characteristics and environmental conditions outlined in previous sections. The Ecological CSM is a graphical representation of the exposure pathways considered for this qualitative fish and wildlife exposure assessment.

A Fish and Wildlife Resources Impact Analysis Decision Key for the Site is presented in Appendix M.

6.2.1.2 General Exposure Considerations

Please refer to Section 6.1.1.2 for general on- and off-site exposure considerations.

As per the human health qualitative exposure assessment, the primary ecological concern at the Site stems from the two identified areas of chlorinated VOC impacts in subsurface soil and groundwater originating in the vicinity of The Former Trench Drain Area and the Former Loading Dock Area.

6.2.1.3 Receptor Characteristics

Since the Site is located in an industrial urban environment, only known sensitive ecological receptors are to be considered in this fish and wildlife exposure assessment. Requests were sent to the New York Natural Heritage Program and the US Fish and Wildlife Service (USFWS) to determine any known occurrence of rare, endangered and/or threatened species in the vicinity of the Site.

The New York Natural Heritage Program reports no State listed or proposed endangered or threatened species under their jurisdiction that exist within the project impact area (Appendix J).

In accordance with the current USFWS policy for information on threatened and endangered species, Stantec has reviewed the USFWS web page for federally listed threatened and endangered species in Monroe County. The federal listing identifies the bog turtle (Clemmys muhlenbergii) in the Towns of Riga and Sweden as the only federally threatened or endangered species occurring in Monroe County. There were no threatened/endangered species identified in the vicinity of Buell Road in the Town of Gates. According to USFWS policy, if a subject site contains no habitat suitable for the subject species, no further investigation is required. Given that the subject site is located in an industrial area with no marsh cover/edge wetlands that are the preferred habitat of the bog turtle, no further investigation is needed.

6.2.2 Exposure Pathway Analysis

The pathway analysis identifies the possible exposure routes through which on-Site and off-Site identified sensitive receptors may come into contact with the contaminants of concern present on the Site. Based on the Fish and Wildlife CSM (Figure 17), the only exposure routes include ingestion, inhalation or dermal contact with substances present in the subsurface by terrestrial fauna living or burrowing below ground (e.g. invertebrate receptors).

Because of the specific conditions encountered at and near the Site, the following pathways have been reviewed, but do not represent important pathways of exposure:

- Sensitive ecological receptors have not been identified as being present on or adjacent to the Site. Hence, on-Site exposure pathways to fish and wildlife are not considered in this assessment;

- Inhalation and contact by sensitive ecological receptors with suspended particles in air is not considered a significant risk unless subsurface soils are excavated and exposed to dispersion mechanisms. Mandatory measures would be adopted to control soil tracking, soil erosion and dispersion of dust during excavation and remediation work in order to protect any sensitive ecological receptors that could potentially be present in the vicinity of the Site; and

- The potential discharge of water resulting from remediation efforts at the Site to the existing sanitary sewer system is not anticipated to have any effect on the possible presence of endangered species in the vicinity of the Site. A potential remediation project would not involve the construction or relocation of any storm sewer discharge locations. The Department and the Monroe County Department of Environmental Services would determine the disposal route and associated permits required for discharge of water generated by a remedial program, however it is anticipated that any effluent would be discharged to the Monroe County sanitary sewer to eliminate potential contact with contaminants.

6.2.3 Fish & Wildlife Exposure Assessment Summary

As mentioned previously, there is no analytical data available to demonstrate that contaminants are migrating to the nearest water body, the Barge Canal. Source removal and control of contaminant migration will best address potential off-Site exposure potentials to any potential sensitive ecological receptors in the area.

7.0 INTERPRETATIONS AND CONCLUSIONS

On behalf of Buell Automatics, Inc. (Buell), Stantec Consulting Services Inc. (Stantec) has performed a Remedial Investigation (RI) on the Buell Site (Site) located at 381 Buell Road in the Town of Gates, NY (Figure 1). This RI was completed pursuant to Buell's Brownfield Cleanup Agreement (BCA) for the Site (Index #B8-0576-00-04A) that was executed by the New York State Department of Environmental Conservation (Department) on December 22, 2003, and a preceding Voluntary Cleanup Agreement (VCA) executed on February 22, 2002.

Results of the RI indicate that there are three source areas of subsurface contamination at the Site. The three areas are located under or adjacent to the western half of the older (southern) section of the facility manufacturing building. Source-area impacts are predominantly from chlorinated VOCs in two areas and petroleum solvent compounds and oil in the third area. No other areas or types of soil contamination were identified at the Site. No PCB, pesticide or metal impacts were observed in soil or groundwater. Groundwater impacts by chlorinated VOCs extend off-Site to the southwest.

7.1 SOURCE AREAS

7.1.1 Former Trench Drain Area

This area is located inside the southwest portion of the building and is adjacent to the area of a former trench drain that was located outside the south wall of the building. Interior borings completed in the vicinity of the former trench drain revealed elevated concentrations of the chlorinated volatile organic compound (VOC) trichloroethene (TCE) and related chlorinated VOCs in soil. Based on these findings, 123.4 tons of grossly-impacted soil and associated concrete were removed from a 20 ft. by 25 ft. by 6- to 7- ft. deep excavation inside the building and disposed off-site as part of an Interim Remedial Measure (IRM) performed in December 2003-2004.

Structural considerations prevented the removal of additional soil; however, the RI data indicate that the extent of significant remaining soil contamination is relatively minor. The RI data indicates that the most highly contaminated material was removed and that the contaminated soil that remains in place is found primarily on the south and east sides of the IRM area. Significant contamination was not detected in floor, sidewall, or boring samples collected in and around the north half of the excavation. In the south half of the excavated area, contaminated soil extends 2 to 3 feet below the bottom of the excavation backfill (from 7 to 10 feet below grade). Along the south and southeast walls of the excavation, contaminated soil was left in place where it was inaccessible beneath foundation grade beams; however, RI data indicates that significant levels of contamination do not extend laterally more than a few feet beyond the excavation limits. Borings located 3 to 5 feet to the south of the excavation limits did not encounter significant contamination. At borings located 2 to 5 feet from the east and west sides of the southern end of the IRM area, relatively low levels of contamination are present in soil in the interval from 5 to 6.5 feet below grade. Relatively low concentrations of contaminants were also detected in the interval from 6 to 8 feet below grade at a boring located approximately 20 feet to the east of the southeast corner of the excavated area.

Indications of petroleum impacts, including observations of staining or sheen in the samples, the presence of ethylbenzene, toluene, and xylene, and relatively high levels of tentatively-identified non-target VOCs and SVOCs (TICs), were noted in boring and sidewall and bottom samples from along the south wall and on the west side of the IRM area. These indications correlate fairly strongly with levels of chlorinated VOCs. It is suspected that the presence of petroleum constituents in the IRM area is a consequence of past releases from the Former Trench Drain Area rather than an overlap of impacts from the Petroleum Impacts Area (see below) located to the northeast of the IRM area.

7.1.2 Former Loading Dock Area

This area is located outside the former loading dock area on the west side of the facility. This source area is estimated to cover an area of approximately 45 ft. by 65 ft. and extends approximately 8 feet deep. Contaminants in this area include TCE and related chlorinated VOCs. The most highly contaminated soil is found in the top 2 feet of soil in center of the area. Impacted soil extends less than 20 feet off-site to the west onto the adjacent Five Star Tool Co. (Five Star Tool) parcel at 383 Buell Road.

In the southeast part of the Former Loading Dock Area, the area of chlorinated VOC impacts is overlapped by an adjacent area of impacts from release of petroleum. As described below, an oily product was observed at the water table in monitoring well MW-10, which is located in the area of overlap.

7.1.3 Petroleum Impacts Area

This area is located under the manufacturing building northeast of the Former Trench Drain Area and east of the Former Loading Dock Area. Low levels of petroleum-related VOCs and higher concentrations of tentatively identified VOCs are present. The contamination in this area is believed to have originated from petroleum solvent use. Cutting oil, as evidenced by the presence of total petroleum hydrocarbons (TPH) and tentatively identified semi-volatile organic compounds (SVOCs) and observations of petroleum sheen or, at a few locations, thin horizons of oil-saturated soil, is also present in this area of the facility. An oily light non-aqueous phase liquid (LNAPL) layer was detected at the water table in the groundwater monitoring well (MW-10) located immediately downgradient of this area, but is not present at other Site wells. TCE contamination was detected in soil at a relatively low level at one location (B-19) in the petroleum impacts area.

7.2 DOWNGRADIENT GROUNDWATER PLUME

To investigate the extent of chlorinated VOC impacts in groundwater from the Former Trench Drain and Former Loading Dock areas, a series of monitoring wells were completed to evaluate soil and groundwater downgradient from the site. The RI data indicates that the extent of petroleum and oil impacts is restricted to the Site. However, groundwater impacts from the chlorinated VOC contamination at the Site extend off-Site approximately 120 to 200 feet to the southwest from the southwest corner of the Site.

South of the Former Trench Drain Area, chlorinated VOCs that exceed groundwater standards extend downgradient onto the adjacent 385 Buell Road property (former All-Around Travel). Buell is in the process of acquiring title to this property. West of the Former Loading Dock Area, low-level chlorinated VOC impacts were found to extend from the former loading dock source area onto the 383 Buell Road property. A limit to the extent of downgradient impacts was established by the absence of impacts in groundwater observed at monitoring well MW-17, which is located on the 1166 Brooks Avenue property.

7.3 SUB-SLAB SOIL VAPOR

A building survey of the former All-Around Travel building, located south of the subject property at 385 Buell Road, was completed under the VCA work plan. As a result of a leaking underground storage tank beneath the building, this structure has been vacant since March 2003 and indoor and sub-slab air sampling was deferred pending re-occupation of the building. Following completion of their on-going acquisition of the 385 Buell Road property, Buell intends to raze this building and replace it with an asphalt parking surface. Assuming this scenario occurs, it is understood that the sub-slab soil vapor and indoor air sampling program will not be needed.

Three additional building surveys, including indoor and sub-slab air sampling, were conducted in adjacent and/or downgradient structures:

- Comfort Inn, 395 Buell Road, where no further action was required by Buell but a separate BCA was executed by the owners of that property to address separate tetrachloroethene (PCE) impacts.

- Five Star Tool, 383 Buell Road, where Site related chlorinated VOCs were reported beneath the slab and one compound was reported at a trace concentration within the building. The RI results indicate that vapor intrusion is not currently causing an adverse impact on conditions in the Five Star Tool building. However, the concentration of TCE detected in the sub-slab sample is above the NYSDOH guidance value that suggests the need for mitigation to protect against potential vapor intrusion.

- Marketing Squad Inc., 1166 Brooks Avenue, where no Site-related impacts were reported. Low level PCE impacts were reported on the west side of the building (the far side of the building away from the Buell Site); these appear to be unrelated to the Buell Automatics Site.

7.4 CONCLUSIONS

The findings of the RI indicate that soil impacts exceeding applicable standards are present on Site, site-related groundwater impacts exceeding applicable standards are present on and downgradient of the Site, and potential Site-related soil-vapor impacts are present off-Site on the adjacent Five Star Tool property located at 383 Buell Rd. and at the adjacent 385 Buell Rd. property. Remedial measures are needed to address the identified Site-related impacts.

An Alternatives Analysis Report will be prepared to evaluate remedial alternatives for addressing the Site-related impacts. The AA Report will take into account the current industrial use and zoning of the Site, the proposed continued industrial use of the Site, current industrial and commercial uses and future uses in the surrounding area, the pending acquisition of the adjacent downgradient property (385 Buell Road), and the presence of other unrelated off-Site soil and groundwater impacts that exist in the area.

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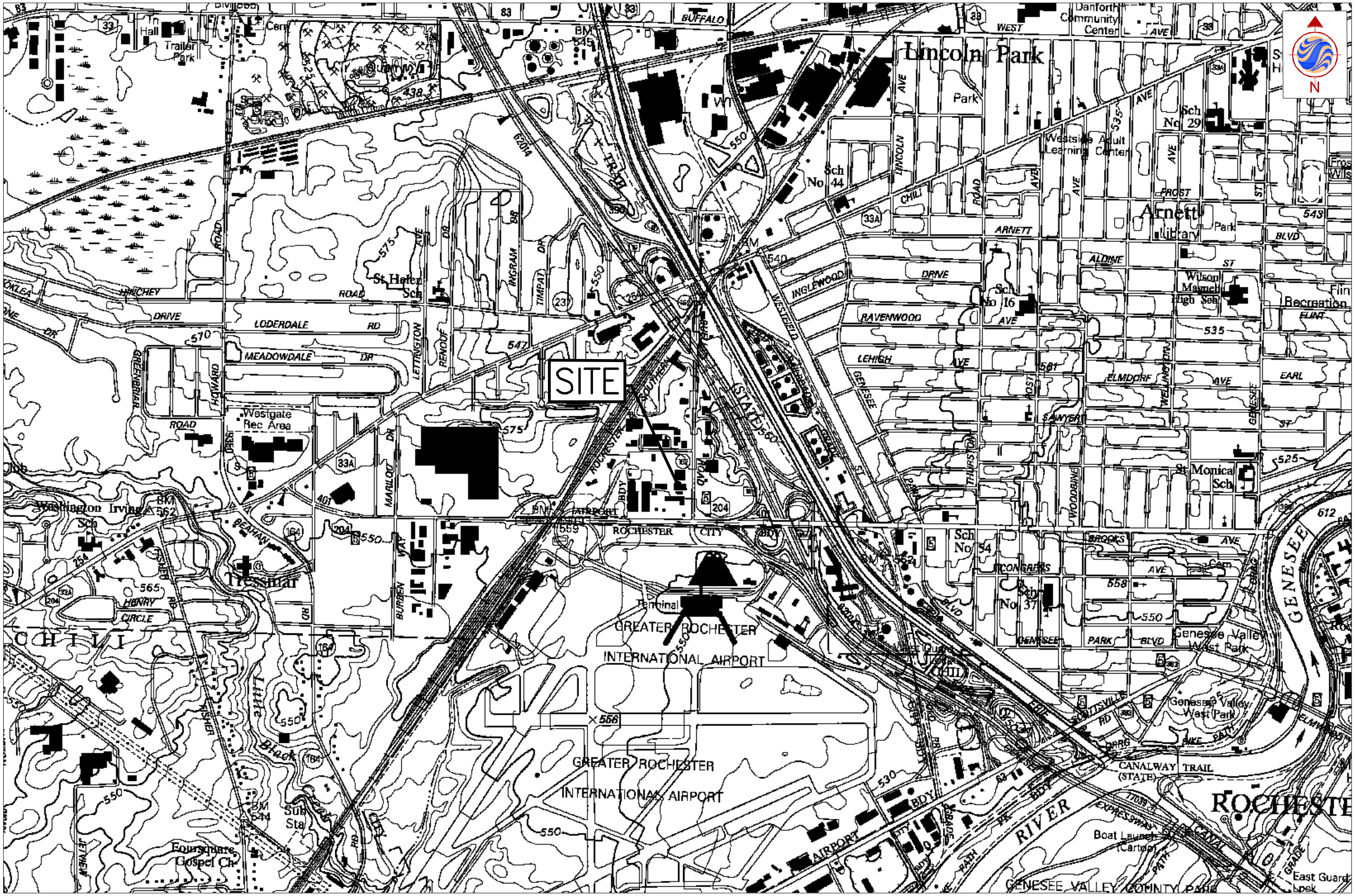

U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 1 _ SITE LOCATION MAP.dwg
2007-08-07 01:18PM By: mbouchard

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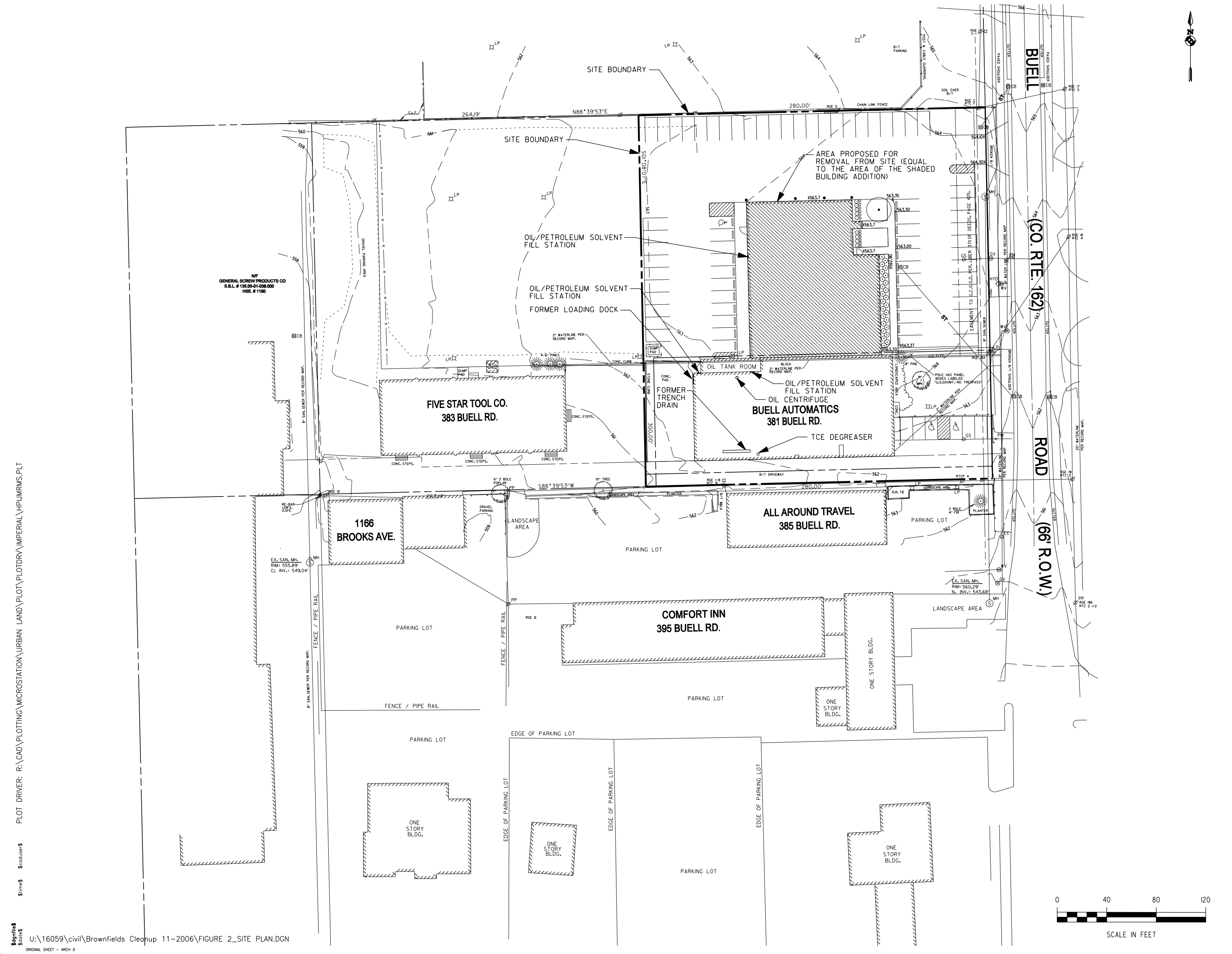
REMEDIAL INVESTIGATION
Rochester, NY U.S.A.

Figure No.
FIGURE 1

Title
SITE LOCATION MAP

APPROX. SCALE: 1" = 2000'



PLOT DRIVER: R:\CAD\PLOTTING\MICROSTATION\URBAN LAND\PLOT\PLOTDRV\IMPERIAL\HPUNRMS.PLT

U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 2_SITE PLAN.DGN

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Legend

Notes

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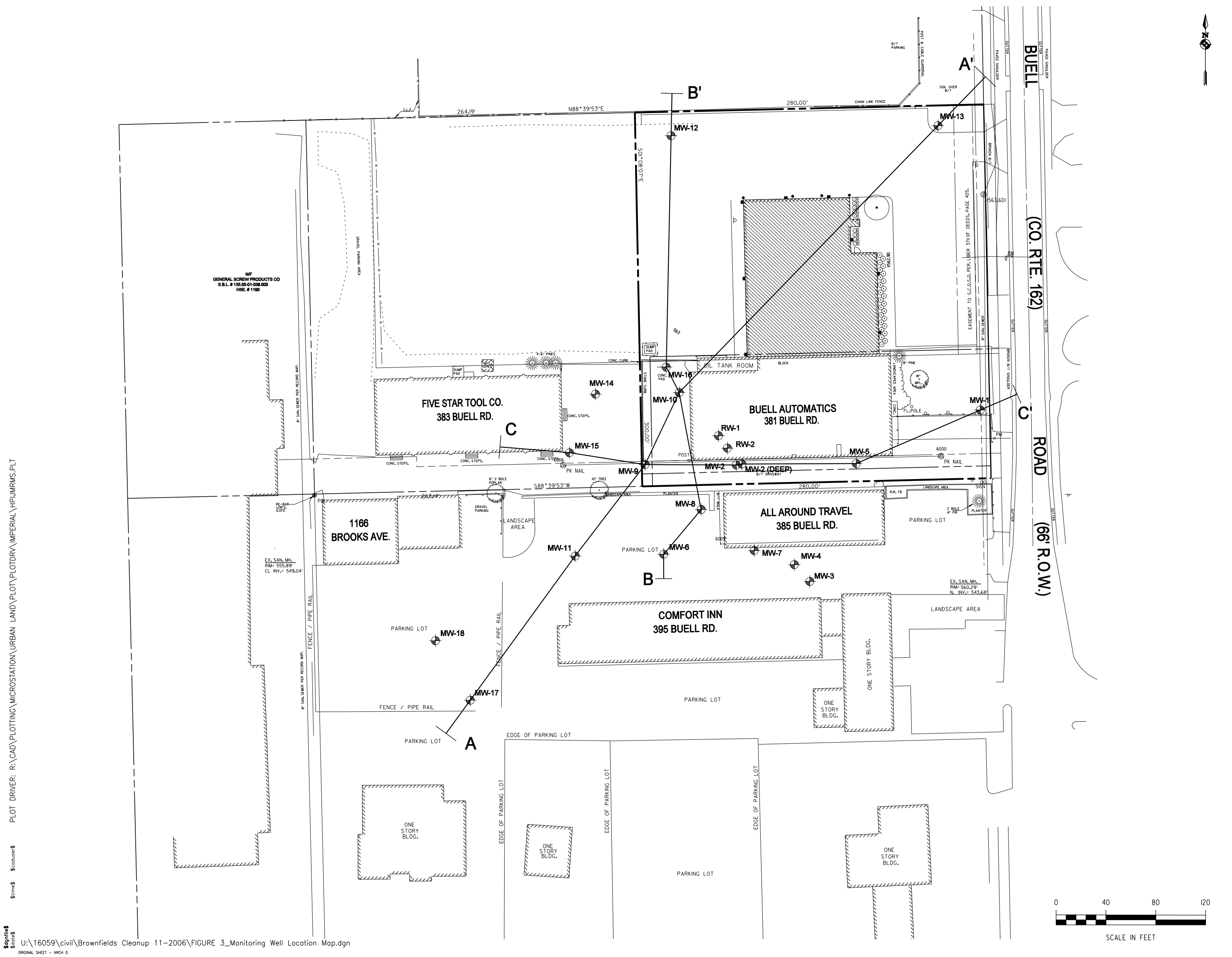
Title

SITE PLAN

Project No.	Scale
190500033	AS SHOWN

Drawing No.	Sheet	Revision
FIGURE 2	of	



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MW-11 MONITORING WELL

A A' GEOLOGIC CROSS SECTION

Notes

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Title

MONITORING WELL LOCATION MAP

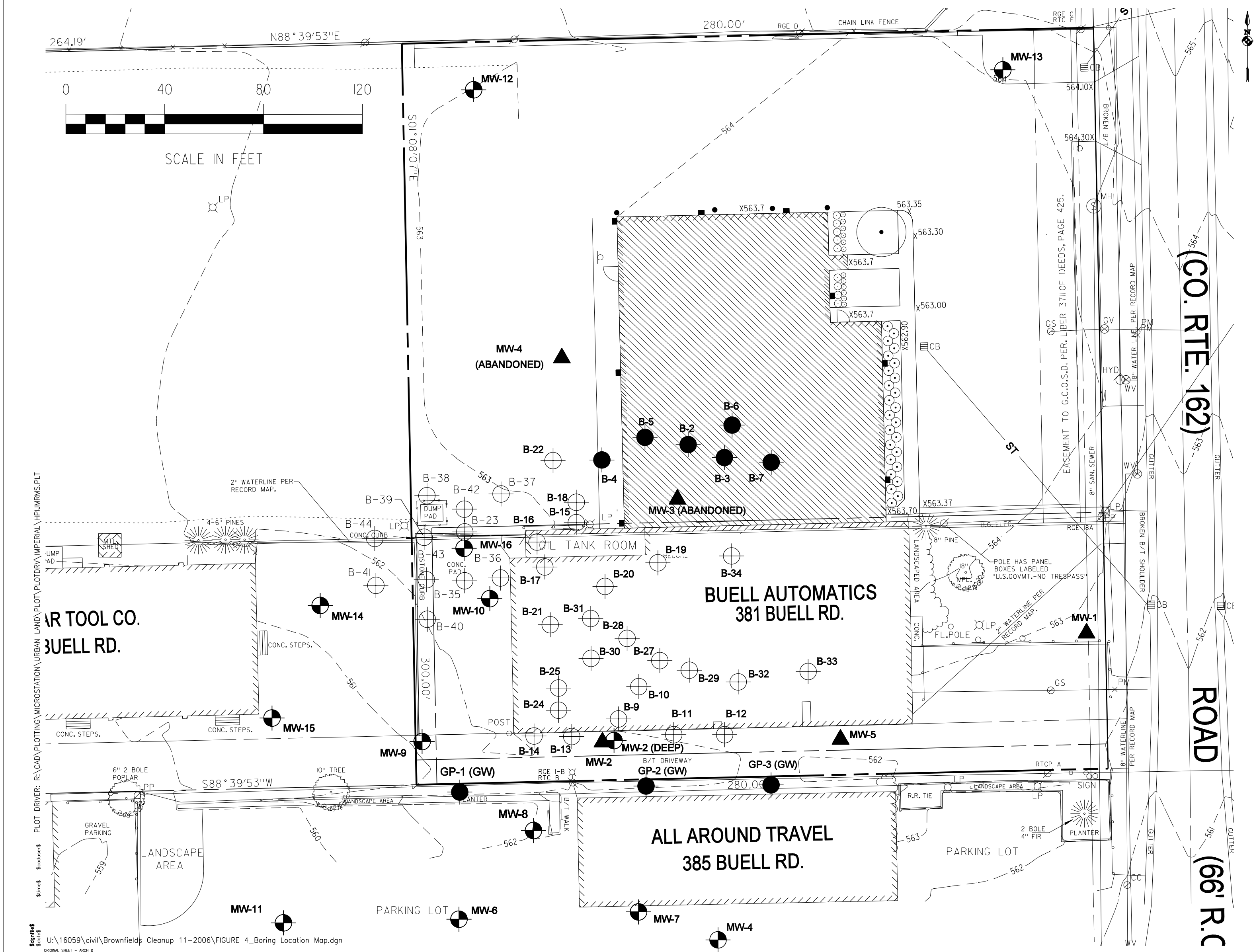
Project No. 190500033

Scale AS SHOWN

Drawing No. FIGURE 3

Sheet of

Revision



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- B-22 — GEOPROBE BORING LOCATION
- MW-5 — PRE-EXISTING MONITORING WELL LOCATION
- MW-8 — RI MONITORING WELL LOCATION
- B-5 — BORING LOCATION

Notes

MAPPING SOURCE :

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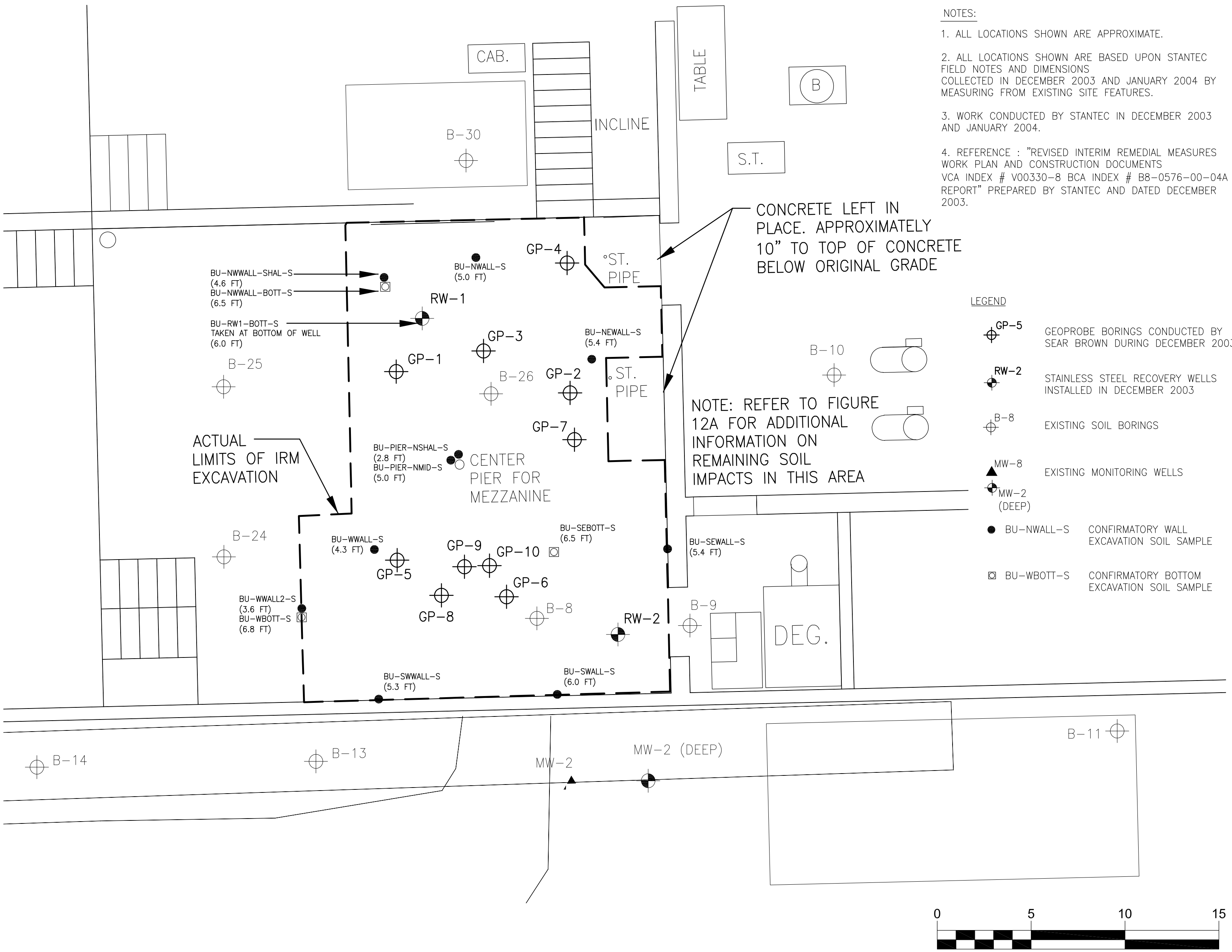
BORING LOCATION MAP

Project No.	Scale	
190500033	AS SHOWN	
Drawing No.	Sheet	Revision
FIGURE 4	of	



NOTES:

1. ALL LOCATIONS SHOWN ARE APPROXIMATE.
2. ALL LOCATIONS SHOWN ARE BASED UPON STANTEC FIELD NOTES AND DIMENSIONS COLLECTED IN DECEMBER 2003 AND JANUARY 2004 BY MEASURING FROM EXISTING SITE FEATURES.
3. WORK CONDUCTED BY STANTEC IN DECEMBER 2003 AND JANUARY 2004.
4. REFERENCE : "REVISED INTERIM REMEDIAL MEASURES WORK PLAN AND CONSTRUCTION DOCUMENTS VCA INDEX # V00330-8 BCA INDEX # B8-0576-00-04A REPORT" PREPARED BY STANTEC AND DATED DECEMBER 2003.

LEGEND

Symbol	Description
GP-5	GEOPROBE BORINGS CONDUCTED BY SEAR BROWN DURING DECEMBER 2003
RW-2	STAINLESS STEEL RECOVERY WELLS INSTALLED IN DECEMBER 2003
B-8	EXISTING SOIL BORINGS
MW-8, MW-2 (DEEP)	EXISTING MONITORING WELLS
BU-NWALL-S	CONFIRMATORY WALL EXCAVATION SOIL SAMPLE
BU-WBOTT-S	CONFIRMATORY BOTTOM EXCAVATION SOIL SAMPLE

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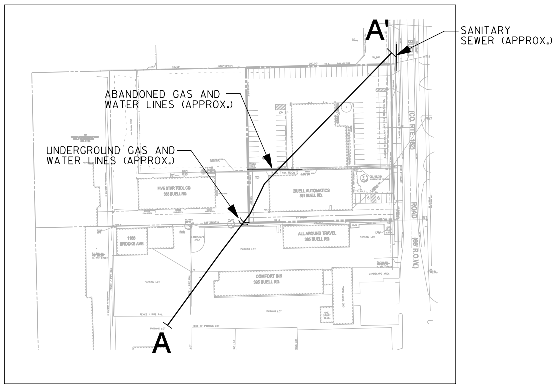
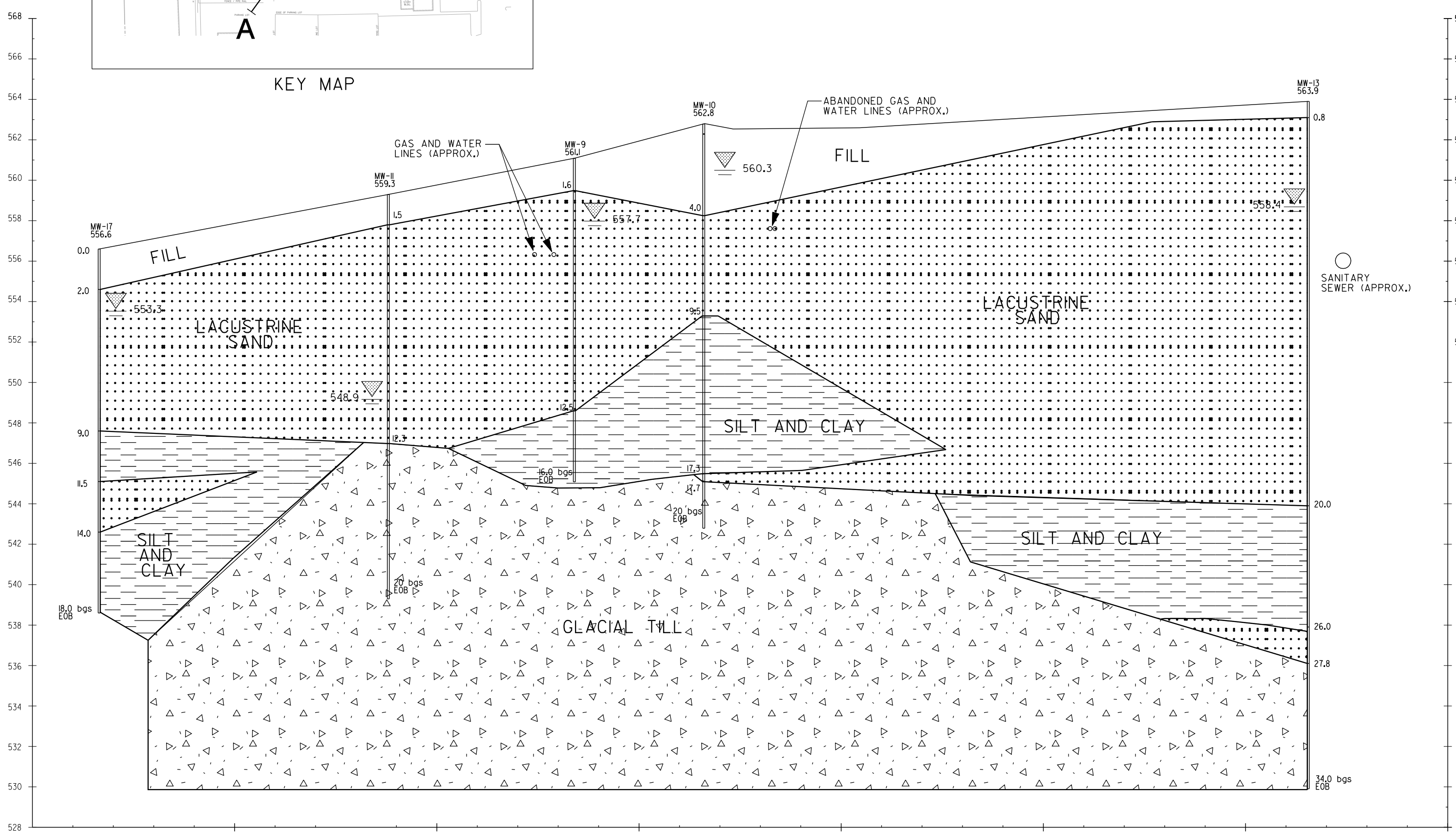
Title
IRM
SOIL BORING LOCATIONS

Project No. 190500033 | Scale AS SHOWN

Drawing No. FIGURE 5 | Sheet of | Revision



KEY MAP



SECTION A-A
SCALE 1"=30' HORIZONTAL.
1"=3' VERTICAL

A A'

U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 6REV_Cross section A-A.dgn

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Legend

- FILL
- LACUSTRINE SAND
- SILT AND CLAY
- GLACIAL TILL
- 557.9 WATER ELEVATION MEASURED ON MAY 2, 2006

Notes

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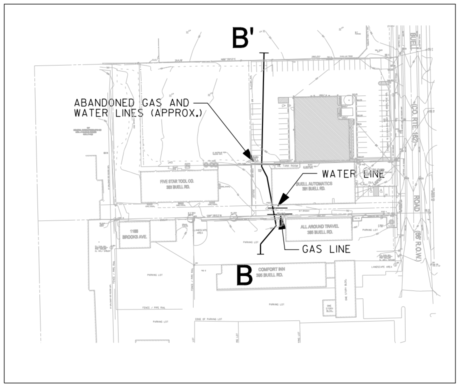
Title

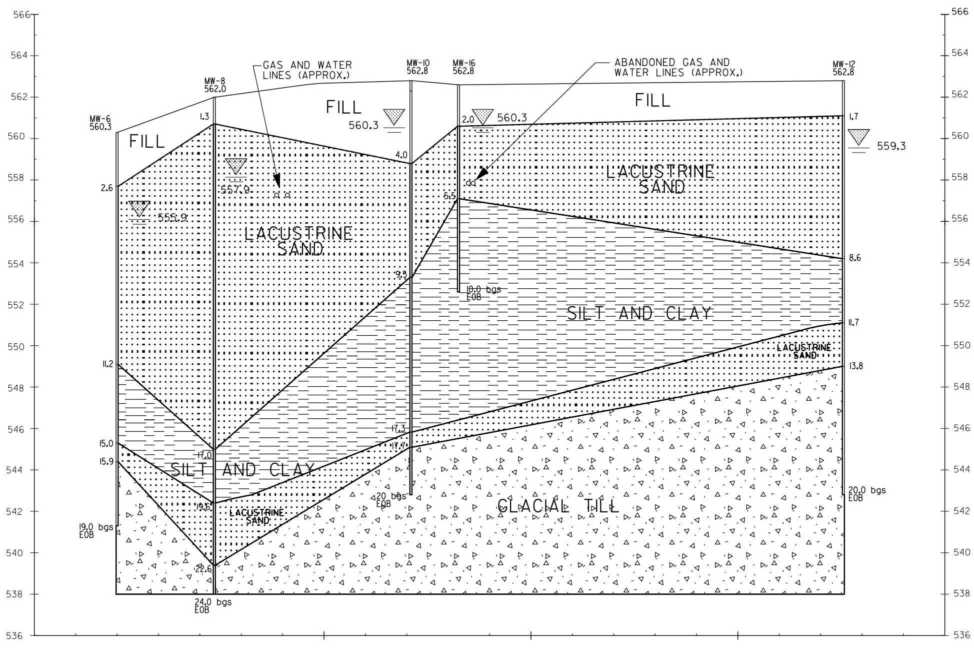
CROSS-SECTION A-A'

Project No.	Scale
190500033	AS SHOWN

Drawing No.	Sheet	Revision
FIGURE 6	of	



KEY MAP



B

B'

SECTION B-B
SCALE 1"=30' HORIZONTAL.
1"=3' VERTICAL

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$cfgnfile$ $date$ U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 7REV_Cross section B-B.dgn

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FILL

LACUSTRINE SAND

SILT AND CLAY

GLACIAL TILL

557.9 WATER ELEVATION MEASURED ON MAY 2, 2006

Notes

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CROSS-SECTION B-B'

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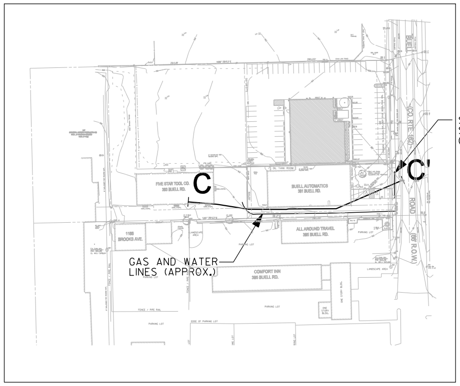
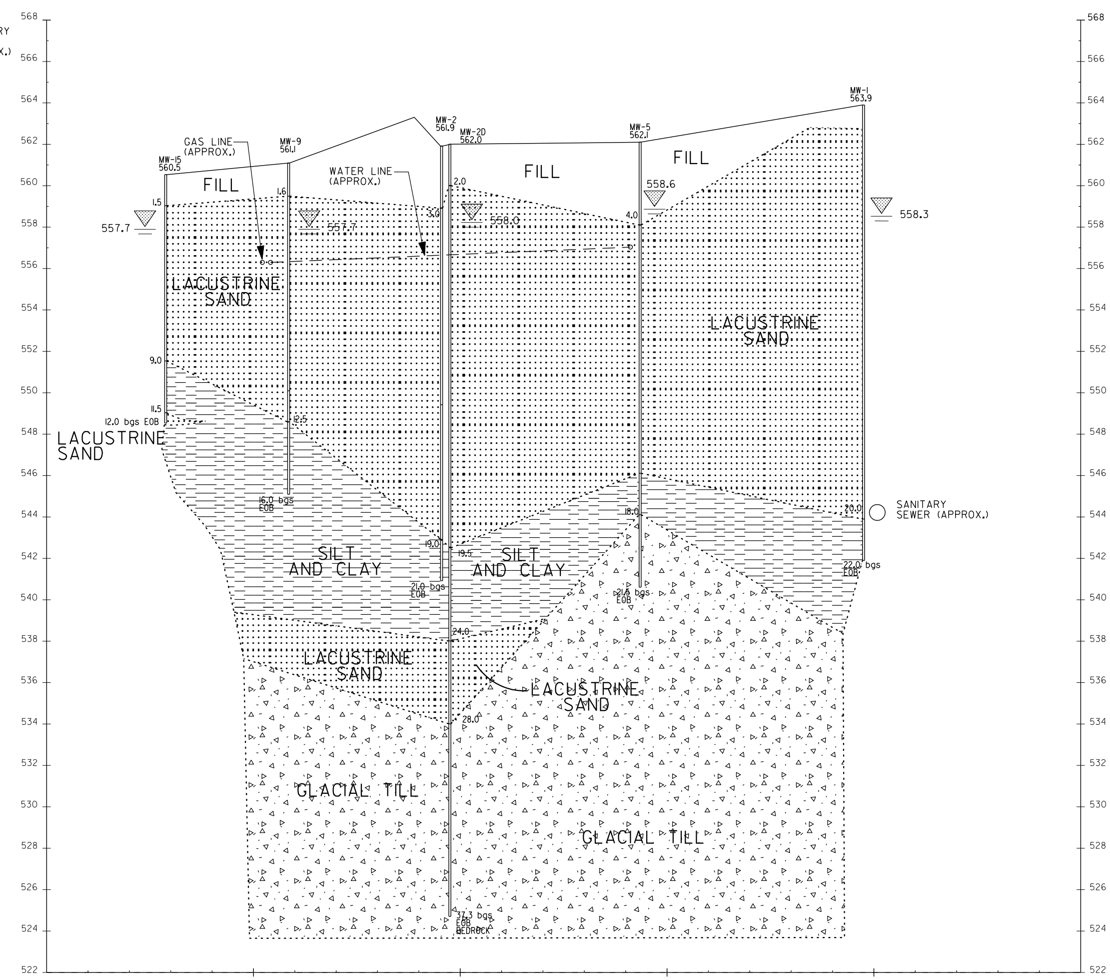
FIGURE 7	of	



KEY MAP

NOTE: GEOLOGICAL INFORMATION FROM LOG OF PRE-EXISTING MONITORING WELL MW-2 NOT SHOWN.



C

C'

SECTION C-C
SCALE 1"=30' HORIZONTAL.
1"=3' VERTICAL

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$signfile$ $date$ U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 8REV_Cross section C-C.dgn

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CROSS-SECTION C-C'

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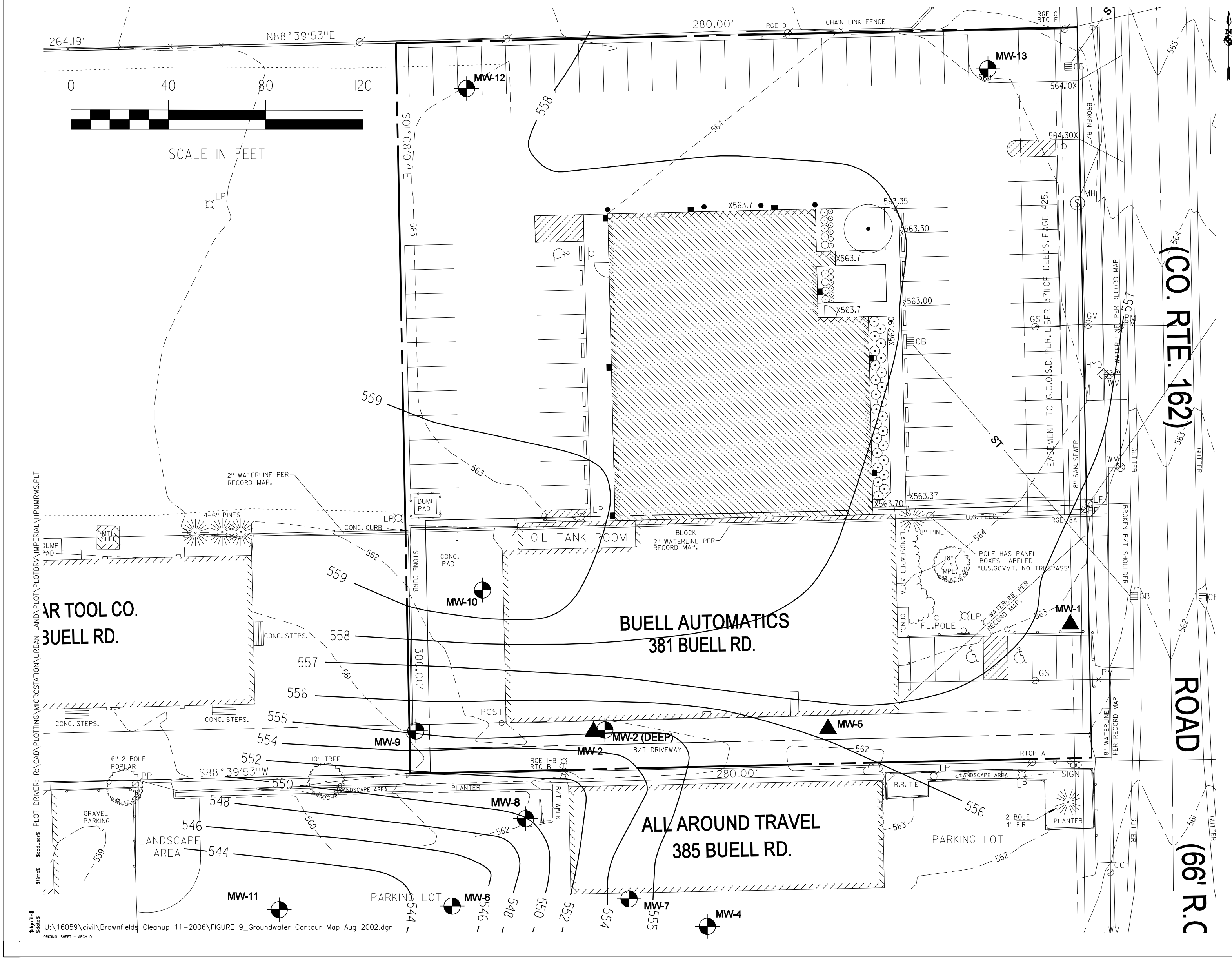
FIGURE 8	of	



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MW-5 ▲ PRE-EXISTING MONITORING WELL

MW-11 RI MONITORING WELL

557 GROUNDWATER CONTOUR

Notes

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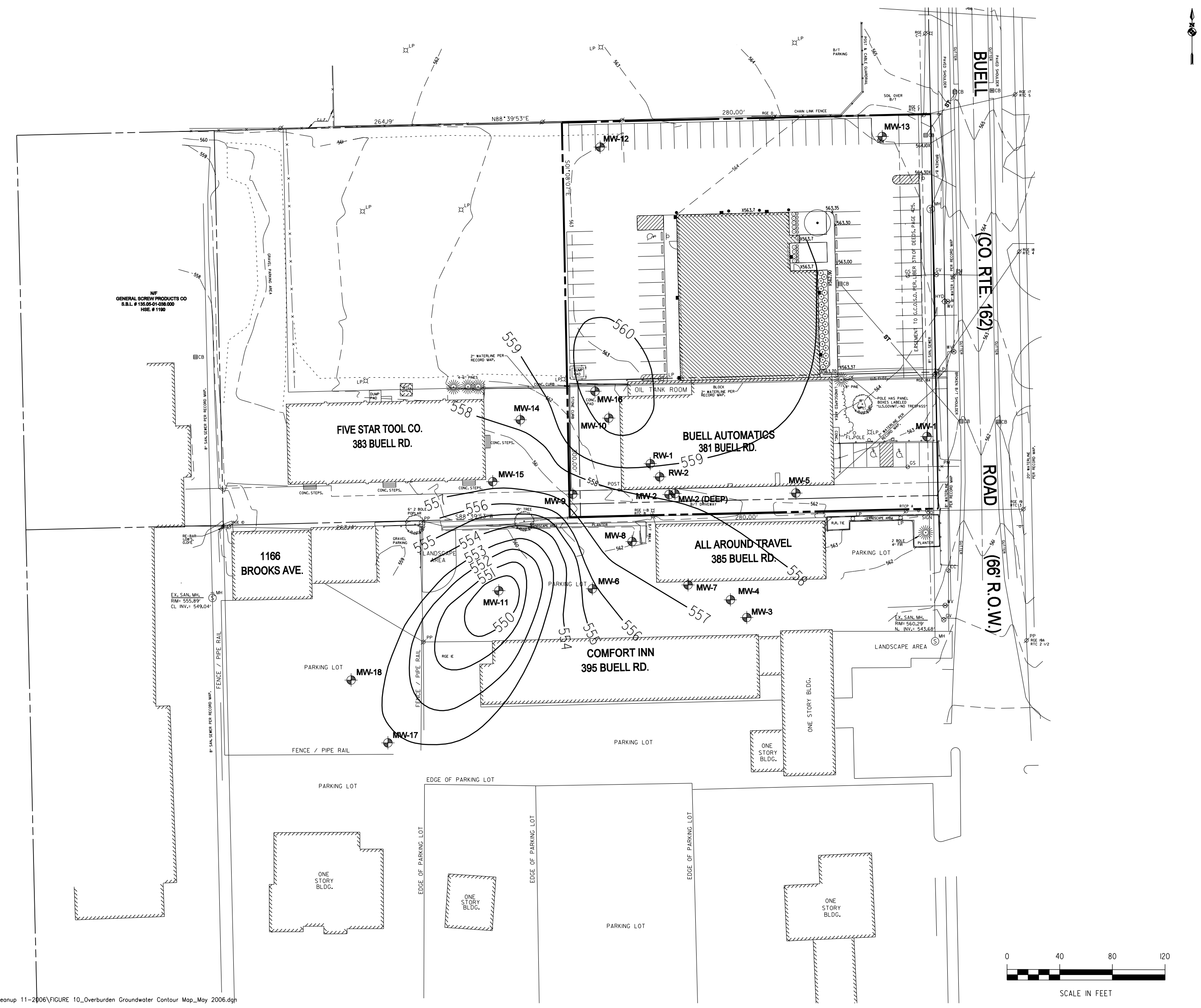
REMEDIAL INVESTIGATION

Title
GROUNDWATER
CONTOUR MAP - AUGUST 2002

Project No.	Scale	
190500033	AS SHOWN	
Drawing No.	**Sheet**	**Revision**
FIGURE 9	of	



U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 10_Overburden Groundwater Contour Map_May 2006.dgn

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MW-II MONITORING WELL

557 GROUNDWATER CONTOUR

Notes

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REMEDIAL INVESTIGATION

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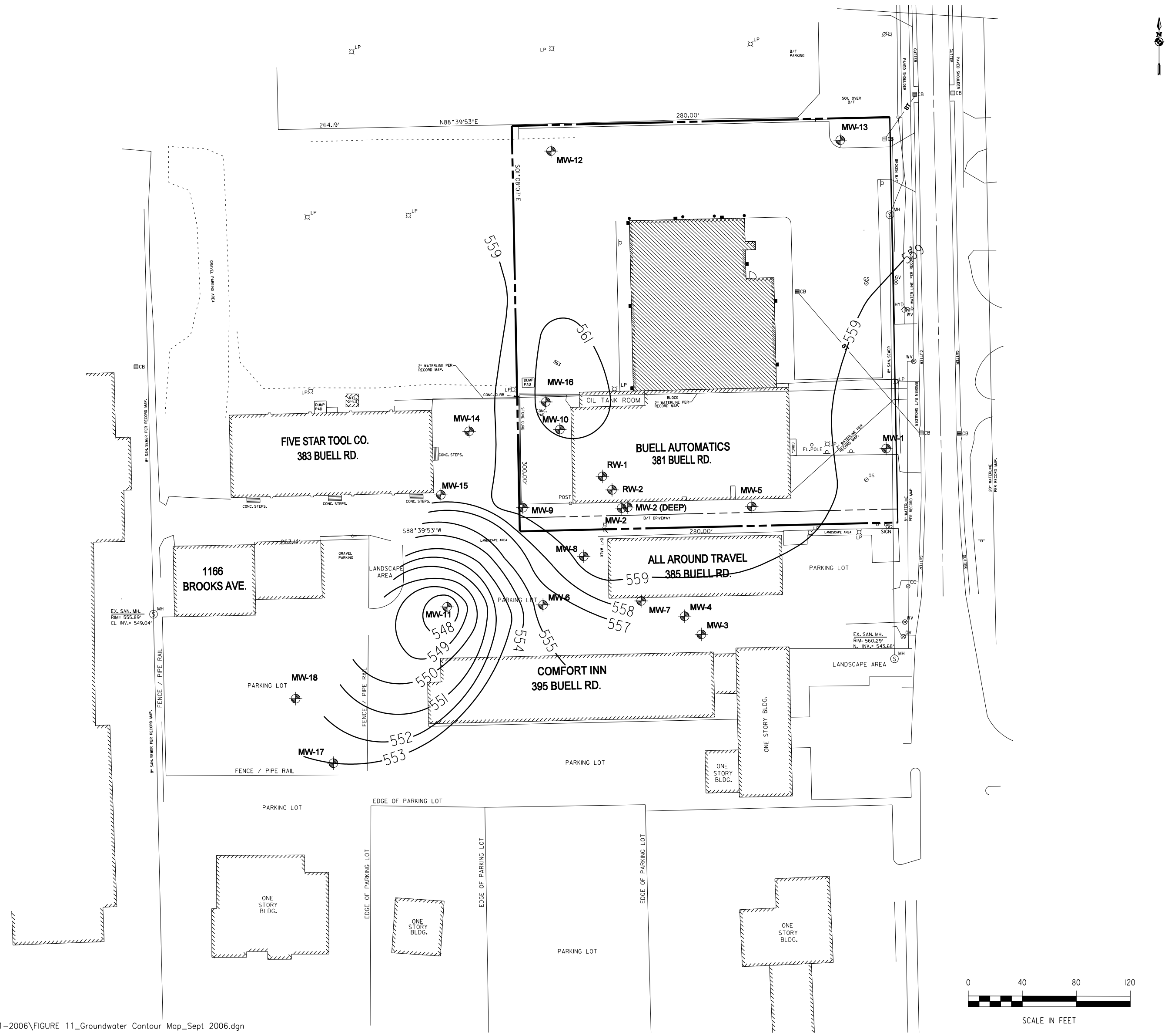
GROUNDWATER CONTOUR MAP - MAY 2006

Project No. 190500033 **Scale** AS SHOWN

Drawing No. FIGURE 10 **Sheet** of **Revision**



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U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 11_Groundwater Contour Map_Sept 2006.dgn

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MW-II EXISTING MONITORING WELL

560 WATER LEVEL CONTOURS

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GROUNDWATER
CONTOUR MAP - SEPT. 2006

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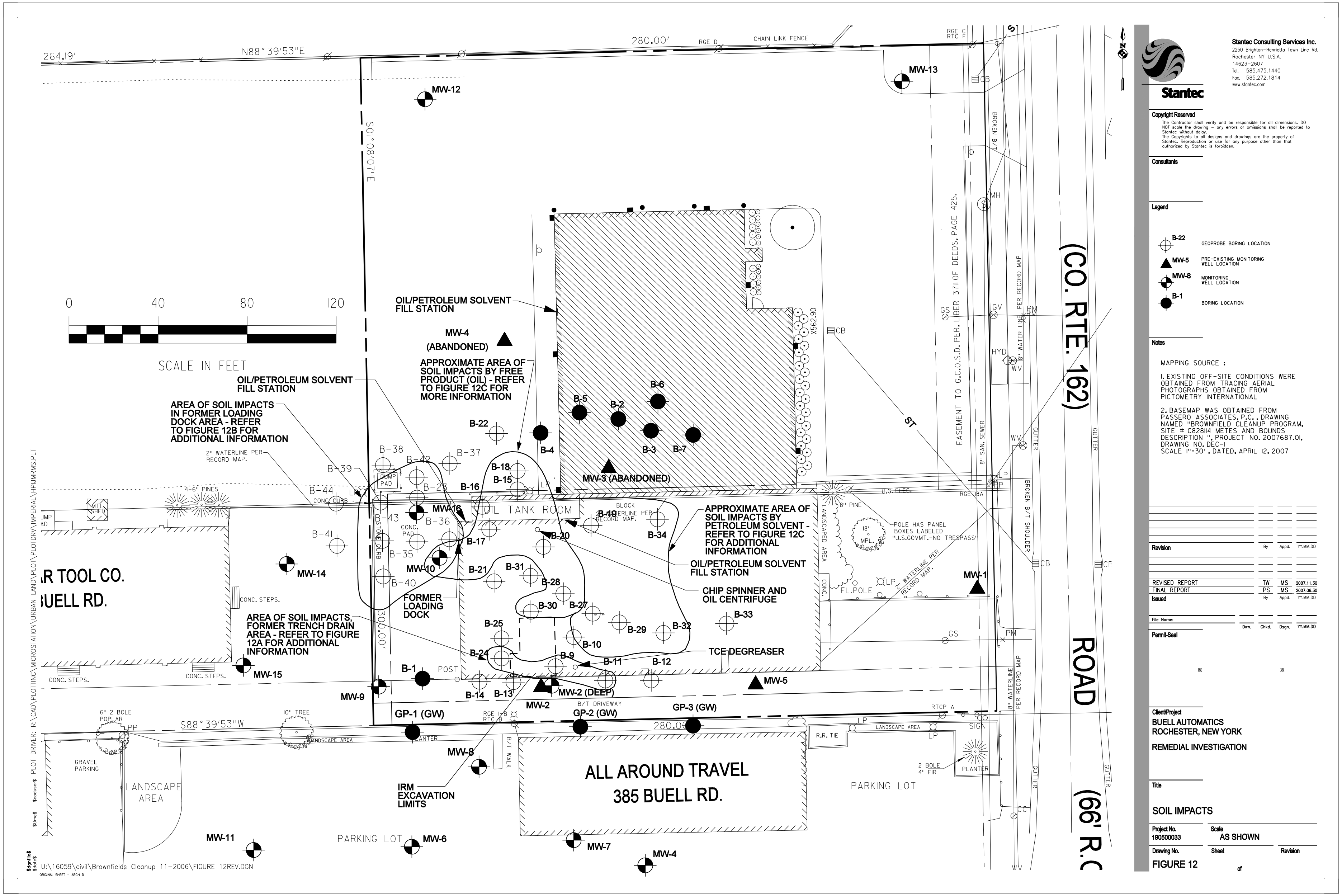
Drawing No.	Sheet	Revision
FIGURE 11	of	



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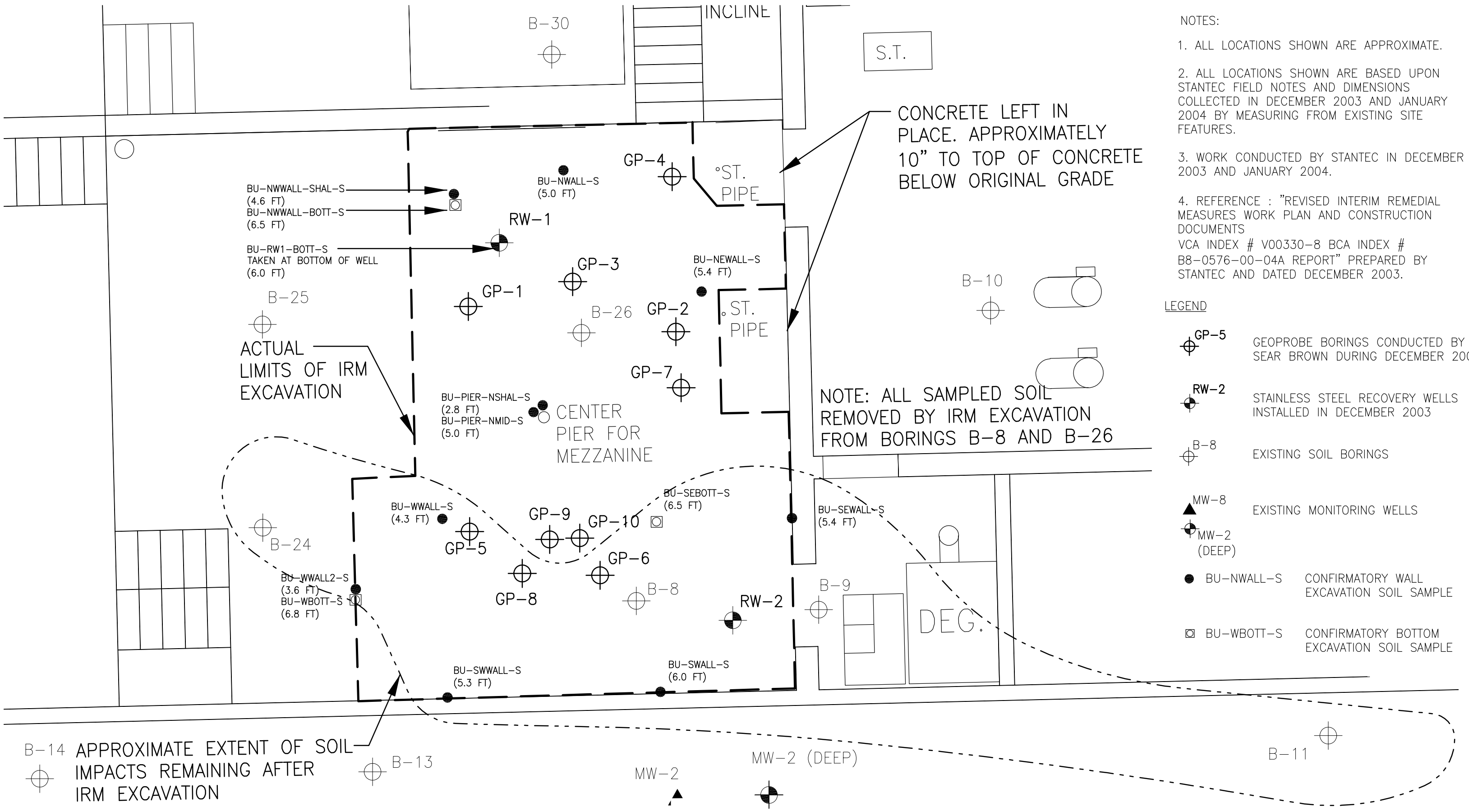
B-22 GEOPROBE BORING LOCATION
MW-5 PRE-EXISTING MONITORING WELL LOCATION
MW-8 MONITORING WELL LOCATION
B-1 BORING LOCATION
Notes
MAPPING SOURCE :
1. EXISTING OFF-SITE CONDITIONS WERE OBTAINED FROM TRACING AERIAL PHOTOGRAPHS OBTAINED FROM PICTOMETRY INTERNATIONAL
2. BASEMAP WAS OBTAINED FROM PASSERO ASSOCIATES, P.C., DRAWING NAMED "BROWNFIELD CLEANUP PROGRAM, SITE # C828114 METES AND BOUNDS DESCRIPTION", PROJECT NO. 2007687.01, DRAWING NO. DEC-1 SCALE 1"=30', DATED, APRIL 12, 2007
Revision By Appd. YY.MM.DD
REVISED REPORT TW MS 2007.11.30
FINAL REPORT PS MS 2007.06.30
Issued By Appd. YY.MM.DD
File Name:
Dwn. Chkd. Dsgn. YY.MM.DD
Permit-Seal
Client/Project
BUELL AUTOMATICS
ROCHESTER, NEW YORK
REMEDIAL INVESTIGATION
Title
SOIL IMPACTS
Project No. 190500033
Scale AS SHOWN
Drawing No. FIGURE 12
Sheet of
Revision
0 40 80 120
SCALE IN FEET
264.19'
N88°39'53"E
280.00'
CHAIN LINK FENCE
S01°08'07"E
S88°39'53"W
(CO. RTE. 162)
ROAD
(66' R.O.
EASEMENT TO G.C.O.S.D. PER. LIBER 3711 OF DEEDS, PAGE 425.
OIL/PETROLEUM SOLVENT FILL STATION
MW-4 (ABANDONED)
APPROXIMATE AREA OF SOIL IMPACTS BY FREE PRODUCT (OIL) - REFER TO FIGURE 12C FOR MORE INFORMATION
AREA OF SOIL IMPACTS IN FORMER LOADING DOCK AREA - REFER TO FIGURE 12B FOR ADDITIONAL INFORMATION
APPROXIMATE AREA OF SOIL IMPACTS BY PETROLEUM SOLVENT - REFER TO FIGURE 12C FOR ADDITIONAL INFORMATION
CHIP SPINNER AND OIL CENTRIFUGE
TCE DEGREASER
AREA OF SOIL IMPACTS, FORMER TRENCH DRAIN AREA - REFER TO FIGURE 12A FOR ADDITIONAL INFORMATION
FORMER LOADING DOCK
IRM EXCAVATION LIMITS
OIL TANK ROOM
MW-3 (ABANDONED)
MW-2 (DEEP)
GP-1 (GW)
GP-2 (GW)
GP-3 (GW)
AR TOOL CO.
BUELL RD.
ALL AROUND TRAVEL
385 BUELL RD.
PARKING LOT
LANDSCAPE AREA
GRAVEL PARKING
CONC. STEPS.
POLE HAS PANEL BOXES LABELED "U.S.GOVMT.-NO TRESPASS"
MW-1 MW-2 MW-4 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10 MW-11 MW-12 MW-13 MW-14 MW-15 MW-16
U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 12REV.DGN



NOTES:

1. ALL LOCATIONS SHOWN ARE APPROXIMATE.
2. ALL LOCATIONS SHOWN ARE BASED UPON STANTEC FIELD NOTES AND DIMENSIONS COLLECTED IN DECEMBER 2003 AND JANUARY 2004 BY MEASURING FROM EXISTING SITE FEATURES.
3. WORK CONDUCTED BY STANTEC IN DECEMBER 2003 AND JANUARY 2004.
4. REFERENCE : "REVISED INTERIM REMEDIAL MEASURES WORK PLAN AND CONSTRUCTION DOCUMENTS VCA INDEX # V00330-8 BCA INDEX # B8-0576-00-04A REPORT" PREPARED BY STANTEC AND DATED DECEMBER 2003.

LEGEND

- GP-5 — GEOPROBE BORINGS CONDUCTED BY SEAR BROWN DURING DECEMBER 2003
- RW-2 — STAINLESS STEEL RECOVERY WELLS INSTALLED IN DECEMBER 2003
- B-8 — EXISTING SOIL BORINGS
- MW-8, MW-2 (DEEP) — EXISTING MONITORING WELLS
- BU-NWALL-S — CONFIRMATORY WALL EXCAVATION SOIL SAMPLE
- BU-WBOTT-S — CONFIRMATORY BOTTOM EXCAVATION SOIL SAMPLE

Summary of Exceedances of SCOs and Field Observations of Contaminant Impacts in Soil - Former Trench Drain IRM Excavation Area

Boring No. / Sample Date	Part 375 SCOs[1] Industrial	Part 375 SCOs[1] GW Prot.	MW-2D 08/05/02	B9 08/12/02	B10 08/12/02	B11 08/08/02	B13 08/08/02	B24 05/03/03	B25 05/03/03	B30 05/03/03	GP-1 12/24/03	GP-2 12/24/03
Laboratory analysis results for soil remaining after IRM			8.0 - 10.0 ft.	5.0 - 6.5 ft.	3.0 - 3.7 ft.	7.5 - 8.0 ft.	3.0 - 3.8 ft.	5.5 - 6.0 ft.	5.5 - 6.0 ft.	3.5 - 4.0 ft.	12.0-13.7 ft.	Not sampled for lab analysis
VOCs (ppb)												
Acetone	1,000,000	50	12 U	1,500 U	1,500 U	**58** J	**57** J	12 U	21	**85** J	6 J	
cis-1,2-Dichloroethene	1,000,000	250	190	**1,200** J	1,500 U	**480**	60 U	**360** D	2 J	24 U	6 U	
Tetrachloroethene	300,000	1,300	12 U	1,500 U	1,500 U	60 U	60 U	12 U	12 U	24 U	6 U	
1,1,1-Trichloroethane	1,000,000	680	12 U	1,500 U	1,500 U	60 U	60 U	12 J	12 U	24 U	6 U	
Trichloroethene	400,000	470	12 U	1,500 U	1,500 U	38 J	60 U	84 D	3 J	24 U	6 U	
Vinyl Chloride	27,000	20	12 U	1,500 U	1,500 U	**140**	60 U	12	12 U	24 U	6 U	
Total VOC TICs	--	--	0	198,700	114,600	128,700	12,530	0	0	7,270	0	
SVOCs (ppb)								NA	NA	NA	NA	
Total SVOC Target Compounds	--	--	47	5,650	740	860	41					
Total SVOC TICs	--	--	1,617	345,810	191,100	37,870	2,830					
Field observations for soil remaining after IRM												
PID readings greater than 100 ppm	--	--	None	223 @ 6.0 ft.	118 @ 2.5 ft. 163 @ 3.5 ft.	None	None	None	None	None	None	None
Oil noted	--	--	None	None	None	None	None	None	None	4.8 - 8 (traces)	None	None
Product sheen noted	--	--	None	4.5-6.5 ft. (trace)	None	None	None	None	None	None	9.7 - 13.7 ft.	None
Odors noted	--	--	None	4.5 - 6.5 ft.	0.5 - 3.8 ft.	6.0 ft.	None	None	None	4.0 - 4.8 ft.	9.7 - 13.7 (slight)	None

Boring No. / Sample Date	GP-3 12/24/03	GP-4 12/24/03	GP-5 12/31/03	GP-5 12/31/03	GP-5 12/31/03	GP-6 12/31/03	GP-7 12/31/03	GP-8 12/31/03	GP-9 12/31/03	GP-10 12/31/03	RW-1 12/30/03	RW-1 12/30/03
Laboratory analysis results for soil remaining after IRM	8.0-9.3 ft.	Not sampled for lab analysis	9.0-9.5 ft.	12.0-12.6 ft.	14.0-14.5 ft. (DEC sample)	10.0-10.6 ft.	Not sampled for lab analysis	7.5-8.0 ft.	Not sampled for lab analysis	19.8-20.0 ft.	6.0 ft	6.0 ft (DEC sample)
VOCs (ppb)												
Acetone	29 J		28,000 U	6 J	6 J	5 J		1,500 U		12	15	32
cis-1,2-Dichloroethene	29 U		28,000 U	12 U	12 U	12 U		**1,600**		19	7 J	7 J
Tetrachloroethene	29 U		28,000 U	12 U	12 U	12 U		**2,000**		11 U	12 U	13 U
1,1,1-Trichloroethane	29 U		**3,800** J	12 U	12 U	12 U		**4,100**		11 U	12 U	13 U
Trichloroethene	8 J		**350,000**	32	12 U	12 U		**320,000** D		20	61	25
Vinyl Chloride	29 U		28,000 U	12 U	12 U	12 J		1,500 U		11 U	5 J	13 U
Total VOC TICs	13,320		49,000	9	0	0		58,700		0	1,008	1,069
SVOCs (ppb)	NA		NA	NA	NA	NA		NA		NA	NA	NA
Field observations for soil remaining after IRM												
PID readings greater than 100 ppm	None	None	193 to 8,000 from 6.6 to 11 ft.			755 to 2480, 5.0 to 7.5 ft.	None	None	None	None	Not measured	
Oil noted	None	None	None			None	None	None	None	None	--	
Product sheen noted	to 9.3 ft.	None	9.0 - 9.6 ft. (trace)			5.0-7.5 ft.(trace)	7.0 (trace)	6.0 ft.	None	None	--	
Odors noted	None	None	9.0 - 9.6 ft.			None	None	None	None	None	--	

Post-excavation Sample Name / Sample Depth (ft.)	Part 375 SCOs[1] Industrial	Part 375 SCOs[1] GW Prot.	Sidewall Samples: BU-SWALL-S 6.0	D323 01 South Wall 5.0-6.0 (DEC Sample)	D323 01 South Wall 5.0-6.0 (DEC Sample DL)	BU-SEWALL-S 5.4	BU-SWWALL-S 5.3	BU-WWALL-S	BU-NWWALL-SHAL-S 4.6	D323 03 N Side Seep 5.0 (DEC Sample)	BU-NWALL-S 5.0	BU-NWALL-S 5.0 (Duplicate)
Laboratory analysis results for soil remaining after IRM												
Acetone	1,000,000	50	21	46 J	1,500 U	7,400 U	1,500 U	(Soil removed during IRM Excavation)	29	10 J	**79**	34
1,1-Dichloroethane	480,000	270	12 U	60 U	1,500 U	**880** J	1,500 U		22 J	25 U	26 U	27 U
cis-1,2-Dichloroethene	1,000,000	250	11 J	230	1,500 U	**150,000**	**1,100** J		89	12 J	26 U	27 U
Ethylbenzene	780,000	1,000	12 U	65	1,500 U	940 J	1,500 U		26 U	25 U	26 U	27 U
Tetrachloroethene	300,000	1,300	12 U	77	1,500 U	7,400 U	1,500 U		26 U	25 U	26 U	27 U
Toluene	1,000,000	700	12 U	11 J	1,500 U	7,400 U	1,500 U		26 U	25 U	26 U	27 U
1,1,1-Trichloroethane	1,000,000	680	12 U	44 J	1,500 U	**6,500** J	1,500 U		26 U	25 U	26 U	27 U
Trichloroethene	400,000	470	24	**2,800** E	**1,700** D	**110,000** J	**5,300** J		26 U	78	26 U	27 U
Vinyl Chloride	27,000	20	12 U	60 U	1,500 U	**3,000** J	1,500 U		**65**	25 U	26 U	27 U
o-Xylene	1,000,000	1,600	2 J	100	1,500 U	**2,000** J	1,500 U		26 U	25 U	26 U	27 U
m/p-Xylenes	1,000,000	1,600	2 J	86	1,500 U	**2,300** J	1,500 U		26 U	25 U	26 U	27 U
Total VOC TICs	--	--	5,460	80,500	154,700	623,000 D	5,410		3,460	2,206	2,361	2,301
Field observations for soil remaining after IRM: PID readings (ppm)	--	--	350			560	460		5.1		4.7	3.4

Post-excavation Sample Name / Sample Depth (ft.)	Sidewall Samples: D323 04 N Sidewall 5.0 (DEC Sample)	BU-NEWALL-S 5.4	BU-WWALL2-S 3.6	D323 05 W Sidewall Added Area (DEC Sample)	Bottom Samples: BU-SEBOTT-S 6.5	D323 02 South End Bott of Exc (DEC Sample)	D323 02 South End Bott of Exc (DEC Sample DL)	BU-NWWALL-BOTT-S 6.5	BU-WBOTT-S 6.8	D323 06 W Side Bott Added Area (DEC Sample)	Pier Samples: BU-PIER-NSHAL-S 2.8	BU-PIER-NMID-S 5.0
Acetone	30 J	**84** J	18 J	40	7,400 U	6,000 U	7,400 U	53	8 J	5 J	1,500 UJ	1,500 UJ
1,1-Dichloroethane	66 U	62 U	4 J	12 U	**1,400** J	**1,200** J	**1,000** JD	10 J	25 U	12 U	1,500 UJ	1,500 UJ
cis-1,2-Dichloroethene	46 J	17 J	**270**	8 J	**190,000**	**150,000** E	**140,000** D	5 J	57	7 J	**1,700**	**2,000**
Ethylbenzene	66 U	62 U	23 U	12 U	**1,900** J	**1,800** J	**1,500** JD	24 U	25 U	12 U	1,500 UJ	1,500 UJ
Tetrachloroethene	66 U	62 U	23 U	12 U	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	540 J	1,500 UJ
Toluene	66 U	62 U	23 U	12 U	**840** J	**730** J	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ
1,1,1-Trichloroethane	7 J	62 U	23 U	12 U	**7,100** J	**7,700**	**7,600** D	24 U	25 U	12 U	450 J	1,500 UJ
Trichloroethene	29 J	240 J	280	24	7,400 U	**1,500** J	**1,100** JD	9 J	100	8 J	**140,000**	390 J
Vinyl Chloride	66 U	62 U	23 U	12 U	**5,100** J	6,000 U	7,400 U	11 J	25 U	12 U	1,500 UJ	1,500 UJ
o-Xylene	10 J	69 J	23 U	12 U	**3,500** J	**3,900** J	**3,400** JD	24 U	25 U	12 U	1,500 UJ	380 J
m/p-Xylenes	66 U	40 J	23 U	12 U	**4,000** J	**4,400** J	**3,700** JD	24 U	25 U	12 U	1,500 UJ	450 J
Total VOC TICs	8,150	58,300	13	7	820,000	852,000	1,208,000	3,760	49	0	26,400	147,300
PID readings (ppm)		21.7	37.0		600			5.5	6.8		79.4	42.8

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All laboratory analysis results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
Bold-faced values are concentrations that exceed Subpart 375.6 soil cleanup objectives for Protection of Groundwater.
"D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
"J" indicates an estimated value.
"U" indicates that the analyte was analyzed but not detected.
"E" indicates that the analyte concentration exceeded the calibration range of the instrument for that specific analysis.
3. All field PID readings are expressed in parts per million (ppm).

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Notes

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD
REVISED RI REPORT			2007.11.30

File Name: FIGURE 12A - IRM Soil Boring Locations.dwg | Dwn. | Chkd. | Dsgn. | YY.MM.DD

Permit-Seal

Client/Project
BUELL AUTOMATICS
ROCHESTER, NEW YORK

REMEDIAL INVESTIGATION

Title
SOIL IMPACTS
FORMER TRENCH DRAIN AREA

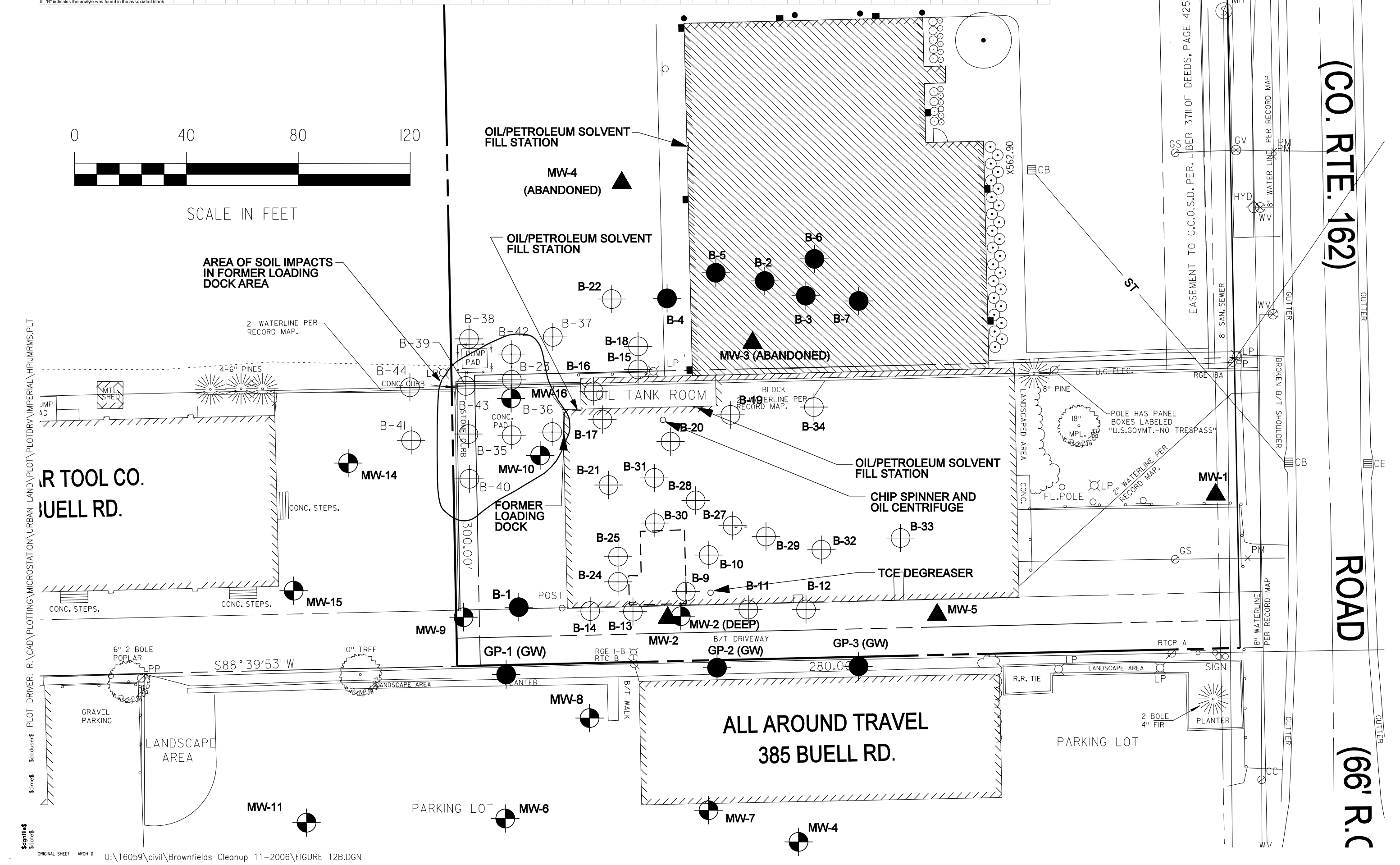
Project No. 190500033
Scale AS SHOWN
Drawing No. FIGURE 12A
Sheet of
Revision

Summary of Exceedances of SCOs and Field Observations of Contaminant Impacts in Soil - Former Loading Dock Area

		Boring No.	MW-10	MW-16			B16	B17	B21	B23	B35		
		Sample Date	08/05/02	11/22/06			08/09/02	08/09/02	05/03/03	05/05/03	09/20/05		
	Part 375 SCOs [1]												
Laboratory analysis results	Industrial	GW Prot.	8.0 - 10.0 ft.	0.5-2.0 ft.	0.5-2.0 ft.Dup	9.0 - 10.0 ft.	6.0 - 6.5 ft.	4.5 - 5.0 ft.	4.5 - 5.0 ft.	1.0 - 2.0 ft.	2.0-3.0 ft.	2.0-3.0 ft. Dup	7.0-8.0 ft.
VOCs (ppb)													
Acetone	1,000,000	50	11 U	**82**	1,500 U	6.0 J	12 J	**64**	**59**	1,500 U	1,500 U	1,500 U	13
1,1-Dichloroethane	480,000	270	45	59 U	**580** J	11 U	13 U	47 J	8 J	**2,400**	1,500 U	**930** J	17
1,1-Dichloroethene	1,000,000	330	5 J	59 U	**650** J	11 U	13 U	61 U	25 U	1,500 U	**480** J	82 J	0.5 J
trans-1,2-Dichloroethene	1,000,000	190	11 U	3 J	**470** J	11 U	13 U	61 U	25 U	1,500 U	81 J	160 J	11 U
cis-1,2-Dichloroethene	1,000,000	250	**890** D	**960**	**42,000** D	26	13 U	61 U	230	**84,000** D	**10,000**	**17,000**	170
1,1,1-Trichloroethane	1,000,000	680	4 J	340	**48,000** D	11 U	13 U	61 U	25 U	**67,000** D	**16,000**	**19,000**	12
Trichloroethene	400,000	470	**440** D	**530**	**290,000** D	29	13 U	61 U	25 U	**820,000** D	1,400 U	1,400 U	51
Vinyl Chloride	27,000	20	**28**	59 U	1,500 U	11 U	13 U	61 U	25 U	1,500 U	1,500 U	1,500 U	11 U
Total VOC TICs	--	--	71	1,831	39,900	65.5	5,530	12,150	6,000	12,500	170,600	148,500	0
SVOCs (ppb)				NA	NA	NA			NA	NA	NA	NA	NA
Total SVOC Target Compounds	--	--	3,800 U				77	1,390					
Total SVOC TICs	--	--	139,500				30,810	136,300					
Field observations													
PID readings greater than 100 ppm	--	--	None	1600 @ 0.5 ft.			None	None	None	160 @ 2.0 ft. 109 @ 3.5 ft.	405 @ 2.5 ft. 115 @ 3.5 ft.		
Oil or product sheen noted	--	--	None	None			5.2 - 7.0 ft.	0.5 - 7.0 ft.	4.5 - 5.0 ft.	2.5 - 3.5 ft.	None		
Odors noted	--	--	0.5 - 4.0 ft.	0.5 - 2.0 ft.			5.2 - 7.0 ft.	0.5 - 5.0 ft.	1.2 - 1.5 ft.	0.5 - 3.5 ft.	None		

Boring No.	B36		B39			B40			B42			B43		
Sample Date	09/20/05		09/20/05			09/20/05			09/20/05			09/20/05		
Laboratory analysis results	7.0-8.0 ft.	9.0-10.0 ft.	2.5-3.0 ft.	2.5-3.0 ft. DL	6.0-7.0 ft.	6.5-7.0 ft.	6.5-7.0 ft. DL	7.5-8.0 ft.	3.5-4.0 ft.	3.5-4.0 ft. DL	7.0-8.0 ft.	3.0-4.0 ft.	3.0-4.0 ft. DL	7.0-8.0 ft.
VOCs (ppb)														
Acetone	1,500 U	1,500 U	**62**	1,500 U	18	25 J	1,600 U	60 U	19	23 JD	1,500 U	8 J	16 JD	1,500 U
1,1-Dichloroethane	1,500 U	1,500 U	48 J	1,500 U	11 U	240	190 JD	8 J	32	37 JD	170 J	28	25 JD	1,500 U
1,1-Dichloroethene	1,500 U	1,500 U	5 J	1,500 U	11 U	33 J	1,600 U	60 U	3 J	4 JD	1,500 U	2 J	61 U	1,500 U
trans-1,2-Dichloroethene	1,500 U	1,500 U	14 J	1,500 U	11 U	13 J	1,600 U	60 U	3 J	62 U	1,500 U	4 J	61 U	1,500 U
cis-1,2-Dichloroethene	**1,700**	**1,900**	**3,100** E	**3,300** D	22	**7,500** E	**8,300** D	**580**	**820** E	**980** D	1,500 U	**800** E	**790** D	**2,200**
1,1,1-Trichloroethane	**16,000**	1,500 U	200	1,500 U	11 U	220	1,600 U	60 U	12 U	62 U	170 J	12 U	61 U	1,500 U
Trichloroethene	**1,800**	**3,400**	61 U	1,500 U	11 U	**900**	**590** JD	81	3 J	4 JD	**3,400**	2 J	61 U	230 J
Vinyl Chloride	1,500 U	1,500 U	61 U	1,500 U	11 U	11 J	1,600 U	60 U	7 J	6 JD	1,500 U	**45**	**25** JD	1,500 U
Total VOC TICs	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SVOCs (ppb)			NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	
Total SVOC Target Compounds	400 U	490										72		46
Total SVOC TICs	NA	NA										NA		NA
Field observations														
PID readings greater than 100 ppm	125 @ 7.5 ft.		None			None			None			None		
Oil or product sheen noted	None		None			None			None			None		
Odors noted	None		None			None			None			None		

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are concentrations that exceed Subpart 375.6 soil cleanup objectives for Protection of Groundwater.
4. (4) = SCOs for total xylenes.
5. "NS" indicates no standard under part 375.6
6. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
7. "J" indicates an estimated value.
8. "U" indicates that the analyte was analyzed but not detected.
9. "B" indicates the analyte was found in the associated blank.



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Legend

B-22 GEOPROBE BORING LOCATION
MW-5 PRE-EXISTING MONITORING WELL LOCATION
MW-8 MONITORING WELL LOCATION
B-1 BORING LOCATION

Notes

MAPPING SOURCE :

1. EXISTING OFF-SITE CONDITIONS WERE OBTAINED FROM TRACING AERIAL PHOTOGRAPHS OBTAINED FROM PICTOMETRY INTERNATIONAL

2. BASEMAP WAS OBTAINED FROM PASSERO ASSOCIATES, P.C., DRAWING NAMED "BROWNFIELD CLEANUP PROGRAM, SITE # C828114 METES AND BOUNDS DESCRIPTION", PROJECT NO. 2007687.01, DRAWING NO. DEC-1 SCALE 1"=30', DATED, APRIL 12, 2007

Revision	By	Appd.	YY.MM.DD
REVISED REPORT	TW	MS	2007.11.30
FINAL REPORT	PS	MS	2007.06.30
Issued	By	Appd.	YY.MM.DD

File Name: | Dwn. | Chkd. | Dsgn. | YY.MM.DD

Permit-Seal

Client/Project
BUELL AUTOMATICS
ROCHESTER, NEW YORK
REMEDIAL INVESTIGATION

Title
SOIL IMPACTS
FORMER LOADING DOCK AREA

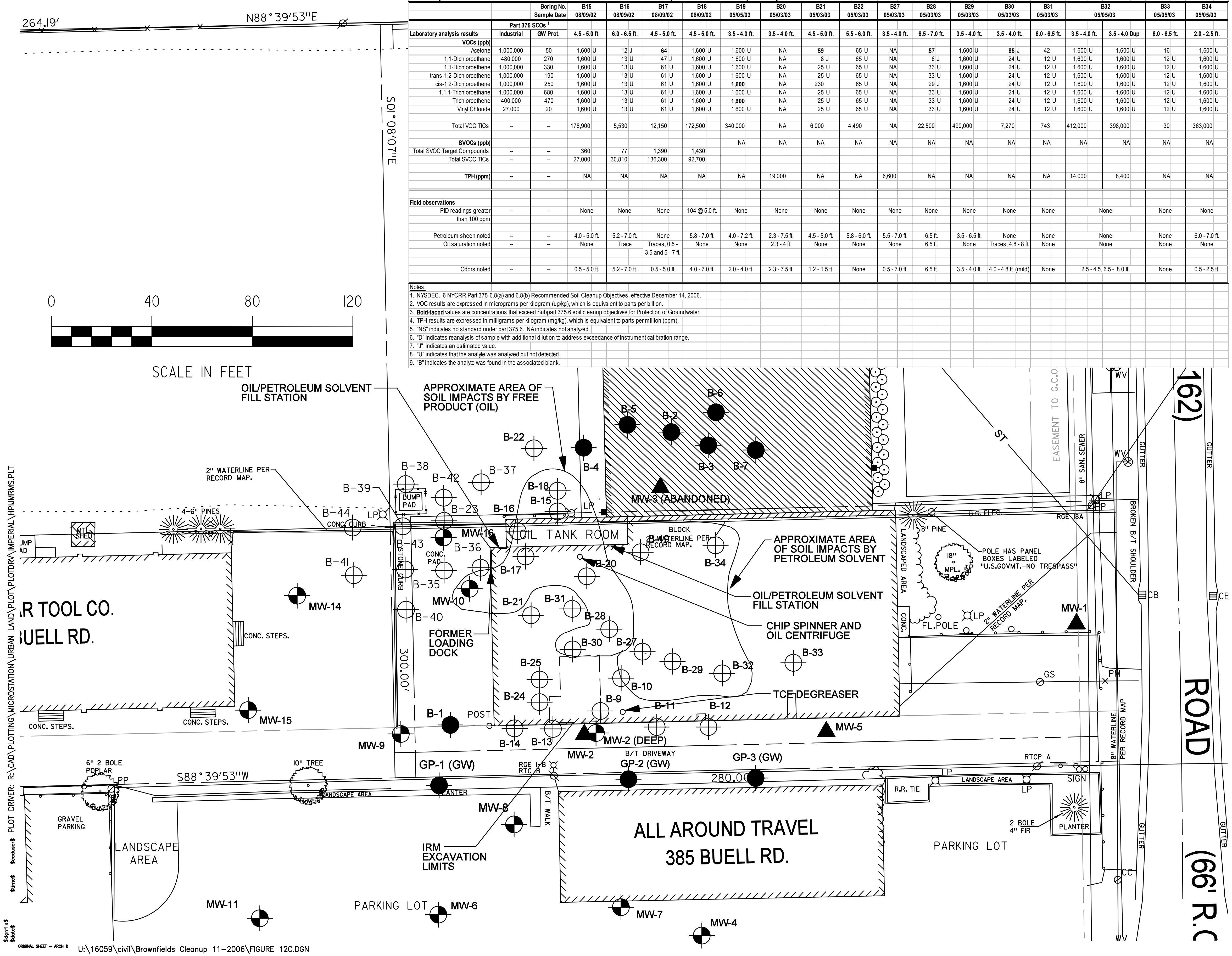
Project No. 190500033 | Scale AS SHOWN
Drawing No. FIGURE 12B | Sheet of | Revision

ORIGINAL SHEET - ARCH D   U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 12B.DGN

Summary of Exceedances of SCOs and Field Observations of Contaminant Impacts in Soil - Areas Impacted by Petroleum Solvents/Oils

Boring No.			B15	B16	B17	B18	B19	B20	B21	B22	B27	B28	B29	B30	B31	B32		B33	B34
Sample Date			08/09/02	08/09/02	08/09/02	08/09/02	05/05/03	05/03/03	05/03/03	05/03/03	05/03/03	05/03/03	05/03/03	05/03/03	05/03/03	05/05/03		05/05/03	05/05/03
	Part 375 SCOs [1]																		
Laboratory analysis results	Industrial	GW Prot.	4.5 - 5.0 ft.	6.0 - 6.5 ft.	4.5 - 5.0 ft.	4.5 - 5.0 ft.	3.5 - 4.0 ft.	3.5 - 4.0 ft.	4.5 - 5.0 ft.	5.5 - 6.0 ft.	3.5 - 4.0 ft.	6.5 - 7.0 ft.	3.5 - 4.0 ft.	3.5 - 4.0 ft.	6.0 - 6.5 ft.	3.5 - 4.0 ft.	3.5 - 4.0 Dup	6.0 - 6.5 ft.	2.0 - 2.5 ft.
VOCs (ppb)																			
Acetone	1,000,000	50	1,600 U	12 J	**64**	1,600 U	1,600 U	NA	**59**	65 U	NA	**57**	1,600 U	**85** J	42	1,600 U	1,600 U	16	1,600 U
1,1-Dichloroethane	480,000	270	1,600 U	13 U	47 J	1,600 U	1,600 U	NA	8 J	65 U	NA	6 J	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U
1,1-Dichloroethene	1,000,000	330	1,600 U	13 U	61 U	1,600 U	1,600 U	NA	25 U	65 U	NA	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U
trans-1,2-Dichloroethene	1,000,000	190	1,600 U	13 U	61 U	1,600 U	1,600 U	NA	25 U	65 U	NA	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U
cis-1,2-Dichloroethene	1,000,000	250	1,600 U	13 U	61 U	1,600 U	**1,600**	NA	230	65 U	NA	29 J	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U
1,1,1-Trichloroethane	1,000,000	680	1,600 U	13 U	61 U	1,600 U	1,600 U	NA	25 U	65 U	NA	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U
Trichloroethene	400,000	470	1,600 U	13 U	61 U	1,600 U	**1,900**	NA	25 U	65 U	NA	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U
Vinyl Chloride	27,000	20	1,600 U	13 U	61 U	1,600 U	1,600 U	NA	25 U	65 U	NA	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U
Total VOC TICs	--	--	178,900	5,530	12,150	172,500	340,000	NA	6,000	4,490	NA	22,500	490,000	7,270	743	412,000	398,000	30	363,000
SVOCs (ppb)							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total SVOC Target Compounds	--	--	360	77	1,390	1,430													
Total SVOC TICs	--	--	27,000	30,810	136,300	92,700													
TPH (ppm)	--	--	NA	NA	NA	NA	NA	19,000	NA	NA	6,600	NA	NA	NA	NA	14,000	8,400	NA	NA
Field observations																			
PID readings greater than 100 ppm	--	--	None	None	None	104 @ 5.0 ft.	None	None	None	None	None	None	None	None	None	None		None	None
Petroleum sheen noted	--	--	4.0 - 5.0 ft.	5.2 - 7.0 ft.	None	5.8 - 7.0 ft.	4.0 - 7.2 ft.	2.3 - 7.5 ft.	4.5 - 5.0 ft.	5.8 - 6.0 ft.	5.5 - 7.0 ft.	6.5 ft.	3.5 - 6.5 ft.	None	None	None		None	6.0 - 7.0 ft.
Oil saturation noted	--	--	None	Trace	Traces, 0.5 - 3.5 and 5 - 7 ft.	None	None	2.3 - 4 ft.	None	None	None	6.5 ft.	None	Traces, 4.8 - 8 ft.	None	None		None	None
Odors noted	--	--	0.5 - 5.0 ft.	5.2 - 7.0 ft.	0.5 - 5.0 ft.	4.0 - 7.0 ft.	2.0 - 4.0 ft.	2.3 - 7.5 ft.	1.2 - 1.5 ft.	None	0.5 - 7.0 ft.	6.5 ft.	3.5 - 4.0 ft.	4.0 - 4.8 ft. (mild)	None	2.5 - 4.5, 6.5 - 8.0 ft.		None	0.5 - 2.5 ft.

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. VOC results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are concentrations that exceed Subpart 375.6 soil cleanup objectives for Protection of Groundwater.
4. TPH results are expressed in milligrams per kilogram (mg/kg), which is equivalent to parts per million (ppm).
5. "NS" indicates no standard under part 375.6. NA indicates not analyzed.
6. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
7. "J" indicates an estimated value.
8. "U" indicates that the analyte was analyzed but not detected.
9. "B" indicates the analyte was found in the associated blank.



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Legend

B-22 GEOPROBE BORING LOCATION
MW-5 PRE-EXISTING MONITORING WELL LOCATION
MW-8 MONITORING WELL LOCATION
B-1 BORING LOCATION

Notes

MAPPING SOURCE :

1. EXISTING OFF-SITE CONDITIONS WERE OBTAINED FROM TRACING AERIAL PHOTOGRAPHS OBTAINED FROM PICTOMETRY INTERNATIONAL

2. BASEMAP WAS OBTAINED FROM PASSERO ASSOCIATES, P.C., DRAWING NAMED "BROWNFIELD CLEANUP PROGRAM, SITE # C828114 METES AND BOUNDS DESCRIPTION ", PROJECT NO. 2007687.01, DRAWING NO. DEC-1 SCALE 1"=30', DATED, APRIL 12, 2007

Revision	By	Appd.	YY.MM.DD
REVISED REPORT	TW	MS	2007.11.30
FINAL REPORT	PS	MS	2007.06.30
Issued	By	Appd.	YY.MM.DD

File Name: Dwn. Chkd. Dsgn. YY.MM.DD

Permit-Seal

Client/Project
BUELL AUTOMATICS
ROCHESTER, NEW YORK
REMEDIAL INVESTIGATION

Title
SOIL IMPACTS
PETROLEUM IMPACTS AREA

Project No.	Scale	
190500033	AS SHOWN	
Drawing No.	Sheet	Revision
FIGURE 12C	of	

PLOT DRIVER: R:\CAD\PLOTTING\MICROSTATION\URBAN LAND\PLOT\PLOTDRV\IMPERIAL\HPJUMRMS.PLT
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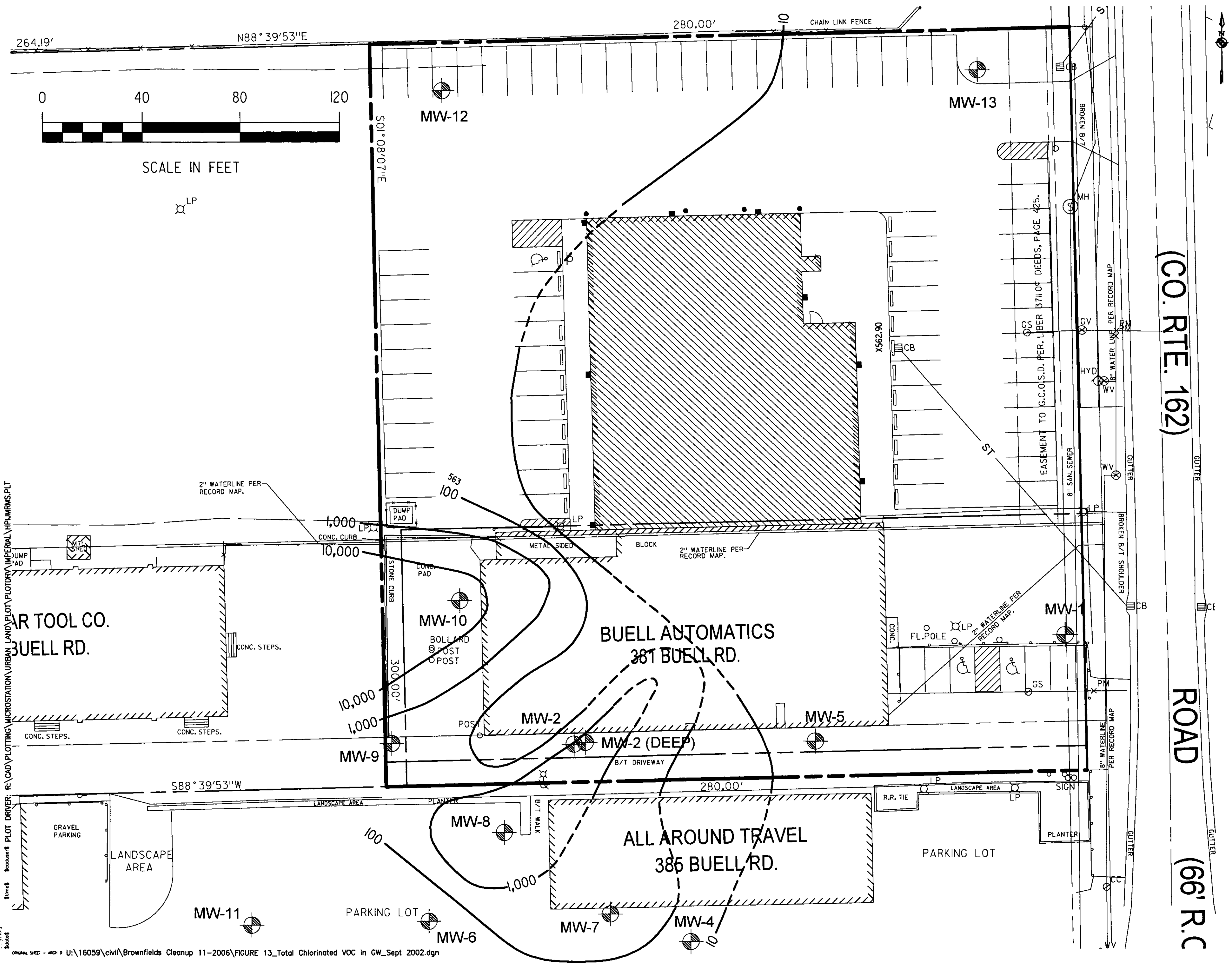
ORIGINAL SHEET - ARCH D U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 12C.DGN



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Legend

MW-1 EXISTING MONITORING WELL
MW-16 NEW MONITORING WELL
10,000 TOTAL CHLORINATED COMPOUNDS IN GROUNDWATER

Notes

MAPPING SOURCE :

1. EXISTING OFF-SITE CONDITIONS WERE OBTAINED FROM TRACING AERIAL PHOTOGRAPHS OBTAINED FROM PICTOMERTY INTERNATIONAL

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Revision	By	Appd.	YY.MM.DD
FINAL REPORT			
Issued	By	Appd.	YY.MM.DD

File Name: Dwn. Chkd. Dsgn. YY.MM.DD

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Client/Project
BUELL AUTOMATICS
ROCHESTER, NEW YORK

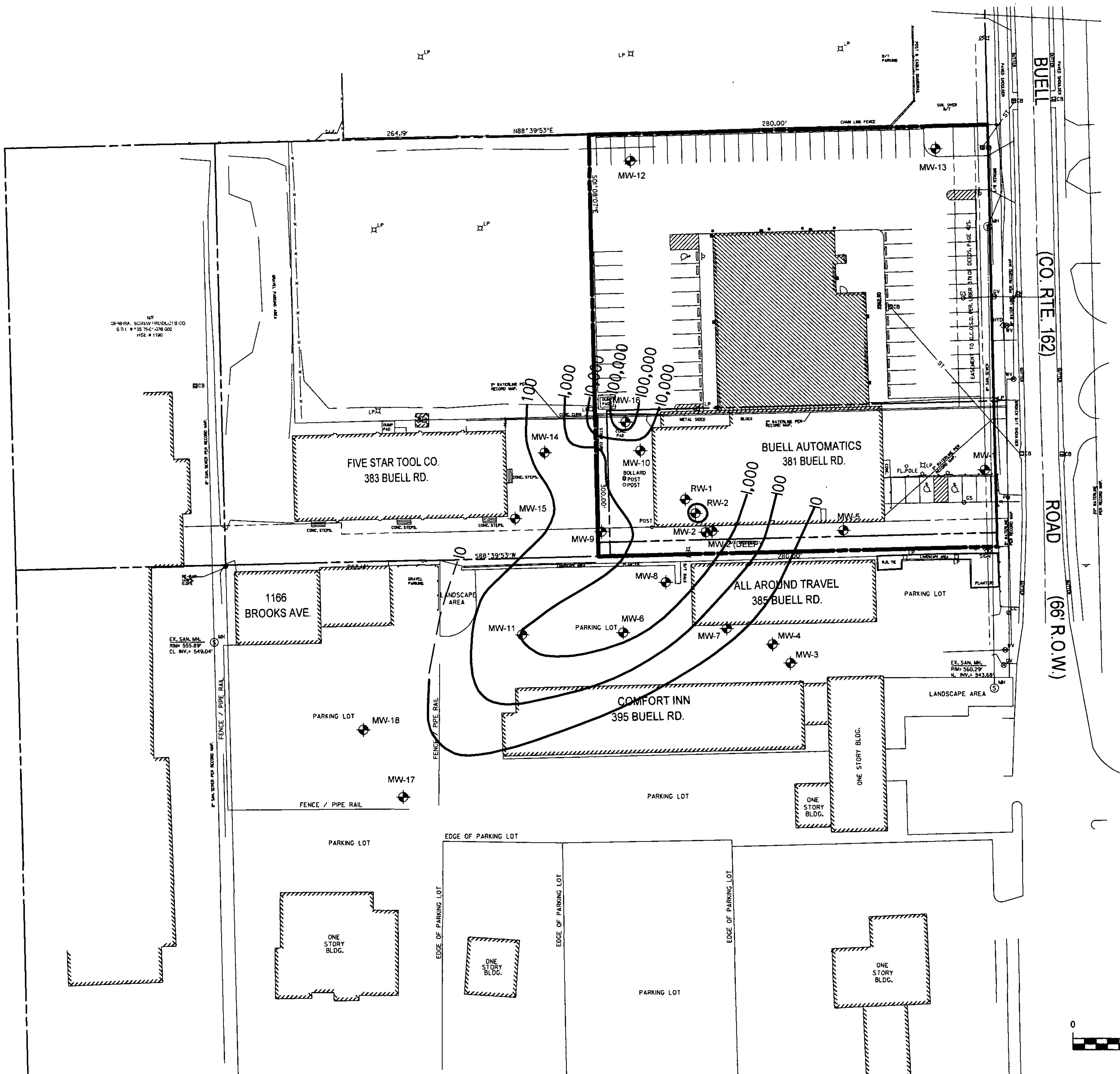
REMEDIAL INVESTIGATION

Title
TOTAL CHLORINATED VOCs IN GROUNDWATER - SEPTEMBER 2002

Project No. 190500033
Scale AS SHOWN

Drawing No. FIGURE 13
Sheet of
Revision

U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 13_Total Chlorinated VOC in GW_Sept 2002.dgn



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Legend

MW-6 EXISTING MONITORING WELL

MW-16 NEW MONITORING WELL

10,000 TOTAL CHLORINATED COMPOUNDS IN GROUNDWATER

Notes

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Revision	By	Appd.	YY.MM.DD

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File Name	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

BUELL AUTOMATICS
ROCHESTER, NEW YORK

REMEDIAL INVESTIGATION

Title

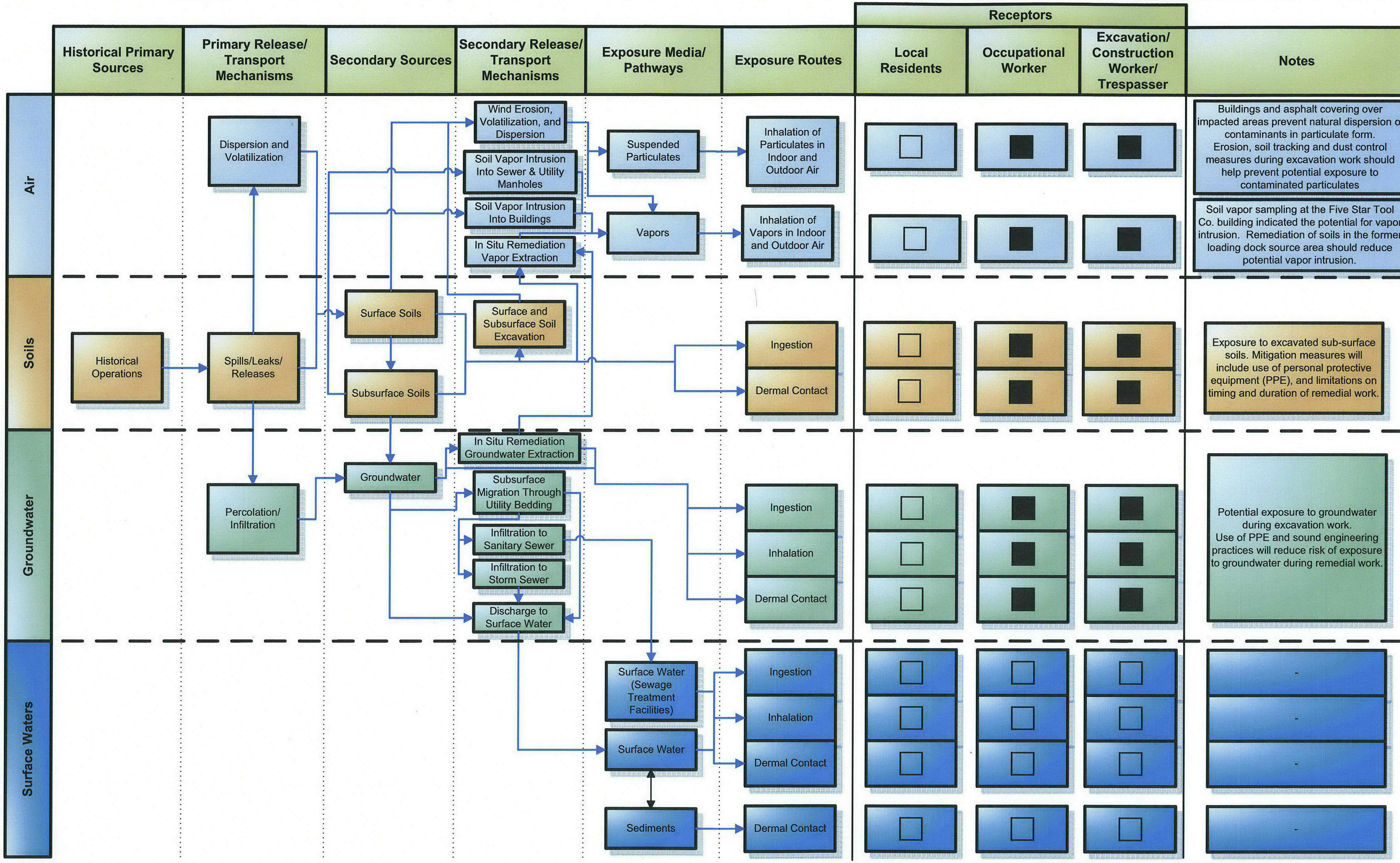
TOTAL CHLORINATED VOCs IN GROUNDWATER - MAY 2006

Project No.	Scale
190500033	AS SHOWN

Drawing No.	Sheet	Revision
FIGURE 14	of	

PLOT DRIVER: R:\CAD\PLOTTING\MICROSTATION\URBAN LAND\PLOT\PLOTDRV\IMPERIAL\HPLJMRMS.PLT

ORIGINAL SHEET - ARCH D U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 14_Total Chlorinated VOC in GW_May 2006.dgn



Legend: ☐ : Pathway Evaluated and Found Incomplete. No Potential Exposure. No Further Mitigation Recommended

■ : Pathway Complete. Potential Exposure. Further Mitigation Recommended

U:\16059\civil\Brownfields Cleanup 11-06\HumanHealthCSM.vsd

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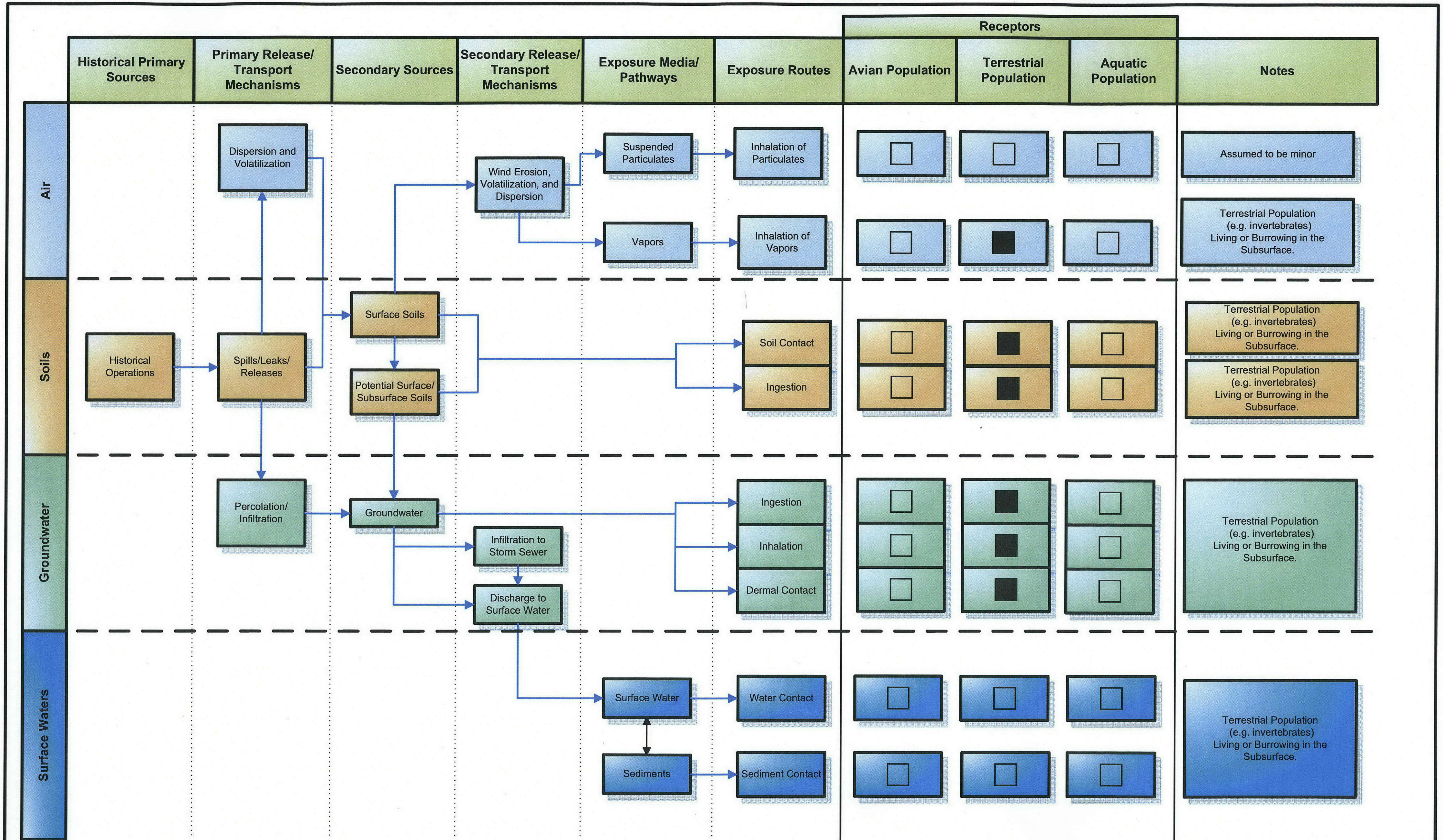
Buell Automatics Remedial Investigation
Human Health Conceptual Site Model for the Qualitative Exposure Assessment

Project No.	Date:	Figure:
190500033	July 2007	15



Legend: ☐ : Pathway Evaluated and Found Incomplete. No Potential Exposure. No Further Mitigation Recommended

■ : Pathway Complete. Potential Exposure. Further Mitigation Recommended

U:\16059\civil\Brownfields Cleanup 11-06\EcologicalCSM.vsd

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Buell Automatics Remedial Investigation

Fish and Wildlife Conceptual Site Model for the Qualitative Exposure Assessment

Project No.	Date:	Figure:
190500033	July 2007	16

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Buell Automatics RI
Rochester, NY

Borehole	Depth (ft. bgs)	PID Readings Peak (ppm)	PID Readings Background (ppm)
Well Installations - May 2002			
MW-7	0-2	0.0	0.0
	2-4	0.0	0.0
	4-6	0.0	0.0
	6-8	0.0	0.0
	8-10	0.0	0.0
	10-12	0.0	0.0
	12-14	0.0	0.0
	14-16	0.0	0.0
	16-18	0.0	0.0
	18-20	0.0	0.0
MW-8	0-2	0.0	0.0
	2-4	0.0	0.0
	4-6	0.0	0.0
	6-8	0.0	0.0
	8-10	0.0	0.0
	10-12	0.0	0.0
	12-14	0.0	0.0
	14-16	2.8	0.0
	16-18	2.5	0.0
	18-20	18.5	0.0
	20-22	0.0	0.0
	22-24	0.0	0.0
MW-12	0-2	0.0	0.0
	2-4	0.0	0.0
	4-6	0.0	0.0
	6-8	0.0	0.0
	8-10	0.0	0.0
	10-12	0.0	0.0
	12-14	0.0	0.0
	14-16	0.0	0.0
	16-18	0.0	0.0
	18-20	0.0	0.0
MW-13	0-2	0.0	0.0
	2-4	0.0	0.0
	4-6	0.0	0.0
	6-8	0.0	0.0
	8-10	0.0	0.0
	10-12	0.0	0.0
	12-14	0.0	0.0
	14-16	0.0	0.0
	16-18	0.0	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Buell Automatics RI
Rochester, NY

Borehole	Depth (ft. bgs)	PID Readings Peak (ppm)	PID Readings Background (ppm)
MW-13, cont.	18-20	0.0	0.0
	20-22	0.0	0.0
	22-24	0.0	0.0
	24-26	0.0	0.0
	26-28	0.0	0.0
	28-30	0.0	0.0
	30-32	0.0	0.0
	32-34	0.0	0.0
Well Installations - August 2002			
MW-2D	0-2	177	0.0
	2-4	2.9	0.0
	4-6	0.0	0.0
	6-8	3.5	0.0
	8-10	23.3	0.0
	10-12	4.7	0.0
	12-14	0.0	0.0
	14-16	0.0	0.0
	16-18	0.0	0.0
	18-20	0.0	0.0
	20-22	0.0	0.0
	22-24	0.0	0.0
	24-26	0.0	0.0
	26-28	3.5	0.0
	29-31	0.5	0.0
	31-33	0.0	0.0
	33-35	0.0	0.0
	35-37	0.0	0.0
	37-37.3	0.0	0.0
MW-6	0-2	0.0	0.0
	2-4	0.0	0.0
	4-6	0.0	0.0
	6-8	0.0	0.0
	8-10	0.0	0.0
	10-12	0.0	0.0
	12-14	0.0	0.0
	14-16	0.0	0.0
	16-16.3	0.0	0.0
	17-19	0.0	0.0
MW-9	0-2	0.0	0.0
	2-4	0.0	0.0
	4-6	0.5	0.0
	6-8	0.0	0.0
	8-10	0.0	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Buell Automatics RI
Rochester, NY

Borehole	Depth (ft. bgs)	PID Readings Peak (ppm)	PID Readings Background (ppm)
MW-9, cont.	10-12	0.0	0.0
	12-14	0.0	0.0
	14-16	0.0	0.0
	16-18	0.0	0.0
	18-20	0.0	0.0
	20-22	0.0	0.0
	22-24	0.0	0.0
MW-10	0.5-2	0.0	0.0
	2-4	0.0	0.0
	4-6	0.0	0.0
	6-8	1.7	0.0
	8-10	13.5	0.0
	10-12	1.7	0.0
	12-14	0.0	0.0
	14-16	0.0	0.0
	16-18	0.0	0.0
	18-20	0.0	0.0
MW-11	0-2	0.5	0.0
	2-4	0.0	0.0
	4-6	0.0	0.0
	6-8	0.0	0.0
	8-10	0.0	0.0
	10-12	0.0	0.0
	12-14	0.0	0.0
	14-16	0.0	0.0
	16-18	0.0	0.0
	18-20	0.0	0.0
Interior and Exterior Geoprobe Borings - August 2002			
B-8	1.8-2.5	3,400	0.0
	3.2-4.5	3,000	0.0
	5-6.5	2,200	0.0
B-9	1.5-2.5	17.0	0.0
	3.5-4.5	83	0.0
	5-6.5	223	0.0
B-10	1.5-2.5	118	0.0
	3-3.7	163	0.0
	3.7-4.5	91	0.0
	5-6	36	0.0
B-11	1.5-2	0.0	0.0
	3.5-4	10.1	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Buell Automatics RI
Rochester, NY

Borehole	Depth (ft. bgs)	PID Readings Peak (ppm)	PID Readings Background (ppm)
B-11, cont.	5.5-6	37	0.0
	7.5-8	42	0.0
	9.5-10	0.0	0.0
	11.5-12	3.5	0.0
B-12	1.8-2	0.0	0.0
	3.5-4	0.0	0.0
	4.8-5.1	48	0.0
	7.5-8	0.0	0.0
	10.5-11	0.0	0.0
B-13	1.5-2	0.0	0.0
	3-3.8	15.0	0.0
	4.5-5	0.0	0.0
	6.5-7	0.0	0.0
	9.5-10	0.0	0.0
B-14	1.5-2	0.0	0.0
	3.5-4	0.0	0.0
	7.5-8	0.0	0.0
	9.5-10	0.0	0.0
B-15	3-3.5	1.2	0.0
	3.5-4	54	0.0
	4.5-5	75	0.0
	6.5-7	3.8	0.0
B-16	2.5-3	2.5	0.0
	3.5-4	3.1	0.0
	6-6.5	3.1	0.0
	7.5-8	2.5	0.0
	8.5-9	2.5	0.0
B-17	1.5-2	10.8	0.0
	3.5-4	12.7	0.0
	4.5-5	18.4	0.0
	6.5-7	14.6	0.0
	8.5-9	3.1	0.0
B-18	3.5-4	4.1	0.0
	4.5-5	104	0.0
	6.5-7	23	0.0
	9.2-10	0.0	0.0
Well Installations - February 2003			
MW-14	1.5-2	0.0	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Buell Automatics RI
Rochester, NY

Borehole	Depth (ft. bgs)	PID Readings Peak (ppm)	PID Readings Background (ppm)
MW-14, cont.	3.5-4	0.0	0.0
	5.5-6	0.0	0.0
	7.5-8	0.0	0.0
	9.5-10	0.0	0.0
	11.5-12	0.0	0.0
	13.5-14	0.0	0.0
	15.5-16	0.0	0.0
MW-15	1.5-2	0.0	0.0
	3.5-4	0.1	0.0
	5.5-6	0.1	0.0
	7.5-8	0.0	0.0
	9.5-10	0.0	0.0
	11.5-12	0.0	0.0
Interior Boring Program - May 2003			
B-19	3.5-4	20	0.0
	6-6.5	1.3	0.0
	7.5-8	3.1	0.0
	9.5-10.2	1.3	0.0
B-20	3.5-4	7.7	0.0
	6-6.5	0.4	0.0
	7.5-8	7.2	0.0
	9.5-10	3.6	0.0
B-21	1.2-1.5	0.4	0.0
	3-4	0.9	0.0
	4-5	2.7	0.0
	7-8	0.4	0.0
B-22	3.5-4	1.3	0.0
	5.5-6	1.3	0.0
	7.5-8	0.9	0.0
B-23	1-2	160	0.0
	3-3.5	53	0.0
	3.5-4	109	0.0
	7.5-8	28	0.0
B-24	1.5-2	5.4	0.0
	3.5-4	4.0	0.0
	5.5-6	4.0	0.0
	7.5-8	1.8	0.0
B-25	1.5-2	85	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Buell Automatics RI
Rochester, NY

Borehole	Depth (ft. bgs)	PID Readings Peak (ppm)	PID Readings Background (ppm)
B-25, cont.	5.5-6	1.3	0.0
	7.5-8	0.9	0.0
B-26	1.5-2	600	0.0
	2.5-3	101	0.0
	3.5-4	60	0.0
	5-6	16.8	0.0
	7-8	12.2	0.0
B-27	3.5-4	4.0	0.0
	6-6.5	1.3	0.0
	7.5-8	3.1	0.0
	9.5-10	0.9	0.0
	11.5-12	0.4	0.0
B-28	3.5-4	0.9	0.0
	6.5-7	1.3	0.0
	9.5-10	0.9	0.0
	11.5-12	1.8	0.0
B-29	3.5-4	8.6	0.0
	5.5-6	1.8	0.0
	7.5-8	0.4	0.0
B-30	3.5-4.0	1.3	0.0
	4-4.8	0.9	0.0
	7.5-8	2.2	0.0
	11.5-12	0.4	0.0
B-31	2.5-3	0.9	0.0
	6-6.5	2.2	0.0
	7.5-8	0.9	0.0
B-32	3.5-4	9.9	0.0
	6-6.5	8.1	0.0
	7.5-8	4.0	0.0
	11.5-12	0.9	0.0
	14.5-15	0.9	0.0
B-33	1.5-2	1.9	0.0
	3.5-4	1.3	0.0
	6-6.5	0.9	0.0
	7.5-8	0.9	0.0
	9.5-10	0.9	0.0
	11-11.5	0.9	0.0
B-34	2-2.5	4.5	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Buell Automatics RI
Rochester, NY

Borehole	Depth (ft. bgs)	PID Readings Peak (ppm)	PID Readings Background (ppm)
B-34, cont.	3.5-4	2.2	0.0
	6-7	1.3	0.0
	7.5-8	1.8	0.0
IRM Geopobe Borings - December 2003			
GP-1	1.7-4.9	7.0	0.0
	4.9-5.7	14.0	0.0
	5.7-7.7	24	0.0
	7.7-9.7	15.0	0.0
	9.7-11	5.0	0.0
	11-13.7	5.0	0.0
GP-2	1-2.5	17.0	0.0
	2.5-5	22	0.0
	5-7	30	0.0
	7-9	14.0	0.0
	9-10.5	10.0	0.0
	10.5-12.7	3.0	0.0
GP-3	1.3-2.3	250	0.0
	2.3-3.3	33	0.0
	3.3-5.3	19.0	0.0
	5.3-8.3	9.0	0.0
	8.3-9.3	13.0	0.0
	9.3-12	2.0	0.0
GP-4	0.8-4.8	2.0	0.0
	4.8-8.5	2.0	0.0
GP-5	0.6 - 2.6	0.0	0.0
	5-6	193	0.0
	6-6.6	29	0.0
	9-9.5	8,000	0.0
	10-10.6	945	0.0
	12-12.6	4.0	0.0
	12.6-14.6	3.0	0.0
GP-6	6-6.5	755	0.0
	7-7.5	2,480	0.0
	9.5-10	1.7	0.0
	10-10.5	22	0.0
	12-12.5	6	0.0
GP-7	6-6.5	1.5	0.0
	9.5-10	42	0.0
	10-10.5	1.7	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Buell Automatics RI
Rochester, NY

Borehole	Depth (ft. bgs)	PID Readings Peak (ppm)	PID Readings Background (ppm)
GP-8	7.5-8	77	0.0
	10-10.5	22	0.0
GP-9	9.5-10	0.1	0.0
	12-12.5	0.0	0.0
GP-10	19.8-20	0.0	0.0
	23-24	0.0	0.0
B-23 Geoprobe Borings - September 2005			
B-35	2-3	405	0.0
	3-4	115	0.0
	5-6	37	0.0
	7-8	18	0.0
B-36	5-6	37	0.0
	7-8	125	0.0
	9-10	35	0.0
B-37	2-3	0.0	0.0
	3-4	4.5	0.0
	7-8	4.1	0.0
B-38	3-3.5	0.0	0.0
	3.5-4	0.0	0.0
	5-6	0.0	0.0
B-39	2.5-3	31	0.0
	3.5-4	23	0.0
	6-7	13.8	0.0
B-40	2-2.5	9.4	0.0
	3.5-4	7.8	0.0
	6.5-7	50	0.0
	7.5-8	22	0.0
B-41	1.9-2.3	2.3	0.0
	3.5-4	9.3	0.0
	7.5-8	5.8	0.0
B-42	1.5-2	8.6	0.0
	3.5-4	7.6	0.0
	6-7	24	0.0
	7-8	93	0.0
B-43	2-3	2.4	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Buell Automatics RI
Rochester, NY

Borehole	Depth (ft. bgs)	PID Readings Peak (ppm)	PID Readings Background (ppm)
B-43, cont.	3-4	88	0.0
	7-8	36	0.0
B-44	2-2.5	0.0	0.0
	3-4	0.0	0.0
	7-8	0.8	0.0
Well Installations - November 2005			
MW-16	0.5-2	1,600	0.0
	2-4	39	0.0
	4-6	23	0.0
	6-8	88	0.0
	8-10	20	0.0
MW-17	0.5-2	0.0	0.0
	2-4	0.0	0.0
	4-6	0.4	0.0
	6-8	3.4	0.0
	8-10	0.6	0.0
	10-12	0.5	0.0
	12-14	1.2	0.0
	14-16	1.3	0.0
	16-18	1.2	0.0
MW-18	0-2	0.0	0.0
	2-4	0.0	0.0
	4-6	0.0	0.0
	6-8	0.0	0.0
	8-10	0.0	0.0
	10-12	0.0	0.0
	12-14	0.0	0.0
	14-16	0.0	0.0
	16-18	0.0	0.0
	18-20	0.0	0.0
	20-22	0.0	0.0

Notes:
1. ft. bgs = feet below ground surface.
2. ppm = parts per million.
3. PID data collected with Thermo Env Model 580B equipped with an 11.7 eV lamp.

TABLE 2
SOIL SAMPLE SUMMARY
Buell Automatics RI
Rochester, NY

Sample ID	Location	Date	Depth (ft. bgs)	TCL VOCs by ASP 95-1	TCL VOCs by OLM 4.2	TCL SVOCs by ASP 95-2	TCL SVOCs by OLM 4.2	TCL Pest/PCBs by ASP 95-3	TAL Metals	TPH by DOH 310.13
May 2002										
BU-MW13-S	MW-13	5/20/02	6 - 8	x					x	
			8 - 10			x				
			10 - 12					x		
BU-XX-S-DU	MW-13	5/20/02	10 - 12					x		
BU-MW7-S	MW-7	5/21/02	16 - 18	x						
			14 - 16			x			x	
BU-MW8-S-MS/MSD	MW-8	5/21/02	16 - 18	x				x		
			18 - 20			x			x	
BU-MW12-S	MW-12	5/22/02	12 - 14	x		x			x	
BU-XX-S-DU	MW-12	5/22/02	12 - 14	x		x			x	
August 2002										
BU-MW2D-S	MW-2D	8/5/02	8 - 10	x		x				
BU-MW10-S	MW-10	8/5/02	2 - 4			x		x	x	
			8 - 10	x						
BU-MW9-S	MW-9	8/6/02	4 - 6	x		x				
BU-MW11-S	MW-11	8/7/02	10 - 12	x		x				
BU-MW6-S	MW-6	8/8/02	15 - 15.9	x		x				
BU-B11-S	B-11	8/8/02	7.5 - 8	x		x				
BU-B12-S	B-12	8/8/02	4 - 5.3	x		x				
BU-B13-S	B-13	8/8/02	3 - 3.8	x		x			x	
BU-B14-S	B-14	8/8/02	3.5 - 4	x		x		x	x	
BU-B18-S	B-18	8/8/02	4.5 - 5	x		x		x	x	
BU-B15-S	B-15	8/9/02	4.5 - 5	x		x		x		
BU-B16-S-MS/MSD	B-16	8/9/02	6 - 6.5	x		x		x		
BU-B17-S	B-17	8/9/02	4.5 - 5	x		x		x	x	
BU-B8-S	B-8	8/12/02	1.8 - 2.5	x		x				
BU-B9-S	B-9	8/12/02	5 - 6.5	x		x				
BU-B10-S	B-10	8/12/02	3 - 3.7	x		x		x	x	

TABLE 2
SOIL SAMPLE SUMMARY
Buell Automatics RI
Rochester, NY

Sample ID	Location	Date	Depth (ft. bgs)	TCL VOCs by ASP 95-1	TCL VOCs by OLM 4.2	TCL SVOCs by ASP 95-2	TCL SVOCs by OLM 4.2	TCL Pest/PCBs by ASP 95-3	TAL Metals	TPH by DOH 310.13
February 2003										
BU-MW14-S-MS/MSD	MW-14	2/26/03	15.2-16	x						
BU-MW15-S	MW-15	2/26/03	11.5-12	x						
BU-S-DUP	MW-15	2/26/03	11.5-12	x						
May 2003										
BU-B19-S	B-19	5/5/03	3.5-4	x						
BU-B20-S	B-20	5/5/03	3.5-4							x
BU-B21-S	B-21	5/3/03	4.5-5	x						
BU-B22-S	B-22	5/5/03	5.5-6	x						
BU-B23-S	B-23	5/3/03	1-2	x						
BU-B24-S	B-24	5/3/03	5.5-6	x						
BU-B25-S	B-25	5/3/03	5.5-6	x						
BU-B26-S	B-26	5/3/03	2.5-3	x						
BU-B27-S	B-27	5/3/03	3.5-4							x
BU-B28-S	B-28	5/3/03	6.5-7	x						
BU-29-S	B-29	5/3/03	3.5-4	x						
BU-B30-S	B-30	5/3/03	3.5-4	x						
BU-B31-S-MS/MSD	B-31	5/5/03	6-6.5	x						
BU-B32-S	B-32	5/5/03	3.5-4	x						x
BU-DUP-S	B-32	5/5/03	3.5-4	x						x
BU-B33-S	B-33	5/5/03	6-6.5	x						
BU-B34-S	B-34	5/5/03	2-2.5	x						

TABLE 2
SOIL SAMPLE SUMMARY
Buell Automatics RI
Rochester, NY

Sample ID	Location	Date	Depth (ft. bgs)	TCL VOCs by ASP 95-1	TCL VOCs by OLM 4.2	TCL SVOCs by ASP 95-2	TCL SVOCs by OLM 4.2	TCL Pest/PCBs by ASP 95-3	TAL Metals	TPH by DOH 310.13
September 2005										
BU-B35-S	B-35	9/20/05	2-3		x					
BU-XX-S	B-35	9/20/05	2-3		x					
BU-B35-S	B-35	9/20/05	7-8		x					
BU-B36-S	B-36	9/20/05	7-8		x		x			
BU-B36-S	B-36	9/20/05	9-10		x		x			
BU-B37-S	B-37	9/20/05	3-4		x					
BU-B39-S	B-39	9/20/05	2.5-3		x					
BU-B39-S	B-39	9/20/05	6-7		x					
BU-B40-S	B-40	9/20/05	6.5-7		x					
BU-B40-S	B-40	9/20/05	7.5-8		x					
BU-B41-S	B-41	9/20/05	3.5-4		x					
BU-B42-S	B-42	9/20/05	3.5-4		x					
BU-B42-S	B-42	9/20/05	7-8		x					
BU-B43-S	B-43	9/20/05	3-4		x		x			
BU-B43-S	B-43	9/20/05	7-8		x		x			
November 2005										
MW16 (0.2-2)	MW-16	11/22/05	0.5-2		x					
MW-DUP	MW-16	11/22/05	0.5-2		x					
MW16 (9-10)	MW-16	11/22/05	9-10		x					
MW17 (7.5-8)	MW-17	11/22/05	7.5-8		x					
MW18 (18-20)	MW-18	11/21/05	18-20		x					

TABLE 3
WELL COMPLETION SUMMARY
Buell Automatics RI
Rochester, NY

Well Designation	Completion Date	Horiz. Coordinates (NAD 27, in feet)		Elevation (ft. AMSL) (NGVD 29)		Bentonite Seal	Sandpack Interval	Screened Interval	Lower Seal	Total Depth	Horiz. Coord. (NAD 83 UTM Zone 18 (NYTM), in meters)		Elevation (ft. AMSL) (NAVD 88)	
		Northing	Easting	Ground	Reference	(ft. bgs)	(ft. bgs)	(ft. bgs)	(ft. bgs)	(ft. bgs)	Northing	Easting	Ground	Reference
Phase II Well Installations														
MW-1	5/26/99	1142537.57	744790.33	562.9	562.7	8.0-10.0	10.0-22.0	12.0-22.0	-----	22.0	283156.900	4778940.184	562.31	562.13
MW-2	5/26/99	1142493.48	744594.42	561.9	561.71	7.0-9.0	9.0-21.0	11.0-21.0	-----	21.0	283096.656	4778929.309	561.30	561.14
MW-5	5/26/99	1142494.61	744690.77	562.1	561.76	7.0-9.0	9.0-21.0	11.5-21.5	-----	21.5	283126.017	4778928.397	561.55	561.19
RI Well Installations														
MW-2D	8/8/02	1142494.16	744598.95	562.0	561.56	20.8 - 31.3	31.3 - 42.3	32.3 - 42.3	-----	42.3	283098.045	4778929.456	561.42	560.99
MW-6	8/8/02	1142421.82	744536.23	560.3	559.78	2.0-4.0	4.0-19.0	5.0-19.0	-----	19.0	283077.999	4778908.241	559.76	559.21
MW-7	5/21/02	1142424.79	744608.88	561.4	560.83	2.0-4.0	4.0-20.0	5.0-20.0	-----	20.0	283100.165	4778908.199	560.79	560.26
MW-8	5/21/02	1142457.74	744566.35	562.0	561.48	2.0-4.0	4.0-19.5	5.0-19.0	19.5 - 24.0	24.0	283087.641	4778918.789	561.39	560.91
MW-9	8/6/02	1142493.78	744521.28	561.1	560.36	2.0-4.0	4.0-16.0	5.0 - 15.0	-----	16.0	283074.383	4778930.353	560.50	559.79
MW-10	8/5/02	1142551.60	744548.68	562.8	562.37	2.0-4.0	4.0-20.0	5.0-20.0	-----	20.0	283083.482	4778947.607	562.18	561.80
MW-11	8/7/02	1142420.37	744465.16	559.3	559.05	2.0-4.0	4.0-20.0	5.0-20.0	-----	20.0	283056.334	4778908.726	558.75	558.48
MW-12	5/22/02	1142757.58	744542.13	562.8	562.3	2.0-4.0	4.0-20.0	5.0-20.0	-----	20.0	283084.172	4779010.429	562.27	561.73
MW-13	5/20/02	1142765.66	744756.32	563.9	563.42	2.0-4.0	4.0-21.0	5.2-20.2	21.0 - 34.0	34.0	283149.514	4779010.098	563.34	562.85
MW-14	2/25/03	1142550.30	744481.45	561.2	560.9	1.5 - 3.0	3.0 - 13.0	4.0 - 13.0	13.0 - 16.0	16.0	283062.989	4778948.087	560.61	560.33
MW-15	2/25/03	1142501.30	744461.37	560.4	560.1	1.5 - 3.0	3.0 - 10.0	4.0 - 10.0	10.0 - 12.0	12.0	283056.234	4778933.424	559.86	559.53
MW-16	11/22/05	1142571.98	744538.31	562.60	561.97	1.0-3.0	3.0-8.0	4.0-8.0	8.0-10.0	10.0	283080.589	4778953.949	562.03	561.40
MW-17	11/22/05	1142304.73	744380.94	556.60	556.16	3.0-6.0	6.0-18.0	7.0-17.0	-----	18.0	283029.175	4778874.602	556.03	555.59
MW-18	11/22/05	1142352.47	744353.02	557.00	556.48	10.6-13.2	13.2-20.5	15.5-20.5	20.5-21.0	21.0	283021.294	4778889.506	556.43	555.91
RW-1	12/30/03	NS	NS	563.7	563.27	0.5-1.5	1.5-12.0	2.0-6.0	-----	12.0	NS	NS	563.13	562.70
RW-2	12/30/03	NS	NS	563.8	563.25	0.5-1.0	1.0-12.0	1.5-6.5	-----	12.0	NS	NS	563.23	562.68

Notes:
1. NS = Not Surveyed
2. ft. bgs = all depths feet below ground surface.
3. All wells completed with flush-mount protective casings.

TABLE 4
WATER LEVEL SUMMARY
Buell Automatics
Rochester, NY

Monitoring Well	Ground Elevation	Reference Elevation	May 31, 2002 Water Level		June 27, 2002 Water Level		August 20, 2002 Water Level		March 31, 2003 Water Level		January 13, 2004 Water Level		August 24, 2004 Water Level		May 2, 2006 Water Level		September 15, 2006 Water Level	
			(ft. btoc)	(elevation)	(ft. btoc)	(elevation)	(ft. btoc)	(elevation)	(ft. btoc)	(elevation)	(ft. btoc)	(elevation)	(ft. btoc)	(elevation)	(ft. btoc)	(elevation)	(ft. btoc)	(elevation)
MW-1	563.9	562.70	3.32	559.38	3.86	558.84	5.79	556.91	3.08	559.62	---	---	---	---	4.38	558.32	4.13	558.57
MW-2	561.9	561.71	2.17	559.54	3.59	558.12	6.31	555.40	2.26	559.45	---	---	---	---	3.68	558.03	1.98	559.73
MW-2 D	562.0	561.56	---	---	---	---	dry	---	dry	---	---	---	---	---	---	---	dry	---
MW-5	562.1	561.76	1.69	560.07	2.58	559.18	4.77	556.99	1.81	559.95	3.05	558.71	---	---	3.21	558.55	2.16	559.60
MW-6	560.3	559.78	---	---	---	---	15.40	544.38	10.30	549.48	---	---	10.01	549.77	3.91	555.87	3.57	556.21
MW-7	561.4	560.83	2.08	558.75	3.24	557.59	5.88	554.95	2.21	558.62	---	---	4.45	556.38	3.45	557.38	2.02	558.81
MW-8	562.0	561.48	6.88	554.60	7.21	554.27	11.05	550.43	3.24	558.24	4.92	556.56	---	---	3.59	557.89	2.31	559.17
MW-9	561.1	560.36	---	---	---	---	5.26	555.10	0.96	559.40	4.08	556.28	---	---	2.65	557.71	0.94	559.42
MW-10	562.8	562.37	---	---	---	---	2.98	559.39	1.55 *	560.82	---	---	---	---	2.11*	560.26	1.26*	561.11
MW-11	559.3	559.05	---	---	---	---	15.99	543.06	10.21	548.84	---	---	15.33	543.72	10.15	548.90	11.96	547.09
MW-12	562.8	562.30	1.60	560.70	2.28	560.02	4.11	558.19	1.50	560.80	---	---	---	---	2.99	559.31	2.49	559.81
MW-13	563.9	563.42	3.30	560.12	4.05	559.37	5.91	557.51	4.02	559.40	---	---	---	---	4.99	558.43	3.88	559.54
MW-14	561.3	560.90	---	---	---	---	---	---	1.16	559.74	2.66	558.24	2.73	558.17	2.85	558.05	2.88	558.02
MW-15	560.5	560.10	---	---	---	---		---	2.97	557.13	3.57	556.53	4.28	555.82	2.45	557.65	1.63	558.47
MW-16	562.6	561.97	---	---	---	---	---	---	---	---	---	---	---	---	1.66	560.31	0.34	561.63
MW-17	556.6	556.16	---	---	---	---	---	---	---	---	---	---	---	---	2.82	553.34	3.13	553.03
MW-18	556.6	556.48	---	---	---	---	---	---	---	---	---	---	---	---	dry	---	dry	---
RW-1	563.7	563.27	---	---	---	---	---	---	---	---	4.96	558.31	---	---	4.21	559.06	---	---
RW-2	563.8	563.25	---	---	---	---	---	---	---	---	5.74	557.51	---	---	5.20	558.05	---	---

Notes:
1. Reference elevation based upon vertical datum NGVD 29.
2. ft. btoc = feet below top of casing.
3. * = oily floating product
4. (---) = not measured.

TABLE 5
FIELD PARAMETER SUMMARY

Buell Automatics RI
Rochester, NY

Well	Date	Time	Volume (gal)	pH (SU)	Conductivity (umhos/cm)	Temperature (^{o}C)	Turbidity (NTU)
MW-1	09/11/02	13:28	2.4	7.24	1,404	17.2	>200
		13:32	3.6	-dry after 1.5 volumes			
	09/12/02	9:25	0.3	6.92	1,430	16.0	>200
MW-2	09/10/02	11:38	1.4	7.19	1,372	19.4	>200
		11:44	2.8	6.95	1,445	18.3	>200
		11:49	4.2	6.96	1,428	18.2	>200
	09/12/02	11:02	126 ml/min	6.96	1,351	19.2	13.1
	(low flow)	11:07	126 ml/min	6.85	1,313	19.2	12.3
		11:12	141 ml/min	6.84	1,310	19.5	10.5
	05/01/06	-	2.2	7.08	1,971	15.7	187
		-	4.4	7.04	2,038	13.8	479
		15:15	6.6	6.92	2,098	13.6	>1000
MW-3	08/24/04	9:46	0.1	6.08	615	19.4	>200
(All-Around)		9:58	0.2	6.28	778	19.7	>200
		10:10	0.3	6.33	788	20.2	>200
	05/01/06	-	0.2	7.05	2,352	11.8	>1000
		12:00	0.4	6.97	2,298	11.7	>1000
			dry				
MW-4	08/24/04	10:26	0.2	6.50	1,306	20.7	>200
(All-Around)		10:38	0.4	6.63	1,120	19.9	>200
		10:50	0.6	6.63	1,123	19.7	>200
MW-5	09/10/02	12:53	2.0	6.93	1,856	19.2	>200
		13:00	4.0	6.92	1,803	18.1	>200
		13:08	6.0	6.90	1,824	18.6	>200
	09/12/02	12:12	141 ml/min	6.75	1,788	19.7	34.1
	(low flow)	12:17	150 ml/min	6.70	1,792	19.7	40.5
		12:22	141 ml/min	6.65	1,776	19.9	21.7
MW-6	09/11/02	10:47	0.1	7.36	1,038	23.0	>200
		10:51	0.3	7.14	1,030	22.4	>200
		10:55	0.5	7.07	1,033	22.2	>200
		10:59	0.7	7.17	1,034	22.2	>200
	08/24/04	12:00	1	6.95	821	21.5	>200
		12:04	2	9.84	832	20.9	>200
		12:08	3	6.84	836	20.9	>200
	05/01/06	-	2.4	7.07	2,048	14.6	>1000
		14:00	4.8	7.19	2,176	12.9	>1000
MW-7	09/11/02	11:22	2.0	6.85	1,153	19.9	152
		11:29	4.0	6.80	1,256	18.8	>200
		11:34	6.0	6.73	1,238	18.9	192
	08/24/04	11:14	2.4	6.67	1,069	18.1	-
		11:20	4.8	6.68	1,119	17.5	-
		11:26	7.2	6.68	1,247	16.7	-

TABLE 5
FIELD PARAMETER SUMMARY
Buell Automatics RI
Rochester, NY

Well	Date	Time	Volume (gal)	pH (SU)	Conductivity (umhos/cm)	Temperature (^{o}C)	Turbidity (NTU)
MW-7	05/01/06	-	2.5	6.89	2,314	14.3	14.1
		-	5.0	6.92	2,478	13.6	35.3
		14:40	7.5	6.95	2,510	12.4	52.9
MW-8	09/10/02	14:02	1.2	7.99	542	20.2	>200
		14:13	2.4	8.10	544	19.6	98.0
		14:20	3.6	8.14	554	19.7	148.0
	09/12/02	13:13	114 ml/min	8.09	584	20.7	6.7
	(low flow)	13:18	120 ml/min	8.07	554	20.7	3.2
		13:23	120 ml/min	8.05	543	21.2	2.8
	05/01/06	-	2.4	7.25	1,538	14.0	261
		-	4.8	7.36	1,789	13.6	337
		13:00	7.2	7.58	1,781	13.2	>1000
MW-9	09/11/02	13:50	1.3	6.70	1,105	21.3	>200
		13:54	2.6	6.78	1,150	20.3	>200
		14:00	3.9	6.65	1,155	19.8	>200
	05/01/06	-	1.9	6.78	2,384	13.2	268
		-	3.8	6.61	2,448	12.4	121
		15:45	5.7	6.79	2,507	12.2	266
MW-10	09/11/02	14:28	2.5	6.56	1,430	19.3	120.0
		14:37	5	6.52	1,418	17.0	144.0
		14:44	7.5	6.44	1,422	16.8	>200
	05/01/06	-	2.8	7.29	1,321	14.2	>1000
		-	5.6	6.80	1,361	12.9	>1000
		11:30	8.4	6.55	1,372	12.8	>1000
MW-11	09/11/02	10:16	0.1	6.77	1,554	20.1	>200
			dry				
	03/13/03	11:56	0.9	7.17	1,541	6.8	77.1
		12:01	1.8	7.25	1,507	6.6	66.3
		12:05	2.7	7.24	1,492	6.5	49.8
		12:12	3.6	7.16	1,490	6.4	28.6
	08/24/04	12:30	0.6	6.76	1,293	20.1	-
		12:34	1.2	6.68	1,297	19.4	-
		12:37	1.8	6.70	1,292	19.1	-
	05/01/06	-	1.4	7.09	2,629	14.1	231
		-	2.8	7.03	2,732	12.6	708
		13:30	4.2	6.84	2,696	12.8	>1000
MW-12	09/11/02	11:58	2.3	6.67	1,044	21.1	82.0
		12:05	4.6	6.75	1,032	20.8	>200
		12:14	6.9	6.76	1,038	20.4	>200
MW-13	09/10/02	10:34	2.1	6.69	1,951	19.1	>200
		10:41	4.2	6.74	1,945	17.8	>200
		10:47	6.3	6.83	1,959	16.0	>200

TABLE 5
FIELD PARAMETER SUMMARY

Buell Automatics RI
Rochester, NY

Well	Date	Time	Volume (gal)	pH (SU)	Conductivity (umhos/cm)	Temperature (^oC)	Turbidity (NTU)
MW-13	09/12/02	9:59	120 ml/min	6.85	1,865	16.8	15.3
	(low flow)	10:04	126 ml/min	6.80	1,871	16.8	15.9
		10:09	104 ml/min	6.74	1,869	16.7	16.0
MW-14	03/13/03	10:27	1.7	7.55	2,609	4.7	50.0
		10:33	3.4	6.91	2,804	4.8	66.8
		10:42	5.1	6.82	2,174	6.2	35.5
		10:47	6.8	6.90	2,244	6.6	26.6
		11:05	8.5	6.90	2,650	6.9	128.1
	08/24/04	13:52	1.6	6.82	1,962	20.7	-
		13:56	3.2	6.74	1,911	19.6	-
		14:00	4.8	6.73	1,834	18.8	-
MW-15	03/13/03	9:30	0.7	5.95	2,577	3.3	82.2
		9:34	1.4	6.46	2,584	3.9	130.5
		9:38	2.1	6.70	2,635	3.9	125.0
		9:41	2.8	7.37	2,593	4.1	99.2
		9:46	3.5	6.78	2,768	4.2	199.2
	08/24/04	13:02	0.9	6.85	1,856	20.1	-
		13:04	1.8	6.87	1,770	20.0	-
		13:06	2.7	6.91	1,716	19.4	-
MW-16	05/01/06	9:14	0.9	6.87	2,951	12.9	>1000
		9:47	1.8	6.61	3,173	11.8	>1000
		10:20	2.7	6.59	3,183	11.7	505
	09/15/06	12:19	1.1	6.84	1,670	21.0	-
		12:26	2.2	6.82	1,701	21.1	-
		12:32	3.3	6.85	1,794	20.9	-
MW-17	05/01/06	9:06	2.2	6.85	2,405	11.4	>200
		9:11	4.4	6.92	2,439	11.1	>200
		9:16	6.6	7.20	2,431	11.5	>200
	09/15/06	9:58	2.1	6.60	1,015	20.1	>200
		10:06	4.3	7.13	1,032	19.3	>200
		10:15	6.4	7.23	1,036	18.8	>200
RW-1	05/02/06	-	0.7	6.58	2,825	17.1	282
		10:55	1.4	6.49	2,822	17.3	387
			dry				
RW-2	05/02/06	11:25	0.5	6.97	1,300	15.3	>1000
			dry				

Notes:
1. ft btoc = feet below top of casing.
2. SU = standard units.
3. umhos/cm = micromhos per centimeter.
4. (^oC) = degrees Celcius.
5. NTU = Nephelometric Turbidity Units.

TABLE 6
GROUNDWATER SAMPLE SUMMARY
Buell Automatics RI
Rochester, NY

Sample ID	Location	Date	Method	TCL VOCs by ASP 95-1	TCL VOCs by OLM 4.2	TCL VOCs by EPA 8260	TCL SVOCs by ASP 95-2	TCL SVOCs by OLM 4.2	TCL Pest/PCBs by ASP 95-3	TAL Metals
August 2002										
BU-B11-GW-MS/MSD	B-11	8/7/02	disposable bailer	x						
BU-B13-GW	B-13	8/7/02	disposable bailer	x						
BU-B14-GW	B-14	8/7/02	disposable bailer	x						
BU-B18-GW	B-18	8/8/02	disposable bailer	x						
Trip Blanks	-	8/8/02	-	x						
BU-B15-GW	B-15	8/9/02	disposable bailer	x						
BU-B16-GW	B-16	8/9/02	disposable bailer	x						
BU-B16-W-RB	B-16	8/9/02	disposable bailer	x						
BU-B17-GW	B-17	8/9/02	disposable bailer	x						
Trip Blanks	-	8/9/02	-	x						
September 2002										
BU-MW2-GW	MW-2	9/10/02	disposable bailer	x			x		x	
BU-XX-GW-DU	MW-2	9/10/02	disposable bailer	x			x		x	
BU-MW5-GW	MW-5	9/10/02	disposable bailer	x			x		x	
BU-MW8-GW	MW-8	9/10/02	disposable bailer	x			x		x	
BU-MW13-GW-MS/MSD	MW-13	9/10/02	disposable bailer	x			x		x	
Trip Blanks	-	9/10/02	-	x						
BU-MW6-GW	MW-6	9/11/02	disposable bailer	x			x			
BU-MW7-GW	MW-7	9/11/02	disposable bailer	x			x			
BU-MW9-GW	MW-9	9/11/02	disposable bailer	x			x			
BU-MW10-GW	MW-10	9/11/02	disposable bailer	x			x			
BU-MW12-GW	MW-12	9/11/02	disposable bailer	x			x			
BU-MW1-GW	MW-1	9/12/02	disposable bailer	x			x			
BU-MW2-GW	MW-2	9/12/02	peristaltic pump							x
BU-DUP-GW	MW-2	9/12/02	peristaltic pump							x
BU-MW5-GW	MW-5	9/12/02	peristaltic pump							x
BU-MW8-GW	MW-8	9/12/02	peristaltic pump							x
BU-MW13-GW-MS/MSD	MW-13	9/12/02	peristaltic pump							x

TABLE 6
GROUNDWATER SAMPLE SUMMARY
Buell Automatics RI
Rochester, NY

Sample ID	Location	Date	Method	TCL VOCs by ASP 95-1	TCL VOCs by OLM 4.2	TCL VOCs by EPA 8260	TCL SVOCs by ASP 95-2	TCL SVOCs by OLM 4.2	TCL Pest/PCBs by ASP 95-3	TAL Metals
Trip Blanks	-	9/12/02	-	x						
March 2003										
BU-MW15-GW	MW-15	3/13/03	disposable bailer	x						
BU-DUP-GW	MW-15	3/13/03	disposable bailer	x						
BU-MW14-GW MS/MSD	MW-14	3/13/03	disposable bailer	x						
BU-MW11-GW	MW-11	3/13/03	disposable bailer	x						
May 2003										
BU-B27-W-MS/MSD	B-27	5/3/03	disposable bailer	x						
BU-DUP-W	B-19	5/3/03	disposable bailer	x						
BU-B19-W	B-19	5/5/03	disposable bailer	x						
Trip Blanks	-	5/5/03	disposable bailer	x						
January 2004										
BU-RW-1-W MS/MSD	RW-1	1/13/04	disposable bailer	x						
BU-RW-2-W	RW-2	1/13/04	disposable bailer	x						
Trip Blanks	-	1/13/04	-	x						
August 2004										
MW-3 (385 Buell)	MW-3	8/24/04	disposable bailer			x				
MW-4 (385 Buell)	MW-4	8/24/04	disposable bailer			x				
MW-6	MW-6	8/24/04	disposable bailer			x				
MW-7	MW-7	8/24/04	disposable bailer			x				
MW-11	MW-11	8/24/04	disposable bailer			x				
MW-14	MW-14	8/24/04	disposable bailer			x				
MW-15	MW-15	8/24/04	disposable bailer			x				
May 2006										
BU-MW2-GW	MW-2	5/1/06	disposable bailer		x					
BU-MW3-GW	MW-3 (385)	5/1/06	disposable bailer		x					
BU-MW6-GW	MW-6	5/1/06	disposable bailer		x					
BU-MW7-GW	MW-7	5/1/06	disposable bailer		x					
BU-MW8-GW	MW-8	5/1/06	disposable bailer		x					
BU-MW9-GW	MW-9	5/1/06	disposable bailer		x					
BU-M10-GW	MW-10	5/1/06	disposable bailer		x			x		

TABLE 6
GROUNDWATER SAMPLE SUMMARY
Buell Automatics RI
Rochester, NY

Sample ID	Location	Date	Method	TCL VOCs by ASP 95-1	TCL VOCs by OLM 4.2	TCL VOCs by EPA 8260	TCL SVOCs by ASP 95-2	TCL SVOCs by OLM 4.2	TCL Pest/PCBs by ASP 95-3	TAL Metals
BU-MW11-GW	MW-11	5/1/06	disposable bailer		x					
BU-M16-GW	MW-16	5/1/06	disposable bailer		x			x		
BU-MW17-GW	MW-17	5/1/06	disposable bailer		x					
BU-RW1-GW	RW-1	5/2/06	disposable bailer		x					
BU-RW2-GW	RW-2	5/2/06	disposable bailer		x					
BU-DUP-GW	MW-16	5/1/06	disposable bailer		x			x		
TRIP BLANK	---	---	---		x					
September 2006										
BU-M16-GW	MW-16	9/15/06	disposable bailer			x				
BU-MW17-GW	MW-17	9/15/06	disposable bailer			x				
TRIP BLANK	---	---	---			x				

TABLE 7
STRATIGRAPHIC SUMMARY
Buell Automatics RI
Rochester, NY

Boring/ Well	Ground Elevation	FILL Top (ft. bgs)	FILL Bottom (ft. bgs)	FILL Top Elev. (ft.AMSL)	FILL Bottom Elev. (ft.AMSL)	LACUSTRINE SAND Top (ft. bgs)	LACUSTRINE SAND Bottom (ft. bgs)	LACUSTRINE SAND Top Elev. (ft.AMSL)	LACUSTRINE SAND Bottom Elev. (ft.AMSL)	SILT and CLAY Top (ft. bgs)	SILT and CLAY Bottom (ft. bgs)	SILT and CLAY Top Elev. (ft.AMSL)	SILT and CLAY Bottom Elev. (ft.AMSL)	LACUSTRINE SAND Top (ft. bgs)	LACUSTRINE SAND Bottom (ft. bgs)	LACUSTRINE SAND Top Elev. (ft.AMSL)	LACUSTRINE SAND Bottom Elev. (ft.AMSL)	GLACIAL TILL Top (ft. bgs)	GLACIAL TILL Bottom (ft. bgs)	GLACIAL TILL Top Elev. (ft.AMSL)	GLACIAL TILL Bottom Elev. (ft.AMSL)	BEDROCK Top (ft. bgs)	BEDROCK Top Elev. (ft.AMSL)
Phase II Field Data																							
MW-1	563.9	0.0	0.0	-	-	0.0	20.0	563.9	543.9	20.0	>22.0	543.9	-	-	-	-	-	-	-	-	-	-	-
MW-2	561.9	0.0	3.0	561.9	558.9	3.0	12.5	558.9	549.4	12.5	19.0	549.4	542.9	-	-	-	-	19.0	> 21	542.9	-	-	-
MW-3	562.8	0.0	5.0	562.8	557.8	3.0	> 21	559.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	562.8	0.0	3.0	562.8	559.8	3.0	19.0	559.8	543.8	19.0	29.0	543.8	533.8	-	-	-	-	29.0	30.5	533.8	532.3	-	-
MW-5	562.1	0.0	4.0	562.1	558.1	4.0	18.0	558.1	544.1	-	-	-	-	-	-	-	-	18.0	>21.5	544.1	-	-	-
B-1	562.8	0.0	3.0	562.8	559.8	3.0	> 9	559.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-2	562.8	0.0	1.0	562.8	561.8	1.0	5.0	561.8	557.8	5.0	> 7	557.8	-	-	-	-	-	-	-	-	-	-	-
B-3	562.8	0.0	1.0	562.8	561.8	1.0	6.0	561.8	556.8	6.0	> 7	556.8	-	-	-	-	-	-	-	-	-	-	-
B-4	562.8	0.0	1.0	562.8	561.8	1.0	6.5	561.8	556.3	6.5	> 7	556.3	-	-	-	-	-	-	-	-	-	-	-
B-5	562.8	0.0	1.0	562.8	561.8	1.0	6.5	561.8	556.3	6.5	> 7	556.3	-	-	-	-	-	-	-	-	-	-	-
B-6	562.8	0.0	3.0	562.8	559.8	3.0	> 13	559.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-7	562.8	0.0	3.0	562.8	559.8	3.0	> 11	559.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remedial Investigation Field Data																							
MW-2D	562.0	0.0	2.0	562.0	560.0	2.0	19.5	560.0	542.5	19.5	24.0	542.5	538.0	24.0	28.0	538.0	534.0	28.0	37.3	534.0	524.7	37.3	524.7
MW-6	560.3	0.0	2.6	560.3	557.7	2.6	11.2	557.7	549.1	11.2	15.0	549.1	545.3	15.0	15.9	545.3	544.4	15.9	> 19	544.4	-	-	-
MW-7	561.4	0.0	1.5	561.4	559.9	1.5	13.4	559.9	548.0	13.4	18.3	548.0	543.1	-	-	-	-	18.3	> 20	543.1	-	-	-
MW-8	562.0	0.0	1.3	562.0	560.7	1.3	17.0	560.7	545.0	17.0	19.6	545.0	542.4	19.6	22.6	542.4	539.4	22.6	> 24	539.4	-	-	-
MW-9	561.1	0.0	1.6	561.1	559.5	1.6	11.0	559.5	550.1	-	-	-	-	-	-	-	-	11.0	> 16	550.1	-	-	-
MW-10	562.8	0.0	0.5	562.8	562.3	0.5	17.7	562.3	545.1	-	-	-	-	-	-	-	-	17.7	> 20	545.1	-	-	-
MW-11	559.3	0.0	1.5	559.3	557.8	1.5	11.2	557.8	548.1	-	-	-	-	-	-	-	-	11.2	> 20	548.1	-	-	-
MW-12	562.8	0.0	1.7	562.8	561.1	1.7	8.6	561.1	554.2	8.6	11.7	554.2	551.1	11.7	13.8	551.1	549.0	13.8	> 20	549.0	-	-	-
MW-13	563.9	0.0	0.8	563.9	563.1	0.8	20.0	563.1	543.9	20.0	26.0	543.9	537.9	26.0	27.8	537.9	536.1	27.8	> 34	536.1	-	-	-
MW-14	561.3	0.0	1.5	561.3	559.8	1.5	4.0	559.8	557.3	4.0	15.2	557.3	546.1	15.2	> 16	546.1	-	-	-	-	-	-	-
MW-15	560.5	0.0	1.5	560.5	559.0	1.5	9.0	559.0	551.5	9.0	11.5	551.5	549.0	11.5	> 12	549.0	-	-	-	-	-	-	-
MW-16	562.6	0.0	2.0	562.6	560.6	2.0	5.5	560.6	557.1	5.5	>10	557.1	-	-	-	-	-	-	-	-	-	-	-
MW-17	556.6	0.0	2.0	556.6	554.6	2.0	9.0	554.6	547.6	9.0	>18	547.6	-	11.5	14.0	545.1	542.6	-	-	-	-	-	-
MW-18	556.6	0.0	2.0	556.6	554.6	-	-	-	-	2.0	21.0	554.6	535.6	21.0	>22	535.6	-	-	-	-	-	-	-
B-8	563.7	0.0	3.0	563.7	560.7	3.0	> 6.5	560.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-9	563.7	0.0	2.5	563.7	561.2	2.5	> 6.5	561.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-10	563.7	0.0	2.5	563.7	561.2	2.5	3.8	561.2	559.9	3.8	> 6	559.9	-	-	-	-	-	-	-	-	-	-	-
B-11	562.0	0.0	2.0	562.0	560.0	2.0	> 12	560.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-12	562.0	0.0	2.0	562.0	560.0	2.0	5.3	560.0	556.7	5.3	> 11	556.7	-	-	-	-	-	-	-	-	-	-	-
B-13	562.0	0.0	2.0	562.0	560.0	2.0	> 10	560.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-14	562.0	0.0	1.7	562.0	560.3	1.7	> 10	560.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-15	563.7	0.0	3.3	563.7	560.4	3.3	> 10	560.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-16	563.7	0.0	3.3	563.7	560.4	3.3	7.0	560.4	556.7	7.0	> 9	556.7	-	-	-	-	-	-	-	-	-	-	-
B-17	563.7	0.0	3.5	563.7	560.2	3.5	7.0	560.2	556.7	7.0	> 9	556.7	-	-	-	-	-	-	-	-	-	-	-
B-18	562.8	0.0	3.5	562.8	559.3	3.5	9.2	559.3	553.6	9.2	> 10	553.6	-	-	-	-	-	-	-	-	-	-	-
B-19	563.7	0.0	2.0	563.7	561.7	2.0	7.2	561.7	556.5	7.2	> 10.2	556.5	-	-	-	-	-	-	-	-	-	-	-
B-20	563.7	0.0	2.3	563.7	561.4	2.3	7.5	561.4	556.2	7.5	> 10	556.2	-	-	-	-	-	-	-	-	-	-	-
B-21	562.8	0.0	2.0	562.8	560.8	2.0	5.0	560.8	557.8	5.0	> 8	557.8	-	-	-	-	-	-	-	-	-	-	-
B-22	562.8	0.0	2.5	562.8	560.3	2.5	6.0	560.3	556.8	6.0	> 8	556.8	-	-	-	-	-	-	-	-	-	-	-
B-23	563.7	0.0	1.0	563.7	562.7	1.0	3.5	562.7	560.2	3.5	> 8	560.2	-	-	-	-	-	-	-	-	-	-	-
B-24	563.7	0.0	0.5	563.7	563.2	0.5	> 8	563.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-25	563.7	0.0	1.5	563.7	562.2	1.5	> 8	562.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-26	563.7	0.0	2.0	563.7	561.7	2.0	> 8	561.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-27	563.7	0.0	1.0	563.7	562.7	1.0	11.2	562.7	552.5	11.2	> 12	552.5	-	-	-	-	-	-	-	-	-	-	-
B-28	563.7	0.0	0.4	563.7	563.3	0.4	11.5	563.3	552.2	11.5	> 12	552.2	-	-	-	-	-	-	-	-	-	-	-
B-29	563.7	0.0	0.5	563.7	563.2	0.5	7.5	563.2	556.2	7.5	> 8	556.2	-	-	-	-	-	-	-	-	-	-	-
B-30	563.7	0.0	3.0	563.7	560.7	3.0	4.8	560.7	558.9	4.8	> 12	558.9	-	-	-	-	-	-	-	-	-	-	-
B-31	563.7	0.0	3.0	563.7	560.7	-	-	-	-	3.0	> 8	560.7	-	-	-	-	-	-	-	-	-	-	-
B-32	563.7	0.0	2.5	563.7	561.2	2.5	> 15	561.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-33	563.7	0.0	0.5	563.7	563.2	0.5	> 11.5	563.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-34	563.7	0.0	0.5	563.7	563.2	0.5	7.0	563.2	556.7	7.0	> 8	556.7	-	-	-	-	-	-	-	-	-	-	-
B-35	563.7	0.0	2.0	563.7	561.7	2.0	5.0	561.7	558.7	5.0	> 8	558.7	-	-	-	-	-	-	-	-	-	-	-
B-36	563.7	0.0	3.0	563.7	560.7	-	-	-	-	3.0	>10	560.7	-	-	-	-	-	-	-	-	-	-	-
B-37	563.7	0.0	2.2	563.7	561.5	2.2	6.0	561.5	557.7	6.0	> 8	557.7	-	-	-	-	-	-	-	-	-	-	-
B-38	563.7	0.0	1.9	563.7	561.8	1.9	3.5	561.8	560.2	3.5	> 6	560.2	-	-	-	-	-	-	-	-	-	-	-
B-39	563.7	0.0	2.0	563.7	561.7	2.0	5.0	561.7	558.7	5.0	> 8	558.7	-	-	-	-	-	-	-	-	-	-	-
B-40	563.7	0.0	2.0	563.7	561.7	2.0	5.0	561.7	558.7	5.0	> 8	558.7	-	-	-	-	-	-	-	-	-	-	-
B-41	563.7	0.0	1.9	563.7	561.8	1.9	2.3	561.8	561.4	2.3	> 8	561.4	-	-	-	-	-	-	-	-	-	-	-
B-42	563.7	0.0	2.0	563.7	561.7	2.0	> 8	561.7	-	2.0	7.0	561.7	556.7	-	-	-	-	-	-	-	-	-	-
B-43	563.7	0.0	2.0	563.7	561.7	2.0	6.5	561.7	557.2	6.5	> 8	557.2	-	-	-	-	-	-	-	-	-	-	-
B-44	563.7	0.0	2.0	563.7	561.7	2.0	5.0	561.7	558.7	5.0	> 8	558.7	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. Reference elevations based upon vertical datum NGVD 29.
2. ft. bgs = feet below ground surface.

TABLE 8
GRAIN SIZE SUMMARY
Buell Automatics RI
Rochester, NY

Sample	Depth (ft. bgs)	STRATIGRAPHIC UNITS: LACUSTRINE SAND	SILT and CLAY	GLACIAL TILL	Description	%gravel	%sand	%silt	%clay	K-value (Hazen) (cm/sec)
MW-8	10-14	x			Reddish Brown Silty Fine Sand	0.0	53.2	46.1	0.7	3.46×10^{-4}
MW-8 (A)	20-22'		x		Light Brown Sandy Silt	1.6	31.5	64.9	2.0	9.22×10^{-5}
MW-8 (B)	20-22'		x		Grayish Brown Clayey Silt	2.4	6.5	52.0	39.1	---
MW-2D	12-16'	x			Brown Silty Fine Sand	0.0	64.9	34.0	1.1	4.93×10^{-4}
MW-2D	20-24'		x		Gray Clayey Silt	1.7	7.8	63.7	26.8	---
MW-2D	33-37'			x	Gray Silty Sand with Gravel	24.5	47.2	27.4	0.9	2.59×10^{-4}
B-29	5.5-6'		x		Brown Sandy Silt	0.0	18.2	81.7	0.1	3.50×10^{-4}
B-29	7.5-8'		x		Reddish Brown Clayey Silt	0.0	6.2	47.2	46.6	---

TABLE 9
SUMMARY OF SLUG TEST RESULTS
Buell Automatics RI
Rochester, NY

MONITORING WELLS	DATE	SCREENED INTERVAL (ft. bgs.)	STRATIGRAPHC UNITS			RISING HEAD (cm/sec)	FALLING HEAD (cm/sec)
			LACUSTRINE SAND	SILT and CLAY	GLACIAL TILL		
MW-2	10/30/02	11 - 21	x	x		5.70E-04	5.20E-04
MW-6	11/26/02	5 - 19	x	x	x	5.34E-04	3.56E-04
MW-7	11/26/02	5 - 20	x	x		1.13E-04	2.31E-04
MW-8	10/30/02	5 - 19	x	x		5.10E-04	7.20E-04
MW-9	10/30/02	5 - 15	x	x		5.50E-04	1.80E-04
MW-17	04/28/06	7-17	x	x		1.10E-04	1.05E-04

Notes:
1. ft. bgs = feet below ground surface.
2. cm/s = centimeter per second.

Table 10
Summary of Volatile Organic Compounds in Soil: Monitoring Wells (µg/kg)
Buell Automatics RI
Rochester, NY

Sample ID	Part 375 Soil Cleanup Objectives [1]		BU-MW2D-S	BU-MW6-S	BU-MW7-S	BU-MW8-S	BU-MW9-S	BU-MW10-S	BU-MW11-S	BU-MW12-S	BU-XX-S-DU	BU-MW13-S	BU-MW14-S	BU-MW15-S	BU-S-DUP	MW-16	MW-DUP	MW-16	MW-17	MW-18
Sample Depth (ft. bgs)	Industrial	Protection of Groundwater	8.0 - 10.0	15.0 - 15.9	16.0 - 18.0	16.0 - 18.0	4.0 - 6.0	8.0 - 10.0	10.0 - 12.0	12.0 - 14.0	12.0 - 14.0	6.0 - 8.0	15.2 - 16.0	11.5 - 12.0	11.5 - 12.0	0.5-2.0	0.5-2.0	9-10	7.5-8	18-20
SDG#			R2213195	R2213195	R2212007	R2212007	R2213195	R2213195	R2213195	R2212007	R2212007	R2212007	R2315842	R2315842	R2315842	R2528921	R2528921	R2528921	R2528921	R2528921
Date			08/05/02	08/08/02	05/21/02	05/21/02	08/06/02	08/05/02	08/07/02	05/22/02	05/22/02	05/21/02	02/25/03	02/25/03	02/25/03	11/22/05	11/22/05	11/22/05	11/22/05	11/22/05
Acetone	1,000,000	50	12 U	11 U	26 B	**96** B	12 U	11 U	12 U	17 B	21 B	19 B	10 U	4 J	4 J	**82**	1,500 U	6.0 J	6 J	14
Benzene	89,000	60	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Bromodichloromethane	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Bromoform	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Bromomethane	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
2-Butanone	1,000,000	120	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Carbon Disulfide	NS	NS	12 U	11 U	2 J	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	5 J	1,500 U	11 U	12 U	0.9 J
Carbon Tetrachloride	44,000	760	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Chlorobenzene	1,000,000	1,100	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Chloroethane	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Chloroform	700,000	370	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Chloromethane	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Dibromochloromethane	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
1,1-Dichloroethane	480,000	270	12 U	11 U	11 U	23 J	28	45	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	**580 J**	11 U	12 U	13 U
1,2-Dichloroethane	60,000	20	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
1,1-Dichloroethene	1,000,000	330	12 U	11 U	11 U	24 J	12 U	5 J	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	**650 J**	11 U	12 U	13 U
trans-1,2-Dichloroethene	1,000,000	190	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	3 J	**470 J**	11 U	12 U	13 U
cis-1,2-Dichloroethene	1,000,000	250	190	4 J	11 U	**480**	90	**890** D	11 J	12 U	12 U	12 U	10 U	10 U	10 U	**960**	**42,000 D**	26	12 U	13 U
1,2-Dichloropropane	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
trans-1,3-Dichloropropene	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
cis-1,3-Dichloropropene	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Ethylbenzene	780,000	1,000	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	78 J	11 U	12 U	13 U
2-Hexanone	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Methylene Chloride	1,000,000	50	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	7 JB	1,500 U	11 U	12 U	13 U
4-Methyl-2-Pentanone	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Styrene	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
1,1,2,2-Tetrachloroethane	NS	NS	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Tetrachloroethene	300,000	1,300	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Toluene	1,000,000	700	12 U	11 U	11 U	6 J	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	3 J	1,500 U	11 U	0.5 J	13 U
1,1,1-Trichloroethane	1,000,000	680	12 U	11 U	11 U	60 U	12 U	4 J	12 U	12 U	12 U	12 U	10 U	10 U	10 U	340	**48,000 D**	11 U	12 U	13 U
1,1,2-Trichloroethane	NS	NS	12 U	11 U	11 U	60 U	12 U	19	12 U	12 U	12 U	12 U	10 U	10 U	10 U	15 J	1,500 U	4.5 J	12 U	13 U
Trichloroethene	400,000	470	12 U	4 J	11 U	**22,000 D**	9 J	**440** D	12 U	12 U	12 U	12 U	10 U	10 U	10 U	**530**	**290,000 D**	29	12 U	13 U
Vinyl Chloride	27,000	20	12 U	11 U	11 U	60 U	6 J	**28**	4 J	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
o-Xylene [(4)]	1,000,000	1,600	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	6 J	1,500 U	11 U	12 U	13 U
m/p-Xylenes [(4)]	1,000,000	1,600	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	59 U	1,500 U	11 U	12 U	13 U
Total VOC TICs	NS	NS	0	11	0	0	10	71	16	0	0	0	0	0	0	1,831	39,900	65.5	0	0

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are concentrations that exceed Subpart 375.6 soil cleanup objectives for Protection of Groundwater.
4. [(4)] = SCOs for total xylenes.
5. "NS" indicates no standard under part 375.6
6. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
7. "J" indicates an estimated value.
8. "U" indicates that the analyte was analyzed but not detected.
9. "B" indicates the analyte was found in the associated blank.
10. BU-XX-S-DU is a duplicate analysis of sample BU-MW-12-S.
11. BU-S-DUP is a duplicate analysis of sample BU-MW15-S.

Table 11
Sumary of Volatile Organic Compounds in Soil: Geoprobe Borings (µg/kg)
Buell Automatics RI
Rochester, NY

Sample ID	Part 375 Soil Cleanup Objectives [1]		BU-B8-S *	B8 (52679) *	BU-B9-S	B-9 (52678)	BU-B10-S	BU-B11-S	BU-B12-S	BU-B13-S	BU-B14-S	BU-B15-S	B-15 (52680)	BU-B16-S	BU-B17-S	B-17 (52681)	BU-B18-S	BU-B19-S	BU-B21-S	BU-B22-S	BU-B23-S	BU-B24-S	BU-B25-S
Sample Depth (ft. bgs)			1.8 - 2.5	3.2 - 4.5	5.0 - 6.5	5.5 - 6	3.0 - 3.7	7.5 - 8.0	4.0 - 5.3	3.0 - 3.8	3.5 - 4.0	4.5 - 5.0	4 - 6	6.0 - 6.5	4.5 - 5.0	1.5 - 2	4.5 - 5.0	3.5 - 4.0	4.5 - 5.0	5.5 - 6.0	1.0 - 2.0	5.5 - 6.0	5.5 - 6.0
SDG#		Groundwater	R2213195	DEC sample	R2213195	DEC sample	R2213195	R2213195	R2213195	R2213195	R2213195	R2213195	DEC sample	R2213195	R2213195	DEC sample	R2213195	R2316744	R2316744	R2316744	R2316744	R2316744	R2316744
Date	Industrial	Protection	08/12/02	08/12/02	08/12/02	08/12/02	08/12/02	08/08/02	08/08/02	08/08/02	08/08/02	08/09/02	08/09/02	08/09/02	08/09/02	08/09/02	08/08/02	05/05/03	05/03/03	05/05/03	05/05/03	05/03/03	05/03/03
Acetone	1,000,000	50	270,000 U	21.5 U	1,500 U	23.8 U	1,500 U	**58** J	28	**57** J	12 U	1,600 U	50.0 U	12 J	**64**	23.5 U	1,600 U	1,600 U	**59**	65 U	1,500 U	12 U	21
Benzene	89,000	60	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Bromobenzene	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
Bromochloromethane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
Bromodichloromethane	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Bromoform	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Bromomethane	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
2-Butanone	1,000,000	120	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
n-Butylbenzene	1,000,000	12,000		4.3 U		4.8 U							10.0 U			4.7 U							
sec-Butylbenzene	1,000,000	11,000		4.3 U		4.8 U							99.4			4.7 U							
tert-Butylbenzene	1,000,000	5,900		4.3 U		4.8 U							10.0 U			4.7 U							
Carbon Disulfide	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Carbon Tetrachloride	44,000	760	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Chlorobenzene	1,000,000	1,100	270,000 U	4.3 U	1,500 U	137.4	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Chloroethane	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Chloroform	700,000	370	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Chloromethane	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
2-Chlorotoluene	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
4-Chlorotoluene	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
1,2-Dibromoethane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
Dibromomethane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
Dibromochloromethane	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
1,2-Dibromo-3-chloropropane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
1,2-Dichlorobenzene	1,000,000	1,100		4.3 U		4.8 U							10.0 U			4.7 U							
1,3-Dichlorobenzene	560,000	2,400		4.3 U		4.8 U							10.0 U			4.7 U							
1,4-Dichlorobenzene	250,000	1,800		4.3 U		4.8 U							10.0 U			4.7 U							
Dichlorodifluoromethane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
1,1-Dichloroethane	480,000	270	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	5 J	47 J	4.7 U	1,600 U	1,600 U	8 J	65 U	**2,400**	2 J	12 U
1,2-Dichloroethane	60,000	20	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
1,1-Dichloroethene	1,000,000	330	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 J	12 U
trans-1,2-Dichloroethene	1,000,000	190	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
cis-1,2-Dichloroethene	1,000,000	250	**76,000** J	4.3 U	**1,200** J	4.8 U	1,500 U	**480**	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	**1,600**	230	65 U	**84,000** D	**360** D	2 J
1,2-Dichloropropane	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
1,3-Dichloropropane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
2,2-Dichloropropane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
1,1-Dichloropropene	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
trans-1,3-Dichloropropene	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
cis-1,3-Dichloropropene	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Ethylbenzene	780,000	1,000	270,000 U	4.3 U	210 J	4.8 U	1,500 U	520	11 U	60 U	12 U	380 J	10.0 U	6 J	27 J	27.6	1,600 U	480 J	25 U	65 U	1,500 U	12 U	12 U
Hexachlorobutadiene	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
2-Hexanone	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Isopropylbenzene	NS	NS		51.4		4.8 U							10.0 U			4.7 U							
4-Isopropyltoluene	NS	NS		4.3 U		111.8							206.3			120.5							
Methylene Chloride	1,000,000	50	270,000 U	21.5 U	1,500 U	23.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	50.0 U	13 U	61 U	23.5 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
4-Methyl-2-Pentanone	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Methyl-tert-butyl Ether	1,000,000	930		4.3 U		4.8 U							10.0 U			4.7 U							
Naphthalene	1,000,000	12,000		202.1		222.1							58.4			395.3							
n-Propylbenzene	1,000,000	3,900		4.3 U		92.7							10.0 U			33.3							
Styrene	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
1,1,1,2-Tetrachloroethane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
1,1,2,2-Tetrachloroethane	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Tetrachloroethene	300,000	1,300	270,000 U	571.5	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Toluene	1,000,000	700	270,000 U	149.8	1,500 U	10.5	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
1,2,3-Trichlorobenzene	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
1,2,4-Trichlorobenzene	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
1,1,1-Trichloroethane	1,000,000	680	**150,000** J	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	16.6	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	**67,000** D	12 J	12 U
1,1,2-Trichloroethane	NS	NS	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	60 U	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12	12 U
Trichloroethene	400,000	470	**14,000,000** D	**292,258**	1,500 U	18.3	1,500 U	38 J	11 U	60 U	12 U	1,600 U	**4,012.5**	13 U	61 U	22.7	1,600 U	**1,900**	25 U	65 U	**820,000** D	84 D	3 J
Trichlorofluoromethane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
1,2,3-Trichloropropane	NS	NS		4.3 U		4.8 U							10.0 U			4.7 U							
1,2,4-Trimethylbenzene	380,000	3,600		114.8		4.8 U							222.2			411.8							
1,3,5-Trimethylbenzene	380,000	8,400		4.3 U		214.2							10.0 U			117.6							
Vinyl Chloride	27,000	20	270,000 U	4.3 U	1,500 U	4.8 U	1,500 U	**140**	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	4.7 U	1,600 U	1,600 U	25 U	65 U	1,500 U	12	12 U
o-Xylene (4)	1,000,000	1,600	270,000 U	4.3 U	170 J	4.8 U	1,500 U	100	11 U	28 J	12 U	1,600 U	10.0 U	5 J	100	120.7	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
m/p-Xylenes (4)	1,000,000	1,600	270,000 U	8.6 U	270 J	9.5 U	620 J	580	11 U	60 U	12 U	1,600 U	10.0 U	13 U	61 U	75.9	1,600 U	1,600 U	25 U	65 U	1,500 U	12 U	12 U
Total VOC TICs	NS	NS	3,820,000		198,700		114,600	128,700	87	12,530	13	178,900		5,530	12,150		172,500	340,000	6,000	4,490	12,500	0	0

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are analytes that exceed Subpart 375.6 soil cleanup objective for Protection of Groundwater.
4. (4) = SCOs for total xylenes.
5. "NS" indicates no standard under part 375.6
6. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
7. "J" indicates an estimated value.
8. "U" indicates that the analyte was analyzed but not detected.
9. "B" indicates the analyte was found in the associated blank.
10. BU-DUP-S is a duplicate analysis of sample BU-B32-S.
11. BU-XX-S is a duplicate analysis of sample BU-B35-S.
12. * = Excavated during IRM.
13. Blank cell indicates no analysis for this parameter.

Table 11
Sumary of Volatile Organic Compounds in Soil: Geoprobe Borings (µg/kg)
Buell Automatics RI
Rochester, NY

Sample ID / *Sample Depth (ft. bgs)* / *SDG#* / *Date*	Part 375 Soil Cleanup Objectives[1] Industrial	Groundwater Protection	BU-B26-S * 2.5 - 3.0 R2316744 05/03/03	BU-B28-S 6.5 - 7.0 R2316744 05/03/03	BU-B29-S 3.5 - 4.0 R2316744 05/03/03	BU-B30-S 3.5 - 4.0 R2316744 05/03/03	BU-B31-S 6.0 - 6.5 R2316744 05/05/03	BU-B32-S 3.5 - 4.0 R2316744 05/05/03	BU-DUP-S 3.5 - 4.0 R2316744 05/05/03	BU-B33-S 6.0 - 6.5 R2316744 05/05/03	BU-B34-S 2.0 - 2.5 R2316744 05/05/03	BU-B35-S 2.0-3.0 R2527877 09/20/05	BU-XX-S 2.0-3.0 R2527877 09/20/05	BU-35-S 7.0-8.0 R2527877 09/20/05	BU-B36-S 7.0-8.0 R2527877 09/20/05	BU-B36-S 9.0-10.0 R2527877 09/20/05	BU-B37-S 3.0-4.0 R2527877 09/20/05	BU-B39-S 2.5-3.0 R2527877 09/20/05	BU-B39-S 2.5-3.0DL R2527877 09/20/05
Acetone	1,000,000	50	1,400 U	**57**	1,600 U	**85** J	42	1,600 U	1,600 U	16	1,600 U	1,500 U	1,500 U	13	1,500 U	1,500 U	19	**62**	1,500 U
Benzene	89,000	60	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Bromobenzene	NS	NS																	
Bromochloromethane	NS	NS																	
Bromodichloromethane	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Bromoform	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Bromomethane	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
2-Butanone	1,000,000	120	1,400 U	33 U	1,600 U	13 J	4 J	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
n-Butylbenzene	1,000,000	12,000																	
sec-Butylbenzene	1,000,000	11,000																	
tert-Butylbenzene	1,000,000	5,900																	
Carbon Disulfide	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	3 J	1,500 U
Carbon Tetrachloride	44,000	760	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Chlorobenzene	1,000,000	1,100	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Chloroethane	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Chloroform	700,000	370	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Chloromethane	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
2-Chlorotoluene	NS	NS																	
4-Chlorotoluene	NS	NS																	
1,2-Dibromoethane	NS	NS																	
Dibromomethane	NS	NS																	
Dibromochloromethane	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
1,2-Dibromo-3-chloropropane	NS	NS																	
1,2-Dichlorobenzene	1,000,000	1,100																	
1,3-Dichlorobenzene	560,000	2,400																	
1,4-Dichlorobenzene	250,000	1,800																	
Dichlorodifluoromethane	NS	NS																	
1,1-Dichloroethane	480,000	270	1,400 U	6 J	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	**930** J	17	1,500 U	1,500 U	12 U	48 J	1,500 U
1,2-Dichloroethane	60,000	20	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
1,1-Dichloroethene	1,000,000	330	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	**480** J	82 J	0.5 J	1,500 U	1,500 U	12 U	5 J	1,500 U
trans-1,2-Dichloroethene	1,000,000	190	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	81 J	160 J	11 U	1,500 U	1,500 U	12 U	14 J	1,500 U
cis-1,2-Dichloroethene	1,000,000	250	**2,000**	29 J	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	**10,000**	**17,000**	170	**1,700**	**1,900**	130	**3,100** E	**3,300** D
1,2-Dichloropropane	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
1,3-Dichloropropane	NS	NS																	
2,2-Dichloropropane	NS	NS																	
1,1-Dichloropropene	NS	NS																	
trans-1,3-Dichloropropene	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
cis-1,3-Dichloropropene	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Ethylbenzene	780,000	1,000	1,400 U	61	740 J	13 J	12 U	500 J	490 J	12 U	890 J	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Hexachlorobutadiene	NS	NS																	
2-Hexanone	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Isopropylbenzene	NS	NS																	
4-Isopropyltoluene	NS	NS																	
Methylene Chloride	1,000,000	50	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	**3** J	1,500 U
4-Methyl-2-Pentanone	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Methyl-tert-butyl Ether	1,000,000	930																	
Naphthalene	1,000,000	12,000																	
n-Propylbenzene	1,000,000	3,900																	
Styrene	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
1,1,1,2-Tetrachloroethane	NS	NS																	
1,1,2,2-Tetrachloroethane	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Tetrachloroethene	300,000	1,300	1,400 U	20 J	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Toluene	1,000,000	700	1,400 U	29 J	1,600 U	6 J	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
1,2,3-Trichlorobenzene	NS	NS																	
1,2,4-Trichlorobenzene	NS	NS																	
1,1,1-Trichloroethane	1,000,000	680	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	**16,000**	**19,000**	12	**16,000**	1,500 U	12 U	200	1,500 U
1,1,2-Trichloroethane	NS	NS	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	3 J	1,500 U	1,500 U	12 U	61 U	1,500 U
Trichloroethene	400,000	470	**18,000**	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,400 U	1,400 U	51	**1,800**	**3,400**	13	61 U	1,500 U
Trichlorofluoromethane	NS	NS																	
1,2,3-Trichloropropane	NS	NS																	
1,2,4-Trimethylbenzene	380,000	3,600																	
1,3,5-Trimethylbenzene	380,000	8,400																	
Vinyl Chloride	27,000	20	1,400 U	33 U	1,600 U	24 U	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
o-Xylene [(4)]	1,000,000	1,600	1,400 U	130	1,600 U	47	12 U	1,600 U	1,600 U	12 U	1,600 U	240 J	200 J	11 U	240 J	1,500 J	12 U	61 U	1,500 U
m/p-Xylenes [(4)]	1,000,000	1,600	1,400 U	250	1,600 U	34	12 U	1,600 U	1,600 U	12 U	1,600 U	1,500 U	1,500 U	11 U	1,500 U	1,500 U	12 U	61 U	1,500 U
Total VOC TICs	NS	NS	7,630	22,500	490,000	7,270	743	412,000	398,000	30	363,000	170,600	148,500	0	0	0	0	0	0

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are analytes that exceed Subpart 375.6 soil cleanup objective for Protection of Groundwater.
4. [(4)] = SCOs for total xylenes.
5. "NS" indicates no standard under part 375.6
6. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
7. "J" indicates an estimated value.
8. "U" indicates that the analyte was analyzed but not detected.
9. "B" indicates the analyte was found in the associated blank.
10. BU-DUP-S is a duplicate analysis of sample BU-B32-S.
11. BU-XX-S is a duplicate analysis of sample BU-B35-S.
12. * = Excavated during IRM.
13. Blank cell indicates no analysis for this parameter.

Table 11
Sumary of Volatile Organic Compounds in Soil: Geoprobe Borings (µg/kg)
Buell Automatics RI
Rochester, NY

Sample ID / *Sample Depth (ft. bgs)* / *SDG#* / *Date*	Part 375 Soil Cleanup Objectives [1] Industrial	Part 375 Soil Cleanup Objectives [1] Groundwater Protection	BU-B39-S 6.0-7.0 R2527877 09/20/05	BU-B40-S 6.5-7.0 R2527877 09/20/05	BU-B40-S 6.5-7.0DL R2527877 09/20/05	BU-B40-S 7.5-8.0 R2527877 09/20/05	BU-B41-S 3.5-4.0 R2527877 09/20/05	BU-B42-S 3.5-4.0 R2527877 09/20/05	BU-B42-S 3.5-4.0DL R2527877 09/20/05	BU-B42-S 7.0-8.0 R2527877 09/20/05	BU-B43-S 3.0-4.0 R2527877 09/20/05	BU-B43-S 3.0-4.0DL R2527877 09/20/05	BU-B43-S 7.0-8.0 R2527877 09/20/05
Acetone	1,000,000	50	18	25 J	1,600 U	60 U	3 J	19	23 JD	1,500 U	8 J	16 JD	1,500 U
Benzene	89,000	60	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Bromobenzene	NS	NS											
Bromochloromethane	NS	NS											
Bromodichloromethane	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Bromoform	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Bromomethane	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
2-Butanone	1,000,000	120	3 J	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
n-Butylbenzene	1,000,000	12,000											
sec-Butylbenzene	1,000,000	11,000											
tert-Butylbenzene	1,000,000	5,900											
Carbon Disulfide	NS	NS	11 U	58 U	1,600 U	60 U	12 U	1 J	62 U	1,500 U	12 U	61 U	1,500 U
Carbon Tetrachloride	44,000	760	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Chlorobenzene	1,000,000	1,100	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Chloroethane	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Chloroform	700,000	370	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Chloromethane	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
2-Chlorotoluene	NS	NS											
4-Chlorotoluene	NS	NS											
1,2-Dibromoethane	NS	NS											
Dibromomethane	NS	NS											
Dibromochloromethane	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
1,2-Dibromo-3-chloropropane	NS	NS											
1,2-Dichlorobenzene	1,000,000	1,100											
1,3-Dichlorobenzene	560,000	2,400											
1,4-Dichlorobenzene	250,000	1,800											
Dichlorodifluoromethane	NS	NS											
1,1-Dichloroethane	480,000	270	2 J	240	190 JD	8 J	2 J	32	37 JD	170 J	28	25 JD	1,500 U
1,2-Dichloroethane	60,000	20	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
1,1-Dichloroethene	1,000,000	330	0.5 J	33 J	1,600 U	60 U	12 U	3 J	4 JD	1,500 U	2 J	61 U	1,500 U
trans-1,2-Dichloroethene	1,000,000	190	11 U	13 J	1,600 U	60 U	12 U	3 J	62 U	1,500 U	4 J	61 U	1,500 U
cis-1,2-Dichloroethene	1,000,000	250	22	**7,500** E	**8,300** D	**580**	44	**820** E	**980** D	1,500 U	**800** E	**790** D	**2,200**
1,2-Dichloropropane	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
1,3-Dichloropropane	NS	NS											
2,2-Dichloropropane	NS	NS											
1,1-Dichloropropene	NS	NS											
trans-1,3-Dichloropropene	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
cis-1,3-Dichloropropene	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Ethylbenzene	780,000	1,000	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Hexachlorobutadiene	NS	NS											
2-Hexanone	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Isopropylbenzene	NS	NS											
4-Isopropyltoluene	NS	NS											
Methylene Chloride	1,000,000	50	11 U	4 J	1,600 U	60 U	12 U	0.6 J	62 U	1,500 U	0.6 J	61 U	1,500 U
4-Methyl-2-Pentanone	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Methyl-tert-butyl Ether	1,000,000	930											
Naphthalene	1,000,000	12,000											
n-Propylbenzene	1,000,000	3,900											
Styrene	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
1,1,1,2-Tetrachloroethane	NS	NS											
1,1,2,2-Tetrachloroethane	NS	NS	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Tetrachloroethene	300,000	1,300	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Toluene	1,000,000	700	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
1,2,3-Trichlorobenzene	NS	NS											
1,2,4-Trichlorobenzene	NS	NS											
1,1,1-Trichloroethane	1,000,000	680	2 J	220	1,600 U	60 U	12 U	12 U	62 U	170 J	12 U	61 U	1,500 U
1,1,2-Trichloroethane	NS	NS	1 J	16 J	1,600 U	7 J	1 J	3 J	3 JD	49 J	12 U	61 U	1,500 U
Trichloroethene	400,000	470	11 U	**900**	**590** JD	81	19	3 J	4 JD	**3,400**	2 J	61 U	230 J
Trichlorofluoromethane	NS	NS											
1,2,3-Trichloropropane	NS	NS											
1,2,4-Trimethylbenzene	380,000	3,600											
1,3,5-Trimethylbenzene	380,000	8,400											
Vinyl Chloride	27,000	20	11 U	11 J	1,600 U	60 U	12 U	7 J	6 JD	1,500 U	**45**	**25** JD	1,500 U
o-Xylene [(4)]	1,000,000	1,600	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
m/p-Xylenes [(4)]	1,000,000	1,600	11 U	58 U	1,600 U	60 U	12 U	12 U	62 U	1,500 U	12 U	61 U	1,500 U
Total VOC TICs	NS	NS	0	0	0	0	0	0	0	0	0	0	0

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are analytes that exceed Subpart 375.6 soil cleanup objective for Protection of Groundwater.
4. [(4)] = SCOs for total xylenes.
5. "NS" indicates no standard under part 375.6
6. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
7. "J" indicates an estimated value.
8. "U" indicates that the analyte was analyzed but not detected.
9. "B" indicates the analyte was found in the associated blank.
10. BU-DUP-S is a duplicate analysis of sample BU-B32-S.
11. BU-XX-S is a duplicate analysis of sample BU-B35-S.
12. * = Excavated during IRM.
13. Blank cell indicates no analysis for this parameter.

Table 12
Summary of Semi-Volatile Organic Compounds in Soil (µg/kg)
Buell Automatics
Rochester, NY

Sample ID	Part 375 Soil Cleanup Objectives [1]		Monitoring Wells									
Sample ID	Industrial	Groundwater Protection	BU-MW2D-S	BU-MW6-S	BU-MW7-S	BU-MW8-S	BU-MW9-S	BU-MW10-S	BU-MW11-S	BU-MW12-S	BU-XX-S-DU	BU-MW13-S
Sample Depth (ft. bgs)			8.0 - 10.0	15.0 - 15.9	16.0 - 18.0	16.0 - 18.0	4.0 - 6.0	8.0 - 10.0	10.0 - 12.0	12.0 - 14.0	12.0 - 14.0	6.0 - 8.0
SDG#			R2213195	R2213195	R2212007	R2212007	R2213195	R2213195	R2213195	R2212007	R2212007	R2212007
Date			08/05/02	08/08/02	05/21/02	05/21/02	08/06/02	08/05/02	08/07/02	05/22/02	05/22/02	05/21/02
Acenaphthene	1,000,000	98,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Acenaphthylene	1,000,000	107,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Anthracene	1,000,000	1,000,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Benzo(a)anthracene	11,000	1,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Benzo(a)pyrene	1,100	22,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Benzo(b)fluoranthene	11,000	1,700	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Benzo(g,h,i)perylene	1,000,000	1,000,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Benzo(k)fluoranthene	110,000	1,700	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Butyl benzyl phthalate	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Di-n-butylphthalate	NS	NS	410 U	43 J	80 JB	81 JB	400 U	3,800 U	370 U	79 JB	78 JB	64 JB
Carbazole	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Indeno(1,2,3-cd)pyrene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
4-chloroaniline	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Bis(-2-chloroethoxy)methane	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Bis(-2-chloroethyl)ether	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2-chloronaphthalene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2-chlorophenol	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2,2'-oxybis(1-chloropropane)	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Chrysene	110,000	1,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Dibenz(a,h)anthracene	1,100	1,000,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Dibenzofuran	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
1,3-dichlorobenzene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
1,2-dichlorobenzene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
1,4-dichlorobenzene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
3,3'-dichlorobenzidine	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2,4-dichlorophenol	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Diethylphthalate	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Dimethyl phthalate	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2,4-dimethylphenol	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2,4-dinitrophenol	NS	NS	1,000 U	930 U	890 U	990 U	990 U	9,500 U	930 U	1,000 U	420 U	1,000 U
2,4-dinitrotoluene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2,6-dinitrotoluene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Bis(2-ethylhexyl)phthalate	NS	NS	47 J	46 J	370 U	400 U	98 J	3,800 U	39 J	400 U	63 J	400 U
Fluoranthene	1,000,000	1,000,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Fluorene	1,000,000	386,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Hexachlorobenzene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Hexachlorobutadiene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Hexachlorocyclopentadiene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Hexachloroethane	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Isophorone	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2-methylnaphthalene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
4,6-dinitro-2-methylphenol	NS	NS	1,000 U	930 U	890 U	990 U	990 U	9,500 U	930 U	1,000 U	1,000 U	1,000 U
4-chloro-3-methylphenol	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2-methylphenol	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
4-methylphenol	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Naphthalene	1,000,000	12,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2-nitroaniline	NS	NS	1,000 U	930 U	890 U	990 U	990 U	9,500 U	930 U	1,000 U	420 U	1,000 U
3-nitroaniline	NS	NS	1,000 U	930 U	890 U	990 U	990 U	9,500 U	930 U	1,000 U	1,000 U	1,000 U
4-nitroaniline	NS	NS	1,000 U	930 U	890 U	990 U	990 U	9,500 U	930 U	1,000 U	1,000 U	1,000 U
Nitrobenzene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	1,000 U	400 U
2-nitrophenol	NS	NS	410 U	370 U	370 U	990 U	400 U	3,800 U	370 U	400 U	420 U	400 U
4-nitrophenol	NS	NS	1,000 U	930 U	890 U	990 U	990 U	9,500 U	930 U	1,000 U	1,000 U	1,000 U
N-nitrosodiphenylamine	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Di-n-octyl phthalate	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Pentachlorophenol	55,000	800	1,000 U	930 U	890 U	990 U	990 U	9,500 U	930 U	1,000 U	1,000 U	1,000 U
Phenanthrene	1,000,000	1,000,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
Phenol	1,000,000	330	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
4-bromophenyl-phenylether	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
4-chlorophenyl-phenylether	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
N-nitroso-di-n-propylamine	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	410 U	400 U
Pyrene	1,000,000	1,000,000	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
1,2,4-trichlorobenzene	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2,4,6-trichlorophenol	NS	NS	410 U	370 U	370 U	400 U	400 U	3,800 U	370 U	400 U	420 U	400 U
2,4,5-trichlorophenol	NS	NS	1,000 U	930 U	890 U	990 U	990 U	9,500 U	930 U	1,000 U	1,000 U	1,000 U
Benzoic acid	NS	NS										
Benzyl alcohol	NS	NS										
Pyridine	NS	NS										
Total SVOC TICs	NS	NS	1,617	1,656	174	2,206	0	139,500	2,241	3,005	3,695	2,545

Sample ID	Geoprobe Soil Borings																
Sample ID	BU-B8-S	BU-B9-S	BU-B10-S	BU-B11-S	BU-B12-S	BU-B13-S	BU-B14-S	BU-B15-S	B-15 (52680)	BU-B16-S	B-17 (52681)	BU-B17-S	BU-B18-S	BU-B36-S	BU-B36-S	BU-B43-S	BU-B43-S
Sample Depth (ft. bgs)	1.8 - 2.5	5.0 - 6.5	3.0 - 3.7	7.5 - 8.0	4.0 - 5.3	3.0 - 3.8	3.5 - 4.0	4.5 - 5.0	4 - 6	6.0 - 6.5	1.5 - 2	4.5 - 5.0	4.5 - 5.0	7.0-8.0	9.0-10.0	3.0-4.0	7.0-8.0
SDG#	R2213195	R2213195	R2213195	R2213195	R2213195	R2213195	R2213195	R2213195	DEC sample	R2213195	DEC sample	R2213195	R2213195				
Date	08/12/02	08/12/02	08/12/02	08/08/02	08/08/02	08/08/02	08/08/02	08/09/02	08/09/02	08/09/02	08/09/02	08/09/02	08/08/02	9/20/05	9/20/05	9/20/05	9/20/05
Acenaphthene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Acenaphthylene	820 J	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Anthracene	1,700 J	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Benzo(a)anthracene	**7,900**	3,900 U	3,900 U	400 U	71 J	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Benzo(a)pyrene	**8,000**	3,900 U	3,900 U	400 U	79 J	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Benzo(b)fluoranthene	**5,700**	3,900 U	3,900 U	400 U	60 J	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Benzo(g,h,i)perylene	4,600	3,900 U	3,900 U	400 U	57 J	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Benzo(k)fluoranthene	**6,400**	3,900 U	3,900 U	400 U	63 J	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Butyl benzyl phthalate	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Di-n-butylphthalate	3,600 U	3,900 U	3,900 U	400 U	39 J	400 U	51 J	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Carbazole	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Indeno(1,2,3-cd)pyrene	5,200	3,900 U	3,900 U	400 U	58 J	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
4-chloroaniline	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Bis(-2-chloroethoxy)methane	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Bis(-2-chloroethyl)ether	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2-chloronaphthalene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2-chlorophenol	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2,2'-oxybis(1-chloropropane)	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Chrysene	**7,300**	3,900 U	3,900 U	400 U	89 J	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Dibenz(a,h)anthracene	2,000 J	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Dibenzofuran	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
1,3-dichlorobenzene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
1,2-dichlorobenzene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
1,4-dichlorobenzene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
3,3'-dichlorobenzidine	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2,4-dichlorophenol	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Diethylphthalate	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Dimethyl phthalate	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2,4-dimethylphenol	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2,4-dinitrophenol	9,000 U	9,800 U	9,300 U	1,000 U	950 U	1,000 U	1,000 U	5,300 U	208 U	1,100 U	196 U	10,000 U	5,200 U	1,000 U	1,000 U	1,000 U	1,000 U
2,4-dinitrotoluene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2,6-dinitrotoluene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Bis(2-ethylhexyl)phthalate	800 J	3,900 U	3,900 U	60 J	70 J	41 J	56 J	2,100 U	208 U	77 J	196 U	4,100 U	2,100 U	400 U	490	72 J	46 J
Fluoranthene	15,000	3,900 U	3,900 U	400 U	250 J	400 U	400 U	2,100 U	208 U	450 U	196 U	450 J	420 J	400 U	400 U	410 U	410 U
Fluorene	500 J	510 J	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	250 J	400 U	400 U	410 U	410 U
Hexachlorobenzene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Hexachlorobutadiene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Hexachlorocyclopentadiene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Hexachloroethane	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Isophorone	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2-methylnaphthalene	1,700 J	3,500 J	740 J	630	380 U	400 U	400 U	360 J	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
4,6-dinitro-2-methylphenol	9,000 U	9,800 U	9,700 U	1,000 U	950 U	1,000 U	1,000 U	5,300 U	208 U	1,100 U	196 U	10,000 U	5,200 U	1,000 U	1,000 U	1,000 U	1,000 U
4-chloro-3-methylphenol	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2-methylphenol	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
4-methylphenol	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Naphthalene	650 J	1,100 J	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	217	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2-nitroaniline	9,000 U	9,800 U	9,700 U	1,000 U	950 U	1,000 U	1,000 U	5,300 U	208 U	1,100 U	196 U	10,000 U	5,200 U	1,000 U	1,000 U	1,000 U	1,000 U
3-nitroaniline	9,000 U	9,800 U	9,700 U	1,000 U	950 U	1,000 U	1,000 U	5,300 U	208 U	1,100 U	196 U	10,000 U	5,200 U	1,000 U	1,000 U	1,000 U	1,000 U
4-nitroaniline	9,000 U	9,800 U	9,700 U	1,000 U	950 U	1,000 U	1,000 U	5,300 U	208 U	1,100 U	196 U	10,000 U	5,200 U	1,000 U	1,000 U	1,000 U	1,000 U
Nitrobenzene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2-nitrophenol	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
4-nitrophenol	9,000 U	9,800 U	9,700 U	1,000 U	950 U	1,000 U	1,000 U	5,300 U	208 U	1,100 U	196 U	10,000 U	5,200 U	1,000 U	1,000 U	1,000 U	1,000 U
N-nitrosodiphenylamine	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Di-n-octyl phthalate	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Pentachlorophenol	9,000 U	9,800 U	9,700 U	1,000 U	950 U	1,000 U	1,000 U	5,300 U	208 U	1,100 U	196 U	10,000 U	5,200 U	400 U	400 U	410 U	410 U
Phenanthrene	3,500 J	540 J	3,900 U	170 J	180 J	400 U	400 U	2,100 U	208 U	450 U	196 U	940 J	480 J	400 U	400 U	410 U	410 U
Phenol	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	1,000 U	1,000 U	1,000 U	1,000 U
4-bromophenyl-phenylether	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
4-chlorophenyl-phenylether	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
N-nitroso-di-n-propylamine	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
Pyrene	8,200	3,900 U	3,900 U	400 U	120 J	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	280 J	400 U	400 U	410 U	410 U
1,2,4-trichlorobenzene	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2,4,6-trichlorophenol	3,600 U	3,900 U	3,900 U	400 U	380 U	400 U	400 U	2,100 U	208 U	450 U	196 U	4,100 U	2,100 U	400 U	400 U	410 U	410 U
2,4,5-trichlorophenol	9,000 U	9,800 U	9,700 U	1,000 U	950 U	1,000 U	1,000 U	5,300 U	208 U	1,100 U	196 U	10,000 U	5,200 U	1,000 U	1,000 U	1,000 U	1,000 U
Benzoic acid									208 U		196 U						
Benzyl alcohol									208 U		196 U						
Pyridine									208 U		196 U						
Total SVOC TICs	271,640	345,810	191,100	37,870	5,260	2,830	2,490	27,000		30,810		136,300	92,700				

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are analytes that exceed Subpart 375.6 soil cleanup objective for Protection of Groundwater.
4. "NS" indicates no standard under part 375.6
5. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
6. "J" indicates an estimated value.
7. "U" indicates that the analyte was analyzed but not detected.
8. "B" indicates the analyte was found in the associated blank.
9. BU-XX-S-DUP is a duplicate analysis of sample BU-MW12-S.

Table 13
Summary of PCBs and Pesticides in Soil (µg/kg)
Buell Automatics RI
Rochester, NY

Sample ID	Part 375 Soil Cleanup Objectives [1]		BU-MW8-S	BU-MW-10-S	BU-MW13-S	BU-XX-S-DU	BU-B10-S	BU-B13-S	BU-B14-S	BU-B15-S	BU-B16-S	BU-B17-S	BU-B18-S
Sample Depth (ft. bgs)		Protection of	16.0-18.0	2.0-4.0	10.0 - 12.0	10.0 - 12.0	3.0-3.7	10.0 - 12.0	3.5 - 4.0	4.5 - 5.0	6.0 - 6.5	4.5 - 5.0	4.5 - 5.0
SDG#	Industrial	Groundwater	R2212007	R2213195	R2212007	R2212007	R2213195	R2213195	R2213195	R2213195	R2213195	R2213195	R2213195
Date			05/21/02	08/05/02	05/22/02	05/22/02	08/12/02	08/08/02	08/08/02	08/09/02	08/09/02	08/09/02	08/08/02
PCBs													
Aroclor-1016	NS	NS	40 U	38 U	40 U	41 U	39 U	40 U	40 U	42 U	44 U	40 U	42 U
Aroclor-1221	NS	NS	80 U	76 U	80 U	83 U	77 U	80 U	80 U	85 U	89 U	81 U	84 U
Aroclor-1232	NS	NS	40 U	38 U	40 U	41 U	39 U	40 U	40 U	42 U	44 U	40 U	42 U
Aroclor-1242	NS	NS	40 U	38 U	40 U	41 U	39 U	40 U	40 U	42 U	44 U	40 U	42 U
Aroclor-1248	NS	NS	40 U	38 U	40 U	41 U	39 U	40 U	40 U	42 U	44 U	40 U	42 U
Aroclor-1254	NS	NS	40 U	38 U	40 U	41 U	39 U	40 U	40 U	42 U	44 U	40 U	42 U
Aroclor-1260	NS	NS	40 U	38 U	40 U	41 U	39 U	40 U	40 U	42 U	44 U	40 U	42 U
Total PCBs	25,000	3,200											
Pesticides													
Aldrin	1,400	190	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
Alpha-BHC	6,800	20	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
Beta-BHC	14,000	90	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
Delta-BHC	1,000,000	250	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
Gamma-BHC (lindane)	23,000	100	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
Alpha-chlordane	47,000	2,900	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
Gamma-chlordane	NS	NS	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
4,4'-ddd	180,000	14,000	4.0 U	3.8 U	4.0 U	4.1 U	3.9 U	4.0 U	-	-	-	-	-
4,4'-dde	120,000	17,000	4.0 U	3.8 U	4.0 U	4.1 U	3.9 U	4.0 U	-	-	-	-	-
4,4'-ddt	94,000	136,000	4.0 U	3.8 U	4.0 U	4.1 U	3.9 U	4.0 U	-	-	-	-	-
Dieldrin	2,800	100	4.0 U	3.8 U	4.0 U	4.1 U	3.9 U	4.0 U	-	-	-	-	-
Endosulfan I	920,000	102,000	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
Endosulfan II	920,000	102,000	4.0 U	3.8 U	4.0 U	4.1 U	3.9 U	4.0 U	-	-	-	-	-
Endosulfan sulfate	920,000	1,000,000	4.0 U	3.8 U	4.0 U	4.1 U	3.9 U	4.0 U	-	-	-	-	-
Endrin	410,000	60	4.0 U	3.8 U	4.0 U	4.1 U	3.9 U	4.0 U	-	-	-	-	-
Endrin aldehyde	NS	NS	4.0 U	3.8 U	4.0 U	4.1 U	3.9 U	4.0 U	-	-	-	-	-
Endrin ketone	NS	NS	4.0 U	3.8 U	4.0 U	4.1 U	3.9 U	4.0 U	-	-	-	-	-
Heptachlor	29,000	380	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
Heptachlor epoxide	NS	NS	2.0 U	1.9 U	2.0 U	2.1 U	1.9 U	2.0 U	-	-	-	-	-
Methoxychlor	NS	NS	20.0 U	19.0 U	20.0 U	21.0 U	19.0 U	20.0 U	-	-	-	-	-
Toxaphene	NS	NS	200.0 U	190.0 U	200.0 U	210.0 U	190.0 U	200.0 U	-	-	-	-	-

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All results are expressed in micrograms per kilogram (µg/kg), which is equivalent to parts per billion.
3. N/A = not available.
4. B-14, B-15, B-16, B-17 and B-18 analyzed for PCBs only.
5. "U" indicates that the analyte was analyzed but not detected.
6. "NS" indicates no standard under part 375.6
7. BU-XX-S-DU is a duplicate sample of BU-MW13-S.

Table 14
Sumary of TAL Metals in Soil (mg/kg)
Buell Automatics RI
Rochester, NY

Sample ID	Eastern	Part 375 Soil Cleanup Objectives [1]		BU-MW7-S	BU-MW8-S	BU-MW10-S	BU-MW12-S	BU-XX-S-DU	BU-MW13-S	BU-B10-S	BU-B13-S	BU-B14-S	BU-B17-S	BU-B18-S
Sample Depth (ft. bgs)	USA		Protection of	14.0-16.0	18.0-20.0	2.0-4.0	12.0 - 14.0	12.0 - 14.0	6.0 - 8.0	3.0 - 3.7	3.0 - 3.8	3.5 - 4.0	4.5 - 5.0	4.5 - 5.0
SDG#	Background	Industrial	Groundwater	R2212007	R2212007	R2213195	R2212007	R2212007	R2212007	R2213195	R2213195	R2213195	R2213195	R2213195
Date	Levels			05/21/02	05/21/02	08/05/02	05/22/02	05/22/02	05/21/02	08/12/02	08/08/02	08/08/02	08/09/02	08/08/02
Silver	NA	6,800	8.3	0.97 U	1.10 U	0.20 U	1.10 U	1.10 U	1.10 U	0.22 U	0.22 U	0.22 U	0.18 U	0.23 U
Aluminum	33,000	NS	NS	4,410	7,050	4,240	1,820	1,980	1,970	6,930	5,310	3,670	2,930	2,960
Arsenic	3 - 12	16	16	1.60 B	2.10 B	2.00 B	0.66 B	0.56 U	2.80	2.40	1.00 B	2.20 B	1.20 B	1.40 B
Barium	15 - 600	10,000	820	43.10	59.80	20.60 B	9.90 B	10.60 B	57.70	48.50	21.60 B	16.60 B	16.90 B	17.80 B
Beryllium	0 - 1.75	2,700	47	0.30 B	0.26 B	0.08 B	0.24 U	0.26 U	0.24 U	0.15 B	0.08 B	0.04 U	0.05 B	0.06 B
Calcium	130 - 35,000	NS	NS	47,100	48,700	1,240	18,800	22,200	21,700	1,450	1,490	1,390	3,300	2,270
Cadmium	0.1 - 1	60	7.5	0.38 U	0.42 U	0.45 B	0.41 U	0.43 U	0.41 U	0.06 U	0.43 B	0.42 B	0.30 B	0.33 B
Cobalt	2.5 - 60	NS	NS	4.50 B	8.20 B	3.50 B	2.50 U	2.70 U	2.90 B	5.30 B	3.40 B	4.10 B	3.00 B	3.20 B
Chromium	1.5 - 40	800	19	7.4	12.7	6.1	3.1	3.1	4.1	9.1	13.5	4.3	5.2	5.2
Copper	1 - 50	10,000	1720	10.10	9.50	6.90	3.40 B	3.90 B	6.30	8.60	10.40	7.10	4.90	6.60
Iron	2,000 - 550,000	NS	NS	10,200	13,800	8,550	4,280	4,980	5,780	15,100	8,210	7,280	6,240	7,300
Mercury	0.001 - 0.2	5.7	0.73	0.01 U	0.01 U	0.01 B	0.01 U	0.01 U	0.01 U	0.02 B	0.01 B	0.01 U	0.01 B	0.01 U
Potassium	8,500 - 43,000	NS	NS	797 B	1,130 B	345 B	263 B	319 B	288 B	270 B	358 B	380 B	274 B	255 B
Magnesium	100 - 5,000	NS	NS	12,100	12,400	1,380	4,400	5,490	5,930	1,480	1,520	1,320	1,710	1,530
Manganese	50 - 5,000	10,000	2,000	316 N	393 N	430	183 N	207 N	622 N	237	267	197	103	97
Sodium	6,000 - 8,000	NS	NS	44.0 U	48.8 U	86.7 U	48.4 U	50.7 U	48.3 U	92.7 U	111.0 B	96.4 U	110.0 B	123.0 B
Nickel	0.5 - 25	10,000	130	10.2	14.7	5.8 B	4.0 B	5.2 B	5.1 B	8.8 B	7.7 B	6.8 B	6.1 B	7.1 B
Lead	200 - 500	3,900	450	4.30	3.50	2.40	0.88	0.98	1.80	4.00	2.20	2.30	2.00	2.50
Antimony	NA	NS	NS	1.80 UN	2.00 UN	0.60 U	2.00 UN	2.10 UN	2.00 UN	0.64 U	0.65 U	0.67 U	0.53 U	0.69 U
Selenium	0.1 - 3.9	6,800	4	0.33 UW	0.36 UW	0.44 U	0.36 UW	0.37 UW	0.37 U	0.47 U	0.47 U	0.49 U	0.39 U	0.50 U
Thallium	NA	NS	NS	0.56 UW	0.61 UW	0.32 U	0.61 UW	0.62 UW	0.62 UW	0.34 U	0.34 U	0.35 U	0.28 U	0.36 U
Vanadium	1 - 300	NS	NS	12.7	18.0	12.6	5.0 B	6.0 B	5.4 B	24.1	11.6	9.3 B	9.5	9.7 B
Zinc	9 - 50	10,000	2,480	26.2	34.7	18.1	13.2	12.0	14.0	20.8	17.9	28.7	14.7	17.2
Total Cyanide	NA	10,000	40	1.11 U	1.20 U	1.14 U	1.21 U	1.24 U	1.21 U	1.16 U	1.20 U	1.21 U	1.22 U	1.26 U

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All data reported in milligrams per kilogram (mg/kg) which is equivalent to parts per million.
3. NA = not available.
4. **Bold-faced** values are analytes that exceed Subpart 375.6 soil cleanup objective for Protection of Groundwater.
5. BU-XX-S-DU is a duplicate analysis of sample BU-MW12-S.
6. "B" indicates the analyte was found in the associated blank.
7. "U" indicates that the analyte was analyzed but not detected.
8. "W" indicates that post-digestion spike for Furnace AA is out of control limits.
9. "N" indicates presumptive evidence of a compound.
10. "SB" indicates site background.
11. Part 375 has separate criteria for hexavalent and trivalent chromium. Total chromium concentrations are compared with the more stringent criteria for hexavalent chromium.
12. "NS" indicates no standard under part 375.6

Table 15
Summary of Total Petroleum Hydrocarbons in Soil
Buell Automatics RI
Rochester, NY

Sample ID / *Sample Depth (ft. bgs)* / *SDG#* / *Date*	**Part 375 Soil Cleanup Objectives** [1] **Industrial**	**Protection of Groundwater**	**BU-B20-S** 3.5-4 R2213195 05/03/03	**BU-B27-S** 3.5-4 R2316744 05/03/03	**BU-B32-S** 3.5-4 R2316744 05/05/03	**BU-DUP-S** 3.5-4 R2316744 05/05/03
TPH						
As N-Dodecane	NS	NS	19,000	6,600	14,000	8,400
Fuel Oil #2/ Diesel Fuel	NS	NS	2,400 U	1,200 U	2,500 U	1,300 U
Gasoline	NS	NS	2,400 U	1,200 U	2,500 U	1,300 U
Kerosene	NS	NS	2,400 U	1,200 U	2,500 U	1,300 U
Lube Oil	NS	NS	2,400 U	1,200 U	2,500 U	1,300 U

Notes:
1. NYSDEC. 6 NYCRR Part 375-6.8(a) and 6.8(b) Recommended Soil Cleanup Objectives, effective December 14, 2006.
2. All results are expressed in milligrams per kilogram (mg/kg), which is equivalent to parts per million.
3. "U" indicates that the analyte was analyzed but not detected.
4. "NS" indicates no standard under part 375.6
5. BU-DUP-S is a duplicate of BU-B32-S

TABLE 16
SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER: MONITORING WELLS
Buell Automatics RI
Rochester, NY

Sample ID	NYSDEC Groundwater	Monitoring Wells									
		BU-MW1-GW	BU-MW2-GW		MW3	BU-MW3-GW	MW4	BU-MW5-GW	BU-MW6-GW		
SDG#	Standards and Guidance	R2213646	R2213646	R2631499	R2422723	R2631499	R2422723	R2213646	R2213646	R2422723	R2631499
Sample Date	Values [1]	09/12/02	09/10/02	05/01/06	08/24/04	05/01/06	08/24/04	09/10/02	09/11/02	08/24/04	05/01/06
Acetone	50 (G)	10 U	10 U	200 U	20 U	10 U	20 U	10 U	10 U	400 U	200 U
Benzene	1	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Bromodichloromethane	50 (G)	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Bromoform	50 (G)	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Bromomethane	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
2-Butanone	NS	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	200 U	200 U
Carbon Disulfide	60 (G)	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	200 U	200 U
Carbon Tetrachloride	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Chlorobenzene	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Chloroethane	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Chloroform	7	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Chloromethane	NS	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Dibromochloromethane	50 (G)	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
1,1-Dichloroethane	5	10 U	**19**	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
1,2-Dichloroethane	1	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
1,1-Dichloroethene	5	10 U	4 J	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
trans-1,2-Dichloroethene	5	10 U	**6** J	**26 J**	5 U	10 U	5 U	10 U	10 U	100 U	200 U
cis-1,2-Dichloroethene	5	10 U	**4,200** D	**3,800**	5 U	10 U	5 U	10 U	10 U	**1,000**	**720**
1,2-Dichloropropane	1	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
trans-1,3-Dichloropropene	0.4 (-cis and -trans)	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
cis-1,3-Dichloropropene	0.4 (-cis and -trans)	10 U	10 U	200 U	5 U	10 U	5 U	10 U	**21**	100 U	200 U
Ethylbenzene	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
2-Hexanone	50 (G)	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	200 U	200 U
Methylene Chloride	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
4-Methyl-2-Pentanone	NA	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	200 U	200 U
Styrene	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
1,1,2,2-Tetrachloroethane	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Tetrachloroethene	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Toluene	5	10 U	1 J	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
1,1,1-Trichloroethane	5	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	**25** J
1,1,2-Trichloroethane	1	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Trichloroethene	5	10 U	**8** J	**240**	5 U	10 U	5 U	10 U	**66**	**3,300**	**2400**
Vinyl Chloride	2	10 U	**470** D	**560**	5 U	10 U	5 U	10 U	10 U	100 U	**50**
o-Xylene	5 (total xylenes)	10 U	2 J	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
m/p-Xylenes	5 (total xylenes)	10 U	10 U	200 U	5 U	10 U	5 U	10 U	10 U	100 U	200 U
Total VOC TICs	NS	**7**	0		41 J		0	0	0		

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Reissued June 1998. April 2000 Addendum.
2. All results are expressed in micrograms per liter (ug/L), which is equivalent to parts per billion.
3. **Bold-faced** values are samples that exceed Class GA groundwater standards and guidance values.
4. "J" indicates an estimated value.
5. (G) indicates guidance value.
6. NA indicates the POC groundwater standard is Not Applicable.
7. "U" indicates that the analyte was analyzed but not detected.
8. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
9. NS = No Standard.

TABLE 16
SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER: MONITORING WELLS
Buell Automatics RI
Rochester, NY

Sample ID	NYSDEC Groundwater	Monitoring Wells											
		BU-MW7-GW			BU-MW8-GW		BU-MW9-GW		BU-MW10-GW		BU-MW11-GW		
SDG#	Standards and Guidance	R2213646	R2422723	R2631499	R2213646	R2631499	R2213646	R2631499	R2213646	R2631499	R2316048	R2422723	R2631499
Sample Date	Values (1)	09/11/02	08/24/04	05/01/06	09/10/02	05/01/06	09/11/02	05/01/06	09/11/02	05/01/06	03/13/03	08/24/04	05/01/06
Acetone	50 (G)	10 U	20 U	10 U	200 U	200 U	10 U	**8.9 J**	500 U	200 U	20 U	20 U	40 U
Benzene	1	10 U	5 U	10 U	200 U	200 U	**1** J	20 U	500 U	200 U	20 U	5 U	40 U
Bromodichloromethane	50 (G)	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Bromoform	50 (G)	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Bromomethane	5	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
2-Butanone	NS	10 U	10 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	10 U	40 U
Carbon Disulfide	60 (G)	**44**	10 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	10 U	40 U
Carbon Tetrachloride	5	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Chlorobenzene	5	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Chloroethane	5	10 U	5 U	10 U	200 U	200 U	**9** J	**5.4 J**	500 U	200 U	20 U	5 U	40 U
Chloroform	7	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Chloromethane	NS	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Dibromochloromethane	50 (G)	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
1,1-Dichloroethane	5	10 U	5 U	10 U	200 U	**14** J	**140**	**170**	**490** J	**330**	**58**	**24**	**87**
1,2-Dichloroethane	1	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
1,1-Dichloroethene	5	**3** J	5 U	10 U	200 U	200 U	2 J	20 U	500 U	200 U	20 U	5 U	**6** J
trans-1,2-Dichloroethene	5	**2** J	5 U	10 U	200 U	200 U	2 J	1.9 J	**61** J	200 U	20 U	5 U	4 J
cis-1,2-Dichloroethene	5	**170**	**8.3**	**20**	200 U	**3,300**	**220** D	**250**	**8,300**	**3,000**	**310**	**200**	**740**
1,2-Dichloropropane	1	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
trans-1,3-Dichloropropene	0.4 (-cis and -trans)	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
cis-1,3-Dichloropropene	0.4 (-cis and -trans)	10 U	5 U	10 U	**510**	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Ethylbenzene	5	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
2-Hexanone	50 (G)	10 U	10 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	10 U	40 U
Methylene Chloride	5	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
4-Methyl-2-Pentanone	NA	10 U	10 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	10 U	40 U
Styrene	5	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
1,1,2,2-Tetrachloroethane	5	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Tetrachloroethene	5	10 U	**8.4**	2 J	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Toluene	5	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
1,1,1-Trichloroethane	5	10 U	5 U	10 U	200 U	200 U	**13**	**9 J**	500 U	200 U	**15** J	**8.6**	**21** J
1,1,2-Trichloroethane	1	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	**2** J
Trichloroethene	5	**97**	**5.8**	**10**	**2,300**	**1,700**	**160**	**21**	**1,100**	**160 J**	**65**	**61**	**110**
Vinyl Chloride	2	**25**	**5**	2 J	**33** J	**150** J	**36**	**53**	**2,000**	**910**	**29**	**19**	**45**
o-Xylene	5 (total xylenes)	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
m/p-Xylenes	5 (total xylenes)	10 U	5 U	10 U	200 U	200 U	10 U	20 U	500 U	200 U	20 U	5 U	40 U
Total VOC TICs	NS	0			0		0		0		0		

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Reissued June 1998. April 2000 Addendum.
2. All results are expressed in micrograms per liter (ug/L), which is equivalent to parts per billion.
3. **Bold-faced** values are samples that exceed Class GA groundwater standards and guidance values.
4. "J" indicates an estimated value.
5. (G) indicates guidance value.
6. NA indicates the POC groundwater standard is Not Applicable.
7. "U" indicates that the analyte was analyzed but not detected.
8. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
9. NS = No Standard.

TABLE 16
SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER: MONITORING WELLS
Buell Automatics RI
Rochester, NY

		Monitoring Wells										
Sample ID	**NYSDEC Groundwater**	**BU-MW12-GW**	**BU-MW13-GW**	**BU-MW14-GW**		**BU-MW15-GW**			**BU-MW16-GW**			
SDG#	**Standards and Guidance**	**R2213646**	**R2213646**	**R2316048**	**R2422723**	**R2316048**	**R2316048**	**R2422723**	**R2631499**	**BU-DUP-GW**	**DEC MW-16**	**R2633662**
Sample Date	**Values** (1)	**09/11/02**	**09/10/02**	**03/13/03**	**08/24/04**	**03/13/03**	**BU-DUP**	**08/24/04**	**05/01/06**	**05/01/06**	**05/01/06**	**09/15/06**
Acetone	50 (G)	10 U	10 U	10 U	20 U	10 U	10 U	20 U	4,000 U	200 U	25 U	10,000 U
Benzene	1	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	**5.6**	1,000 U
Bromodichloromethane	50 (G)	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
Bromoform	50 (G)	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
Bromomethane	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	2,000 U
2-Butanone	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	4,000 U	200 U	25 U	5,000 U
Carbon Disulfide	60 (G)	3 J	10 U	10 U	10 U	10 U	10 U	10 U	4,000 U	200 U	5 U	1,000 U
Carbon Tetrachloride	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
Chlorobenzene	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
Chloroethane	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	2,000 U
Chloroform	7	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
Chloromethane	NS	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	2,000 U
Dibromochloromethane	50 (G)	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	2,000 U
1,1-Dichloroethane	5	10 U	10 U	**12**	**22**	10 U	10 U	5 U	**2,800 J**	**340**	**3,300** D	**3,600**
1,2-Dichloroethane	1	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	**4.5** J	1,000 U
1,1-Dichloroethene	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	**780 J**	200 U	**670** E	**1,600**
trans-1,2-Dichloroethene	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	**31** J	**900** E	1,000 U
cis-1,2-Dichloroethene	5	10 U	10 U	**100**	**120**	**6.1** J	5.0 J	**22**	**120,000 D**	**2,800**	**160,000** D	**150,000**
1,2-Dichloropropane	1	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
trans-1,3-Dichloropropene	0.4 (-cis and -trans)	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
cis-1,3-Dichloropropene	0.4 (-cis and -trans)	**6** J	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
Ethylbenzene	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
2-Hexanone	50 (G)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	4,000 U	200 U	25 U	5,000 U
Methylene Chloride	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
4-Methyl-2-Pentanone	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	4,000 U	200 U	25 U	1,000 U
Styrene	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
1,1,2,2-Tetrachloroethane	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
Tetrachloroethene	5	**18**	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
Toluene	5	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	5 U	1,000 U
1,1,1-Trichloroethane	5	10 U	10 U	2.8 J	5 U	10 U	10 U	5 U	**4,000**	200 U	**3,900** D	**5,800**
1,1,2-Trichloroethane	1	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	**65**	1,000 U
Trichloroethene	5	**7** J	1 J	3.4 J	**8**	10 U	10 U	5 U	**8,200**	**170 J**	**7,800** D	**15,000**
Vinyl Chloride	2	10 U	10 U	10 U	5 U	10 U	10 U	5 U	**640 J**	**890**	**520** E	1,000 U
o-Xylene	5 (total xylenes)	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	15 U	1,000 U
m/p-Xylenes	5 (total xylenes)	10 U	10 U	10 U	5 U	10 U	10 U	5 U	4,000 U	200 U	15 U	1,000 U
Total VOC TICs	NS	0	0	0		0	0					

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Reissued June 1998. April 2000 Addendum.
2. All results are expressed in micrograms per liter (ug/L), which is equivalent to parts per billion.
3. **Bold-faced** values are samples that exceed Class GA groundwater standards and guidance values.
4. "J" indicates an estimated value.
5. (G) indicates guidance value.
6. NA indicates the POC groundwater standard is Not Applicable.
7. "U" indicates that the analyte was analyzed but not detected.
8. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
9. NS = No Standard.

TABLE 16
SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER: MONITORING WELLS
Buell Automatics RI
Rochester, NY

Sample ID	NYSDEC Groundwater	Monitoring Wells						
		BU-MW17-GW			RW-1		RW-2	
SDG#	Standards and Guidance	R2631499	DEC MW-17	R2633662	R2419875	R2631499	R2419875	R2631499
Sample Date	Values (1)	05/01/06	05/01/06	09/15/06	01/13/04	05/02/06	01/13/04	05/02/06
Acetone	50 (G)	10 U	1 U	10 U	**14**	200 U	10 U	2,000 U
Benzene	1	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Bromodichloromethane	50 (G)	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Bromoform	50 (G)	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Bromomethane	5	10 U	1 U	2 U	10 U	200 U	10 U	2,000 U
2-Butanone	NS	10 U	1 U	5 U	**7** J	200 U	10 U	2,000 U
Carbon Disulfide	60 (G)	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Carbon Tetrachloride	5	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Chlorobenzene	5	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Chloroethane	5	10 U	1 U	2 U	10 U	200 U	10 U	2,000 U
Chloroform	7	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Chloromethane	NS	10 U	1 U	2 U	10 U	200 U	10 U	2,000 U
Dibromochloromethane	50 (G)	10 U	1 U	2 U	10 U	200 U	10 U	2,000 U
1,1-Dichloroethane	5	10 U	1 U	1 U	**8** J	**250**	10 U	**160 J**
1,2-Dichloroethane	1	10 U	1 U	1 U	10 U	200 U	**120** J	2,000 U
1,1-Dichloroethene	5	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
trans-1,2-Dichloroethene	5	10 U	1 U	1 U	10 U	**27 J**	10 U	2,000 U
cis-1,2-Dichloroethene	5	10 U	1 U	1 U	**33**	**4,600 D**	**15,000**	**27,000**
1,2-Dichloropropane	1	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
trans-1,3-Dichloropropene	0.4 (-cis and -trans)	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
cis-1,3-Dichloropropene	0.4 (-cis and -trans)	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Ethylbenzene	5	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
2-Hexanone	50 (G)	10 U	1 U	5 U	10 U	200 U	10 U	2,000 U
Methylene Chloride	5	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
4-Methyl-2-Pentanone	NA	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Styrene	5	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
1,1,2,2-Tetrachloroethane	5	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Tetrachloroethene	5	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Toluene	5	10 U	1 U	1 U	**8** J	200 U	10 U	2,000 U
1,1,1-Trichloroethane	5	10 U	1 U	1 U	10 U	200 U	200 J	**230 J**
1,1,2-Trichloroethane	1	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
Trichloroethene	5	10 U	1 U	1 U	10 U	**400**	**8,100**	**13,000**
Vinyl Chloride	2	10 U	1 U	1 U	**14**	**1,200**	440 J	2,000 U
o-Xylene	5 (total xylenes)	10 U	1 U	1 U	10 U	200 U	10 U	2,000 U
m/p-Xylenes	5 (total xylenes)	10 U	1 U	1 U	**1** J	200 U	10 U	2,000 U
Total VOC TICs	NS							

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Reissued June 1998. April 2000 Addendum.
2. All results are expressed in micrograms per liter (ug/L), which is equivalent to parts per billion.
3. **Bold-faced** values are samples that exceed Class GA groundwater standards and guidance values.
4. "J" indicates an estimated value.
5. (G) indicates guidance value.
6. NA indicates the POC groundwater standard is Not Applicable.
7. "U" indicates that the analyte was analyzed but not detected.
8. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
9. NS = No Standard.

TABLE 17
SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER: GEOPROBE BORINGS
Buell Automatics
Rochester, New York

Sample ID	NYSDEC Groundwater	GROUNDWATER SAMPLES - GEOPROBE BORINGS										
		BU-B11-GW	BU-B13-GW	BU-B14-GW	BU-B15-GW	BU-B16-GW	BU-B16-W-RB	BU-B17-GW	BU-B18-GW	BU-B19-W		BU-B27-W
SDG#	Standards and Guidance	R2213195	R2213195	R2213195	R2213195	R2213195	R2213195	R2213195	R2213195	R2316744	DUP	R2316744
Date	Values [1]	08/08/02	08/08/02	08/08/02	08/09/02	08/09/02	08/09/02	08/09/02	08/08/02	05/05/03	05/05/03	05/03/03
Acetone	50 (G)	10 U	10 U	10 U	10 U	10 U	10 U	11	10 U	10 U	10 U	13
Benzene	1	10 U	10 U	10 U	3 J	**4** J	10 U	**10** J	**2** J	10 U	10 U	10 U
Bromodichloromethane	50 (G)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	50 (G)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	60 (G)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	5	10 U	10 U	10 U	10 U	3 J	10 U	2 J	10 U	10 U	10 U	10 U
Chloroform	7	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	50 (G)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	5	4 J	10 U	10 U	10 U	**24**	10 U	**240** D	10 U	10 U	10 U	10 U
1,2-Dichloroethane	1	10 U	10 U	10 U	10 U	10 U	10 U	**6** J	10 U	10 U	10 U	10 U
1,1-Dichloroethene	5	3 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	5	2 J	10 U	10 U	10 U	2 J	10 U	**12**	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5	**280** D	**38**	**6** J	3 J	3 J	10 U	**700** D	10 U	10 U	10 U	10 U
1,2-Dichloropropane	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	0.4 (-cis and -trans)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	0.4 (-cis and -trans)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5	10 U	10 U	10 U	2 J	10 U	10 U	5 J	5 J	4 J	4 J	10 U
2-Hexanone	50 (G)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	5	10 U	10 U	10 U	10 U	10 U	10 U	2 J	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	5	**66** D	**23**	**33**	10 U	10 U	10 U	2 J	10 U	4 J	4 J	10 U
Vinyl Chloride	2	**64** D	10 U	10 U	10 U	**3** J	10 U	**1,300** D	10 U	10 U	10 U	10 U
o-Xylene	5 (total xylenes)	10 U	10 U	10 U	10 U	10 U	10 U	**18**	10 U	10 U	10 U	10 U
m/p-Xylenes	5 (total xylenes)	10 U	10 U	10 U	10 U	10 U	10 U	**6** J	10 U	10 U	10 U	10 U
Total VOC TICs	NS	172	0	0	421	65	0	2,304	4,990	176	170	250

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Reissued June 1998. April 2000 Addendum.
2. All results are expressed in micrograms per liter (ug/L), which is equivalent to parts per billion.
3. **Bold-faced** values are samples that exceed Class GA groundwater standards and guidance values.
4. "J" indicates an estimated value.
5. (G) indicates guidance value.
6. NA indicates the POC groundwater standard is Not Applicable.
7. "U" indicates that the analyte was analyzed but not detected.
8. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
9. NS = No Standard.

TABLE 18
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
Buell Automatics
Rochester, NY

		GROUNDWATER SAMPLES													
Sample ID	**NYSDEC Groundwater**	**BU-MW1-GW**	**BU-MW2-GW**	**BU-XX-GW-DU**	**BU-MW5-GW**	**BU-MW6-GW**	**BU-MW7-GW**	**BU-MW8-GW**	**BU-MW9-GW**	**BU-MW10-GW**		**BU-MW12-GW**	**BU-MW13-GW**	**BU-MW16-GW**	**BU-DUP-GW**
SDG#	**Standards and Guidance**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2631499**	**R2213646**	**R2213646**	**R2631499**	**R2631499**
Date	**Values** (1)	**09/12/02**	**09/10/02**	**09/10/02**	**09/10/02**	**09/11/02**	**09/11/02**	**09/10/02**	**09/11/02**	**09/11/02**	**05/01/06**	**09/11/02**	**09/10/02**	**05/01/06**	**05/01/06**
Acenaphthene	20	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	1 J	210 U
Acenaphthylene	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Anthracene	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Benzo(a)anthracene	0.002	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Benzo(a)pyrene	0.002	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Benzo(b)fluoranthene	0.002	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Benzo(g,h,i)perylene	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Benzo(k)fluoranthene	0.002	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Butyl benzyl phthalate	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Di-n-butylphthalate	NS	3 JB	1 JB	2 JB	3 JB	1 JB	1 JB	1 JB	2 JB	2 JB	500 U	5 JB	2 JB	9 U	210 U
Carbazole	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	2 J	210 U
Indeno(1,2,3-cd)pyrene	0.002	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
4-chloroaniline	5	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Bis(-2-chloroethoxy)methane	5	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Bis(-2-chloroethyl)ether	1	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2-chloronaphthalene	10	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2-chlorophenol	2	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2,2'-oxybis(1-chloropropane)	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Chrysene	0.002	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Dibenz(a,h)anthracene	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Dibenzofuran	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
1,3-dichlorobenzene	3	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
1,2-dichlorobenzene	3	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
1,4-dichlorobenzene	3	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
3,3'-dichlorobenzidine	5	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2,4-dichlorophenol	2	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Diethylphthalate	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Dimethyl phthalate	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2,4-dimethylphenol	2	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2,4-dinitrophenol	2	23 U	24 U	24 U	26 U	31 U	24 U	24 U	24 U	23 U	1200 U	24 U	24 U	23 U	520 U
2,4-dinitrotoluene	5	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2,6-dinitrotoluene	5	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Bis(2-ethylhexyl)phthalate	5	1 J	10 U	9 U	2 J	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	1 J	210 U
Fluoranthene	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	1 J	210 U
Fluorene	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Hexachlorobenzene	0.04	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Hexachlorobutadiene	0.5	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Hexachlorocyclopentadiene	5	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Hexachloroethane	5	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Isophorone	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2-methylnaphthalene	4.7	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
4,6-dinitro-2-methylphenol	2	23 U	24 U	24 U	26 U	31 U	24 U	24 U	24 U	23 U	1200 U	24 U	24 U	23 U	520 U
4-chloro-3-methylphenol	2	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2-methylphenol	2	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	2 J	210 U
4-methylphenol	2	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	3 J	210 U
Naphthalene	10	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	**27**	210 U

TABLE 18
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
Buell Automatics
Rochester, NY

		GROUNDWATER SAMPLES													
Sample ID	**NYSDEC Groundwater**	**BU-MW1-GW**	**BU-MW2-GW**	**BU-XX-GW-DU**	**BU-MW5-GW**	**BU-MW6-GW**	**BU-MW7-GW**	**BU-MW8-GW**	**BU-MW9-GW**	**BU-MW10-GW**		**BU-MW12-GW**	**BU-MW13-GW**	**BU-MW16-GW**	**BU-DUP-GW**
SDG#	**Standards and Guidance**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2631499**	**R2213646**	**R2213646**	**R2631499**	**R2631499**
Date	**Values** (1)	**09/12/02**	**09/10/02**	**09/10/02**	**09/10/02**	**09/11/02**	**09/11/02**	**09/10/02**	**09/11/02**	**09/11/02**	**05/01/06**	**09/11/02**	**09/10/02**	**05/01/06**	**05/01/06**
2-nitroaniline	5	23 U	24 U	24 U	26 U	31 U	24 U	24 U	24 U	23 U	1200 U	24 U	24 U	23 U	520 U
3-nitroaniline	5	23 U	24 U	24 U	26 U	31 U	24 U	24 U	24 U	23 U	1200 U	24 U	24 U	23 U	520 U
4-nitroaniline	5	**6** J	24 U	24 U	26 U	31 U	24 U	24 U	24 U	23 U	1200 U	24 U	24 U	23 U	520 U
Nitrobenzene	0.4	**3** J	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2-nitrophenol	2	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
4-nitrophenol	2	1 J	24 U	24 U	26 U	31 U	24 U	24 U	24 U	23 U	1200 U	24 U	24 U	23 U	520 U
N-nitrosodiphenylamine	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Di-n-octyl phthalate	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Pentachlorophenol	2	23 U	24 U	24 U	26 U	31 U	24 U	24 U	24 U	23 U	1200 U	24 U	24 U	23 U	520 U
Phenanthrene	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
Phenol	2	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	2 J	9 U	9 U	210 U
4-bromophenyl-phenylether	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
4-chlorophenyl-phenylether	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
N-nitroso-di-n-propylamine	NS	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	59 J
Pyrene	50	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
1,2,4-trichlorobenzene	5	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2,4,6-trichlorophenol	2	9 U	10 U	9 U	10 U	12 U	10 U	10 U	9 U	9 U	500 U	9 U	9 U	9 U	210 U
2,4,5-trichlorophenol	2	23 U	24 U	24 U	26 U	31 U	24 U	24 U	24 U	23 U	1200 U	24 U	24 U	23 U	520 U
Total SVOC TICs	NS	55	120	194	41	61	99	167	289	252	8980	93	68	24	9150

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Reissued June 1998. April 2000 Addendum.
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. NS indicates no standard is available.
4. **Bolded** values are samples that exceed Class GA groundwater standards and guidance values.
5. "J" indicates an estimated value.
6. "B" indicates analyte found in the associated blank.
7. "U" indicates that the analyte was analyzed but not detected.
8. BU-XX-GW-DU is a duplicate analysis of sample MW-2.

TABLE 19
SUMMARY OF PCBs AND PESTICIDES IN GROUNDWATER
Buell Automatics
Rochester, NY

	GROUNDWATER SAMPLES					NYSDEC Groundwater
Sample ID	**BU-MW2-GW**	**BU-DUP-GW**	**BU-MW5-GW**	**BU-MW8-GW**	**BU-MW13-GW**	
SDG#	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**R2213646**	**Standards and Guidance**
Date	**09/12/02**	**09/12/02**	**09/12/02**	**09/12/02**	**09/12/02**	**Values** (1)
Aroclor-1016	0.98 U	0.95 U	0.94 U	0.93 U	0.95 U	0.09
Aroclor-1221	2.00 U	1.90 U	1.90 U	1.90 U	1.90 U	0.09
Aroclor-1232	0.98 U	0.95 U	0.94 U	0.93 U	0.95 U	0.09
Aroclor-1242	0.98 U	0.95 U	0.94 U	0.93 U	0.95 U	0.09
Aroclor-1248	0.98 U	0.95 U	0.94 U	0.93 U	0.95 U	0.09
Aroclor-1254	0.98 U	0.95 U	0.94 U	0.93 U	0.95 U	0.09
Aroclor-1260	0.98 U	0.95 U	0.94 U	0.93 U	0.95 U	0.09
Aldrin	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	0.002
Alpha-bhc	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	N/A
Beta-bhc	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	N/A
Delta-bhc	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	N/A
Gamma-bhc (lindane)	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	N/A
Alpha-chlordane	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	0.05
Gamma-chlordane	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	0.05
4,4'-ddd	0.098 U	0.095 U	0.094 U	0.093 U	0.095 U	0.3
4,4'-dde	0.098 U	0.095 U	0.094 U	0.093 U	0.095 U	0.2
4,4'-ddt	0.098 U	0.095 U	0.094 U	0.093 U	0.095 U	0.2
Dieldrin	0.098 U	0.095 U	0.094 U	0.093 U	0.095 U	0.004
Endosulfan i	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	0.22
Endosulfan ii	0.098 U	0.095 U	0.094 U	0.093 U	0.095 U	0.22
Endosulfan sulfate	0.098 U	0.095 U	0.094 U	0.093 U	0.095 U	N/A
Endrin	0.098 U	0.095 U	0.094 U	0.093 U	0.095 U	0.2
Endrin aldehyde	0.098 U	0.095 U	0.094 U	0.093 U	0.095 U	5
Endrin ketone	0.098 U	0.095 U	0.094 U	0.093 U	0.095 U	5
Heptachlor	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	0.04
Heptachlor epoxide	0.049 U	0.048 U	0.047 U	0.047 U	0.048 U	0.03
Methoxychlor	0.49 U	0.48 U	0.47 U	0.47 U	0.48 U	35
Toxaphene	4.90 U	4.80 U	4.70 U	4.70 U	4.80 U	0.06

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards Guidance Series (TOGS).
   Reissued June 1998. April 2000 Addendum.
2. All results are expressed in milligrams per liter (mg/L) which is equivalent to parts per million.
3. N/A = not available.
4. **Bolded** values are samples that exceed Class GA groundwater standards.
6. "U" indicates that the analyte was analyzed but not detected.
7. BU-XX-GW-DU is a duplicate analysis of sample MW-2.

TABLE 20
SUMMARY OF TAL METALS IN GROUNDWATER
Buell Automatics
Rochester, NY

Sample ID / SDG# / Date	NYSDEC Groundwater Standards and Guidance Values (1)	GROUNDWATER SAMPLES BU-MW2-GW R2213646 09/10/02	BU-DUP-GW R2213646 09/10/02	BU-MW5-GW R2213646 09/10/02	BU-MW8-GW R2213646 09/10/02	BU-MW13-GW R2213646 09/10/02
Silver	50	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
Aluminum	100	**221**	**208**	**856**	25 B	**607**
Arsenic	50	3.8 B	5.7 B	1.8 U	11.3	1.8 U
Barium	1,000	226	228	42.5 B	16.0 B	39.9 B
Beryllium	11	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Calcium	N/A	99,600	99,800	190,000	39,500	149,000
Cadmium	5	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Cobalt	5	2.7 U	2.7 U	2.8 B	2.7 U	2.7 U
Chromium	50	3.1 B	2.9 B	3.8 B	0.8 B	3.9 B
Copper	200	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Iron	300	**796**	**809**	**936**	27 B	**694**
Mercury	0.7	0.06 B	0.01 U	0.02 B	0.01 U	0.01 U
Potassium	N/A	2,310 B	2,410 B	2,770 B	583 B	3,260 B
Magnesium	35,000	**39,500**	**39,500**	**42,200**	8,850	**43,400**
Manganese	30	**880**	**863**	**1,610**	**64**	**380**
Sodium	N/A	155,000	156,000	183,000	73,700	255,000
Nickel	100	7.0 B	7.7 B	7.4 B	3.2 B	2.8 B
Lead	50	1.1 U	1.1 U	2.6 B	1.1 U	1.1 U
Antimony	3	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Selenium	10	1.8 UW	1.8 UW	3.5 U	1.8 UW	3.5 UW
Thallium	8	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Vanadium	14	1.9 U	1.9 U	2.0 B	7.9 B	1.9 U
Zinc	2,000	8.6 B	7.0 B	11.8 B	6.9 U	6.9 U
Total Cyanide	N/A	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards Guidance Series (TOGS). Reissued June 1998. April 2000 Addendum.
2. All results are expressed in milligrams per liter (mg/L) which is equivalent to parts per million.
3. N/A = not available.
4. **Bolded** values are analytes that exceed Class GA groundwater standards.
6. "U" indicates that the analyte was analyzed but not detected.
7. "W" indicates that post-digestion spike for Furnace AA is out of control limits.
8. BU-DUP-GW is a duplicate analysis of sample MW-2.
9. "B" indicates analyte found in the associated blank.

Table 21
Summary of Air and Sump Water Sampling Results - Comfort Inn
Buell Automatics RI
Rochester, NY

Sample area	Room 122				Basement				Outdoor		Soil Vapor / Indoor Air Matrix (4)	Recommended Action (5,6)
Sample number	SG-1		BA-1		SG-2A		BA-2A		BK-1			
Sample date	1/28/2004		1/28/2004		2/6/2004		2/6/2004		1/28/2004			
VOC Compounds	**Result µg/m³**	MRL µg/m³	**Result µg/m³**	MRL µg/m³	**Result µg/m³**	MRL µg/m³	**Result µg/m³**	MRL µg/m³	**Result µg/m³**	MRL µg/m³		
Vinyl Chloride	ND	0.71	ND	0.74	ND	130	ND	0.68	ND	0.63	Matrix 1	No Further Action
1,1-Dichloroethane	ND	0.71	ND	0.74	ND	130	ND	0.68	ND	0.63	No Applicable Matrix	NA
cis-1,2-Dichloroethene	ND	0.71	ND	0.74	**5,200**	130	ND	0.68	ND	0.63	Matrix 2	Mitigate
Trichloroethene	**4.3**	0.71	ND	0.74	**9,900**	130	ND	0.68	ND	0.63	Matrix 1	Mitigate
trans-1,2-Dichloroethene	ND	0.71	ND	0.74	**160**	130	ND	0.68	ND	0.63	No Applicable Matrix	NA
Tetrachloroethene	**0.79**	0.71	ND	0.74	**21,000**	130	**1.1**	0.68	ND	0.63	Matrix 2	Mitigate

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
   SG = soil gas. BA = building air.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Final Guidance, October 2006. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
5. Soil Vapor / Indoor Air Matrix 1; Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Final Guidance, October 2006. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
6. Soil Vapor / Indoor Air Matrix 2; Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Final Guidance, October 2006. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
7. **Bold-faced** values are concentrations that have been reported above the method reporting limits.

	SUMP WATER SAMPLES			NYSDEC GW Standards and Guidance Values (1)
Sample number	BU-SW1	BU-SW2	Trip Blank	
Sample date	1/26/2004	1/26/2004	1/26/2004	
Parameter				
trans-1,2-Dichloroethene	**69**	**89**	5.0 U	5
Tetrachloroethene	**100**	**120**	5.0 U	5
Trichloroethene	**67**	**100**	5.0 U	5

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Reissued June 1998. April 2000 Addendum.
2. All results are expressed in micrograms per liter (ug/L), which is equivalent to parts per billion (ppb).
3. **Bold-faced** values are samples that exceed groundwater standards.

Table 22
Summary of Air Sampling Results - Five Star Tool Company

Buell Automatics RI
Rochester, NY

Sample medium / Sample number / Sample date	Sub-Slab Vapor 32905-1 3/29/2005		Soil Vapor / Indoor Air Matrix (4)	Recommended Action (4)
VOC Compound	Result (µg/m³)	MRL (µg/m³)		
Vinyl Chloride	ND	1.4	Matrix 1	No further action
1,1-Dichloroethane	**4.2**	1.4	Not assigned	NA
cis-1,2-Dichloroethene	**9.1**	1.4	Matrix 2	No further action
Trichloroethene	**340**	1.4	Matrix 1	Mitigate

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Final Guidance, October 2006. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
5. **Bold-faced** values are concentrations that have been reported above the method reporting limits.

Sample medium / Sample number / Sample date	Indoor Air 32905-2 3/29/2005		USEPA BASE(4) Data (indoor background)	NYSDOH Air Guideline Value(5)	USEPA Target Indoor Air Concentration (6)		Outdoor Air 32905-3 3/29/2005	
VOC Compound	Result (µg/m³)	MRL (µg/m³)	Indoor (µg/m³)	Indoor (µg/m³)	Indoor- 1 x 10^{-5} (µg/m³)	Indoor - 1 x 10^{-6} (µg/m³)	Result (µg/m³)	MRL (µg/m³)
Vinyl Chloride	ND	1.5	<0.6 - 7.5	5 (9)	Not applicable	Not applicable	ND	1.8
1,1-Dichloroethane	ND	1.5	<0.2 - <0.9	NA	500	50	ND	1.8
cis-1,2-Dichloroethene	**1.6**	1.5	<0.6 - <2.3	100 (10)	Not applicable	Not applicable	ND	1.8
Trichloroethene	ND	1.5	<0.6 - 88.5	5	Not applicable	Not applicable	ND	1.8

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Building Assessment and Survey Evaluation (BASE 2001); USEPA.
5. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Final Guidance, October 2006. NYSDOH, Center for Environmental Health, Bureau of Environmental Exposure.
6. Draft Guidance For Evaluating The Vapor Intrusion To Indoor Air Pathway From Groundwater And Soils. United States Environmental Protection Agency, Office of Solid Waste and Emergency Response, November 2002.
7. NA = not available.
8. **Bold-faced** values are concentrations that have been reported above the method reporting limits.
9. Assumes the same value as the NYSDOH Air Guideline for TCE.
10. Assumes the same value as the NYSDOH Air Guideline for PCE.

Table 23
Summary of Air Sampling Results - 1166 Brooks Avenue
Buell Automatics RI
Rochester, NY

Sample medium / Sample number / Sample date	Sub-Slab Vapor BU-1166-SS-1 3/23/2006		Sub-Slab Vapor BU-1166-SS-2 3/23/2006		Soil Vapor / Indoor Air Matrix (4)	Recommended Action (5,6)
VOC Compound	Result (µg/m³)	MRL (µg/m³)	Result (µg/m³)	MRL (µg/m³)		
Vinyl Chloride	ND	0.72	ND	0.71	Matrix 1	No Further Action
1,1-Dichloroethane	ND	0.72	**1.6**	0.71	No Applicable Matrix	NA
cis-1,2-Dichloroethene	ND	0.72	**1.2**	0.71	Matrix 2	No Further Action
Trichloroethene	ND	0.72	**13**	0.71	Matrix 1	No Further Action
Trans-1,2-Dichloroethene	ND	0.72	ND	0.71	No Applicable Matrix	NA
Tetrachloroethene	**0.98**	0.72	**5.1**	0.71	Matrix 2	No Further Action

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Final Guidance, October 2006. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
5. Soil Vapor / Indoor Air Matrix 1; Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Final Guidance, October 2006. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
6. Soil Vapor / Indoor Air Matrix 2; Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Final Guidance, October 2006. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
7. **Bold-faced** values are concentrations that have been reported above the method reporting limits.

Sample medium / Sample number / Sample date	Indoor Air BU-1166-IA-1 3/23/2006		Indoor Air BU-1166-IA-2 3/23/2006		USEPA BASE(4) Data (indoor background)	NYSDOH Air Guideline Value(5)	Outdoor Air BU-1166-AMB 3/23/2006	
VOC Compound	Result (µg/m³)	MRL (µg/m³)	Result (µg/m³)	MRL (µg/m³)	Indoor (µg/m³)	Indoor (µg/m³)	Result (µg/m³)	MRL (µg/m³)
Vinyl Chloride	ND	0.69	ND	0.67	<0.6 - 7.5	5 (9)	ND	0.70
1,1-Dichloroethane	ND	0.69	ND	0.67	<0.2 - <0.9	N/A	ND	0.70
cis-1,2-Dichloroethene	ND	0.69	ND	0.67	<0.6 - <2.3	100 (10)	ND	0.70
Trichloroethene	ND	0.25 J	ND	0.25 J	<0.6 - 88.5	5	ND	0.25 J
Trans-1,2-Dichloroethene	ND	0.69	ND	0.67	N/A	N/A	ND	0.70
Tetrachloroethene	ND	0.69	ND	0.67	<0.9 - 65.7	100	ND	0.70

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Building Assessment and Survey Evaluation (BASE 2001); USEPA.
5. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Final Guidance, October 2006. NYSDOH, Center for Environmental Health, Bureau of Environmental Exposure.
6. Draft Guidance For Evaluating The Vapor Intrusion To Indoor Air Pathway From Groundwater And Soils. USEPA, Office of Solid Waste and Emergency Response, November 2002.
7. N/A = not available.
8. **Bold-faced** values are concentrations that have been reported above the method reporting limits.
9. Assumes the same value as the NYSDOH Air Guideline for TCE.
10. Assumes the same value as the NYSDOH Air Guideline for PCE.
11. J = detection of the compound below this concentration is considered tentative.

REMEDIAL INVESTIGATION REPORT
BUELL AUTOMATICS SITE
SITE #C828114
INDEX #B8-0576-00-04A
381 BUELL ROAD
ROCHESTER, NEW YORK

December 2007 (Revised)

VOLUME 2

Prepared for:

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
6274 EAST AVON-LIMA ROAD
AVON, NEW YORK 14414

Prepared on Behalf of:

BUELL AUTOMATICS, INC.
381 BUELL ROAD
ROCHESTER, NEW YORK

Prepared By:

STANTEC CONSULTING SERVICES INC.
2250 BRIGHTON-HENRIETTA TOWN LINE ROAD
ROCHESTER, NEW YORK 14623-2674

Stantec

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix A

Boundary and Topographic Survey Maps

P.N. 2007687.01
APRIL 12, 2007
E.J.F.

BUELL AUTOMATICS, INC.
BROWNFIELD CLEANUP PROGRAM
SITE #C828114
METES AND BOUNDS DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND, SITUATED IN GREAT LOT 32, TOWNSHIP 1, 4000 ACRE TRACT, TOWN OF GATES, COUNTY OF MONROE, AND STATE OF NEW YORK, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING ON THE WESTERLY RIGHT OF WAY OF BUELL ROAD, (66' ROW) AT THE NORTHEASTERLY PROPERTY CORNER OF LOT 1 OF THE BUELL AUTOMATICS RESUBDIVISION, AS FILED IN THE MONROE COUNTY CLERK'S OFFICE AT LIBER 297 OF MAPS, PAGE 55; THENCE,

1. SOUTH 01°08'07" EAST, ALONG SAID WESTERLY RIGHT OF WAY, A DISTANCE OF 300.00 FEET TO A POINT; THENCE,
2. SOUTH 88°39'53" WEST, ALONG THE NORTHERLY PROPERTY LINE OF LANDS OF NOW OR FORMERLY MICHAEL T. WEBB AND JAMES W. WEBB, A DISTANCE OF 280.00 FEET TO A POINT; THENCE,
3. NORTH 01°08'07" WEST, ALONG THE EASTERLY PROPERTY LINE OF LANDS OF NOW OR FORMERLY GERSTEV AND COMPANY, A DISTANCE OF 300.00 FEET TO A POINT; THENCE,
4. NORTH 88°39'53" EAST, ALONG THE SOUTHERLY PROPERTY LINE OF LANDS OF NOW OR FORMERLY 333 BUELL ROAD, A DISTANCE OF 280.00 FEET TO THE POINT OF BEGINNING, ENCOMPASSING 1.928 ACRES OF LAND, MORE OR LESS.

EXCEPTING FROM THE ABOVE DESCRIPTION THE FOLLOWING PARCEL OF LAND:

COMMENCING ON THE WESTERLY RIGHT OF WAY OF BUELL ROAD, (66' ROW) AT THE NORTHEASTERLY PROPERTY CORNER OF LOT 1 OF THE BUELL AUTOMATICS RESUBDIVISION, AS FILED IN THE MONROE CLERK'S OFFICE AT LIBER 297 OF MAPS, PAGE 55; THENCE, SOUTH 51°41'25" WEST, A DISTANCE OF 136.28 FEET TO THE POINT OF BEGINNING; THENCE,

NOTE: THE FIRST 7 COURSES RUN ALONG THE FACE OF THE BUILDING.

1. SOUTH 01°18'20" EAST, A DISTANCE OF 16.80 FEET TO A POINT; THENCE,

2. NORTH 88°41'40" EAST, A DISTANCE OF 7.70 FEET TO A POINT; THENCE,
3. SOUTH 01°18'20" EAST, A DISTANCE OF 7.70 FEET TO A POINT; THENCE;
4. SOUTH 88°41'40" WEST, A DISTANCE OF 7.70 FEET TO A POINT; THENCE,
5. SOUTH 01°18'20" EAST, A DISTANCE OF 33.75 FEET TO A POINT; THENCE,
6. NORTH 88°37'36" EAST, A DISTANCE OF 18.60 FEET TO A POINT; THENCE,
7. SOUTH 01°22'24" EAST, A DISTANCE OF 57.91 FEET TO A POINT; THENCE,
8. SOUTH 88°49'32" WEST, A DISTANCE OF 104.09 FEET TO A POINT; THENCE,

NOTE THE FOLLOWING 2 COURSES RUN ALONG THE FACE OF THE BUILDING.

9. NORTH 01°21'37" WEST, A DISTANCE OF 115.76 FEET TO A POINT; THENCE,
10. NORTH 88°36'47" EAST, A DISTANCE OF 85.54 FEET TO THE POINT OF BEGINNING, ENCOMPASSING 0.254 ARES OF LAND, MORE OR LESS.

THE TOTAL REMAINING AREA OF THE ORIGINAL PARCEL MINUS THE ADDITION IS 1.674 ACRES OF LAND, MORE OR LESS.

ALL AS SHOWN ON A MAP PREPARED BY PASSERO ASSOCIATES, ENTITLED" BROWNFIELD CLEANUP PROGRAM, SITE 3C828114, METES AND BOUNDS DESCRIPTION", DRAWING NO. DEC-1, AND DATED APRIL 12, 2007.

UNDERGROUND UTILITY NOTE:

UNDERGROUND UTILITIES SHOWN ARE PLOTTED FROM RECORD MAPS THAT WERE PROVEDED BY SAID UTILITIES.

IT WILL BE THE RESPONSIBILITY OF THOSE USING THIS PLAN FOR INFORMATION TO FIELD VERIFY ALL UNDERGROUND UTILITIES.

CONTRACTOR IS TO NOTIFY CENTRAL STAKEOUT PHONE NO. 1-800-962-7962 FOR LOCATION OF ANY UNDERGROUND UTILITIES BEFORE UNDERTAKING ANY CONSTRUCTION IN THIS AREA.

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

NOTE:

THE HORIZONTAL DATUM IS REFERENCED TO THE N.Y.S. PLANE COORDINATE SYSTEM, WEST ZONE, TRANSVERSE MERCATOR SYSTEM.

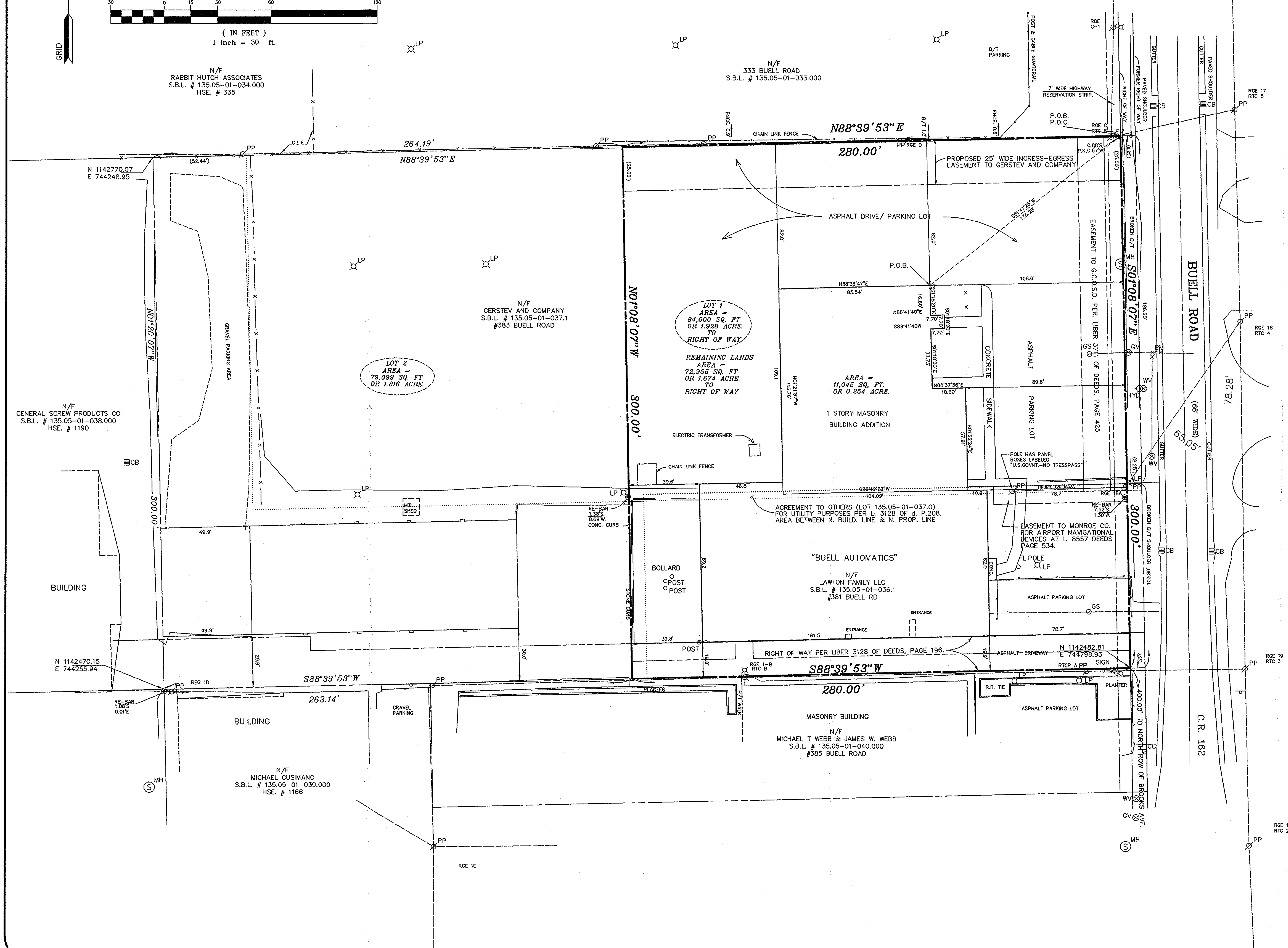
BEARINGS SHOWN HEREON ARE REFERENCED TO GRID BEARINGS. DISTANCES SHOWN ARE GROUND DISTANCES.

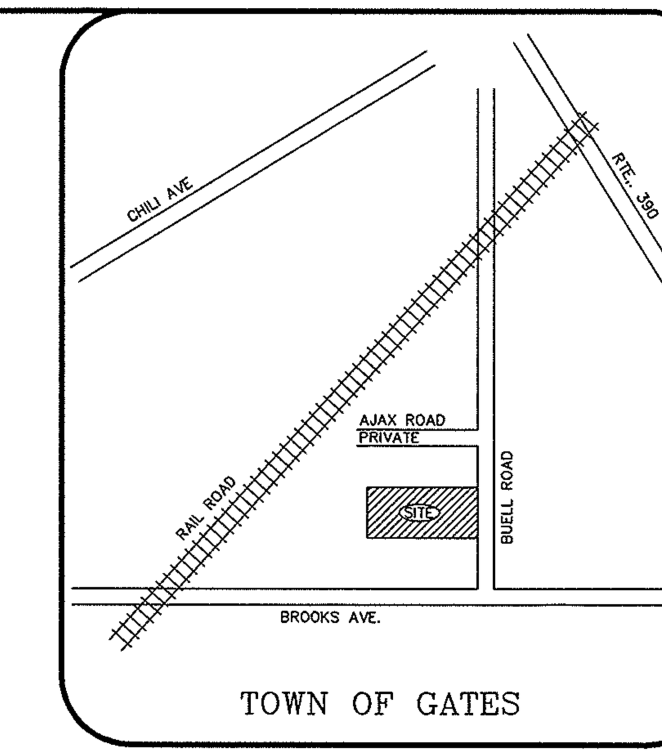
MONUMENTS USED

MCGS 311 1975	ELEV.=565.16'	N = 1,142,121.555	E = 745,966.133	N.A.D. 1927
NYSDOT 4-1-303		N = 1,142,790.49	E = 744,796.72	N.A.D. 1927.

GRID FACTOR = 1.0000059 ELEVETION FACTOR = 0.9999730

SURVEY FIELD WORK ON THIS SURVEY WAS DONE TO AN ACCURACY GREATER THAN ONE PART IN 10,000 (1 : 10,000), USING ESTABLISHED CONTROL REFERENCED HEREON.





LOCATION SKETCH
N.T.S.

REFERENCES:

1. MAP BY HERMAN J. KLINGENBERGER ENTITLED " BUELL AUTOMATICS SUBDIVISION " , FILED IN LIBER 224 OF MAPS, PAGE 17.
2. MAP BY CARMICHAEL & MUERB ASSOC. ENTITLED "...MAP SHOWING PROPERTY OF A. F. TADDEO CORP." LAST DATED JAN. 29, 1979.
3. MAP BY ROBERT M. DUNN. ENTITLED "...MAP SHOWING INSTRUMENT LOCATION... ... BUELL AUTOMATICS INC." LAST DATED APRIL 20, 1974.
4. MAP BY RONALD W. STAUB. ENTITLED "INSTRUMENT SURVEY MAP 351 BUELL ROAD" LAST DATED NOV. 12, 1990.
5. MAP BY THOMAS B. SEAR. FILED IN LIBER 156 OF MAPS, PAGE 85.
6. ABSTRACT BY MONROE TITLE INSURANCE CORPORATION, ABSTRACT No. 102426, LAST DATED JAN. 16, 1998.
7. ABSTRACT BY ROCHESTER ABSTRACT CORPORATION, SEARCH No. 4250/PT. 32/8, LAST DATED AUG. 7, 1979.
8. ABSTRACT BY TICIR TITLE GUARANTEE, SEARCH No. 5196-00682, PART OF, LAST DATED JAN. 21, 1993.
9. LIBER 6364 OF DEEDS, PAGE 64.
10. LIBER 3128 OF DEEDS, PAGE 176.
11. LIBER 8040 OF DEEDS, PAGE 430.
12. LIBER 2944 OF DEEDS, PAGE 327.
13. MAP BY PASSERO ASSOC. FILED IN LIBER 231 OF MAPS, PAGE 29.
14. MAP BY PASSERO ASSOCIATES, P.C. ENTITLED "BUELL AUTOMATICS RESUBDIVISION" FILED IN THE M.C.C.O. AT LIBER 297 OF MAPS, PG. 55.
15. ABSTRACT OF TITLE PREPARED BY MONROE TITLE INSURANCE CORPORATION, ABSTR. NO. 127342 LAST DATED OCTOBER 04, 1999.

No.	DATE	BY	REVISION

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS IN VIOLATION OF STATE EDUCATION LAW ARTICLE 145 SECTION 7209 AND ARTICLE 147 SECTION 7307

STATE OF NEW YORK · EDWARD J. FREEMAN · 049774 · LICENSED LAND SURVEYOR

PASSERO ASSOCIATES, P.C.
ARCHITECTS-ENGINEERS-SURVEYORS
100 LIBERTY POLE WAY ROCHESTER, N.Y. 14604
716-325-1000

PROJECT: BUELL AUTOMATICS, INC.
GREAT LOT 32, TOWNSHIP 1, 4000 ACRE TRACT
TOWN OF GATES, MONROE COUNTY, STATE OF NEW YORK

DRAWING: BROWNFIELD CLEANUP PROGRAM, SITE # C828114
METES AND BOUNDS DESCRIPTION

CLIENT: GARY LAWTON
381 BUELL ROAD
ROCHESTER, N.Y.

Partner in Charge	J.F.C.
Project Manager	E.J.F.
Drawn by	D.S.C./D.P.S.

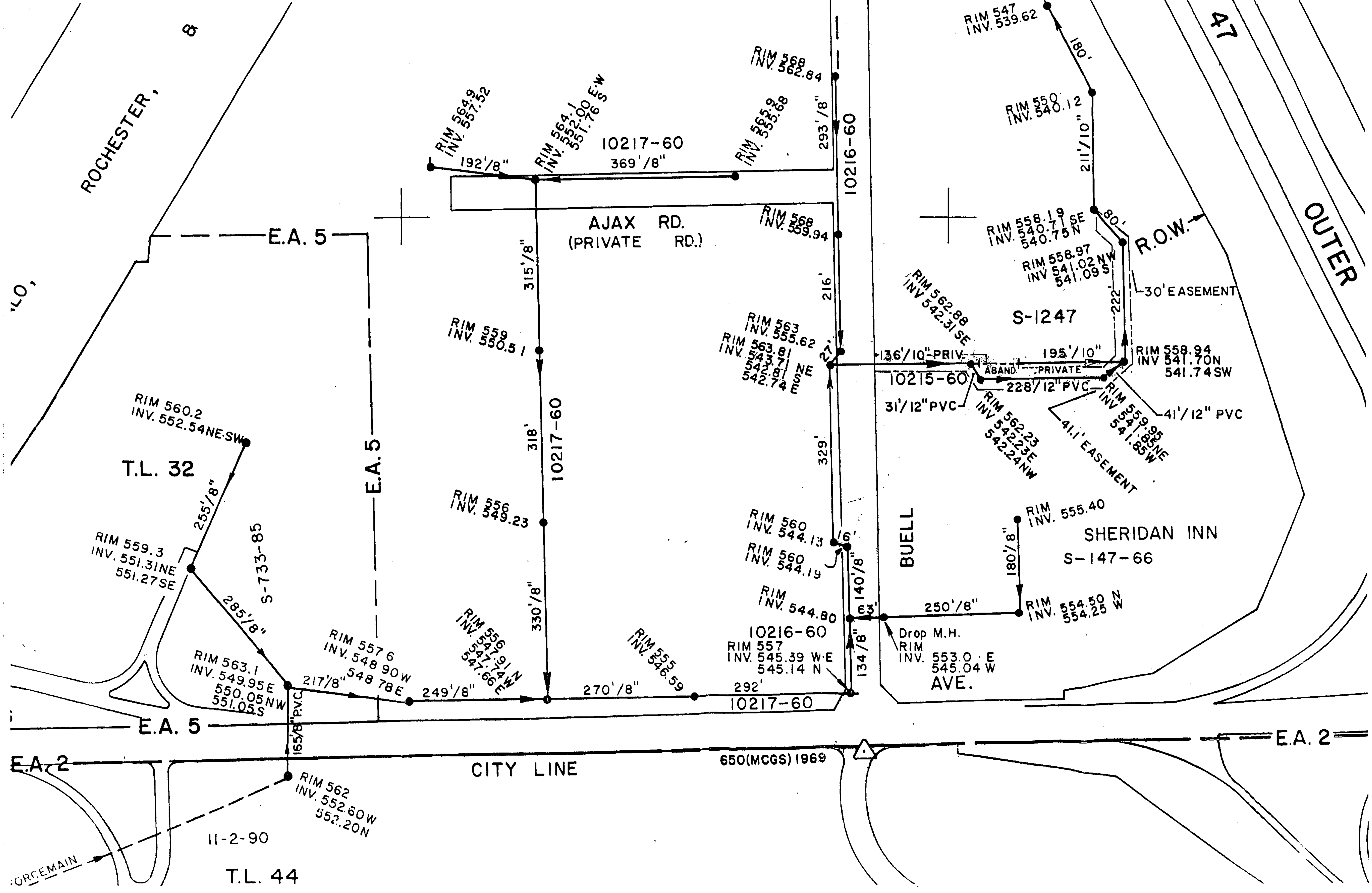
PROJECT NO. 2007687.01
DRAWING NO. DEC-1
SCALE 1"=30'
DATE APRIL 12, 2007

Z:\2007\2007687\2007687.01\Drawings\Survey\2007687.01DEC.dwg, 4/16/2007 6:57:27 AM, efreeman

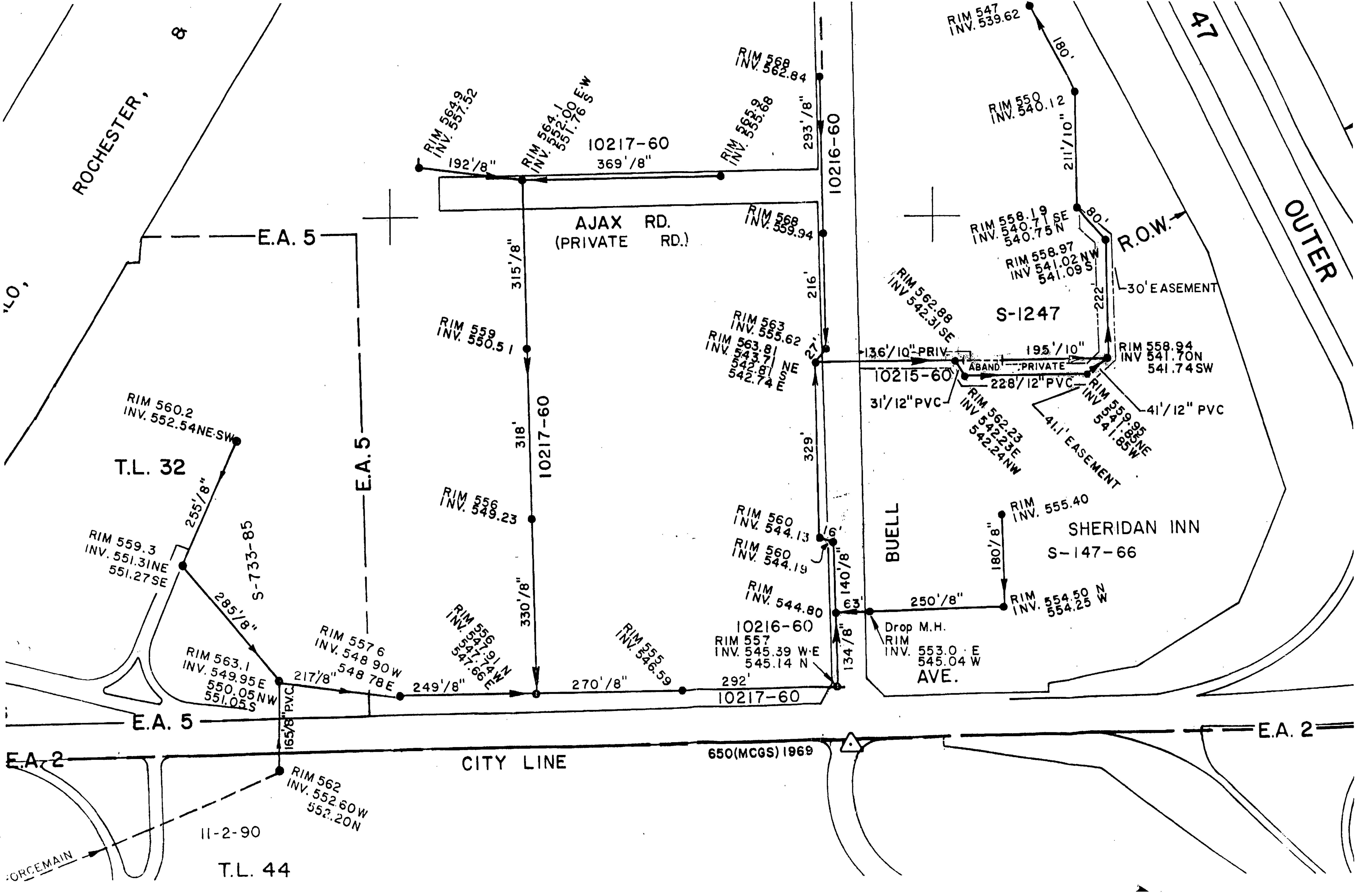
BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix B

Sanitary Sewer Map



ROCHESTER,
LO,
RIM 564.9
INV. 557.52
192'/8"
RIM 564.1
INV. 552.00 E-W
551.76 S
10217-60
369'/8"
RIM 565.9
INV. 555.68
RIM 568
INV. 562.84
293'/8"
10216-60
RIM 547
INV. 539.62
180'
RIM 550
INV. 540.12
211'/10"
47
OUTER
E.A. 5
AJAX RD.
(PRIVATE RD.)
315'/8"
RIM 568
INV. 559.94
216'
RIM 558.19
INV. 540.71 SE
540.75 N
80'
R.O.W.
RIM 558.97
INV 541.02 NW
541.09 S
222'
30' EASEMENT
S-1247
RIM 562.88
INV 542.31 SE
RIM 563
INV. 555.62
RIM 563.81
INV. 543.71 NE
542.81 S
542.74 E
27'
136'/10" PRIV.
ABAND.
PRIVATE
195'/10"
RIM 558.94
INV 541.70 N
541.74 SW
10215-60
228'/12" PVC
31'/12" PVC
RIM 562.23
INV 542.23 E
542.24 NW
RIM 559.95
INV 541.89 NE
541.85 W
41'/12" PVC
41.1' EASEMENT
RIM 559
INV. 550.51
318'
10217-60
RIM 560.2
INV. 552.54 NE-SW
T.L. 32
255'/8"
E.A. 5
329'
RIM 556
INV. 549.23
RIM 559.3
INV. 551.31 NE
551.27 SE
S-733-85
RIM 560
INV. 544.13
16'
RIM 560
INV. 544.19
140'/8"
BUELL
RIM
INV. 555.40
180'/8"
SHERIDAN INN
S-147-66
330'/8"
285'/8"
RIM
INV. 544.80
63'
250'/8"
RIM
INV. 554.50 N
554.25 W
RIM 557.6
INV. 548.90 W
548.78 E
RIM 556
INV. 547.91 N
547.74 W
547.66 E
RIM 555
INV. 546.59
10216-60
RIM 557
INV. 545.39 W-E
545.14 N
Drop M.H.
RIM
INV. 553.0 E
545.04 W
134'/8"
RIM 563.1
INV. 549.95 E
550.05 NW
551.05 S
217'/8"
249'/8"
270'/8"
292'
10217-60
AVE.
E.A. 5
165'/8" P.V.C.
E.A. 2
CITY LINE
650 (MCGS) 1969
E.A. 2
RIM 562
INV. 552.60 W
552.20 N
11-2-90
FORCEMAIN
T.L. 44



ROCHESTER,
'LO,
T.L. 32
T.L. 44
E.A. 5
E.A. 2
CITY LINE
650(MCGS) 1969
11-2-90
FORCEMAIN
S-733-85
10217-60
10216-60
10215-60
AJAX RD.
(PRIVATE RD.)
BUELL AVE.
OUTER
R.O.W.
47
S-1247
SHERIDAN INN
S-147-66
30' EASEMENT
41.1' EASEMENT
RIM 564.9 INV. 557.52
RIM 564.1 INV. 552.00 E-W 551.76 S
RIM 565.9 INV. 555.68
192'/8"
369'/8"
RIM 568 INV. 562.84
293'/8"
RIM 568 INV. 559.94
216'
315'/8"
318'
330'/8"
RIM 559 INV. 550.51
RIM 556 INV. 549.23
RIM 563 INV. 555.62
RIM 563.81 INV. 543.71 NE 542.81 S 542.74 E
27'
329'
RIM 560 INV. 544.13
RIM 560 INV. 544.19
16'
140'/8"
RIM INV. 544.80
63'
134'/8"
RIM 557 INV. 545.39 W-E 545.14 N
292'
270'/8"
RIM 555 INV. 546.59
249'/8"
RIM 556 INV. 547.91 N 547.74 W 547.66 E
RIM 557.6 INV. 548.90 W 548.78 E
217'/8"
RIM 563.1 INV. 549.95 E 550.05 NW 551.05 S
165'/8" P.V.C.
RIM 562 INV. 552.60 W 552.20 N
285'/8"
RIM 559.3 INV. 551.31 NE 551.27 SE
255'/8"
RIM 560.2 INV. 552.54 NE-SW
Drop M.H.
RIM INV. 553.0 E 545.04 W
250'/8"
RIM INV. 554.50 N 554.25 W
180'/8"
RIM INV. 555.40
RIM 547 INV. 539.62
180'
RIM 550 INV. 540.12
211'/10"
RIM 558.19 INV. 540.71 SE 540.75 N
80'
RIM 558.97 INV 541.02 NW 541.09 S
222'
RIM 558.94 INV 541.70 N 541.74 SW
195'/10"
PRIVATE
136'/10" PRIV.
ABAND.
RIM 562.88 INV 542.31 SE
228'/12" PVC
31'/12" PVC
41'/12" PVC
RIM 562.23 INV 542.23 E 542.24 NW
RIM 559.95 INV 541.85 NE 541.85 W

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix C

Boring Logs and Well Completion Reports

Stantec

2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. MW - 2D

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/5/02
Project #:	16059	Driller:	N. Short	Completion Date:	8/8/02
Client:	Buell Automatics	Elevation:	562.0 ft. AMSL	Drilling Method:	6-1/4 in ID HSA; wet rotary NX
Location:	381 Buell Road	Weather:	sunny; 70; light wind- N	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		46				34.0	5"	1	0-2'	Gray coarse to fine Sand, some coarse gravel and silt,
			11							dry, (asphalt surface with road base)
				6						**(FILL)**
					6					**2.0 '**
		6				0.0	5"	2	2-4'	Brown silty fine Sand, moist
			6							
				7						**(LACUSTRINE SAND)**
					7					
		3				0.5	16"	3	4-6'	-same, except wet
5			3							
				3						
					3					
		2				0.0	12"	4	6-8'	-same, except gray
			5							
				6						
					10					
		6				0.0	18"	5	8-10'	-same, except brown
			10							
				13						
10					13					
		2				0.0	18"	6	10-12'	-same, except gray brown
			3							
				9						
					10					
		3				0.0	18"	7	12-14'	-same
			6							
				7						
					8					
		4				0.5	18"	8	14-16'	-same
15			4							
				5						
					5					
		2				0.0	12"	9	16-18'	-same
			2							
				3						
					4					
		4				0.0	12"	10	18-20'	-same, except Silt, with trace fine sand and gravel
			4							at 19.5'
				5						**19.5 '**
20					6					**(LACUSTRINE SILT AND CLAY)**

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Stantec

2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. MW - 2D

Project:	Voluntary Investigation	Drill Contractor: Nothnagle	Start Date: 8/5/02
Project #:	16059	Driller: N. Short	Completion Date: 8/8/02
Client:	Buell Automatics	Elevation: 562.0 ft. AMSL	Drilling Method: 6-1/4 in ID HSA; wet rotary NX
Location:	381 Buell Road	Weather: sunny; 70; light wind- N	Supervisor: P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
20	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		2				0.0	14"	11	20-22'	Gray Clay, some silt, trace sand and gravel, moist
			2							
				3						**(LACUSTRINE SILT AND CLAY)**
					4					
		3				0.0	24"	12	22-24'	Gray and red brown clayey Silt, trace fine sand, moist
			3							
				4						
					4					**24.0 '**
		4				0.0	16"	13	24-26'	Gray silty fine Sand, wet
25			4							
				6						**(LACUSTRINE SAND)**
					4					
		4				0.0	18"	14	26-28'	Gray silty fine Sand, wet
			6							
				10						
					50					**28.0 '**
										-spoon bouncing; roller bit from 28.0 to 29.0 w/o sampling
		26				0.0	16"	15	29-31 '	Dense gray coarse to fine Sand and Gravel, some silt,
30			21							trace clay, moist; hard
				23						
					30					
		10				0.0	12"	16	31-33'	-same
			15							
				18						**(GLACIAL TILL)**
					23					
		15				0.0	10"	17	33-35'	-same
			14							
				22						
35					18					
		8				0.0	6"	18	35-37'	-same
			8							
				13						
					15					**37.3'**
						0.0	NR	19	37-37.3 '	No recovery; top of rock at 37.3 ft. bgs. - auger refusal
									RUN 1:	
									37.3 - 42.3 '	Gray, vuggy crystalline Limestone; coral;
									Rec = 100%	8 fractures, 2 with calcite crystals.
									RQD = 64 %	
40										**(BEDROCK)**

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Stantec

2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. **MW - 2D**

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/5/02
Project #:	16059	Driller:	N. Short	Completion Date:	8/8/02
Client:	Buell Automatics	Elevation:	562.0 ft. AMSL	Drilling Method:	6-1/4 in ID HSA; wet rotary NX
Location:	381 Buell Road	Weather:	sunny; 70; light wind- N	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
40	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
									RUN 1: continued	
									37.3 - 42.3 '	Gray, vuggy crystalline Limestone; coral;
									Rec = 100%	8 fractures, 2 with calcite crystals.
									RQD = 64 %	**(BEDROCK)**
										42.3 '
										Boring terminated at 42.3 ft. bgs
45										Notes:
										1. 4-inch diameter steel casing grouted at 22.0 ft. bgs.
										2. Monitoring well MW-2D installed in completed borehole. See well detail sheet.
50										
55										
60										

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Stantec

BEDROCK MONITORING WELL

DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-2D
DATE COMPLETED: 8/8/02
DRILLING METHOD: 6-1/4 in ID HSA; wet rotary NX core
SUPERVISOR: P. Smith

FLUSH MOUNT ROAD BOX

SURFACE SEAL TYPE: Concrete

TOP OF SEAL @ 20.8 ft.

BOTTOM OF 4-inch Steel Casing @22.0 ft. bgs

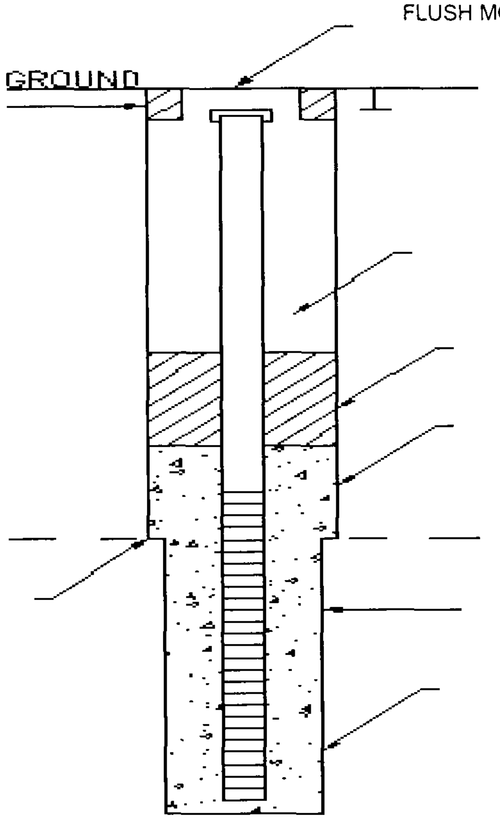
BOTTOM OF SEAL @ 31.3 ft.

TOP OF SCREEN @ 32.3 ft.

TOP OF ROCK @ 37.3 ft.

BOTTOM OF SCREEN @ 42.3 ft.

BOTTOM OF HOLE @ 42.3 ft.



8-inch OVERBURDEN HOLE DIAMETER

WELL CASING ANNULUS BACKFILL TYPE: Cement

SEAL TYPE: Bentonite

SANDPACK TYPE:
SAND, SIZE Quartzite Sand, 00N

4-inch BEDROCK HOLE DIAMETER (NX core reamed with 3-7/8 in. roller bit).

NOTE:
ALL DIMENSIONS ARE BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT _____ PERFORATED __x__ LOUVRE _____ OTHER

SCREEN MATERIAL: STAINLESS STEEL _____ PVC __x__ OTHER _____

SCREEN LENGTH: 10.0 ft. SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 10-inch overburden hole; nominal 4-inch bedrock hole.

Stantec
2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. MW - 6

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/8/02
Project #:	16059	Driller:	N. Short	Completion Date:	8/8/02
Client:	Buell Automatics	Elevation:	560.3 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	Clear, 70's	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		34				0.5	10"	1	0-2'	Gray Gravel, some sand and silt; asphalt surface, road base
			22							**(FILL)**
				14						
					10					
		5				0.0	16"	2	2-4'	**2.6 '**
			10							Brown silty fine Sand, moist
				10						
					10					
		6				0.0	18"	3	4-6'	-same, except wet
5			9							
				10						**(LACUSTRINE SAND)**
					12					
		9				0.0	20"	4	6-8'	-same
			10							
				11						
					9					
		3				0.0	16"	5	8-10'	-same
			4							
				5						
10					5					
		2				0.0	16"	6	10-12'	-same
			3							**11.2 '**
				6						Red brown Silt, some fine sand, trace clay and gravel, moist
					13					
		3				0.0	16"	7	12-14'	-same, with increasing clay and gravel
			5							
				8						**(LACUSTRINE SILT AND CLAY)**
					9					
		3				0.0	18"	8	14-16'	-same (Till)
15			7							**15.0 '**
				11						Brown silty fine Sand, dry **(LACUSTRINE SAND)**
					11					**15.9 '**
		100/3				0.0	2"	9	16-16.3 '	rock fragments
		9				0.0	16"	10	17-19'	Dense gray, sandy Till, dry; rock frags from 18.5 to 18.8 '
			28							**(GLACIAL TILL)**
				70						
					37					**19.0 '**
										Boring terminated at 19.0 ft. bgs
20										

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Monitoring well MW-6 installed in completed borehole. See well detail sheet.

Stantec

OVERBURDEN MONITORING WELL

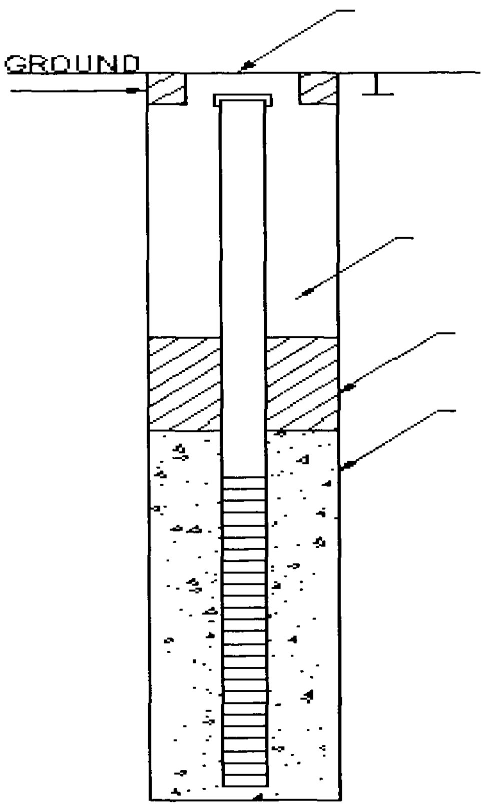
DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-6
DATE COMPLETED: 8/8/02
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 2.0 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 4.0 ft

SANDPACK TYPE:
SAND, SIZE Quartzite Sand, 00N

TOP OF SCREEN @ 5.0 ft

BOTTOM OF SCREEN @ 19.0 ft

BOTTOM OF HOLE @ 19.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 14.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

Stantec

2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. MW - 7

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	05/21/02
Project #:	16059	Driller:	N. Short	Completion Date:	05/21/02
Client:	Buell Automatics	Elevation:	561.4 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	Occ. Rain; wind 5-10 west	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		30				0.0	12"	1	0-2'	Gray Gravel, some sand and silt (asphalt surface, road base)
			10							**(FILL)**
				10						**1.5 '**
					5					Brown silty fine SAND, moist
		6				0.0	10"	2	2-4'	-same
			6							
				7						
					14					
		6				0.0	16"	3	4-6'	-same, except wet
5			7							
				8						**(LACUSTRINE SAND)**
					12					
		13				8.0	24"	4	6-8'	-same, with interbedded silt seams
			14							
				14						
					15					
		4				0.0	16"	5	8-10'	-same
			7							
				8						
10					8					
		3				0.0	18"	6	10-12'	-same
			7							
				7						
					8					
		6				0.0	16"	7	12-14'	-same
			7							
				8						
					10					
		3				0.0	14"	8	14-16'	Gray brown SAND, some silt, trace gravel, moist
15			7							
				14						
					15					
		3				0.0	6"	9	16-18'	-same, with increasing silt, trace gravel
			7							
				8						
					10					
		1				0.0	20"	10	18-20'	**18.3**
			3							Red brown clayey SILT, some fine sand, moist, plastic
				6						**(LACUSTRINE SILT and CLAY)**
20					8					**20.0**

Boring terminated at 20.0 ft. BGS
Monitoring well MW-7 installed in completed borehole. See well detail sheet.

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Stantec

OVERBURDEN MONITORING WELL

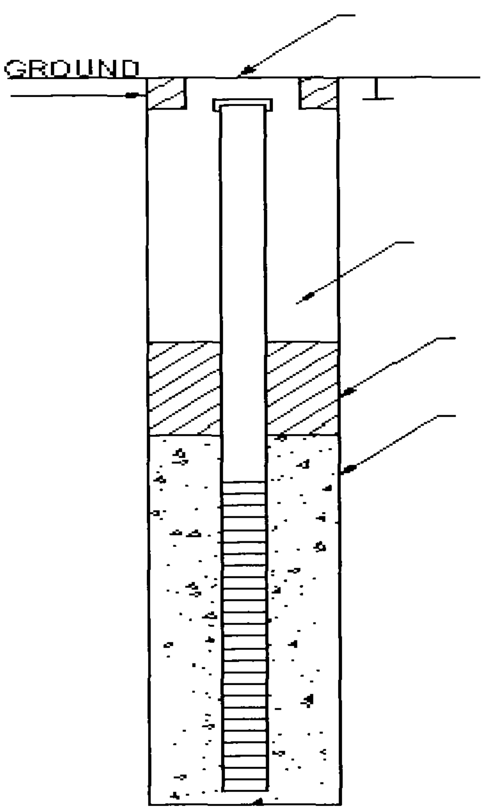
DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-7
DATE COMPLETED: 5/20/02
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE: Concrete

FLUSH MOUNT ROAD BOX



WELL CASING ANNULUS BACKFILL TYPE: Cement

SEAL TYPE: Bentonite

PACK TYPE: SAND, SIZE: Quartzite Sand, 00N

TOP OF SEAL @ 2.0 ft

BOTTOM OF SEAL @ 4.0 ft

TOP OF SCREEN @ 5.0 ft

BOTTOM OF SCREEN @ 20.0 ft

BOTTOM OF HOLE @ 20.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 15.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

Stantec

2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. MW - 8

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	5/21/2002
Project #:	16059	Driller:	N. Short	Completion Date:	5/21/2002
Client:	Buell Automatics	Elevation:	562.0 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	Occ. Rain; wind 5-10 west	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		17				0.0	14"	1	0-2'	Asphalt surface - gravel base
			8							**(FILL)** **1.3 '**
				6						Brown silty fine SAND, moist
					5					
		3				0.0	16"	2	2-4'	same, except wet
			5							
				4						
					6					Dark gray seam @ 3.7 ' (no odors, staining)
		8				0.0	15"	3	4-6'	Brown silty fine SAND, wet
5			7							
				6						
					5					
		5				0.0	16"	4	6-8'	-same
			5							
				6						**(LACUSTRINE SAND)**
					9					
		5				0.0	16"	5	8-10'	-same
			7							
				9						
10					10					
		3				0.0	16"	6	10-12'	-same
			5							
				6						
					8					
		5				0.0	16"	7	12-14'	-same, with occasional silt seams
			5							
				6						
					7					
		5				2.8	12"	8	14-16'	-same
15			7							
				12						Gray brown c-f SAND, some silt, trace clay and gravel, moist,
					14					
		6				2.5	12"	9	16-18'	-same
			7							**17.0 '**
				7						Gray and red brown mottled clayey SILT, some sand, moist,
					6					plastic
		5				18.5	18"	10	18-20'	-same **(LACUSTRINE SILT and CLAY)**
			6							
				9						**19.6 '**
20					12					Gray fine SAND, some silt, dry **(LACUSTRINE SAND)**

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

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Test Boring No. MW - 8

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	5/21/2002
Project #:	16059	Driller:	N. Short	Completion Date:	5/21/2002
Client:	Buell Automatics	Elevation:	562.0 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	Occ. Rain; wind 5-10 wes	Supervisor:	P.Smith

	C	Blows on Sampler				SAMPLE				Soil and Rock Information Remarks
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	
		6				0.0	16"	11	20-22'	Interbedded gray, fine Sand and moist, gray brown clayey till, dry
			7							
				8						**(LACUSTRINE SAND)**
					18					
		15				0.0	16"	12	22-24'	-same
			16							**22.6 '**
				27						Gray coarse to fine Sand, silt and gravel, dry
					28					**(GLACIAL TILL)** **24.0 '**
										Boring terminated at 24.0 ft. BGS
25										
										Note:
										1. Monitoring well installed in completed borehole. See well detail sheet.
30										
35										
40										

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

OVERBURDEN MONITORING WELL

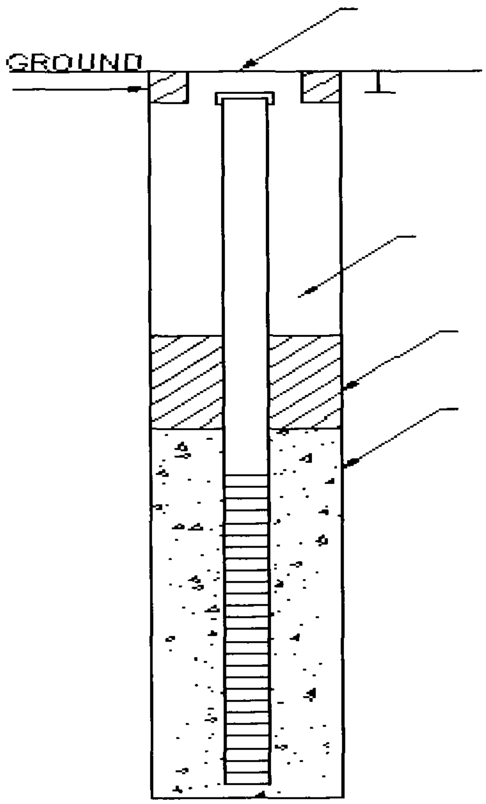
DESIGN DETAILS

Stantec

PROJECT NAME:	Remedial Investigation	HOLE DESIGNATION:	MW-8
PROJECT NUMBER:	16059	DATE COMPLETED:	5/21/02
CLIENT:	Buell Automatics	DRILLING METHOD:	4-1/4 in ID HSA
LOCATION:	381 Buell Road. Rochester, NY	SUPERVISOR:	P. Smith

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 2.0 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 4.0 ft

PACK TYPE:
SAND, SIZE Quartzite Sand, 00N

TOP OF SCREEN @ 5.0 ft

BOTTOM OF SCREEN @ 19.0 ft

LOWER SEAL from 19.5 to 24.0 ft.

BOTTOM OF HOLE @ 24.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 14.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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Test Boring No. MW - 9

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/6/02
Project #:	16059	Driller:	N. Short	Completion Date:	8/6/02
Client:	Buell Automatics	Elevation:	561.1 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	Ptly sunny, 60's	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		12				0.0	8"	1	0.5-2'	Gray coarse to fine Sand and Gravel, dry
			13							(asphalt surface w/ road base) **(FILL)**
				11						**1.6 '**
										Brown silty fine Sand @ 1.6'
		5				0.0	12"	2	2-4'	-same, except wet @ 3.5'
			6							
				5						
					6					
		4				0.0	16"	3	4-6'	-same
5			4							
				6						**(LACUSTRINE SAND)**
					6					
		4				14.8	20"	4	6-8'	-same
			5							
				7						
					7					
		4				0.0	18"	5	8-10'	-same
			4							
				7						
10					9					
		1				0.0	16"	6	10-12'	-same
			5							
				17						Gray brown silty coarse to fine Sand, some Silt
					22					little coarse to fine gravel, moist
		3				0.0	16"	7	12-14'	**12.5 '**
			4							Gray clayey Silt, trace gravel, moist
				5						
					7					**(LACUSTRINE SILT and CLAY)**
		2				0.0	20"	8	14-16'	-same
15			3							
				4						
					9					**16.0 '**
										Boring terminated at 16.0 ft. BGS
										Note:
										1. Monitoring well MW-9 installed in completed borehole.
										See well detail sheet.
20										

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Stantec

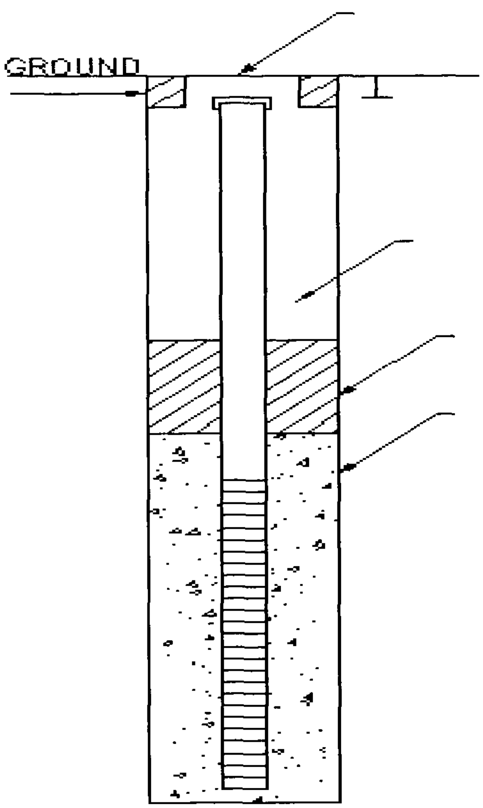
OVERBURDEN MONITORING WELL

DESIGN DETAILS

PROJECT NAME:	Remedial Investigation	HOLE DESIGNATION:	MW-9
PROJECT NUMBER:	16059	DATE COMPLETED:	8/6/02
CLIENT:	Buell Automatics	DRILLING METHOD:	4-1/4 in ID HSA
LOCATION:	381 Buell Road, Rochester, NY	SUPERVISOR:	P. Smith

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 2.0 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 4.0 ft

PACK TYPE:
SAND, SIZE Quartzite Sand, 00N

TOP OF SCREEN @ 5.0 ft

BOTTOM OF SCREEN @ 15.0 ft

BOTTOM OF HOLE @ 16.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 10.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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Test Boring No. MW - 10

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/5/02
Project #:	16059	Driller:	N. Short	Completion Date:	8/5/02
Client:	Buell Automatics	Elevation:	562.8 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	sunny; 70; light wind- N	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information	
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks	
		2				0.0	6"	1	0-2'	0-0.5 concrete surface-	0.5 '
			3							Dark gray silty fine Sand, moist; strong petroleum odor	
				5							
										(FILL)	
		5				1.7	10"	2	2-4'	- same	
			3								
				3							
					5						4.0 '
		3				0.0	12"	3	4-6'	Red brown, moist silty fine Sand, little clay, moist,	
5			3							no odor	
				4							
					5					(LACUSTRINE SAND)	
		5				0.0	16"	4	4-8'	-same	
			8								
				13							
					17						
		4				0.0	16"	5	8-10'	-same	
			7								9.0 '
				7						same, except no clay, wet	9.5 '
10					9						
		2				0.0	18"	6	10-12'	Red brown clayey Silt, some fine sand, moist	
			3								
				9							
					11					(LACUSTRINE SILT and CLAY)	
		3				0.0	22"	7	12-14'	-same	
			4								
				6							
					7						
		4				0.0	18"	8	14-16'	-same, with trace gravel	
15			5								
				7							
					8						
		5				0.0	18"	9	16-18'	-same	
			5								17.3 '
				6						Red brown silty fine Sand, wet (LACUSTRINE SAND)	
					3						17.7 '
		2				0.0	12"	10	18-20'	Red brown clayey Silt, little Sand, trace Gravel, moist	
			2								
				3						(GLACIAL TILL)	
20					4						20.0 '

Boring terminated at 20.0 ft. BGS

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Monitoring well MW-10 installed in completed borehole. See well detail sheet.

Stantec

OVERBURDEN MONITORING WELL

DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-10
DATE COMPLETED: 8/5/02
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE: Concrete

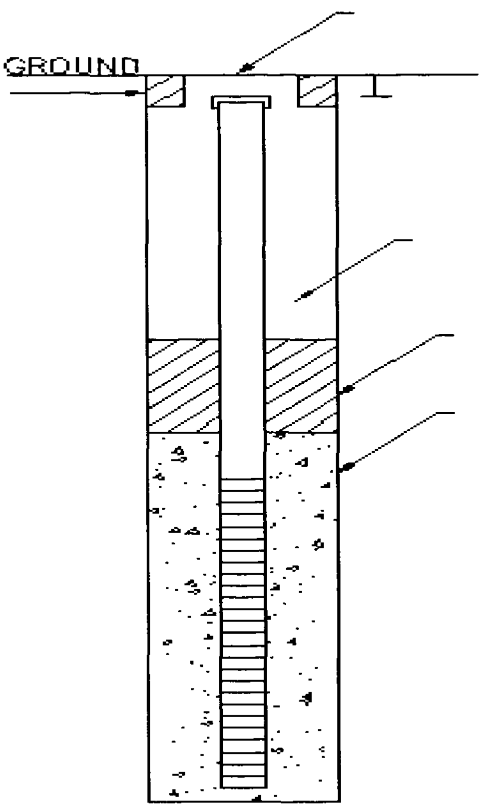
TOP OF SEAL @ 2.0 ft

BOTTOM OF SEAL @ 4.0 ft

TOP OF SCREEN @ 5.0 ft

BOTTOM OF SCREEN @ 20.0 ft

BOTTOM OF HOLE @ 20.0 ft



FLUSH MOUNT ROAD BOX

WELL CASING
ANNULUS BACKFILL
TYPE: Cement

SEAL TYPE: Bentonite

PACK TYPE:
SAND, SIZE: Quartzite Sand, 00N

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 15.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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Test Boring No. MW - 11

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/7/02
Project #:	16059	Driller:	N. Short	Completion Date:	8/7/02
Client:	Buell Automatics	Elevation:	559.3 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	Clear, 70's	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		30				0.0	12"	1	0-2'	Gray Gravel, some sand and silt (asphalt, road base)
			15							**(FILL)**
				7						**1.5 '**
				9						
		9				0.0	12"	2	2-4'	Brown Silt, some fine sand, wet
			8							
				8						
					8					**(LACUSTRINE SAND)**
		3				0.0	12"	3	4-6'	-same
5			3							
				4						
					6					
		3				0.0	12"	4	6-8'	-same
			6							
				7						
					8					
		2				0.0	12"	5	8-10'	-same
			5							
				7						
10					8					
		5				0.0	16"	6	10-12'	-same
			7							**11.2 '**
				9						Gray brown Sand, some Silt, trace fine gravel, moist
					9					
		3				0.0	20"	7	12-14'	**12.3 '**
			4							Gray Silt, some Clay, little fine sand, moist
				5						
					12					
		15				0.0	4"	8	14-14.7'	Gray brown gravelly Silt, moist
15			100/2							
										(GLACIAL TILL)
		15				0.0	16"	9	16-18'	-same
			20							
				18						
					20					
		13				0.0	16"	10	18-19.8	-same
			18							
				24						
20					100/3					**20.0 '**

Boring terminated at 20.0 ft. BGS

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Monitoring well MW-11 installed in completed borehole. See well detail sheet.

Stantec

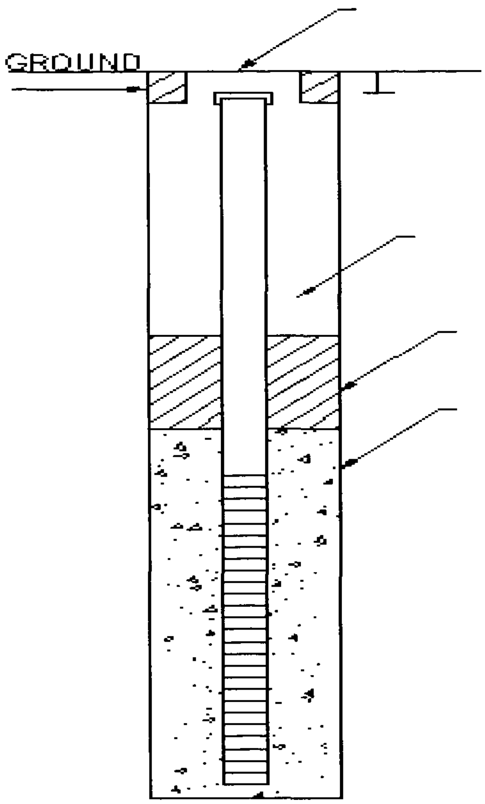
OVERBURDEN MONITORING WELL

DESIGN DETAILS

PROJECT NAME:	Remedial Investigation	HOLE DESIGNATION:	MW-11
PROJECT NUMBER:	16059	DATE COMPLETED:	8/7/02
CLIENT:	Buell Automatics	DRILLING METHOD:	4-1/4 in ID HSA
LOCATION:	381 Buell Road, Rochester, NY	SUPERVISOR:	P. Smith

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 2.0 ft

SEAL TYPE: *Bentonite*

BOTTOM OF SEAL @ 4.0 ft

PACK TYPE:
SAND, SIZE Quartzite Sand, 00N

TOP OF SCREEN @ 5.0 ft

BOTTOM OF SCREEN @ 20.0 ft

BOTTOM OF HOLE @ 20.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 15.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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Test Boring No. MW - 12

Project:	Voluntary Investigation	Drill Contractor: Nothnagle	Start Date: 5/22/02
Project #:	16059	Driller: N. Short	Completion Date: 5/22/02
Client:	Buell Automatics	Elevation: 562.8 ft. AMSL	Drilling Method: Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather: Clear; wind 10-15 west	Supervisor: P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		18				0.0	16"	1	0-2'	Gray Gravel, some sand and silt (asphalt surface, road base)
			10							**(FILL)**
				9						**1.7**
					4					Dark gray Silt, some roots, moist
		4				0.0	20"	2	2-4'	
			4							-same, except gray brown, no roots, little clay @ 3.0
				4						**3.7**
					7					
		3				0.0	14"	3	4-6'	Gray brown fine Sand, some silt, wet
5			4							
				4						**(LACUSTRINE SAND)**
					5					
		7				0.0	14"	4	6-8'	-same, except gray brown
			7							
				11						
					9					
		3				0.0	16"	5	8-10'	**8.6**
			7							Red brown clayey Silt, trace gravel, moist; plastic
				4						
10					12					**(LACUSTRINE SILT and CLAY)**
		1				0.0	18"	6	10-12'	-same
			4							
				9						**11.7**
					15					Brown silty fine Sand, wet
		4				0.0	16"	7	12-14'	
			7							**(LACUSTRINE SAND)**
				7						
					15					**13.8 '**
		3				0.0	16"	8	14-16'	Gray Sand, some silt, little coarse to fine gravel, moist
15			13							
				13						**(GLACIAL TILL)**
					18					
		19				0.0	14"	9	16-18'	-same, except dense, gravelly
			20							
				25						
					42					
		13				0.0	12"	10	18-20'	-same, dry to moist
			17							
				25						
20					35					**20.0 '**

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Boring terminated at 20.0 ft. BGS
Monitoring well MW-12 installed in completed borehole. See well detail sheet.

OVERBURDEN MONITORING WELL

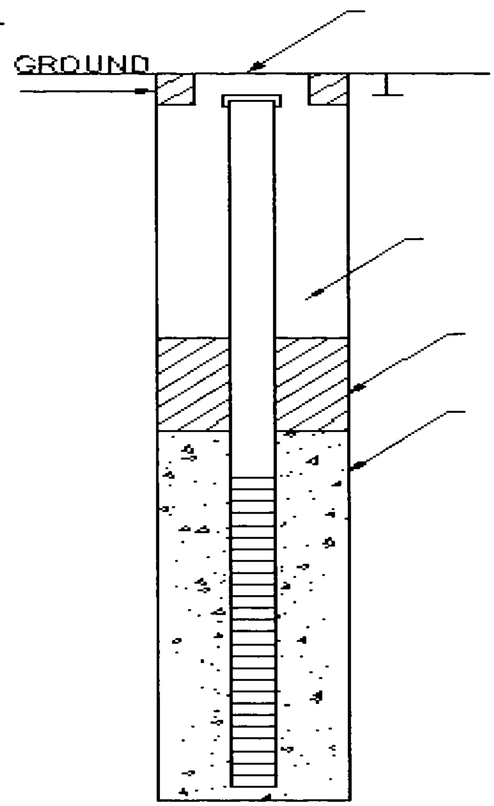
DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-12
DATE COMPLETED: 5/21/02
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE: Concrete

FLUSH MOUNT ROAD BOX



WELL CASING ANNULUS BACKFILL TYPE: Cement

TOP OF SEAL @ 2.0 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 4.0 ft

PACK TYPE:
SAND, SIZE: Quartzite Sand, 00N

TOP OF SCREEN @ 5.0 ft

BOTTOM OF SCREEN @ 20.0 ft

BOTTOM OF HOLE @ 20.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 15.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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Test Boring No. MW - 13

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	5/20/02
Project #:	16059	Driller:	N. Short	Completion Date:	5/20/02
Client:	Buell Automatics	Elevation:	563.9 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	Ptly cdy; 40's	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		2				0.0	18"	1	0-2'	Coarse to fine Sand and Gravel, moist
			3							(FILL) 0.8
				4						Brown silty fine Sand, moist
					4					
		2				0.0	20"	2	2-4'	-same, except dark brown, moist to wet @ 3.0 '
			2							
				2						
					2					
		1				0.0	14"	3	4-6'	Red brown Silt, little fine sand and clay, trace coarse sand
5			2							and fine gravel, moist
				3						
					8					
		3				0.0	16"	4	6-8'	Brown Sand and Silt, wet
			7							
				9						(LACUSTRINE SAND)
					10					
		10				0.0	12"	5	8-10'	- same
			9							
				8						
10					10					
		10				0.0	16"	6	10-12'	- same
			13							
				18						11.5 '
					20					Dense Silt w/ fine sand, trace gravel, 11.5 - 12.0 '
		12				0.0	12"	7	12-14'	Gray brown silty fine Sand, wet
			16							
				18						
					20					
		8				0.0	18"	8	14-16'	Gray brown silty fine Sand, trace clay, wet; varves
15			12							
				13						(LACUSTRINE SAND)
					16					
		7				0.0	16"	9	16-18'	- same
			11							
				11						
					11					
		2				0.0	12"	10	18-20'	- same
			9							
				9						
20					11					20.0 '

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

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Test Boring No. MW - 13

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	5/20/02
Project #:	16059	Driller:	N. Short	Completion Date:	5/20/02
Client:	Buell Automatics	Elevation:	563.9 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	Ptly cdy; 40's	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
20	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		7				0.0	16"	11	20-22'	Red brown Silt, some fine sand, trace clay, loose, wet
			9							
				11						**(LACUSTRINE SILT and CLAY)**
					15					
		2				0.0	12"	12	22-24'	- same
			3							
				7						
					10					
		9				0.0	12"	13	24-26'	- same
25			11							**25.5'**
				9						Gray Silt, some fine sand, compact; varves **26.0'**
					15					
		2				0.0	16"	14	26-28'	Gray brown silty fine Sand, wet, loose
			3							
				3						**(LACUSTRINE SAND)**
					3					**27.8 '**
		7				0.0	12"	15	28-30'	Gray Silt, some fine sand, trace gravel, moist; compact
			31							
				30						**(GLACIAL TILL)**
30					22					
		8				0.0	18"	16	30-32'	Gray brown Sand, some silt, trace clay, moist
			8							
				10						same, except little clay, trace gravel, moist
					10					Gray brown Silt, some clay, little fine sand, moist; plastic
		2				0.0	18"	17	32-34'	
			3							
				4						
					5					**34.0 '**
										Boring terminated at 34.0 ft. BGS
35										
										<u>Note:</u>
										1. Monitoring well MW-13 installed in completed borehole.
										See well detail sheet.
40										

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Stantec

OVERBURDEN MONITORING WELL

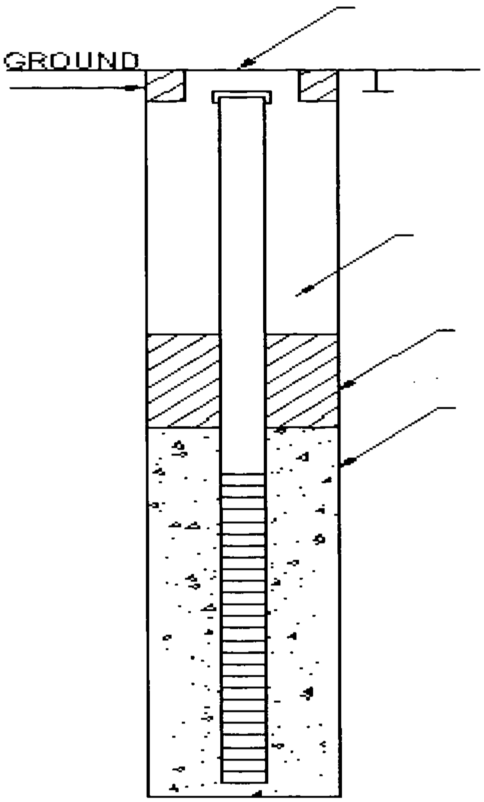
DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-13
DATE COMPLETED: 5/22/02
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 2.0 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 4.0 ft

PACK TYPE:
SAND, SIZE Quartzite Sand, 00N

TOP OF SCREEN @ 5.2 ft

BOTTOM OF SCREEN @ 20.2 ft

LOWER SEAL from 21.0 to 34.0 ft. bgs

BOTTOM OF HOLE @ 34.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 15.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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2250 Brigton Henrietta Town Line Road
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Test Boring No. MW - 14

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	2/25/03
Project #:	16059	Driller:	S. Loranty	Completion Date:	2/25/03
Client:	Buell Automatics	Elevation:	561.3 ft. AMSL	Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	10^{o}, light snow	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
								1	0-2'	Asphalt surface **0.5 '**
			14							Gray Sand and Gravel, dry **(FILL)**
				18						**1.5 '**
					25	0.0				Brown silty fine Sand, some gravel, moist
		4						2	2-4'	- same, without gravel
			7							**(LACUSTRINE SAND)**
				8						
					10	0.0				**4.0 '**
		3						3	4-6'	Red brown Sand, some silt and clay, trace gravel,
5			6							moist
				10						
					12	0.0				**(LACUSTRINE SILT and CLAY)**
		3						4	6-8'	- same
			7							
				9						
					12	0.0				
		3						5	8-10'	- same
			7							
				8						
10					13	0.0				
		3						6	10-12'	- same
			3							
				4						
					5	0.0				**12.0 '**
		1						7	12-14'	Gray brown Silt, some clay and fine sand, moist
			3							
				5						**(LACUSTRINE SILT and CLAY)**
					6	0.0				
		2						8	14-16'	- same **15.2 '**
15			3							Brown fine Sand, some silt, dry
				5						**(LACUSTRINE SAND)**
					11	0.0				**16.0 '**
										Boring terminated at 16.0 ft. BGS
										Note:
										1. Monitoring well MW-14 installed in completed
										borehole. See well detail sheet.
20										

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Stantec

OVERBURDEN MONITORING WELL

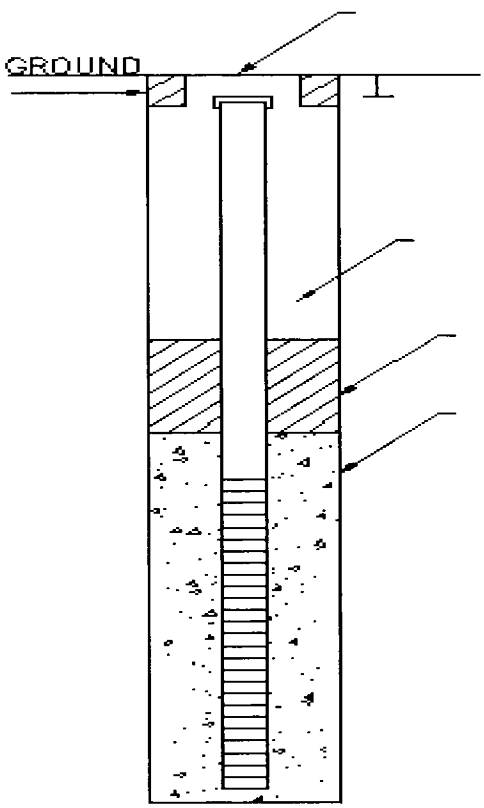
DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-14
DATE COMPLETED: 2/25/03
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 1.5 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 3.0 ft

PACK TYPE:
SAND, SIZE Quartzite Sand, 00N

TOP OF SCREEN @ 4.0 ft

BOTTOM OF SCREEN @ 13.0 ft

LOWER SEAL from 13.0 to 16.0 ft. bgs

BOTTOM OF HOLE @ 16.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 9.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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Test Boring No. MW - 15

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	2/25/03
Project #:	16059	Driller:	S. Loranty	Completion Date:	2/25/03
Client:	Buell Automatics	Elevation:	560.5 ft. AMSL	Drilling Method:	4-1/4 in ID H S A
Location:	381 Buell Road	Weather:	10°, light snow	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
								1	0-2'	Asphalt surface **0.5 '**
			34							Gray Silt and gravel, dry **(FILL)**
				26						**1.5 '**
					13	0.0				Brown fine silt fine SAND, moist
		3						2	2-4'	- same, except moist to wet
			10							
				11						**(LACUSTRINE SAND)**
					4	0.0				**4.0 '**
		3						3	4-6'	- same, with trace gravel
5			6							
				7						
					9	0.0				
		6						4	6-8'	- same
			12							
				14						
					16	0.0				
		4						5	8-10'	
			6							**9.0 '**
				7						Gray and red brown Clay, some silt, little fine sand,
10					8	0.0				moist
		4						6	10-12'	- same
			7							**(LACUSTRINE SILT and CLAY)**
				9						**11.5 '**
					13	0.0				Brown very fine Sand, some silt, dry **(LACUSTRINE**
										SAND) **12.0 '**
										Boring terminated at 12.0 ft. BGS
										Note:
										1. Monitoring well MW-15 installed in completed
15										borehole. See well detail sheet.
20										

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

OVERBURDEN MONITORING WELL

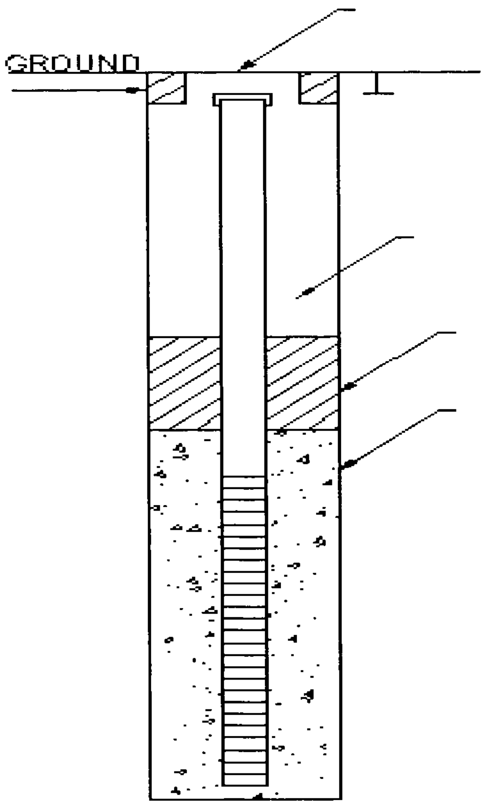
DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-15
DATE COMPLETED: 2/25/03
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 1.5 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 3.0 ft

PACK TYPE:
SAND, SIZE Quartzite Sand, 00N

TOP OF SCREEN @ 4.0 ft

BOTTOM OF SCREEN @ 10.0 ft

LOWER SEAL from 10.0 to 12.0 ft. bgs

BOTTOM OF HOLE @ 12.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 6.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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Test Boring No. MW - 16

Project:	Remedial Investigation	Drill Contractor:	Nothnagle
Project #:	16059	Driller:	K. Bush
Client:	Buell Automatics	Elevation:	562.6
Location:	381 Buell Road	Weather:	
Start Date:	11/22/05	Completion Date:	11/22/05
Drilling Method:	Hollow stem auger 4-1/4 in ID	Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		0				1,600	16"	1	0-2'	Concrete surface 0.5'
			1							Gray SAND, some Silt, moist; strong odor
				2						(FILL)
					3					2.0'
		3				39	12"	2	2-4'	Dark gray, fine Sand, some Silt
			3							
				5						(LACUSTRINE SAND)
					5					
		3				23	16"	3	4-6'	same, except wet
5			7							
				9						5.5'
					7					Red brown SILT, some clay, moist
		3				88	18"	4	6-8'	
			8							(LACUSTRINE SILT and CLAY)
				10						
					13					8.0'
						20	18"	5	8-10'	Interbedded Clay and Sand, wet
										9.0'
10										Gray brown SILT, some Sand, moist
										(LACUSTRINE SILT) 10.0'
										Boring terminated at 10.0 ft. BGS
15										Note: 1. Monitoring well MW-16 installed in completed borehole. See well detail sheet.
20										

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

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OVERBURDEN MONITORING WELL

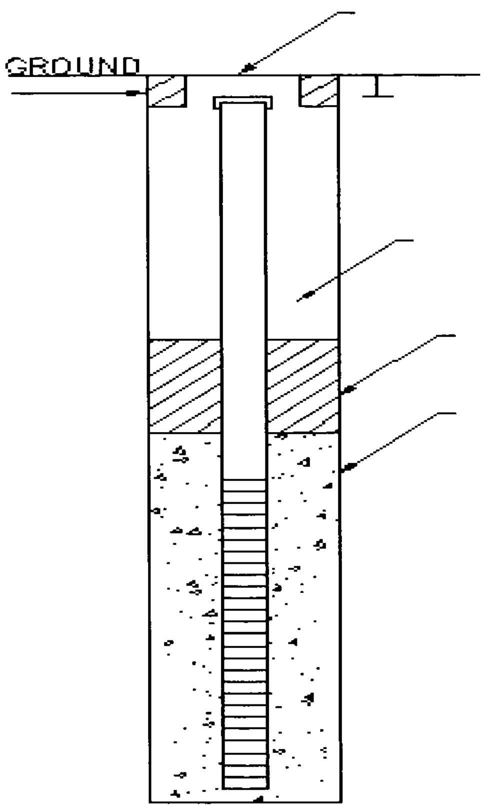
DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-16
DATE COMPLETED: 11/22/05
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 1.0 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 3.0 ft

PACK TYPE:
SAND, SIZE Quartzite Sand, 00N

TOP OF SCREEN @ 4.0 ft

BOTTOM OF SCREEN @ 8.0 ft

LOWER SEAL from 8.0 to 10.0 ft. bgs

BOTTOM OF HOLE @ 10.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 4.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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Test Boring No. MW - 17

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	11/22/05
Project #:	16059	Driller:	K. Bush	Completion Date:	11/22/05
Client:	Buell Automatics	Elevation:		Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:		Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		25				0.0	18"	1	0-2'	Asphalt surface 0.5 '
			24							Gray brown, coarse to fine SAND, some Silt, moist
				8						**(FILL)** **1.5'**
					7					Dark gray SILT, some Sand, moist **2.0'**
		7				0.0	18"	2	2-4'	Red brown fine SAND, some Silt, trace fine Gravel
			6							and Clay, moist
				8						**(LACUSTRINE SAND)**
					10					
		3				0.4	12"	3	4-6'	same
5			8							
				9						
					11					
		2				3.4	12"	4	6-8'	same
			6							
				12						**7.5'**
					20					Brown fine SAND, some silt, wet
		3				0.6	24"	5	8-10'	same
			8							**9.0'**
				7						Red brown SILT, some clay and fine sand, moist
10					8					
		3				0.5	24"	6	10-12'	same **(LACUSTRINE SILT and CLAY)**
			5							
				14						**11.5'**
					18					Brown fine SAND, some silt, wet
		4				1.2	24"	7	12-14'	same
			8							**(LACUSTRINE SAND)**
				7						
					5					**14.0'**
		2				1.3	24"	8	14-16'	Gray SILT, some clay and fine sand, moist
15			WH							
				2						**(LACUSTRINE SILT and CLAY)**
					2					
		WH				1.2	24"	9	16-18'	same
			WH							
				2						
					2					**18.0'**
										Boring terminated at 18.0 ft. BGS
										Note:
										1. Monitoring well MW-17 installed in completed
20										borehole. See well detail sheet.

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

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OVERBURDEN MONITORING WELL

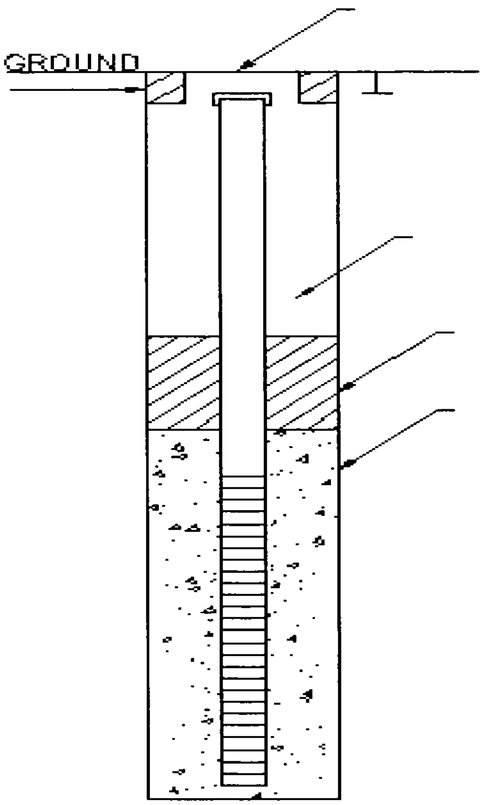
DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-17
DATE COMPLETED: 11/22/05
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE: Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 3.0 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 6.0 ft

PACK TYPE:
SAND, SIZE: Quartzite Sand, 00N

TOP OF SCREEN @ 7.0 ft

BOTTOM OF SCREEN @ 17.0 ft

BOTTOM OF HOLE @ 18.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 10.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

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Test Boring No. MW - 18

Project:	Remedial Investigation	Drill Contractor: Nothnagle	Start Date: 11/22/05
Project #:	16059	Driller: K. Bush	Completion Date: 11/22/05
Client:	Buell Automatics	Elevation:	Drilling Method: Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:	Supervisor: P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		21				0.0	12"	1	0-2'	Asphalt surface 0.5 '
			13							Dark gray silty fine SAND, trace Gravel, dry
				9						**(FILL)**
					6					**2.0'**
		6				0.0	18"	2	2-4'	Red brown SILT, some clay, dry; dessication cracks
			6							
				10						
					12					
		5				0.0	18"	3	4-6'	same
5			9							
				13						**(LACUSTRINE and CLAY)**
					16					
		4				0.0	18"	4	6-8'	same
			9							
				12						
					17					
		4				0.0	18"	5	8-10'	same, with trace Sand, moist
			11							
				14						
10					16					
		4				0.0	18"	6	10-12'	same
			6							
				9						
					12					
		2				0.0	18"	7	12-14'	same
			3							**(LACUSTRINE and CLAY)**
				5						
					4					
		2				0.0	24"	8	14-16'	same
15			3							
				6						
					6					
		WH				0.0	24"	9	16-18'	same
			1							**17.0'**
				2						Gray clayey SILT, some fine gravel, wet
					1					
		WH				0.0	24"	10	18-20'	Same, with thin seams of coarse Sand, moist to wet
			2							
				1						
20					11					

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
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Test Boring No. MW - 18

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	11/22/05
Project #:	16059	Driller:	K. Bush	Completion Date:	11/22/05
Client:	Buell Automatics	Elevation:		Drilling Method:	Hollow stem auger 4-1/4 in ID
Location:	381 Buell Road	Weather:		Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	Remarks
		3				0.0	24"	11	20-22'	Gray clayey SILT, some Sand, wet
			9							**(LACUSTRINE and CLAY)**
				7						**21.0'**
					9					Buff fine SAND, some Silt, dry
										(LACUSTRINE SAND) 22.0'
										Boring terminated at 22.0 ft. BGS
25										Note:
										1. Monitoring well MW-18 installed in completed borehole. See well detail sheet.
30										
35										
40										

N = No. of Blows to Drive 2 " Spoon, 12 ", with 130 lb. Wt., 30 " Ea. Blow.

Stantec

OVERBURDEN MONITORING WELL

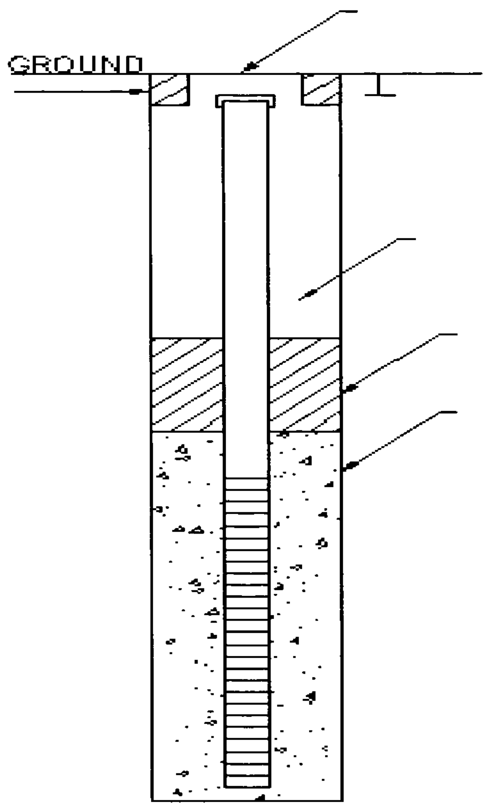
DESIGN DETAILS

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: MW-18
DATE COMPLETED: 11/22/05
DRILLING METHOD: 4-1/4 in ID HSA
SUPERVISOR: P. Smith

SURFACE SEAL TYPE: Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

TOP OF SEAL @ 10.6 ft

SEAL TYPE: Bentonite

BOTTOM OF SEAL @ 13.2 ft

PACK TYPE:
SAND, SIZE: Quartzite Sand, 00N

TOP OF SCREEN @ 15.5 ft

BOTTOM OF SCREEN @ 20.5 ft

LOWER SEAL from 20.5 to 21.0 ft. bgs

BOTTOM OF HOLE @ 21.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC __x__ OTHER ____

SCREEN LENGTH: 5.0 ft SCREEN DIAMETER: 2.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in. ID

HOLE DIAMETER: nominal 8 - inch

OVERBURDEN MONITORING WELL

DESIGN DETAILS

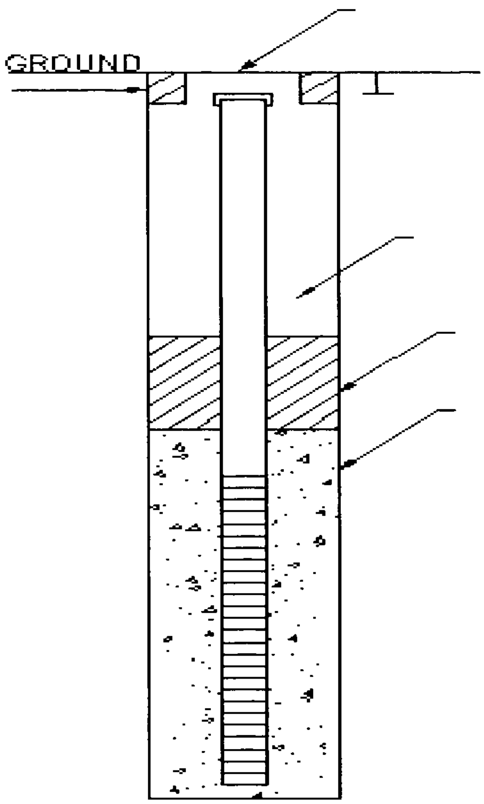
Stantec

PROJECT NAME: Remedial Investigation
PROJECT NUMBER: 16059
CLIENT: Buell Automatics
LOCATION: 381 Buell Road, Rochester, NY

HOLE DESIGNATION: RW-1
DATE COMPLETED: 12/30/03
DRILLING METHOD: Backhoe
SUPERVISOR: A. Krause

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



TOP OF SEAL @ 0.5 ft

BOTTOM OF SEAL @ 1.5 ft

TOP OF SCREEN @ 2.0 ft

BOTTOM OF SCREEN @ 6.0 ft

BOTTOM OF HOLE @ 12.0 ft

WELL CASING
ANNULUS BACKFILL
TYPE: Cement

SEAL TYPE: Bentonite

PACK TYPE:
SAND, SIZE Quartzite Sand, 00N

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL __X__ PVC ____ OTHER ____

SCREEN LENGTH: 4.0 ft SCREEN DIAMETER: 6.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: Stainless Steel WELL CASING DIAMETER: 6.0 in.

HOLE DIAMETER: NA

Stantec

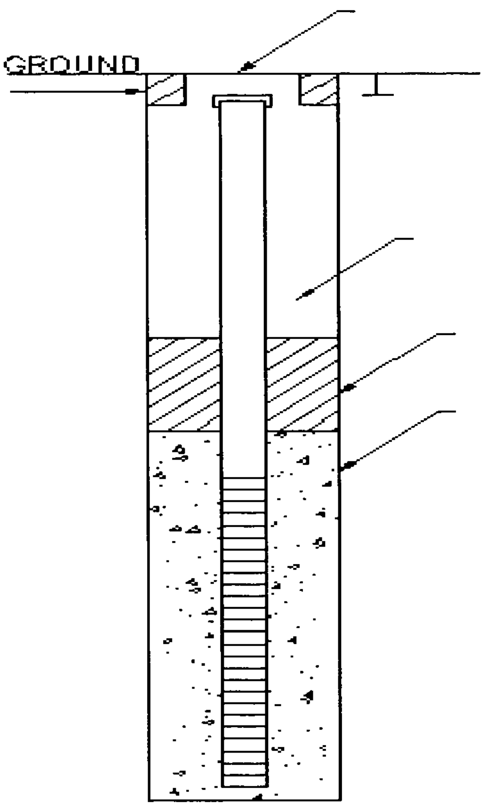
OVERBURDEN MONITORING WELL

DESIGN DETAILS

PROJECT NAME:	Remedial Investigation	HOLE DESIGNATION:	RW-2
PROJECT NUMBER:	16059	DATE COMPLETED:	12/30/03
CLIENT:	Buell Automatics	DRILLING METHOD:	Backhoe
LOCATION:	381 Buell Road, Rochester, NY	SUPERVISOR:	A. Krause

SURFACE SEAL TYPE Concrete

FLUSH MOUNT ROAD BOX



WELL CASING
ANNULUS BACKFILL
TYPE: Cement

SEAL TYPE: Bentonite

PACK TYPE:
SAND, SIZE Quartzite Sand, 00N

TOP OF SEAL @ 0.5 ft

BOTTOM OF SEAL @ 1.0 ft

TOP OF SCREEN @ 1.5 ft

BOTTOM OF SCREEN @ 6.5 ft

BOTTOM OF HOLE @ 12.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED __x__ LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL __X__ PVC ____ OTHER ____

SCREEN LENGTH: 5.0 ft SCREEN DIAMETER: 6.0 in. ID SCREEN SLOT SIZE: 0.010 inch

WELL CASING MATERIAL: Stainless Steel WELL CASING DIAMETER: 6.0 in.

HOLE DIAMETER: NA

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Test Boring No. GP-1

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/24/03
Project #:	16059	Driller:	R. Rose	Completion Date:	12/24/03
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	A. Krause

SAMPLE				Soil Information Remarks
PID	Rec.	No.	Depth	
				Concrete 0.5'
				Concrete and Asphalt 1.7
7		1	1.7-5.7'	Red, clayey fine SAND.
14				Gray, fine SAND, little Clay, wet
24		2	5.7-9.7'	s.a.a.
15				Gray, very fine SAND, wet
5		3	9.7-13.7'	Brown, fine SAND, irridescent sheen, slight odor, wet 13.7'
				Boring terminated at 13.7'

Depth scale (ft): 0, 5, 10, 15, 20

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-2

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/24/03
Project #:	16059	Driller:	R. Rose	Completion Date:	12/24/03
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	A. Krause

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks
0					Concrete
					1.0'
	17		1	1.0-5.0'	Red CLAY, moist
5	22				Gray fine SAND, wet.
	30		2	5.0-9.0'	Gray, clayey fine SAND, wet
	14				Brown, fine SAND, wet
10					
	10		3	9.0-12.7'	s.a.a.
	3				12.7'
					Equipment Refusal at 12.7'
15					
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-3

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/24/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	12/24/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	A. Krause

Depth (ft)	PID	Rec.	No.	Depth	Soil Information Remarks
0					Concrete — 1.3'
	250		1	1.3-5.3'	Asphalt
	33				Brown, fine SAND, moist
5	19				Red CLAY, moist
	9		2	5.3-9.3'	Brown and gray fine SAND, wet, with product globules/sheen.
	13				Black staining.
	2		3	9.3-12.0'	
10					Brown, gray fine SAND, wet — 12.0'
					Equipment Refusal at 12.0'
15					
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-4

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/24/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	12/24/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	A. Krause

	SAMPLE				Soil Information
0	PID	Rec.	No.	Depth	Remarks
					Concrete 0.8'
	2		1	0.8-4.8'	Gray, fine SAND, moist, black staining.
5	2		2	4.8-8.5'	Red CLAY to clayey fine SAND, little fine and medium GRAVEL, moist. 8.0'
					Equipment Refusal at 8.0'
10					
15					
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-5

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/31/03
Project #:	16059	Driller:	R. Rose	Completion Date:	12/31/03
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P. Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks
0					**0.6'**
		18"	1	.6-2.6'	Gray, brown, fine SAND, moist.
	0.0				
		36"	2	2.6-6.6'	**(FILL)**
					- same
5					
	193				**6.6'**
		36"	3	6.6-10.6'	Brown silty fine SAND, wet.
					(LACUSTRINE SAND)
	8,000				same, with trace brown product, strong odor (9-9.6 ft.) **9.6'**
10					same, with trace gravel
	945				**10.6'**
		24"	4	10.6-12.6'	Brown silty fine SAND, moist.
	4.0				
		24"	5	12.6-14.6'	- same
	3.0				**14.6'**
15					Boring terminated at 14.6 ft. bgs
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-6

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/31/03
Project #:	16059	Driller:	R. Rose	Completion Date:	12/31/03
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P. Smith

	SAMPLE				Soil Information Remarks	
0	PID	Rec.	No.	Depth		
						0.5'
		24"	1	0.5-2.5'	Gray, brown, fine SAND, moist.	
					(FILL)	
		48"	2	2.5-6.5'	- same	
5					- irridescent sheen at 5-6 ft.	
					- same except wet @ 6 ft.	
	755				- irridescent sheen, trace product 6.5-7.5'	6.5'
		48"	3	6.5-10.5'		
	2,480					
					Brown, silty fine SAND, wet.	
10	1.7				(LACUSTRINE SAND)	
	22					
		24"	4	10.5-12.5'	- same	
	6.0					12.5'
					Boring terminated at 12.5 ft. bgs	
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-7

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC
Project #:	16059	Driller:	R. Rose
Client:	Buell Automatics	Elevation:	
Location:	381 Buell Road	Weather:	Interior
Start Date:	12/31/2003		
Completion Date:	12/31/2003		
Drilling Method:	Geoprobe		
Supervisor:	P. Smith		

Depth (ft)	SAMPLE PID	SAMPLE Rec.	SAMPLE No.	SAMPLE Depth	Soil Information Remarks
0					**0.5'**
		24"	1	0.5-2.5'	Gray brown fine SAND, some silt, moist
		24"	2	2.5-6.5'	- same
					- same, except wet at 4.5 ft. **(FILL)**
5					
	1.5				
		24"	3	6.5-10.5	**7.0 '**
					Gray fine SAND, some silt, wet, with trace irridescent sheen.
					(LACUSTRINE SAND)
10	42.2				
	1.7				- same, except brown
					Boring terminated at 10.5' **10.5'**
15					
20					

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-8

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/31/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	12/31/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P. Smith

Depth (ft)	SAMPLE PID	SAMPLE Rec.	SAMPLE No.	SAMPLE Depth	Soil Information Remarks
0					0.5'
		12"	1	0.5-2.5'	Gray brown fine SAND, some silt, moist.
		24"	2	2.5-6.5'	- same except wet at 5.5 ft. **(FILL)**
5					
					6.0'
		48"	3	6.5-10.5'	Brown sandy SILT, wet, with dark brown product, irridescent sheen.
	77				**(LACUSTRINE SAND)**
10					
	22				10.5'
					Boring terminated at 10.5'
15					
20					

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-9

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/31/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	12/31/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P. Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks
0					0.5'
					Boring advanced to 8.5 ft. w/o sampling.
5					
					8.5'
			1	8.5-12.5'	Brown fine sandy SILT, wet.
10	0.1				**(LACUSTRINE SILT AND CLAY)**
	0.0				12.5'
					Boring terminated at 12.5'
15					
20					

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-10

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/31/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	12/31/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P. Smith/A. Krause

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks
0					0.5'
					Boring advanced to 16 ft. w/o sampling.
5					
10					
15					16.0'
			1	16-20'	Gray fine SAND, some silt, wet. **(LACUSTRINE SAND)**
					19.8'
20	0			19.8-20'	Brown gray clayey fine SAND, some silt and gravel, moist.

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. GP-10

Project:	Voluntary Investigation - IRM	Drill Contractor:	SLC	Start Date:	12/31/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	12/31/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P. Smith/A. Krause

	SAMPLE				Soil Information
20	PID	Rec.	No.	Depth	Remarks
			2	20-24'	Brown gray clayey fine SAND, trace gravel, moist.
					(GLACIAL TILL)
	0.0				**24.0'**
					Boring terminated @ 24.0 ft. bgs
25					
30					
35					
40					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-8

Project:	Voluntary Investigation	Drill Contractor: Nothnagle	Start Date: 8/12/2002
Project #:	16059	Driller: N. Short	Completion Date: 8/12/2002
Client:	Buell Automatics	Elevation:	Drilling Method: Manual Geoprobe
Location:	381 Buell Road	Weather: Interior	Supervisor: P.Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks	
0			1	0.5-2.5	Concrete	**0.5 '**
					Coarse to fine Sand and Gravel, moist	
	3,400				**(FILL)**	
					(Black from 1.8 to 2.5 ft.; strong odor)	
		18"	2	2.5-4.5		**3.0 '**
					Brown silty fine SAND, moist	
					(LACUSTRINE SAND)	
	3,000					
5		12"	3	4.5-6.5	- same	
	2,200					**6.5 '**
					Boring terminated at 6.5 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-9

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/12/2002
Project #:	16059	Driller:	N. Short	Completion Date:	8/12/2002
Client:	Buell Automatics	Elevation:		Drilling Method:	Manual Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks	
0		12"	1	0.5-2.5'	Concrete	0.5 '
					Brown SILT and Gravel, moist, mild odor (FILL)	2.5 '
	17	18"	2	2.5-4.5 '	Brown silty fine SAND, moist to wet	
	83		3	4.5-6.5 '	- same, with strong odor, trace iridescent sheen, wet	
5					(LACUSTRINE SAND)	
	223					6.5 '
					Boring terminated at 6.5 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-10

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/12/2002
Project #:	16059	Driller:	N. Short	Completion Date:	8/12/2002
Client:	Buell Automatics	Elevation:		Drilling Method:	Manual Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

Depth (ft)	SAMPLE PID	SAMPLE Rec.	SAMPLE No.	SAMPLE Depth	Soil Information Remarks	
0		24"	1	0.5-2.5 '	Concrete	0.5 '
					Brown sandy SILT, moist, moderate odor	
					(LACUSTRINE SAND)	
	118		2	2.5-4.5 '	- same	
	163					3.8 '
					Red brown clayey SILT, moist	
	91				(LACUSTRINE SILT AND CLAY)	
5			3	4.5-6.0 '	- same	
	36					6.0 '
					Boring terminated at 6.0 ft. bgs	
10						
15						
20						

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-11

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/8/2002
Project #:	16059	Driller:	N. Short	Completion Date:	8/8/2002
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Clear, 70s	Supervisor:	P.Smith

Depth (ft)	PID	Rec.	No.	Depth	Soil Information Remarks
0		36"	1	0-4.0 '	Gray coarse to fine Sand and Gravel, dry (asphalt surface, gravel base)
					(FILL)
	0.0				2.0 '
					Brown fine sandy Silt, moist
	10				
		48"	2	4.0-8.0 '	- same, except gray
5					
	37				wet @ 6 ft. with very strong odor
					(LACUSTRINE SAND)
	42				
		28"	3	8.0-12 '	- poor recovery, sampler overpacked
10	0.0				
	4.0				12.0 '
					Boring terminated at 12.0 ft. bgs
15					
20					

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-12

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle
Project #:	16059	Driller:	N. Short
Client:	Buell Automatics	Elevation:	
Location:	381 Buell Road	Weather:	Clear, 70s
Start Date:	8/8/2002		
Completion Date:	8/8/2002		
Drilling Method:	Geoprobe		
Supervisor:	P.Smith		

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks
0		36"	1	0-4.0	Gray coarse to fine Sand and Gravel, dry (asphalt surface, gravel base)
					(FILL)
	0				**2.0 '**
					Brown silty fine Sand, moist
	0				- same, except wet @ 3.5 **(LACUSTRINE SAND)**
		48"	2	4.0-8.0	
5	48				**5.3 '**
					Red brown Silt and Clay, moist
	0				
		28"	3	8.0-11	- same
					(LACUSTRINE SILT AND CLAY)
10					
	0				**11.0 '**
					Boring terminated at 11.0 ft. bgs
15					
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-13

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/8/2002
Project #:	16059	Driller:	N. Short	Completion Date:	8/8/2002
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Clear, 70s	Supervisor:	P.Smith

Depth (ft)	PID	SAMPLE Rec.	SAMPLE No.	SAMPLE Depth	Soil Information Remarks
0		36"	1	0-4	Gray coarse to fine Sand and Gravel, dry (asphalt surface, gravel base)
					(FILL)
	0				**2.0 '**
					Brown silty fine Sand, moist
					- same, except black from 3 to 3.8 ft.
	15				
		36"	2	4.0-7.0	Gray brown silty fine SAND, wet
5	0				
					(LACUSTRINE SAND)
	0				
		36"	3	7.0-10.0	- same
10	0				**10.0 '**
					Boring terminated at 10.0 ft. bgs
15					
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-14

Project:	Voluntary Investigation	Drill Contractor: Nothnagle	Start Date: 8/8/2002
Project #:	16059	Driller: N. Short	Completion Date: 8/8/2002
Client:	Buell Automatics	Elevation:	Drilling Method: Geoprobe
Location:	381 Buell Road	Weather: Clear, 70s	Supervisor: P.Smith

Depth (ft)	PID	Rec.	No.	Depth	Soil Information Remarks
0		24"	1	0-4 '	Gray coarse to fine Sand and Gravel, dry (asphalt surface, gravel base) **(FILL)** **1.7 '**
	0				Brown silty fine Sand, moist
	0				
		4"	2	4-7 '	same, except wet
5					**(LACUSTRINE SAND)**
		36"	3	7-10 '	same, except gray
	0				
10	0				**10.0 '**
					Refusal @ 10'
15					
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-15

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/9/2002
Project #:	16059	Driller:	N. Short	Completion Date:	8/9/2002
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

	SAMPLE				Soil Information	
0	PID	Rec.	No.	Depth	Remarks	
		16"	1	0-4 '	Concrete	0.5 '
					Gray SAND and Gravel, strong odor	
					(FILL)	
	1					3.3 '
					Gray clayey SILT, moist	
	54				**(LACUSTRINE SILT and CLAY)**	4.0 '
		36"	2	4-7 '	Gray silty fine SAND, wet, strong odor, iridescent sheen	
5	75				**(LACUSTRINE SAND)**	5.0 '
					Red brown CLAY, moist	
					(LACUSTRINE SILT and CLAY)	6.0 '
					Brown silty fine SAND, wet	
	4				**(LACUSTRINE SAND)**	7.0 '
		NR	3	7-10 '	- no recovery; sleeve destroyed	
10						10.0 '
					Boring terminated at 10.0 ft. bgs	
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-16

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/9/2002
Project #:	16059	Driller:	N. Short	Completion Date:	8/9/2002
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

Depth (ft)	PID	Rec.	No.	Depth	Soil Information / Remarks	
0		18"	1	0-4 '	Concrete	**0.5 '**
					Gray coarse to fine SAND and moist Gravel, mild odor	
					(FILL)	
	2.5					**3.3 '**
	3.1				Red brown clayey SILT, trace roots	
		36"	2	4-7 '	**(Relict Topsoil)**	
5						**5.2 '**
					Brown to black silty fine SAND, wet, strong odor, iridescent sheen, trace free product	
	3.1				**(LACUSTRINE SAND)**	
						7.0 '
		24"	3	7-9 '		
	2.5				Red brown silty Clay, dry to moist	
					(LACUSTRINE SILT and CLAY)	
	2.5					**9.0 '**
					Boring terminated at 9.0 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-17

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/9/2002
Project #:	16059	Driller:	N. Short	Completion Date:	8/9/2002
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

	SAMPLE				Soil Information	
0	PID	Rec.	No.	Depth	Remarks	
		36"	1	0-4 '	Concrete	0.5 '
					Gray brown fine SAND; silt, sand and gravel layers;	
	10.8				strong odor, trace oily product, moist	
					(FILL)	
						3.5 '
	12.7				Gray brown SILT, some fine Sand, moist	4.0 '
		36"	2	4-7 '	Gray SAND, wet, strong odor	
5	18.4				**(LACUSTRINE SAND)**	5.0 '
					Red brown clayey SILT, with oily product in cracks	
					(LACUSTRINE SILT and CLAY)	
	14.6					
		24"	3	7-9 '	Red brown clayey SILT, moist	
	3.1					9.0 '
					Boring terminated at 9.0 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

Stantec

2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. B-18

Project:	Voluntary Investigation	Drill Contractor:	Nothnagle	Start Date:	8/8/2002
Project #:	16059	Driller:	N. Short	Completion Date:	8/8/2002
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:		Supervisor:	P.Smith

	SAMPLE				Soil Information	
0	PID	Rec.	No.	Depth	Remarks	
		6"	1	0-4 '	Gray coarse to fine Sand and Gravel, dry (asphalt surface, gravel base)	
					(FILL)	
						3.5 '
	4.1				Black, silty fine SAND, moist	**4.0 '**
		36"	2	4-7 '	Gray SAND, moist, strong odor	
5	104					**5.0 '**
					Red Brown CLAY, moist	**5.8 '**
					Gray SAND, wet, strong odor and iridescent sheen	
					(LACUSTRINE SAND)	
	23					
			3	7-10 '	- poor recovery, sleeve destroyed	
						9.2 '
					Red brown clayey SILT, moist **(LACUSTRINE SILT and CLAY)**	
10	0					**10.0 '**
					Boring terminated at 10.0 ft. bgs	
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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(585) 475-1440

Test Boring No. B-19

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/5/03
Project #:	16059	Driller:	R. Rose	Completion Date:	5/5/03
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:		Supervisor:	P.Smith

Depth (ft)	SAMPLE PID	SAMPLE Rec.	SAMPLE No.	SAMPLE Depth	Soil Information Remarks	
0		30"	1	0-4 '	Concrete	0.5 '
					Brown and gray Sand and Gravel, some silt, moist (FILL)	2.0 '
					Dark gray Silt, some fine sand, strong odor, moist to wet	
	20.4					
		48"	2	4-8 '	Gray silty fine Sand, wet, iridescent sheen	
5					(LACUSTRINE SAND)	
	1.3					7.2 '
					Red Brown clayey Silt, moist	
	3.1					
		26"	3	8-10.2 '	-same	
10					(LACUSTRINE SILT AND CLAY)	
	1.3					10.2 '
					Boring terminated at 10.2 ft. bgs	
15						
20						

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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(585) 475-1440

Test Boring No. B-20

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/5/03
Project #:	16059	Driller:	R. Rose	Completion Date:	5/5/03
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:		Supervisor:	P.Smith

Depth (ft)	PID	Rec.	No.	Depth	Soil Information Remarks
0		30"	1	0-4 '	Concrete **0.5 '**
					Gray brown Sand and Gravel, moist **(FILL)** **2.3 '**
					Dark gray silty fine Sand, moist; strong odor, free product (oil)
	7.7				
		48"	2	4-8 '	- same, with iridescent sheen, wet
5					
	0.4				**(LACUSTRINE SAND)** **7.5 '**
	7.2				Red brown silty Clay, trace gravel, occasional sand seam
		24"	2	8-10 '	
					- same, except smeared with product **(LACUSTRINE SILT AND CLAY)**
10	3.6				**10.0 '**
					Boring terminated at 10.0 ft. bgs
15					
20					

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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2250 Brigton Henrietta Town Line Road
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(585) 475-1440

Test Boring No. B-21

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/3/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	5/3/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:		Supervisor:	P.Smith

Depth (ft)	PID	Rec.	No.	Depth	Soil Information Remarks	
0		36"	1	0-4 '	Concrete	0.5 '
					Gray brown to black Silt, Sand and Gravel (FILL)	1.2 '
	0.4				Black, moist tar-like seam, strong odor from 1.2 to 1.5 ft.	1.5 '
					Dark gray silty fine SAND, moist to wet	
	0.9				(LACUSTRINE SAND)	
		36"	2	4-8 '	- same with iridescent sheen from 4.5-5 ft.	
5	2.7					5.0 '
					Red brown Silt, some clay, dry to moist	
					(LACUSTRINE SILT and CLAY)	
	0.4					8.0 '
					Boring terminated at 8.0 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-22

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/5/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	5/5/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Rain/high Wind	Supervisor:	P.Smith

	SAMPLE				Soil Information	
0	PID	Rec.	No.	Depth	Remarks	
		18"	1	0-4 '	Asphalt surface	**0.5 '**
					Gray brown silty fine Sand, moist (poor recovery)	
	1.3				**(LACUSTRINE SAND)**	
		48"	2	4-8 '	- same, except wet	
5						
	1.3				- same with sheen from 5.8 to 6.0 ft.	**6.0 '**
					Red brown Clay, some silt, moist; stiff	
					(LACUSTRINE SILT and CLAY)	
	0.9					**8.0 '**
					Boring terminated at 8.0 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

Stantec
2250 Brigton Henrietta Town Line Road
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Test Boring No. B-23

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/5/03
Project #:	16059	Driller:	R. Rose	Completion Date:	5/5/03
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Rain/high winds	Supervisor:	P.Smith

	SAMPLE				Soil Information	
0	PID	Rec.	No.	Depth	Remarks	
			1	0-4 '	Asphalt surface	0.5 '
	160				Dark gray silty fine Sand, moist; strong odor	
					(LACUSTRINE SAND)	
	53				- same, except wet with iridescent sheen	3.5 '
	109				Red brown clayey Silt, moist, stiff	
			2	4-8 '		
5						
					- same with trace gravel (LACUSTRINE SILT and CLAY)	
	28					8.0 '
					Boring terminated at 8.0 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Test Boring No. B-24

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/5/03
Project #:	16059	Driller:	R. Rose	Completion Date:	5/5/03
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

	SAMPLE				Soil Information Remarks	
0	PID	Rec.	No.	Depth		
			1	0-2 '	Concrete	**0.5 '**
	5.4				Gray brown silty fine Sand, moist **(LACUSTRINE SAND)**	
			2	2-4 '		**3.0 '**
	4.0				Red brown silty Clay, moist	**4.0 '**
			3	4-6 '	Red brown Silt, some fine sand, trace clay, wet	
5						
	4.0					
			4	6-8 '	- same	
	1.8				**(LACUSTRINE SILT and CLAY)**	**8.0 '**
					Boring terminated at 8.0 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. B-25

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/3/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	5/3/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	interior	Supervisor:	P.Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks	
0			1	0-2 '	Concrete surface	0.5 '
					Brown silty fine Sand, moist, concrete @ 1.5'	
	85				(LACUSTRINE SAND)	
		NR	2	2-4 '	(No Recovery)	4.0 '
			3	4-6 '	Gray brown Silt and Sand, trace clay, moist	
5						
	1.3					
			4	6-8 '	same, except wet	
					(LACUSTRINE SILT and CLAY)	
	0.9					8.0 '
					Boring terminated at 8.0 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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2250 Brigton Henrietta Town Line Road
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(585) 475-1440

Test Boring No. B-26

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/3/2002
Project #:	16059	Driller:	R. Rose	Completion Date:	5/3/2002
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:		Supervisor:	P.Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks	
0			1	0-2 '	Concrete	0.5 '
					Brown SILT, some fine Sand, trace Clay, moist	
					black asphalt(?) 1.8-2'	
	600				(FILL)	
			2	2-4 '		2.5 '
	101				Gray SILT, some fine Sand, trace Clay, moist, moderate odor,	
						3.0 '
	60					
			3	4-6 '	Gray brown, wet Silty fine SAND, trace Clay	
5						
					(LACUSTRINE SAND)	
	16.8					
			4	6-8 '	same	
	12.2					8.0 '
					Boring terminated at 8.0 ft. bgs	
10						
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Rochester, NY 14623
(585) 475-1440

Test Boring No. B-27

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/3/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	5/3/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks
0		28"	1	0-4 '	Concrete **0.5 '**
					Gray silty fine Sand, trace clay, moist to wet; strong odor
					(LACUSTRINE SAND)
	4.0				
			2	4-8 '	- same
5					**5.5 '**
					iridescent sheen from 5.5 to 7 ft.
	1.3				**7.0 '**
					dark brown Silt from 7 to 8 ft.
	3.1	48"			**8.0 '**
			3	8-12 '	- same, except moist to wet
					(LACUSTRINE SAND)
10	0.9				
					11.2 '
					Red brown Silt, some clay, moist **(LACUSTRINE SILT and CLAY)**
	0.4				**12.0 '**
					Boring terminated at 12.0 ft. bgs
15					
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Stantec

Test Boring No. B-28

Project:	Voluntary Investigation	Drill Contractor: SLC	Start Date: 5/3/2003
Project #:	16059	Driller: R. Rose	Completion Date: 5/3/2003
Client:	Buell Automatics	Elevation:	Drilling Method: Geoprobe
Location:	381 Buell Road	Weather: Interior	Supervisor: P.Smith

Depth (ft)	PID	Rec.	No.	Depth	Soil Information Remarks
0		30"	1	0-4'	Concrete **0.4 '**
					Dark gray Silt, some find sand, trace clay, moist; mild odor
	0.9				**4.0 '**
		48"	2	4-8'	Red brown SILT, some clay, moist
5					**(LACUSTRINE SILT and CLAY)**
	1.3				**6.5 '**
					Gray silty fine SAND, wet, trace sheen (free product?) @ 6.5 ft., strong odor
		48"	3	8-12'	- same (possible slough)
					(LACUSTRINE SAND)
10	0.9				
					11.5 '
	1.8				Red brown silty CLAY, moist **(LACUSTRINE SILT and CLAY)**
					12.0 '
					Boring terminated at 12.0 ft. bgs
15					
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

Stantec

2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. B-29

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/3/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	5/3/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

Depth (ft)	PID	Rec.	No.	Depth	Soil Information / Remarks	
0		36"	1	0-4'	concrete	0.5
					Dark gray SILT, some fine sand, moist, wet **(LACUSTRINE SAND)**	3.5 '
	8.6				Iridescent sheen @ 3.5-4', strong odor	4.0 '
		48"	2	4-8'	Gray brown silty fine SAND, wet **(LACUSTRINE SAND)**	5.0 '
5	1.8				same, with iridescent sheen from 5.0-6.5'	6.5 '
					same, without sheen	7.5 '
	0.4				Red brown silty CLAY, moist **(LACUSTRINE SILT and CLAY)**	8.0 '
					Boring terminated at 8.0 ft. bgs	
10						
15						
20						

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. B-30

Project:	Voluntary Investigation	Drill Contractor: SLC	Start Date: 5/3/2003
Project #:	16059	Driller: R. Rose	Completion Date: 5/3/2003
Client:	Buell Automatics	Elevation:	Drilling Method: Geoprobe
Location:	381 Buell Road	Weather: Interior	Supervisor: P.Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks	
0		36"	1	0-4'	Concrete	0.5 '
					Gray SAND, some gravel, silt, some black aslphalt looking material, moist	3.0 '
	1.3				Gray silty fine SAND, moist **(LACUSTRINE SAND)**	
			2	4-8'	same as above, except dark gray, wet, mild odor	
5	0.9					4.8 '
					Red brown CLAY, trace Gravel, moist (trace product - oil)	
	2.2				**(LACUSTRINE SILT and CLAY)**	
			3	8-12'	same, except hard	
10						
	0.4					12.0 '
					Boring terminated at 12.0 ft. bgs	
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No. B-31

Project:	Voluntary Investigation	Drill Contractor:	SLC
Project #:	16059	Driller:	R. Rose
Client:	Buell Automatics	Elevation:	
Location:	381 Buell Road	Weather:	Interior
Start Date:	5/5/2003		
Completion Date:	5/5/2003		
Drilling Method:	Geoprobe		
Supervisor:	P.Smith		

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks
0			1	0-4'	Concrete 0.5 '
					Black coarse to fine Sand and Gravel, moist
					(FILL)
	0.9				3.0 '
					Red brown silty Clay, moist
			2	4-8'	- same
5					
					(LACUSTRINE SILT and CLAY)
	2.2				
	0.9				8.0 '
					Boring terminated at 8.0 ft. bgs
10					
15					
20					

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

2250 Brigton Henrietta Town Line Road
Rochester, NY 14623
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Test Boring No. B-32

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/5/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	5/5/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

	SAMPLE				Soil Information Remarks	
0	PID	Rec.	No.	Depth		
		30"	1	0-4'	Concrete	0.5 '
					Gray Sand and gravel, moist	
					(FILL)	2.5 '
					Dark gray silty fine SAND, moist to wet, strong petroleum odor	
	9.9				**(LACUSTRINE SAND)**	
		48"	2	4-8'		4.5 '
5					Red brown silty CLAY, moist	
					(LACUSTRINE SILT and CLAY)	
	8.1					6.5 '
					Dark gray silty fine SAND, wet, strong odor	
	4.0					
		24"	3	8-12'	Brown silty fine SAND, no odor	
					(LACUSTRINE SAND)	
10						
	0.9					
			4	12-15'	same, except very dense, moist	
15	0.9					15.0 '
					Boring terminated at 15.0 ft. bgs	
20						

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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Rochester, NY 14623
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Test Boring No. B-33

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/5/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	5/5/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

Depth (ft)	SAMPLE PID	SAMPLE Rec.	SAMPLE No.	SAMPLE Depth	Soil Information Remarks	
0		24"	1	0-4'	Concrete	**0.5 '**
					Red brown Silt, some fine sand, little clay, moist	
	1.9					
					(LACUSTRINE SILT and CLAY)	
	1.3				Dark gray @ 3.5'	**4.0'**
		48"	2	4-8'	Brown silty fine Sand, wet	
5					**(LACUSTRINE SAND)**	
	0.9					
	0.9					
			3	8-11.5'	same, with trace clay	
10	0.9					
					same, except red brown, no clay	
	0.9					**11.5'**
					Boring terminated at 11.5 ft. bgs	
15						
20						

Notes:
1. PID Thermo Env Model 580 B with 11.8 eV lamp.

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2250 Brigton Henrietta Town Line Road
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Test Boring No. B-34

Project:	Voluntary Investigation	Drill Contractor:	SLC	Start Date:	5/5/2003
Project #:	16059	Driller:	R. Rose	Completion Date:	5/5/2003
Client:	Buell Automatics	Elevation:		Drilling Method:	Geoprobe
Location:	381 Buell Road	Weather:	Interior	Supervisor:	P.Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks	
0		36"	1	0-4'	Concrete	0.5 '
					Dark gray Silt, moist, strong petroleum odor	
	4.5					
					Gray brown Silt, some fine sand, trace clay, moist	
	2.2				**(LACUSTRINE SILT and CLAY)**	
		48"	2	4-8'		
5						6.0'
					Brown silty fine Sand, moist; top/bottom stained dark gray; sheen	
	1.3				**(LACUSTRINE SAND)**	7.0 '
	1.8				Red brown Clay, some silt, moist; stiff	8.0 '
					Boring terminated at 8.0 ft. bgs	
10						
15						
20						

Notes:

1. PID Thermo Env Model 580 B with 11.8 eV lamp.

Stantec

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(585) 475-1440

Test Boring No.: B-35

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

	SAMPLE				Soil Information
0	PID	Rec.	No.	Depth	Remarks
		24"	1	0-4'	Concrete surface **(FILL)** 2.0
	405				Brown fine Sandy SILT, moist **(LACUSTRINE SAND)**
	115				
		36"	2	4-8'	Same, except wet 5.0
5					Red brown SILT, some fine Sand and Clay, moist **(LACUSTRINE SILT and CLAY)**
	37				
	17.5				8.0
					Boring terminated at 8.0 ft. bgs.
10					
15					Note: 1. Boring backfilled with bentonite chips at completion.
20					

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Test Boring No.: B-36

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

	SAMPLE				Soil Information
0	PID	Rec.	No.	Depth	Remarks
		30"	1	0-4'	Concrete surface
					Gray SAND, some Silt, trace Gravel, moist
					(FILL)
	8.5				3.0'
					Red brown, SILT, some Clay, trace Gravel, wet
	29				
		36"	2	4-8'	same, except stiff, moist
5					
	37				
					(LACUSTRINE SILT and CLAY)
	125				
		24"	3	8-10	same
10	35				10.0'
					Boring terminated at 10.0 ft. bgs.
15					
					Note:
					1. Boring backfilled with bentonite chips at completion.
20					

Stantec

2250 Brighton Henrietta Town Line Road
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Test Boring No.: B-37

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

Depth (ft)	PID	Rec.	No.	Depth	Soil Information Remarks
0			1	0-4'	Asphalt surface
					Gray brown, SILT, Sand and Gravel, moist
	0.0				**(FILL)**
					3.2'
					Dark gray, SILT, some fine Sand, moist
	4.5				
			2	4-8'	Gray brown, Silty fine SAND, wet
5					**(LACUSTRINE SAND)**
					6.0'
					Red brown, SILT, some fine Sand and Clay, moist
					(LACUSTRINE SILT and CLAY)
	4.1				8.0'
					Boring terminated at 8.0 ft. bgs.
10					
15					
					Note:
					1. Boring backfilled with bentonite chips at completion.
20					

Stantec

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Test Boring No.: B-38

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

	SAMPLE				Soil Information
0	**PID**	**Rec.**	**No.**	**Depth**	**Remarks**
		36"	1	0-4	Asphalt surface
					Gray, coarse to fine Sand and Gravel, dry
					(FILL)
					1.9'
					Red brown, SILT, some Sand and Clay, moist
					3.0'
	0.0				sand lense 3-3.5 ft. bgs 3.5
	0.0				
		24"	2	4-6'	Red brown, SILT, some Sand and Clay, moist
5					
					(LACUSTRINE SILT and CLAY)
	0.0				6.0
					Boring terminated at 6.0 ft. bgs.
10					
15					
					Note:
					1. Boring backfilled with bentonite chips at completion.
20					

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No.: B-39

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

	SAMPLE				Soil Information
0	PID	Rec.	No.	Depth	Remarks
			1	0-4'	Asphalt surface
					Gray, coarse to fine SAND and Gravel, moist
					(FILL)
					2.0'
					Gray, silty fine SAND, wet
	30.5				**(LACUSTRINE SAND)**
	22.8				
			2	4-8'	Same, except gray brown
5					5.0'
					Red brown, SILT, some Clay and fine Sand, moist
	13.8				**(LACUSTRINE SILT and CLAY)**
					8.0'
					Boring terminated at 8.0 ft. bgs.
10					
15					
					Note:
					1. Boring backfilled with bentonite chips at completion.
20					

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No.: B-40

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

	SAMPLE				Soil Information
0	PID	Rec.	No.	Depth	Remarks
			1	0-4'	Concrete surface Gray brown, coarse to fine SAND and Gravel, some Silt, moist **(FILL)** 2.0'
	9.4				Gray brown silty fine SAND, wet **(NATIVE)**
	7.8				
			2	4-8'	same
5					5.0'
					Red brown clayey SILT, moist **(LACUSTRINE SILT and CLAY)**
	50.1				
	22.3				8.0
					Boring terminated @ 8.0 ft. bgs.
10					
15					
					Note: 1. Boring backfilled with bentonite chips at completion.
20					

U:\16059\data\Boring logs\geoprobe borings.xls\B-40

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No.: B-41

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

	SAMPLE				Soil Information	
0	PID	Rec.	No.	Depth	Remarks	
		48"	1	0-4'	Asphalt surface	
					Gray brown, coarse to fine SAND and Gravel, some Silt, moist	
					(FILL)	1.9'
	2.3				Brown, silty fine SAND, moist **(LACUSTRINE SAND)**	2.3'
					Red brown, silty CLAY, moist	
					(LACUSTRINE SILT and CLAY)	
	9.3					
		24"	2	4-8'	same	
5						
	5.8					8.0'
					Boring terminated at 8.0 ft. bgs.	
10						
15						
					Note:	
					1. Boring backfilled with bentonite chips at completion.	
20						

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No.: B-42

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

	SAMPLE				Soil Information
0	PID	Rec.	No.	Depth	Remarks
		48	1	0-4'	asphalt surface, gray sand and gravel base, dry
					(FILL)
	8.6				2.0'
					Red brown clayey SILT, moist
					(LACUSTRINE SILT and CLAY)
					3.5'
	7.6				sand seam from 3.5 to 4.0 ft. bgs
		36	2	4-8'	Red brown clayey SILT, moist
5					
	24.4				7.0'
					Red brown silty fine SAND, wet
	93.1				**(LACUSTRINE SAND)** 8.0'
					Boring terminated at 8.0 ft. bgs.
10					
15					
					Note:
					1. Boring backfilled with bentonite chips at completion.
20					

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No.: B-43

Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

Depth (ft)	SAMPLE PID	Rec.	No.	Depth	Soil Information Remarks
0			1	0-4'	Gray sand and gravel, dry **(FILL)** 2.0'
					Gray brown silty fine SAND, wet **(LAUCSTRINE SAND)**
	2.4				
	8.8				
			2	4-8'	same
5					6.5'
					Red brown clayey SILT, moist **(LACUSTRINE SILT and CLAY)**
	35.5				8.0'
					Boring terminated at 8.0 ft. bgs.
10					
15					
20					

Note:
1. Boring backfilled with bentonite chips at completion.

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(585) 475-1440

Test Boring No.: B-44

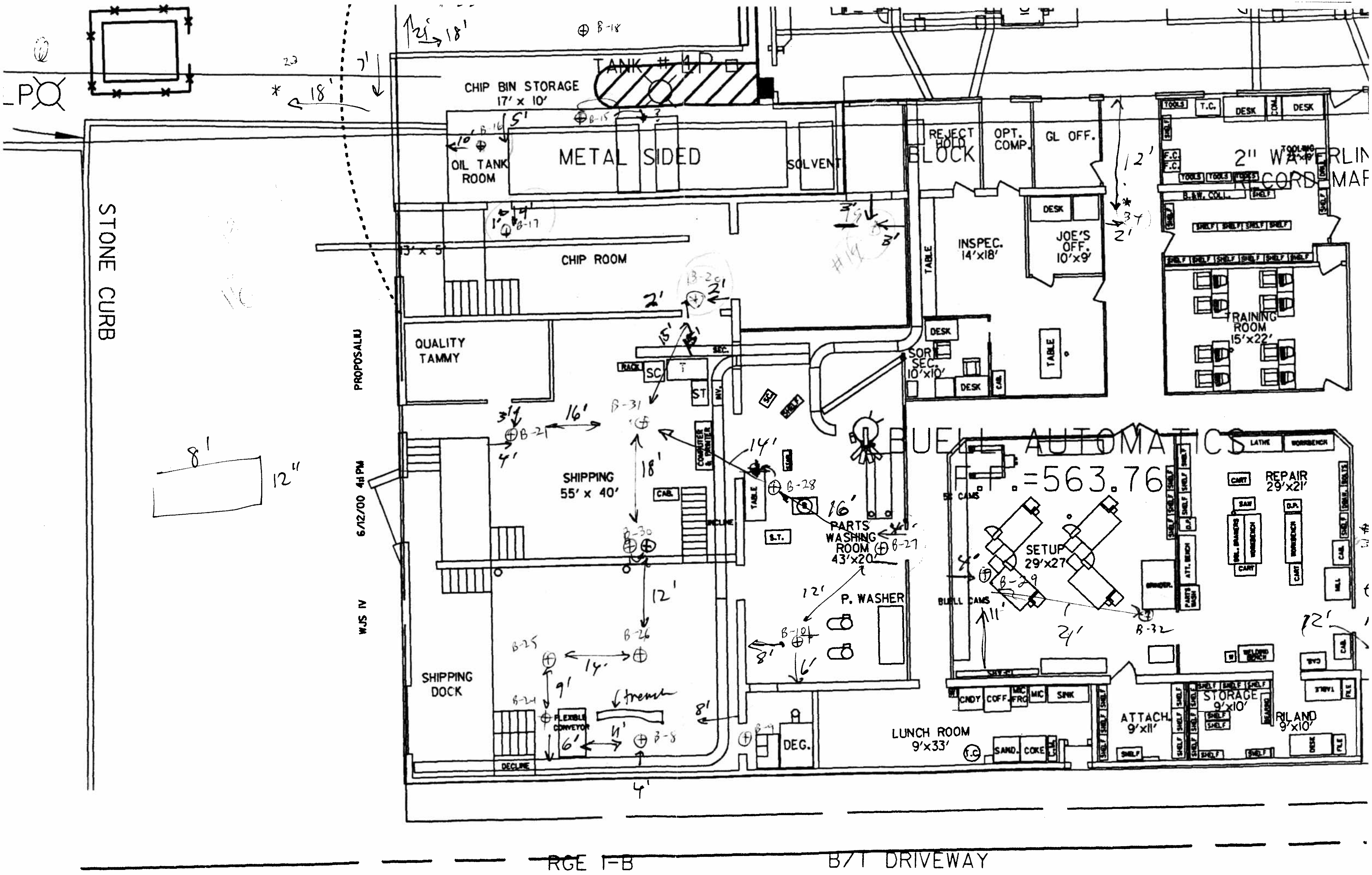
Project:	Remedial Investigation	Drill Contractor:	Nothnagle	Start Date:	9/20/2005
Project #:	16059	Driller:	N. Short	Completion Date:	9/20/2005
Client:	Buell Automatics	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:		Supervisor:	P. Smith

Depth (ft)	SAMPLE PID	SAMPLE Rec.	SAMPLE No.	SAMPLE Depth	Soil Information Remarks
0		24"	1	0-4'	Gravel surface Gray brown, coarse to fine SAND and Gravel, some Silt, moist **(FILL)** 2.0'
					Gray brown fine SAND, some Silt, wet **(LACUSTRINE SAND)**
	0.0	36"	2	4-8'	same 5.0
5					Red brown, SILT, some Clay and fine Sand, moist **(LACUSTRINE SILT and CLAY)** 8.0'
	0.8				
					Boring terminated at 8.0 ft. bgs.
10					
15					
					Note: 1. Boring backfilled with bentonite chips at completion.
20					

Appendix C

Swing-tie Measurements for Interior Boring Locations

(presented on the following page)



TANK # LP
CHIP BIN STORAGE
17' x 10'
OIL TANK ROOM
METAL SIDED
SOLVENT
BLOCK
REJECT HOLD
OPT. COMP.
GL OFF.
2" WATERLINE
RECORD MAP
TOOLING
DESK
T.C.
TOOLS
B.&W. COLL.
SHELF
CHIP ROOM
INSPEC.
14'x18'
JOE'S OFF.
10'x9'
TABLE
TRAINING ROOM
15'x22'
QUALITY TAMMY
STONE CURB
PROPOSAL
6/12/00 4d PM
WJS IV
SORT SEC.
10'x10'
CAB.
RACK
SC
ST
INV.
COMPUTER & PRINTER
SHIPPING
55' x 40'
BUELL AUTOMATICS
F.F. =563.76
LATHE
WORKBENCH
REPAIR
29'x21'
CART
SAW
D.P.
SETUP
29'x27'
GRINDER
PARTS WASH
ATT. BENCH
BUELL CAMS
PARTS WASHING ROOM
43'x20'
INCLINE
S.T.
P. WASHER
SHIPPING DOCK
FLEXIBLE CONVEYOR
DECLINE
DEG.
LUNCH ROOM
9'x33'
CNDY
COFF.
MIC
FRG
SINK
SAND.
COKE
ATTACH.
9'x11'
STORAGE
9'x10'
RILAND
9'x10'
FILE
RGE 1-B
B/T DRIVEWAY
B-15
B-16
B-17
B-18
B-20
B-21
B-24
B-25
B-26
B-27
B-28
B-29
B-30
B-31
B-32
B-8
B-101
trench
8'
12"
18'
16'
14'
12'

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix D

Sub-Slab Soil Gas Survey Reports

August 22, 2006

Mr. Scott Dean
1166 Brooks Avenue
Rochester, NY 14624

RE: Sub-Slab Soil Vapor Sampling Report
1166 Brooks Avenue
Rochester, NY

Dear Mr. Dean:

On behalf of Buell Automatics, Inc. (Buell), Stantec Consulting Services Inc. (Stantec) is pleased to submit this Sub-Slab Soil Vapor Sampling Report for 1166 Brooks Avenue (Figure 1).

Building Inventory

A building walkthrough of 1166 Brooks Avenue was conducted on March 22, 2005 with representatives of the New York State Department of Environmental Conservation (DEC) and the New York State Department of Health (NYSDOH). Mr. Dick Wagner, General Manager for Marketing Squad, Inc. and David Shahin, Vice-President, provided access to areas of interest within the building. Mr. Wagner provided a copy of building floor plans prior to the walk through. The building plans are attached to the Building Inventory in Appendix A.

The 1166 Brooks Avenue building was constructed in two parts. The eastern half of the facility is slab-on-grade cinder block construction with a ducted, natural gas, forced air furnace. This half of the building is used for offices. The floor is carpeted, except for the utility room. A sump is located in a closet off the bathroom, adjacent to the utility room. The western half of the facility is cinder block construction with a raised floor; however, there is no access or crawl space. There is a large, open room on the west side of the facility, which is used as a call center. No central ducted HVAC system is present in the west room. Heating is provided by individual natural gas units suspended from the ceiling.

All cleaning products used in this facility are common commercially available products. A parts per billion (ppb) Rae photo-ionization detector (PID) was used to survey cleaning products for volatile organic vapors. No PID readings above background measurements were noted.

Based upon the knowledge that the building was constructed in two parts and had separate HVAC systems, it was requested by the DEC that Stantec collect sub-slab vapor and indoor air samples from both the east and west sides of the facility, in addition to a sump water sample.

Sump Water Sampling

On March 23, 2006, one water quality sample was collected by Stantec from the sump in the utility closet at 1166 Brooks Avenue (see figure in Appendix A). Ms. Debby McNaughton (NYDOH) was present to observe the sampling. Water in the sump was evacuated prior to sampling by manually activating the sump pump. Sample BU-1166-SUMP was collected from the sump and forwarded with a blind field duplicate (BU-1166-DUP) to Columbia Analytical Services (CAS) for analysis of Target Compound List (TCL) Volatile Organic Compounds (VOCs) by EPA Method 8260.

Sub-Slab Soil Vapor Sampling

This soil gas survey was completed pursuant to the February 23, 2006 Work Plan for a Sub-Slab Soil Gas Survey at 1166 Brooks Avenue (the Work Plan) and comments provided by the DEC in a letter dated March 3, 2006.

Holes were drilled in two locations through the concrete floors in the gas utility room on the east side of the building and in a storage closet on the west side of the building on March 23, 2006 (see Appendix A). Following penetration of the floors, stainless steel implants and attached ¼-inch diameter teflon tubing were installed and sealed with non-shrinking hydraulic cement.

Debby McNaughton (NYSDOH) was present at the time of sampling. Prior to sampling, the tubing for the sub-slab samples was purged with the PID. Sub-slab sample BU-1166-SS-1 and indoor air sample BU-1166-IA-1 were co-located in the furnace room on the east side of the building. Sub-slab sample BU-1166-SS-2 and indoor air sample BU-1166-IA-2 were co-located in the storage room on the west side of the building. Background ambient air sample BU-1166-AMB was collected outside on the east side of the building. All samples were collected in 6-liter canisters over a period of approximately two hours and monitored with in-line gauges. Each summa canister had an initial vacuum reading between 26 and 30 inches of mercury (Hg).

All summa canister samples were submitted to CAS. Analysis was requested to be performed by USEPA Method TO-15 for the following site-specific VOCs: tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethane (1,1-DCA), cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (VC).

Analytical Results

Copies of the laboratory analytical reports for the water and air samples collected from the 1166 Brooks Avenue building survey are presented in Appendix B.

Sump Water

No VOCs were reported to be present in the sump water at 1166 Brooks Avenue.

Indoor Air Sampling Results

Summaries of the laboratory analytical results for the sub-slab vapor, indoor air and outdoor air samples are presented in Tables 1, 2 and 3, respectively. Included in these tables are available NYSDOH, and USEPA guidance values.

The sub-slab vapor samples collected at 1166 Brooks Avenue were reported to contain low-level, but detectable concentrations of four target VOCs: tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE) and 1,1-dichloroethane (1,1-DCA). One compound, PCE, was reported from BU-1166-SS-1 on the east side of the building. Four compounds, PCE, TCE, cis-1,2-DCE and 1,1-DCA, were reported from BU-1166-SS-2 on the west side of the building. No compounds were reported above the method reporting limit for either of the two indoor, or one outdoor (ambient) air samples.

According to the NYSDOH Draft Guidance's "Soil Vapor / Indoor Air Matrices 1 and 2", the concentrations of PCE and TCE in the sub slab vapor samples, combined with the non-detect concentrations in indoor air samples, do not warrant any further action.

Should you have any questions or require further information, please call me at 413-5620, Mr. Frank Sowers, DEC, at 226-5357, or Ms. Debby McNaughton, NYSDOH, at 423-8069.

Sincerely,

Michael P. Storonsky
Senior Associate

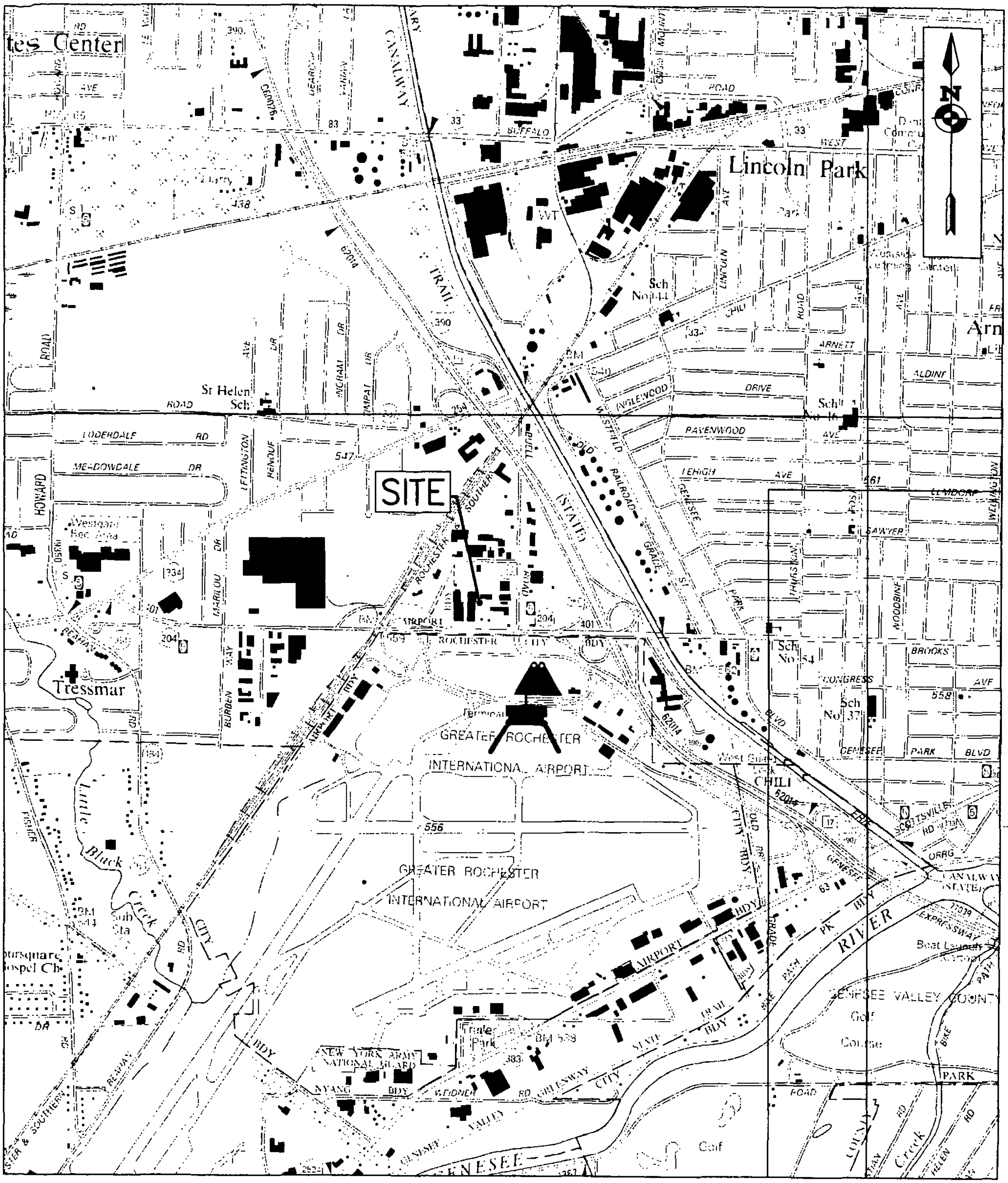
Attachments:

Figure 1 – Site Location Map

Table 1 - Summary of Sub-Slab Vapor Sampling Results
Table 2 - Summary of Indoor Air Quality Sampling Results
Table 3 - Summary of Outdoor Air Quality Sampling Results

Appendix A – Building Inventory
Appendix B – Analytical Laboratory Reports

cc: Frank Sowers, P.E. (NYSDEC – Avon)
Debby McNaughton (NYSDOH - Rochester)
Richard Lawton (Buell Automatics)
Jerry Greenfield, Esq. (Chamberlain, D'Amanda, Oppenheimer & Greenfield)
File



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ANY LICENSEE WHO ALTERS THIS DOCUMENT IS REQUIRED BY LAW TO AFFIX HIS OR HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE AND SPECIFIC DESCRIPTION OF THE ALTERATIONS.

PROJECT ENGINEER/ARCHITECT: D. BELASKAS, P.E.
PROJECT MANAGER: M. STORONSKY
DRAWN BY: A. LESS
SCALE: 1" = 2000'
FIRST ISSUE DATE

STANTEC CONSULTING SERVICES INC.
2250 Brighton-Henrietta Town Line Road
Rochester, N.Y. 14623-2706
Tel:(585) 475-1440
Fax: (585) 272-1814
www.stantec.com

PROJECT: SUB-SLAB SOIL VAPOR SAMPLING REPORT
1166 BROOKS AVE
ROCHESTER, NEW YORK

TITLE OF DRAWING: SITE LOCATION MAP

PROJECT NO. 16059
DRAWING NO. FIG. 1

U:\16059\civil\Supplemental Work Plan - Feb 05'\FIG 1_1166 .dwg

TABLE 1
SUMMARY OF SUB-SLAB VAPOR SAMPLING RESULTS
1166 Brooks Avenue
Rochester, New York

VOC Compound	Sub-Slab Vapor BU-1166-SS-1 Result (µg/m³)	Sub-Slab Vapor BU-1166-SS-1 MRL (µg/m³)	Sub-Slab Vapor BU-1166-SS-2 Result (µg/m³)	Sub-Slab Vapor BU-1166-SS-2 MRL (µg/m³)	Soil Vapor / Indoor Air Matrix (4)	Recommended Action (5,6) (µg/m³)
Vinyl Chloride	ND	0.72	ND	0.71	No Applicable Matrix	NA
1,1-Dichloroethane	ND	0.72	**1.6**	0.71	No Applicable Matrix	NA
cis-1,2-Dichloroethene	ND	0.72	**1.2**	0.71	No Applicable Matrix	NA
Trichloroethene	ND	0.72	**13**	0.71	Matrix 1	No Further Action
Trans-1,2-Dichloroethene	ND	0.72	ND	0.71	No Applicable Matrix	NA
Tetrachloroethene	**0.98**	0.72	**5.1**	0.71	Matrix 2	No Further Action

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Public Comment Draft, February 2005. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
5. Soil Vapor / Indoor Air Matrix 1; Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Public Comment Draft, February 2005. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
6. Soil Vapor / Indoor Air Matrix 2; Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Public Comment Draft, February 2005. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
7. **Bold-faced** values are concentrations that have been reported above the method reporting limits.

TABLE 2
SUMMARY OF INDOOR
AIR QUALITY SAMPLING RESULTS
1166 Brooks Avenue
Rochester, New York

	Indoor Air BU-1166-IA-1		**Indoor Air** BU-1166-IA-2		**USEPA BASE[4] Data** (background office levels)	**NYSDOH Mitigation Guideline Value[5]**
VOC Compound	Result (µg/m³)	MRL (µg/m³)	Result (µg/m³)	MRL (µg/m³)	Indoor (µg/m³)	Indoor (µg/m³)
Vinyl Chloride	ND	0.69	ND	0.67	<0.9	N/A
1,1-Dichloroethane	ND	0.69	ND	0.67	<0.5	N/A
cis-1,2-Dichloroethene	ND	0.69	ND	0.67	<1.0	N/A
Trichloroethene	ND	0.25 J	ND	0.25 J	<1.2 - 1.2	5
Trans-1,2-Dichloroethene	ND	0.69	ND	0.67	N/A	N/A
Tetrachloroethene	ND	0.69	ND	0.67	<1.9 - 5.9	100

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Building Assessment and Survey Evaluation (BASE '94-'98); Unpublished; Indoor Environments Division, United States Environmental Protection Agency (USEPA).
5. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Public Comment Draft, February 2005. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
6. Draft Guidance For Evaluating The Vapor Intrusion To Indoor Air Pathway From Groundwater And Soils (Subsurface Vapor Intrusion Guida United States Environmental Protection Agency (USEPA), Office of Solid Waste and Emergency Response (OSWER), November 2002.
7. N/A = not available.
8. **Bold-faced** values are concentrations that have been reported above the method reporting limits.

TABLE 3
SUMMARY OF OUTDOOR AIR QUALITY SAMPLING RESULTS
1166 Brooks Avenue
Rochester, New York

VOC Compound	Ambient Air BU-1166-AMB Result (µg/m³)	Ambient Air BU-1166-AMB MRL (µg/m³)	EPA BASE[4] Data (background levels) Outdoor (µg/m³)	NYSDOH Air Guideline Value[5] Outdoor (µg/m³)
Vinyl Chloride	ND	0.70	<1.0	N/A
1,1-Dichloroethane	ND	0.70	<0.4	N/A
cis-1,2-Dichloroethene	ND	0.70	<1.0	N/A
Trichloroethene	ND	0.25 J	<1.5	5
Trans-1,2-Dichloroethene	ND	0.70	N/A	N/A
Tetrachloroethene	ND	0.70	<1.4 - 3.0	100

Notes:

1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Building Assessment and Survey Evaluation (BASE '94-'98); Unpublished; United States Environmental Protection Agency (USEPA), Indoor Environments Division.
5. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Public Comment Draft, February 2005. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
6. N/A = not available.

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Pete Smith Date/Time Prepared 3/22/06

Preparer's Affiliation Stantec Consulting Services Inc. Phone No. 585-475-1440

Purpose of Investigation Buell ECA

1. OCCUPANT:

Interviewed: Y / N (Y circled)

Last Name: Wagner First Name: Dick / Dave Shahin

Address: 1166 Brooks Avenue

County: Monroe

Home Phone: N/A Office Phone: (585) 340-5902

Number of Occupants/persons at this location 30-35 Age of Occupants 18 - 70, varies

2. OWNER OR LANDLORD: (Check if same as occupant X)

Interviewed: Y / N (N circled)

Last Name: Dean First Name: Scott

Address: 1166 Brooks Avenue

County: Monroe

Home Phone: N/A Office Phone: (585) 340-5902

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: ______

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:______

If multiple units, how many? ______

If the property is commercial, type?

Business Type(s) Telemarketing / Fundraiser

Does it include residences (i.e., multi-use)? Y / N If yes, how many? ______

Other characteristics:

Number of floors 1 Building age 1970

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Not conducted (NC)

Airflow near source

NC

Outdoor air infiltration

NC

Infiltration into air ducts

NC

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction: wood frame concrete stone brick

b. Basement type: None full crawlspace slab other ________

c. Basement floor: None concrete dirt stone other ________

d. Basement floor: None uncovered covered covered with ______________

e. Concrete floor: unsealed sealed sealed with Carpeted/except Kitchen Tile in Bathroom

f. Foundation walls: poured block stone other ________

g. Foundation walls: unsealed sealed sealed with ______________

h. The basement is: None wet damp dry moldy

i. The basement is: finished unfinished partially finished

j. Sump present? Y / N

k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: NA (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Other than sump, no identified entry points.

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other ________

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: gas (2)

Boiler/furnace located in: Basement Outdoors Main Floor Other________

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

There are air ducts in the eastern portion of the building. They are insulated and located above the ceiling tiles. No cold air returns were noted.

7. OCCUPANCY

No Basement

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)
Basement	---
1st Floor	office, administrative, telefundraising
2nd Floor	---
3rd Floor	---
4th Floor	---

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify__________

d. Has the building ever had a fire? Y / N When?__________

e. Is a kerosene or unvented gas space heater present? Y / N Where?__________

f. Is there a workshop or hobby/craft area? Y / N Where & Type?__________

g. Is there smoking in the building? Y / N How frequently?__________

h. Have cleaning products been used recently? Y / N When & Type? spic/span, typical household products

i. Have cosmetic products been used recently? Y / N When & Type?__________

j. Has painting/staining been done in the last 6 months? Y / N Where & When? 1 mo. ago latex, touch-up

k. Is there new carpet, drapes or other textiles? Y / N Where & When? ______

l. Have air fresheners been used recently? Y / N When & Type? spray, occasionally

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? ______

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? outside

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? ______

Are there odors in the building? Y / N
If yes, please describe: ______

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? alcohol wipes to clean telephones

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: ______
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other: ______
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other: ______

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: ______

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

N/A

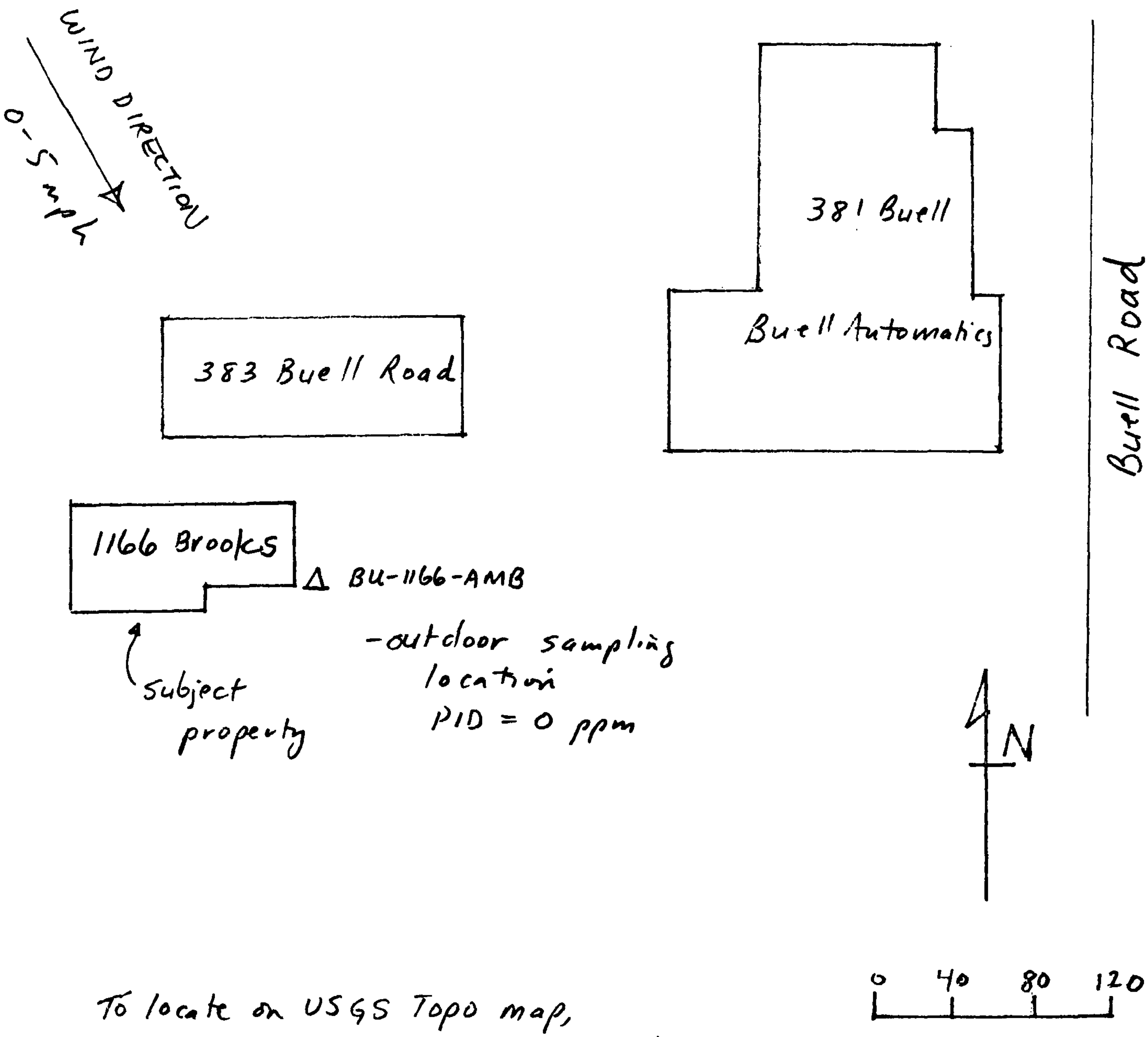
First Floor:

See Attached Building Floor Plan

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



To locate on USGS Topo map, see Rochester West quadrangle.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: Rae ppb PID

List specific products found in the residence that have the potential to affect indoor air quality.

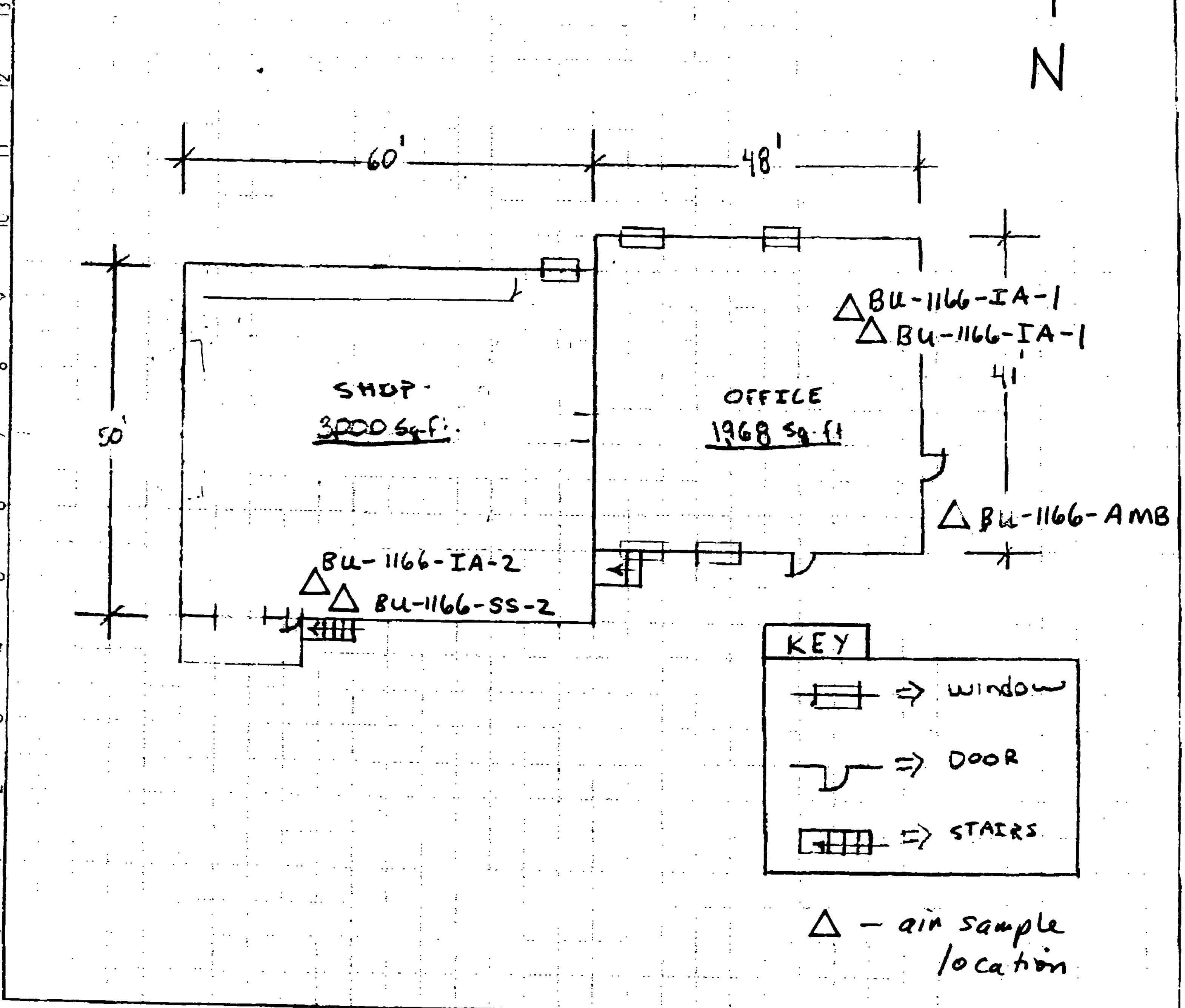
Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Bathroom #1	febreze deodorizer	1000 ml	u	alcohol	0	N
Bathroom #1	krud kutter	1 gal	u	biodegradable non-toxic	0	N
				no active ingredient		
Bathroom #1	Oust air sanitizer	3-10 oz	uo	ethylene glycol	0	N

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

...FABRICATORS
36 Brooks Avenue • Rochester, NY 14624
Tel: (716) 235-3050 • Fax: (716) 235-3055
Rochester's Counter Top Specialists
Solid Surface & Laminate Products

Contact ______ Phone # ______
Job name ______ Phone # ______
Date ______ Date required ______
Sales ______

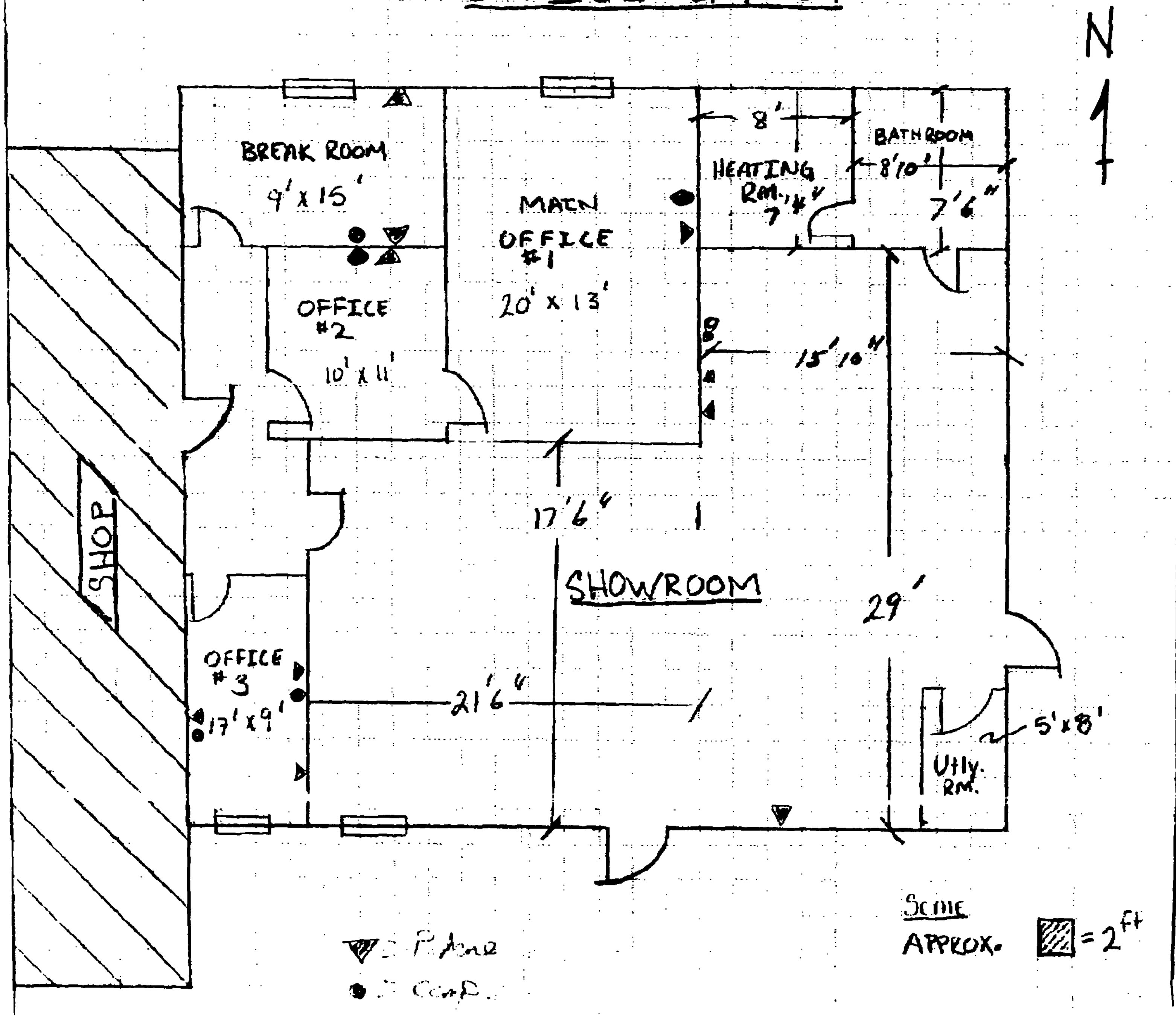
BUILDING LAYOUT



EMPIRE FABRICATORS
1166 Brooks Avenue • Rochester, NY 14624
Tel: (716) 235-3050 • Fax: (716) 235-3055
Rochester's Counter Top Specialists
Solid Surface & Laminate Products

Customer ____ Job # ____
Contact ____ Phone # ____
Job name ____ Phone # ____
Date ____ Date required ____
Sales ____

OFFICE LAYOUT



Columbia Analytical Services inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

April 11, 2006

RECEIVED
APR 1 2006
Stantec

Mr. Peter Smith
Stantec Consulting
2250 Brighton-Henrietta TL Rd.
Rochester, NY 14623-2706

PROJECT:BUELL AUTOMATICS #1905000333
Submission #:R2630850

Dear Mr. Smith

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Karen Bunker

Karen Bunker
Project Manager

Enc.

Columbia Analytical Services inc.

1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client	: Stantec Consulting
Project Reference	: BUELL AUTOMATICS #1905000333
Lab Submission #	: R2630850
Project Manager	: Karen Bunker
Reported	: 04/11/06

Report Contains a total of 13 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

Columbia Analytical Services inc.

CASE NARRATIVE

This report contains analytical results for the following samples:
Submission #: R2630850

Lab ID	Client ID
890930	BU-1166-SUMP
890931	BU-1166-DUP

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.

Columbia Analytical Services INC.
An Employee - Owned Company

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds, or when the data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit and greater than the MDL.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.

P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The concentration is reported on the Form I and flagged with a "P".

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - As specified in Case Narrative.

* - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Illinois ID #200047
Maine ID #NY0032
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved

Nebraska Accredited
New Jersey ID # NY004
New York ID # 10145
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
West Virginia ID # 292

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 04/11/06

Stantec Consulting
Project Reference: BUELL AUTOMATICS #1905000333
Client Sample ID : BU-1166-SUMP

Date Sampled : 03/23/06 06:15 **Order #:** 890930 **Sample Matrix:** WATER
Date Received: 03/23/06 **Submission #:** R2630850 **Analytical Run** 128282

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/29/06			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
METHYL-TERT-BUTYL ETHER	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
CYCLOHEXANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
DICHLORODIFLUOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYLBENZENE	5.0	5.0 U	UG/L
METHYL ACETATE	10	10 U	UG/L
METHYLCYCLOHEXANE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 04/11/06

Stantec Consulting
Project Reference: BUELL AUTOMATICS #1905000333
Client Sample ID : BU-1166-SUMP

Date Sampled : 03/23/06 06:15 **Order #:** 890930 **Sample Matrix:** WATER
Date Received: 03/23/06 **Submission #:** R2630850 **Analytical Run** 128282

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/29/06			
ANALYTICAL DILUTION: 1.00			
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLORO1,2,2-TRIFLUOROETHA	5.0	5.0 U	UG/L
VINYL CHLORIDE	2.0	2.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS	RESULT	UNITS
4-BROMOFLUOROBENZENE	(80 - 123 %)	97	%
TOLUENE-D8	(88 - 124 %)	100	%
DIBROMOFLUOROMETHANE	(91 - 115 %)	101	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 04/11/06

Stantec Consulting
Project Reference: BUELL AUTOMATICS #1905000333
Client Sample ID : BU-1166-DUP

Date Sampled : 03/23/06 **Order #:** 890931 **Sample Matrix:** WATER
Date Received: 03/23/06 **Submission #:** R2630850 **Analytical Run** 128282

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/29/06			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
METHYL-TERT-BUTYL ETHER	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
CYCLOHEXANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
DICHLORODIFLUOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYLBENZENE	5.0	5.0 U	UG/L
METHYL ACETATE	10	10 U	UG/L
METHYLCYCLOHEXANE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 04/11/06

Stantec Consulting
Project Reference: BUELL AUTOMATICS #1905000333
Client Sample ID : BU-1166-DUP

Date Sampled : 03/23/06 **Order #:** 890931 **Sample Matrix:** WATER
Date Received: 03/23/06 **Submission #:** R2630850 **Analytical Run** 128282

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 03/29/06				
ANALYTICAL DILUTION: 1.00				
TRICHLOROFLUOROMETHANE		5.0	5.0 U	UG/L
1,1,2-TRICHLORO1,2,2-TRIFLUOROETHA		5.0	5.0 U	UG/L
VINYL CHLORIDE		2.0	2.0 U	UG/L
O-XYLENE		5.0	5.0 U	UG/L
M+P-XYLENE		5.0	5.0 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
4-BROMOFLUOROBENZENE	(80 - 123 %)		96	%
TOLUENE-D8	(88 - 124 %)		97	%
DIBROMOFLUOROMETHANE	(91 - 115 %)		98	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 893562 ANALYTICAL RUN # : 128282

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 03/29/06			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	108	50 - 150
BENZENE	20.0	99	70 - 130
BROMODICHLOROMETHANE	20.0	98	70 - 130
BROMOFORM	20.0	105	70 - 130
BROMOMETHANE	20.0	105	50 - 150
2-BUTANONE (MEK)	20.0	95	50 - 150
METHYL-TERT-BUTYL ETHER	20.0	100	70 - 130
CARBON DISULFIDE	20.0	103	70 - 130
CARBON TETRACHLORIDE	20.0	105	70 - 130
CHLOROBENZENE	20.0	108	70 - 130
CHLOROETHANE	20.0	104	70 - 130
CHLOROFORM	20.0	97	70 - 130
CHLOROMETHANE	20.0	118	70 - 130
1,2-DIBROMO-3-CHLOROPROPANE	20.0	89	50 - 150
CYCLOHEXANE	20.0	70	50 - 150
DIBROMOCHLOROMETHANE	20.0	105	70 - 130
1,2-DIBROMOETHANE	20.0	103	70 - 130
1,3-DICHLOROBENZENE	20.0	102	70 - 130
1,4-DICHLOROBENZENE	20.0	99	70 - 130
1,2-DICHLOROBENZENE	20.0	103	70 - 130
DICHLORODIFLUOROMETHANE	20.0	113	70 - 130
1,1-DICHLOROETHANE	20.0	103	70 - 130
1,2-DICHLOROETHANE	20.0	102	70 - 130
1,1-DICHLOROETHENE	20.0	107	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	99	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	96	70 - 130
1,2-DICHLOROPROPANE	20.0	99	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	109	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	114	70 - 130
ETHYLBENZENE	20.0	104	70 - 130
2-HEXANONE	20.0	97	70 - 130
ISOPROPYLBENZENE	20.0	99	70 - 130
METHYL ACETATE	20.0	94	50 - 150
METHYLCYCLOHEXANE	20.0	71	50 - 150
METHYLENE CHLORIDE	20.0	98	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	102	70 - 130
STYRENE	20.0	98	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	98	70 - 130
TETRACHLOROETHENE	20.0	107	70 - 130
TOLUENE	20.0	101	70 - 130
1,2,4-TRICHLOROBENZENE	20.0	98	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 893562 ANALYTICAL RUN # : 128282

DATE ANALYZED : 03/29/06
ANALYTICAL DILUTION: 1.0

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
1,1,1-TRICHLOROETHANE	20.0	99	70 - 130
1,1,2-TRICHLOROETHANE	20.0	102	70 - 130
TRICHLOROETHENE	20.0	100	70 - 130
TRICHLOROFLUOROMETHANE	20.0	104	70 - 130
1,1,2-TRICHLORO1,2,2-TRIFLUOROETHA	20.0	109	70 - 130
VINYL CHLORIDE	20.0	99	70 - 130
O-XYLENE	20.0	101	70 - 130
M+P-XYLENE	40.0	101	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 04/11/06

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 893561 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 128282

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/29/06			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
METHYL-TERT-BUTYL ETHER	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
CYCLOHEXANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
DICHLORODIFLUOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYLBENZENE	5.0	5.0 U	UG/L
METHYL ACETATE	10	10 U	UG/L
METHYLCYCLOHEXANE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 04/11/06

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled :	**Order #:** 893561	**Sample Matrix:** WATER
Date Received:	**Submission #:**	**Analytical Run** 128282

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 03/29/06				
ANALYTICAL DILUTION: 1.00				
1,1,2-TRICHLORO1,2,2-TRIFLUOROETHA		5.0	5.0 U	UG/L
VINYL CHLORIDE		2.0	2.0 U	UG/L
O-XYLENE		5.0	5.0 U	UG/L
M+P-XYLENE		5.0	5.0 U	UG/L
SURROGATE RECOVERIES	QC LIMITS			
4-BROMOFLUOROBENZENE	(80 - 123 %)		98	%
TOLUENE-D8	(88 - 124 %)		100	%
DIBROMOFLUOROMETHANE	(91 - 115 %)		102	%

Columbia Analytical Services[INC]
An Employee - Owned Company

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (585) 288-5380 • 800-695-7222 x11 • FAX (585) 288-8475

PAGE 1 OF 1

SR #

CAS Contact

Project Name: Butll Automatics
Project Number: 1905 ~~X~~ 00033
Project Manager: Mike Storonsky
Report CC:
Company Address: Stantec
2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
Phone #: (585) 413-5620
FAX#: (585) 424-5951
Sampler's Signature: Peter Smith
Sampler's Printed Name: Peter Smith

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

Preservative Key
0. ~~NONE~~
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's 8260 624 CLP	GC/MS SVOA's 8270 625 CLP	GC VOA's 8021 601/602	PESTICIDES 8081 608 CLP	PCB's 8082 608 CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
BU-1166-Sump	890930	3/23/06	0615	W	2	X							use Butll List
BU-1166-Dup	890931	3/23/06	—	W	2	X							" " "

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
___ I. Results Only
X II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata X Yes ___ No

INVOICE INFORMATION
PO #
BILL TO:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: 0°C
CUSTODY SEALS: Y N

SUBMISSION #: D2630850

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Pete Smith	Signature: Nicole M. Cook	Signature	Signature	Signature	Signature
Printed Name: Pete Smith	Printed Name: N. Cook	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Stantec	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 3/23/06 1530	Date/Time: 3/23/06 1530	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

Cooler Receipt And Preservation Check Form

Project/Client Stantec Submission Number R2630850

Cooler received on 3/22/06 by: KMC **COURIER:** CAS UPS FEDEX VELOCITY CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did any VOA vials have significant air bubbles? YES NO N/A
5. Were **Ice** or **Ice packs** present? YES NO
6. Where did the bottles originate? CAS/ROC, CLIENT
7. Temperature of cooler(s) upon receipt: 7°C ______ ______ ______ ______

Is the temperature within 0° - 6° C?: Yes Yes Yes Yes Yes

If No, Explain Below No No No No No

Date/Time Temperatures Taken: 3/22/06 1550

Thermometer ID: 161 or IR GUN Reading From: Temp Blank or Sample Bottle

If out of Temperature, Client Approval to Run Samples ______

PC Secondary Review: KB 3/24/06

Cooler Breakdown: Date : 3-24-06 by: KE

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies: ______

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3					
2	H_2SO_4					
Residual Chlorine (+/-)	for TCN & Phenol					
5-9**	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH ______

**If pH adjustment is required, use NaOH and/or H_2SO_4.

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2		
<2		

Other Comments:

PC Secondary Review: KB 4/11/06

\\ROCHESTER1\GROUP\SMODOCS\Cooler Receipt v 2.doc

1 Mustard Street, Suite 250 Rochester, NY 14609-6925 (585) 288-5380 ph (585) 288-8475 fax

Columbia Analytical Services
An Employee - Owned Company

April 24, 2006

Mr. Peter Smith
Stantec Consulting Group, Inc.
2250 Brighton- Henrietta Townline Road
Rochester , NY 14623-2706

Re: Buell Automatics Project/ 19050033
CAS Submission #s P2600754, R2630990

Dear Mr. Smith,

Enclosed is the analytical data report for the above referenced project. All analyses were preformed at the CAS-Simi Valley Air Laboratory. The data was also forwarded to you in final format on 4/7/06.

Please contact me at (585)-288-5380 ext. 134 if you have questions regarding this information.

Sincerely,
COLUMBIA ANALYTICAL SERVICES

Karen Bunker

Karen Bunker
Project Manager

Enc.

NARRATIVE

2665 Park Center Drive, Suite D   Simi Valley, California 93065   (805) 526-7161   (805) 526-7270 fax

Columbia Analytical Services
An Employee - Owned Company

LABORATORY REPORT

Client:	STANTEC	Date of Report:	04/18/06
Address:		Date Received:	03/24/06
		CAS Project No:	P2600754
Contact:	Mr. Peter Smith	Purchase Order:	Verbal
Client Project ID:	Buell Automatics / 190500033	New York Lab ID:	11221

Five (5) Stainless Steel Summa Canisters labeled:

"BU-1166-SS-1"   "BU-1166-IA-1"   "BU-1166-SS-2"   "BU-1166-IA-2"   "BU-1166-AMB"

The samples were received at the laboratory under chain of custody on March 24, 2006. The samples were received intact. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time that they were received at the laboratory.

Volatile Organic Compound Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for selected volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-15. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5972 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given in the attached data package. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Reviewed and Approved:	Reviewed and Approved:
Chaney Bolster	Chris Parnell
Chaney Bolster	Chris Parnell
Analytical Chemist	GCMS-VOA Team Leader
Air Quality Laboratory	Air Quality Laboratory

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Stantec Work order: P2600754

Project: Buell Automatics 190500033

Sample(s) received on: 3/24/06 Date opened: 3/24/06 by: MZ

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client or as required by the method/SOP.

		Yes	No	N/A
1	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _______ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _______ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
2	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
	Cooler Temperature NA °C			
	Blank Temperature NA °C			
9	Is pH (acid) **preservation** necessary, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** (acid) preserved?	☐	☐	☒
	Were <u>**VOA vials**</u> checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Required pH (as received, if required)	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2600754-001			NA	
P2600754-002			NA	
P2600754-003			NA	
P2600754-004			NA	
P2600754-005			NA	

Explain any discrepancies: (include lab sample ID numbers):

NYSDEC DATA PACKAGE SUMMARY FORMS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements *VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
EU-1166-SS-1	[illegible]-001	EPA TO-15					
EU-1166-IP-1	-002						
EU-1166-SS-2	-003						
EU-1166-IP-1	-004						
EU-1166-AMB	-005						

AS 4/15/06

AS 4/15/06

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
P2600754-001	Air	3/23/06	3/24/06	NA	3/31/06
-002					
-003					4/1/06
-004					3/31/06
-005					4/1/06
			4/18/06		

CHAIN OF CUSTODY FORMS

Columbia Analytical Services

Air Quality Laboratory
2665 Park Center Drive, Suite D
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Chain of Custody Record & Analytical Service Request

Page ______ of ______

Requested Turnaround Time by Close of Business Day (Surcharges) Please Circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (15%) 10 Day-Standard

CAS Project No. P2600754

CAS Contact: KAREN BUNKER

Reporting Information (Company Name & Address): Stantec 2250 Brighton Henrietta Town Line Road Rochester, New York 14623

Attention: Peter Smith

Phone (585) 413-5635 Fax (585) 424-5951

Email Address for Result Reporting: ~~peters~~ phsmith@stantec.com

P.O. # / Billing Information

Project Name: Buell Automatics

Project Number: 190500033

Sampler (Print & Sign): Peter Smith / Pete Smith

Analysis Method and/or Analytes: TO-15 analytes: Vinyl chloride, 1,1-DCA, cis 1,2-DCE, trans 1,2-DCE, TCE and PCE

Client Sample ID	Date Collected	Time Collected	Lab Sample No.	Sample Type (Air/Liquid/Solid/Tube)	Canister ID (Bar Code#)	Flow Controller (Bar Code #)	Sample Volume	TO-15 analytes: Vinyl chloride, 1,1-DCA	cis 1,2-DCE, trans 1,2-DCE	TCE and PCE		Comments e.g. Preservative or specific instructions
BU-1166-SS-1	3/23/06	8:50	1	Air	SC00182	6V-2-15	6L	X			-4.1	Note
BU-1166-IA-1	"	8:50	2	Air	SC00212	6V-2-029	6L	X			-2.8	Site-
BU-1166-SS-2	"	9:05	3	Air	SC00256	6V-2-023	6L	X			-3.8	Specific
BU-1166-IA-2	"	9:05	4	Air	SC00101	6V-2-026	6L	X			-2.3	Component
BU-1166-Amb	3/23/06	9:15	5	Air	AC00383	FC00511	6L	X			-3.5	List (6)
											-23.8	
											-24.6	
											-24.5	
											-28.9	

Report Tier Levels - please select
Tier I - (default if not specified) ______
Tier II (QC forms) ______
Tier III (QC, Raw Data, Spectra) 10% Surcharge ______
Other ASP CATEGORY B

EDD required Yes / No
Type: ______

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Pete Smith	3/23/06	12:00	[illegible]	3/24/06	0930
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ______ °C 4439

GC/MS VOLATILES DATA

QC Summary

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Project ID: **Buell Automatics/190500033** CAS Project ID: P2600754

Surrogate Spike Recovery Results

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2 Date Collected: 3/23/06
Analyst: Chaney Bolster Date Received: 3/24/06
Sampling Media: Summa Canister(s) Date Analyzed: 3/31 - 4/1/06
Test Notes:

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4		Toluene-d8		Bromofluorobenzene		Data Qualifier
		% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	
Method Blank	P060331-MB	**105**	70-140	**99**	70-140	**94**	70-140	
Lab Control Sample	P060331-LCS	**110**	70-140	**98**	70-140	**98**	70-140	
BU-1166-SS-1	P2600754-001	**99**	70-140	**99**	70-140	**93**	70-140	
BU-1166-IA-1	P2600754-002	**98**	70-140	**99**	70-140	**95**	70-140	
BU-1166-SS-2	P2600754-003	**111**	70-140	**96**	70-140	**95**	70-140	
BU-1166-IA-2	P2600754-004	**99**	70-140	**98**	70-140	**95**	70-140	
BU-1166-AMB	P2600754-005	**97**	70-140	**99**	70-140	**93**	70-140	

Verified By: NJ Date: 4/7/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **Lab Control Sample**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2600754
CAS Sample ID: P060331-LCS

Laboratory Control Sample (LCS) Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Bolster
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/31/06
Volume(s) Analyzed: NA Liter

CAS #	Compound	Amount Spiked ng	Amount Recovered ng	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	25.8	29.0	**112**	71-131	
156-60-5	trans-1,2-Dichloroethene	26.8	26.0	**97**	73-131	
75-34-3	1,1-Dichloroethane	27.3	25.6	**94**	69-134	
156-59-2	cis-1,2-Dichloroethene	27.3	26.4	**97**	74-130	
79-01-6	Trichloroethene	28.3	27.4	**97**	73-132	
127-18-4	Tetrachloroethene	26.5	25.2	**95**	78-130	

Verified By: [illegible] Date: 4/7/06

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Project ID: **Buell Automatics/190500033**
CAS Project ID: P2600754

Method Blank Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Lab File ID: 03310603.D
Analyst: Chaney Bolster
Date Analyzed: 3/31/06
Sampling Media: Summa Canister
Time Analyzed: 11:01
Test Notes:

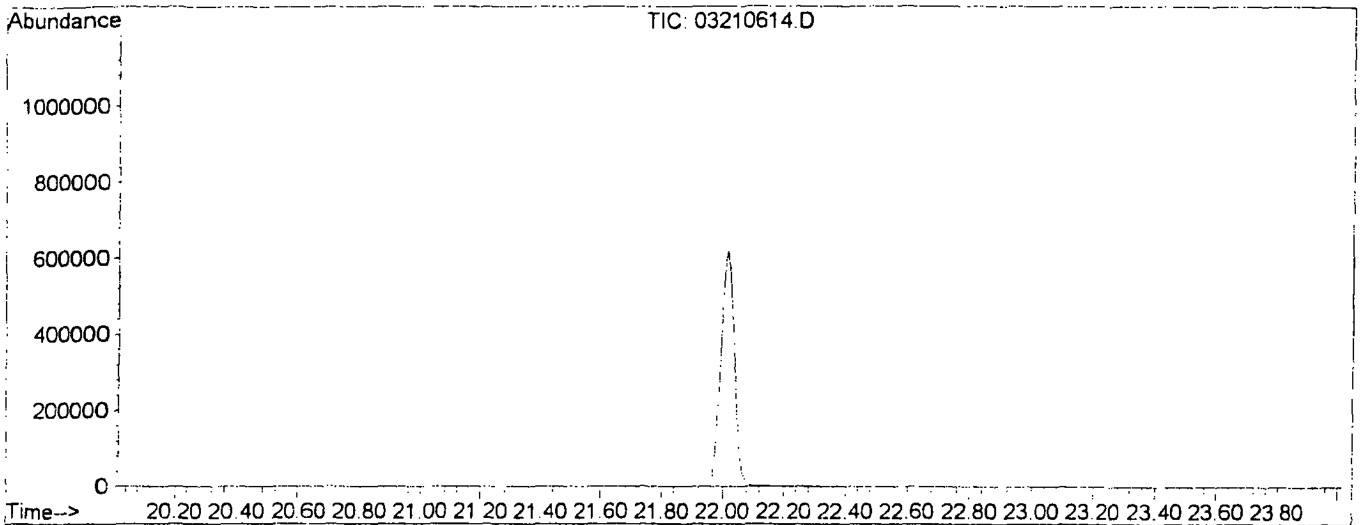
Client Sample ID	CAS Sample ID	Lab File ID	Time Analyzed
Lab Control Sample	P060331-LCS	03310604.D	11:54
BU-1166-SS-1	P2600754-001	03310612.D	19:41
BU-1166-IA-1	P2600754-002	03310614.D	21:21
BU-1166-IA-2	P2600754-004	03310616.D	23:01
BU-1166-AMB	P2600754-005	03310618.D	00:40
BU-1166-SS-2	P2600754-003	03310621.D	03:08

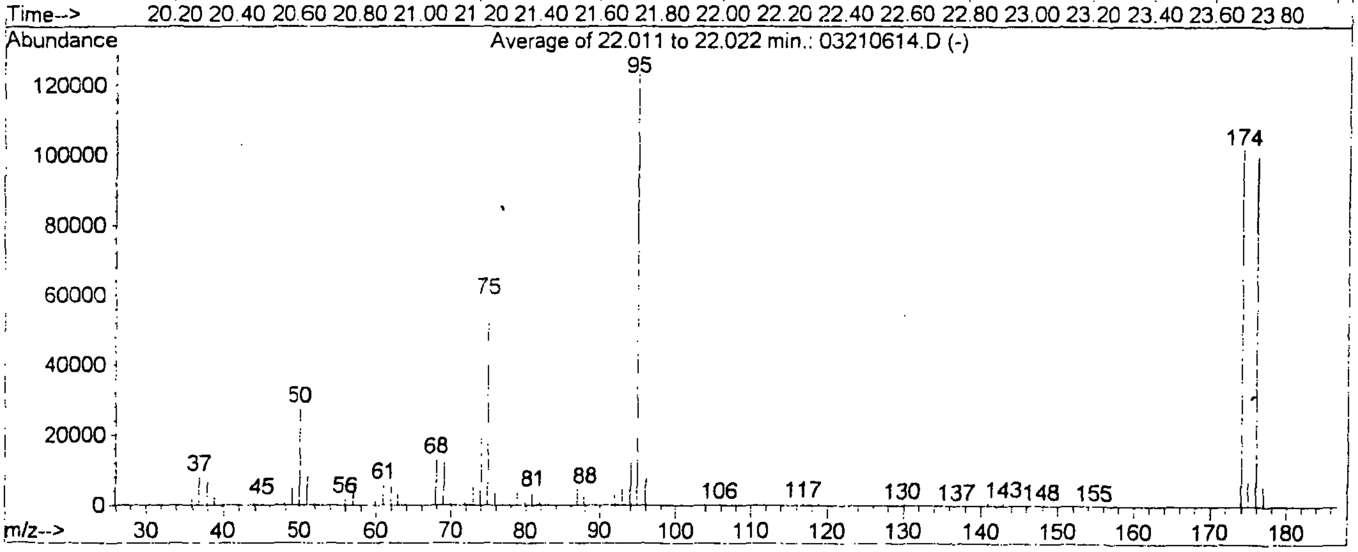
Verified by: MJ Date: 4/7/06

I-14L

BFB

Data File : J:\MS02\DATA\2006_03\21\03210614.D Vial: 1
Acq On : 21 Mar 2006 22:51 Operator: CB
Sample : Calibration Blank (100ml) Inst : MS02
Misc : S15-03160601 Multiplr: 1.00
MS Integration Params: rteint.p
Method : J:\MS02\METHODS\R2032206.M (RTE Integrator)
Title : TO-15 Tekmar AutoCan/HP 5890/HP 5972 MSD



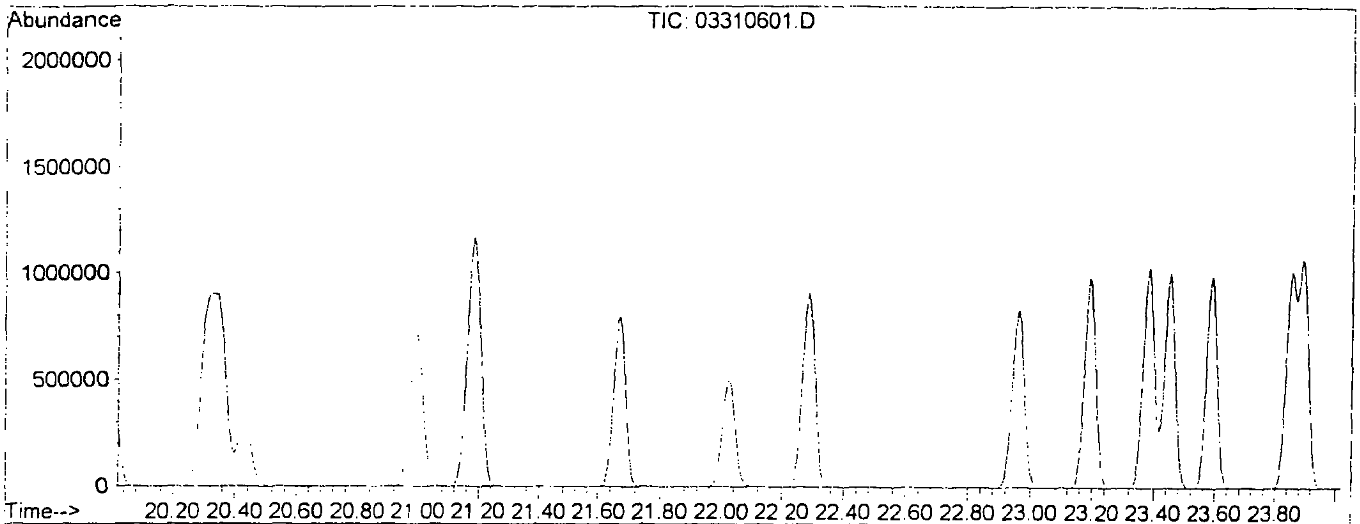


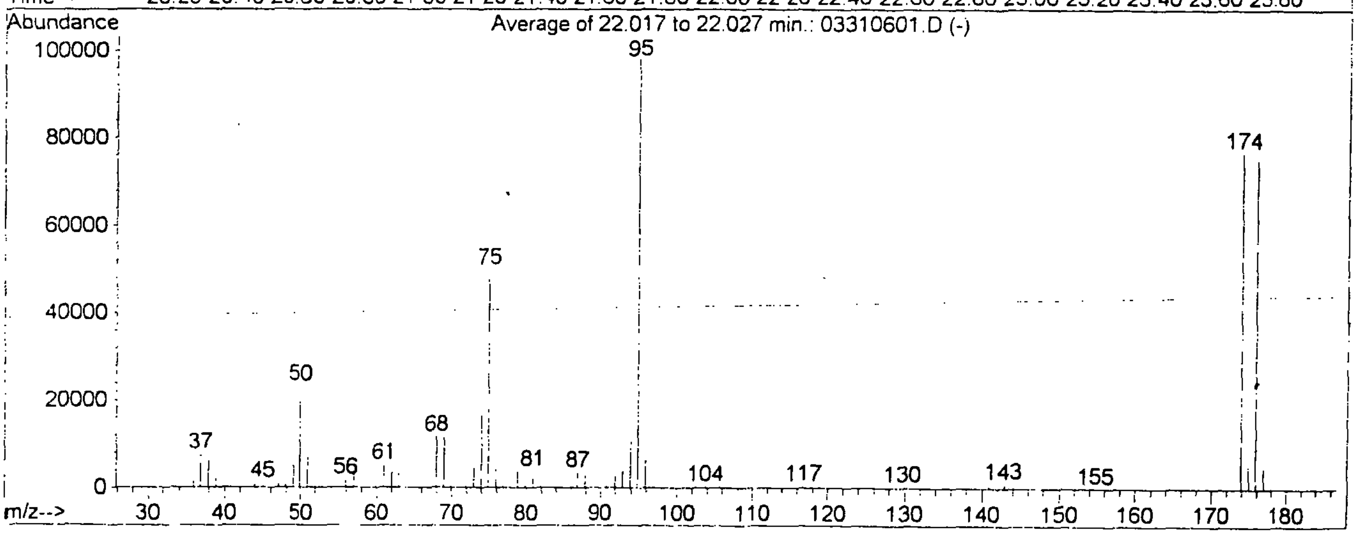
AutoFind: Scans 3363, 3364, 3365; Background Corrected with Scan 3349

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.4	27555	PASS
75	95	30	66	47.8	58840	PASS
96	95	5	9	6.4	7876	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	82.7	101773	PASS
175	174	4	9	6.9	7027	PASS
176	174	93	101	98.1	99816	PASS
177	176	5	9	6.6	6561	PASS

BFB

```
Data File : J:\MS02\DATA\2006_03\31\03310601.D          Vial: 1
Acq On    : 31 Mar 2006   9:07                      Operator: CB
Sample    : 25ng TO-15 CCV Std                      Inst    : MS02
Misc      : S15-03300601/S15-03210603               Multiplr: 1.00
MS Integration Params: rteint.p
Method    : J:\MS02\METHODS\R2032206.M (RTE Integrator)
Title     : TO-15  Tekmar AutoCan/HP 5890/HP 5972 MSD
```





AutoFind: Scans 3364, 3365, 3366; Background Corrected with Scan 3351

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.5	23109	PASS
75	95	30	66	50.6	49787	PASS
96	95	5	9	6.5	6443	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	78.0	76795	PASS
175	174	4	9	7.5	5731	PASS
176	174	93	101	98.7	75832	PASS
177	176	5	9	6.5	4897	PASS

Sample Data

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **BU-1166-SS-1**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2600754
CAS Sample ID: P2600754-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Chaney Bolster
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00182

Date Collected: 3/23/06
Date Received: 3/24/06
Date(s) Analyzed: 3/31/06
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -2.0 Pf 1 = 3.5

Can D.F. = 1.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.72	ND	0.28	
156-60-5	trans-1,2-Dichloroethene	ND	0.72	ND	0.18	
75-34-3	1,1-Dichloroethane	ND	0.72	ND	0.18	
156-59-2	cis-1,2-Dichloroethene	ND	0.72	ND	0.18	
79-01-6	Trichloroethene	ND	0.72	ND	0.13	
127-18-4	Tetrachloroethene	**0.98**	0.72	**0.14**	0.11	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: MJ Date: 4/1/06

Stantec Consulting Group Inc.
85 Metro Park
Rochester NY 14623-2607
Tel: (585) 475-1440 Fax: (585) 272-1814

stantec.com

Stantec

May 9, 2005

Mr. Bart Putzig, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, New York 14414-9519

RE: Sub-Slab Soil Vapor Survey Report
Five Star Tool Co., Inc. **16059**
NYSDEC Site No. C828114
Brownfield Cleanup Agreement Index No. B8-0576-00-04A
Buell Automatics, Inc.
Rochester, New York

Dear Bart:

On behalf of Buell Automatics, Inc. (Buell), Stantec Consulting Services, Inc. (Stantec) has prepared this Sub-Slab Soil Vapor Survey Report, summarizing work performed at Five Star Tool Co., Inc. (Five Star), located at 383 Buell Road, Rochester, New York (Figure 1).

Background

Written notice was forwarded to Mr. Gert Falkner, owner of 383 Buell Road, on February 28, 2005, identifying the purpose of, and reasons for the proposed survey. Stantec submitted a Work Plan to the New York State Department of Environmental Conservation (NYSDEC) on March 25, 2005 for a sub-slab soil vapor survey at the Five Star building located at 383 Buell Road. The Work Plan included the required elements as set forth in the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Public Comment Draft, February 2005 (NYSDOH Draft Guidance). The Work Plan incorporated comments and suggestions that Stantec received at a meeting that was held with the NYSDEC, NYSDOH, and Monroe County Department of Health (MCDOH) on January 5, 2005 and during a building inspection performed on March 24, 2005. The work plan was approved in a letter from the Department dated March 28, 2005.

Building Inspection

A building inspection was performed on March 24, 2005. Representatives from the NYSDEC, NYSDOH, MCDOH and Stantec were in attendance for the building inspection. Mr. Ken Lalonde, President of Five Star and Mr. Gert Falkner, property owner, were also present. Prior to the building inspection, Stantec had contacted Mr. Falkner for any available drawings, plans or records for Five Star. However, no such documents were available.

Analytical Results

Volatile organic compound analysis was performed using United States Environmental Protection Agency (USEPA) Method TO-15. The following site-specific volatile organic compounds (VOCs) were selected for laboratory analysis:

- Vinyl Chloride (VC);
- 1,1-Dichloroethane (1,1-DCA);
- cis-1,2-Dichloroethene (cis-1,2-DCE); and
- Trichloroethene (TCE).

Summaries of the laboratory analytical results are presented in Tables 1, 2 and 3 along with applicable guidance values. Laboratory reports are presented in Appendix B. A data usability report was not required for this sampling program.

The sub-slab vapor sample (32905-1) and indoor air sample (32905-2) were reported to contain detectable concentrations of target VOCs. No detectable concentrations of target VOCs were reported for the outdoor air sample (32905-3). Method Reporting Limits (MRLs) ranged from 1.4 $\mu g/m^3$ to 1.8 $\mu g/m^3$. Concentrations reported for the sub-slab vapor sample resulted in the slightly higher MRLs.

As shown in Table 1, three (3) VOCs were reported for the sub-slab vapor sample:

- 1,1-DCA (4.2 $\mu g/m^3$);
- cis-1,2-DCE (9.1 $\mu g/m^3$); and
- TCE (340 $\mu g/m^3$).

As shown in Table 2, only one (1) target VOC, cis-1,2-DCE was reported to be present in the indoor air sample at a concentration of 1.6 $\mu g/m^3$, a value which is below USEPA target indoor air concentrations.

According to the NYSDOH Draft Guidance "Soil Vapor / Indoor Air Matrix 1", the sub-slab concentration of TCE found in the Five Star building is high enough to warrant mitigation. The NYSDOH Guidance document defines mitigation as follows:

> "Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated."

However, the NYSDOH Draft Guidance also indicates that guidance values are currently under review and the reported occurrences of target VOCs will be evaluated on a case-by-case basis.

Conclusion

Analysis of the sub-slab vapor sample revealed three VOCs to be present, including 340 μg/m^3 of TCE, beneath the concrete floor slab in the northeastern portion of the Five Star building. Analysis of the indoor air sample, collected immediately adjacent to the sub-slab sample, revealed one low level concentration of cis-1,2-DCE (1.6 μg/m^3).

Given the low level concentration of cis-1,2-DCE inside the Five Star Building, which is below USEPA target indoor air concentrations, there does not appear to be a human health concern for the building occupants at this time. However, given the sub-slab vapor concentrations, Buell Automatics will work with the NYSDEC, NYSDOH and MCDOH to pursue this matter.

Should you have any questions or require further information, please call me at 585-475-1440, ext. 760.

Sincerely,

Michael P. Storonsky
Senior Associate

Figure 1 – Site Location Map
Figure 2 – Sample Location Plan

Table 1 – Summary of Sub-Slab Vapor Sampling Results
Table 2 – Summary of Indoor Air Quality Sampling Results
Table 3 – Summary of Outdoor Air Quality Sampling Results

Appendix A – Indoor Air Quality Questionnaire and Building Inventory
Appendix B – Analytical Laboratory Reports

cc: Frank Sowers, P.E. (NYSDEC – Avon)
James Charles Esq. (NYSDEC – Buffalo)
Joseph Albert (MCDOH – Rochester)
Debby McNaughton (NYSDOH – Rochester)
Richard Lawton (Buell Automatics)
Jerry Greenfield, Esq. (Chamberlain, D'Amanda, Oppenheimer & Greenfield)
Gert Falkner (Five Star Tool)
Joseph Picciotti (Harris Beach)
File

It is understood that the entire building was constructed in 1957, with no additions since that time. The building is a concrete block structure with a raised floor that was constructed to allow for potential connection to the Buell Automatics building at 381 Buell Road. No internal footers are known to exist. There are no sumps in the building, as the floor is elevated approximately four (4) feet above the surrounding grade. The heating system is natural gas hot air circulation. The portion of the building in closest proximity to the Buell Automatics property is used as a grinding room. Both water and natural gas service come into the building in the grinding room, near its northeastern corner.

Upon access to the building, air quality was screened using a calibrated photoionization detector (PID). Air was screened just above significant openings in the floor. No PID readings above background were noted originating from these openings.

Given the potential for commercially available products, such as solvents, oils, etc. to contain VOCs, attention was given to the presence of such products as potential sources of VOC findings. All solvents and grinding oils used at Five Star are petroleum-based distillates. The NYSDOH building inventory is provided in Appendix A.

It was agreed during the March 24, 2005 site visit that a location (marked with white paint) in the northeastern portion of the building would be the area where a sub-slab soil vapor point would be installed and an indoor air sample would be collected. In addition, one ambient air sample was to be collected outside, on the upwind side of the building.

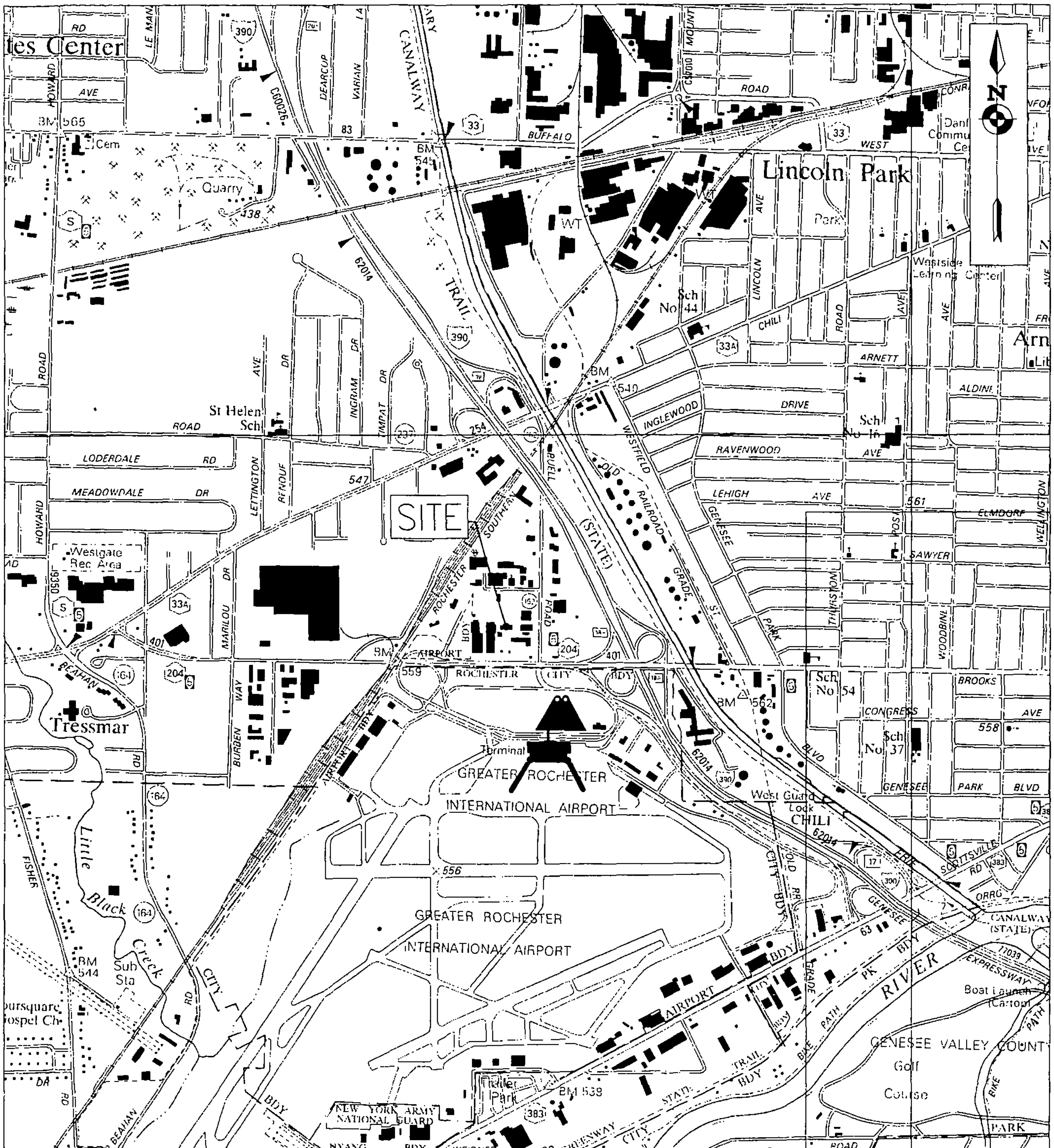
Field Activities

The floor penetration for the sub-slab sample was completed with a rotary hammer drill on March 28, 2005 for installation of the monitoring point. Mr. Frank Sowers (NYSDEC) and Ms. Debbie McNaughton (NYSDOH) were present for installation of the monitoring point. The concrete was approximately 8-inches thick. Following penetration of the floor, soil vapor tubing (¼ ID. HDPE) was installed and sealed with non-shrinking hydraulic cement. The tubing was installed to a depth approximately two inches below the slab to allow the soil vapor samples to be collected from directly beneath the concrete floor. The tubing was capped and the grout was allowed to set for approximately 24 hours.

Air sampling was performed by Stantec at the Five Star building on March 29, 2005. Mr. Joe Albert (MCDOH), Mr. Sowers (NYSDEC) and Ms. McNaughton (NYSDOH) were present at the time of sampling. Prior to sampling, the tubing for the sub-slab sample was purged and monitored with a PID. A PID reading of 1.4 ppm was recorded.

Three samples were collected using 6.0-liter Summa canisters equipped with two (2) hour flow regulators and monitored with in-line flow gauges. The sub-slab vapor sample and the indoor air sample were designated 32905-1 and 32905-2, respectively and had initial vacuum readings of approximately 30 inches of Hg (in. Hg). The outdoor air sample 32905-3 had an initial vacuum reading of approximately 27 in. Hg.

All summa canister samples were submitted to Columbia Analytical Services (CAS) Air Quality Laboratory in Simi Valley, California, a New York State-approved laboratory (NY Lab. ID No: 11221).



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PROJECT ENGINEER/ARCHITECT	D. BELASKAS, P.E.
PROJECT MANAGER	M. STORONSKY
DRAWN BY	A. LESS
SCALE	1" = 2000'
FIRST ISSUE DATE	

STANTEC CONSULTING SERVICES INC.

85 Metro Park
Rochester, N.Y. 14623-2674
Tel:(585) 475-1440
Fax: (585) 272-1814
www.stantec.com

Stantec

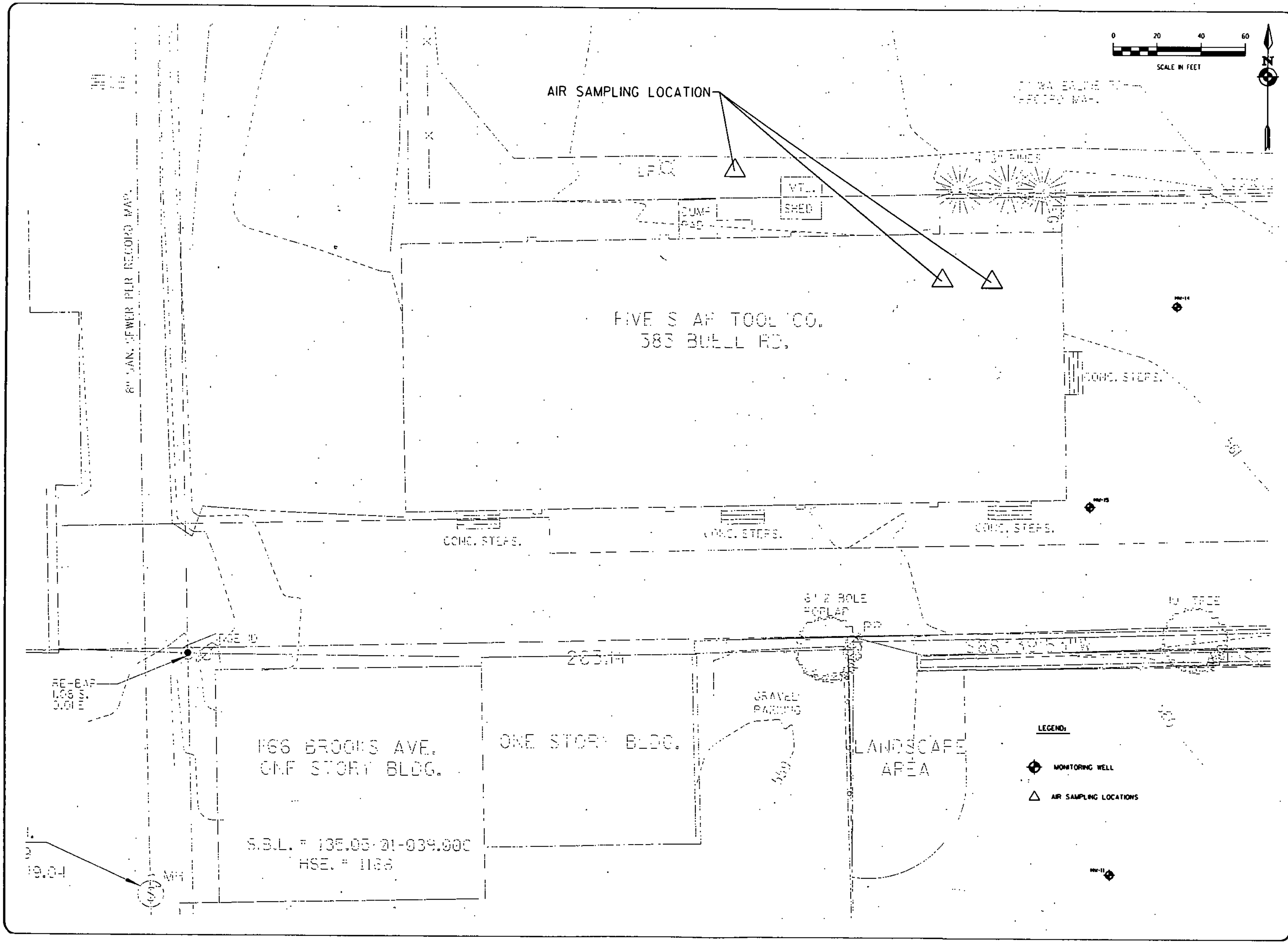
PROJECT
BROWNFIELDS CLEANUP
SUB-SLAB VAPOR SAMPLING
383 BUELL RD
ROCHESTER, NEW YORK

TITLE OF DRAWING
SITE LOCATION MAP

PROJECT NO.
16059

DRAWING NO
FIG. 1

U:\16059\civil\Supplemental Work Plan - Feb 05\FIG 1_383 .dwg



BROWNFIELD CLEANUP INVESTIGATION
BUELL AUTOMATICS, INC.
383 BUELL RD
ROCHESTER, NY

SAMPLING LOCATION PLAN

Stantec
85 Metro Park
Rochester, N.Y. 14623-2674
Tel (585) 475-1440
Fax (585) 272-1814
www.stantec.com

REVISIONS

PROJECT NO. 16059

DRAWING NO. FIGURE 2

TABLE 1
SUMMARY OF SUB-SLAB VAPOR SAMPLING RESULTS

Five Star Tool Company, Inc.
383 Buell Road
Rochester, New York

	Sub-Slab Vapor Sample # 32905-1		Soil Vapor / Indoor Air Matrix 1[4]
VOC Compound	Result (µg/m³)	MRL (µg/m³)	(µg/m³)
Vinyl Chloride	ND	1.4	No Applicable Matrix
1,1-Dichloroethane	**4.2**	1.4	No Applicable Matrix
cis-1,2-Dichloroethene	**9.1**	1.4	No Applicable Matrix
Trichloroethene	**340**	1.4	**Mitigate**[5]

Notes:

1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Public Comment Draft, February 2005. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
5. Soil Vapor / Indoor Air Matrix 1; Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Public Comment Draft, February 2005. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
6. **Bold-faced** values are concentrations that have been reported above the method reporting limits.

TABLE 2
SUMMARY OF INDOOR
AIR QUALITY SAMPLING RESULTS

Five Star Tool Company, Inc.
383 Buell Road
Rochester, New York

	Indoor Air Sample # 32905-2		USEPA BASE[(4)] Data (background levels)	NYSDOH Air Guideline Value[(5)]	USEPA Target Indoor Air Concentration [(6)]	
VOC Compound	Result (µg/m³)	MRL (µg/m³)	Indoor (µg/m³)	Indoor (µg/m³)	Indoor- 1 x 10^{-5} (µg/m³)	Indoor - 1 x 10^{-6} (µg/m³)
Vinyl Chloride	ND	1.5	<0.9	N/A	2.8	0.28
1,1-Dichloroethane	ND	1.5	<0.5	N/A	500	50
cis-1,2-Dichloroethene	**1.6**	1.5	<1.0	N/A	35	3.5
Trichloroethene	ND	1.5	<1.2 - 1.2	5	0.22	0.022

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Building Assessment and Survey Evaluation (BASE '94-'98); Unpublished; Indoor Environments Division, United States Environmental Protection Agency (USEPA).
5. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Public Comment Draft, February 2005. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
6. Draft Guidance For Evaluating The Vapor Intrusion To Indoor Air Pathway From Groundwater And Soils (Subsurface Vapor Intrusion Guidance). United States Environmental Protection Agency (USEPA), Office of Solid Waste and Emergency Response (OSWER), November 2002.
7. N/A = not available.
8. **Bold-faced** values are concentrations that have been reported above the method reporting limits.

TABLE 3
SUMMARY OF OUTDOOR AIR QUALITY SAMPLING RESULTS

Five Star Tool Company, Inc.
383 Buell Road
Rochester, New York

	Outdoor Air Sample # 32905-3		**EPA BASE[4] Data** (background levels)	**NYSDOH Air Guideline Value[5]**
VOC Compound	Result ($\mu g/m^3$)	MRL ($\mu g/m^3$)	Outdoor ($\mu g/m^3$)	Outdoor ($\mu g/m^3$)
Vinyl Chloride	ND	1.8	<1.0	N/A
1,1-Dichloroethane	ND	1.8	<0.4	N/A
cis-1,2-Dichloroethene	ND	1.8	<1.0	N/A
Trichloroethene	ND	1.8	<1.5	5

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.
4. Building Assessment and Survey Evaluation (BASE '94-'98); Unpublished; United States Environmental Protection Agency (USEPA), Indoor Environments Division.
5. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Public Comment Draft, February 2005. New York State Department of Health (NYSDOH), Center for Environmental Health, Bureau of Environmental Exposure.
6. N/A = not available.

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Peter H. Smith Date/Time Prepared 3/29/2005 2:30pm

Preparer's Affiliation Stantec Phone No. (585) 475-1440

Purpose of Investigation BCA Investigation, Buell Automatics (No. B8-0576-00-04A)

1. OCCUPANT: Five Star Tool Co., Inc. (machine shop)

Interviewed: Y / N

Last Name: LaLonde First Name: Ken

Address: 383 Buell Road, Gates, NY 14624

County: Monroe

Home Phone: ____________ Office Phone: (585) 328 - 9580

Number of Occupants/persons at this location 22 Age of Occupants ~30

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: Falkner First Name: Gert

Address: 383 Buell Road, Gates, NY 14624

County: Monroe

Home Phone: ____________ Office Phone: (585) 328-9580

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: ____________

If the property is residential, type? (Circle appropriate response) N/A

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:__________

If multiple units, how many? ________

If the property is commercial, type? N/A

Business Type(s) ____________________________

Does it include residences (i.e., multi-use)? Y / N   If yes, how many? ______

Other characteristics:

Number of floors 1   Building age 1957

Is the building insulated? Y / N   How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

N/A: First Floor Only

Airflow near source

Yes, exhaust vents near machines

Outdoor air infiltration

Yes, overhead doors at east and west end of building, infiltration around doors; closed during test

Infiltration into air ducts

Yes, for ventilation

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete block	stone	brick
b. Basement type:	full	crawlspace	slab	other raised floor
c. Basement floor: N/A	concrete	dirt	stone	other ______
d. Basement floor: N/A	uncovered	covered	covered with ______	
e. Concrete floor:	unsealed	sealed	sealed with ______	
f. Foundation walls:	poured	block	stone	other ______
g. Foundation walls:	unsealed	sealed	sealed with ______	
h. The basement is: N/A	wet	damp	dry	moldy
i. The basement is: N/A	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: ______(feet) N/A

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Cracks in concrete floor; water and gas utility entry points (north east corner)

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
~~Space Heaters~~	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other ______

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
~~Electric~~	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: electric

Boiler/furnace located in: Basement Outdoors Main Floor Other ______

Air conditioning: Central Air Window units Open Windows None office only (roof unit)

4

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

purification of air, blower system

7. OCCUPANCY

7 - 3 30

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	N/A
1st Floor	office / machine shop
2nd Floor	N/A
3rd Floor	N/A
4th Floor	N/A

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA Please specify________

d. Has the building ever had a fire? Y / N When?________

e. Is a kerosene or unvented gas space heater present? Y / N Where?________

f. Is there a workshop or hobby/craft area? Y / N Where & Type? machine shop

g. Is there smoking in the building? Y / N How frequently?________

h. Have cleaning products been used recently? Y / N When & Type? office / bathroom products

i. Have cosmetic products been used recently? Y / N When & Type? _______________

j. Has painting/staining been done in the last 6 months? Y / N Where & When? office / shop

k. Is there new carpet, drapes or other textiles? Y / N Where & When? 1.5 years ago - office

l. Have air fresheners been used recently? Y / N When & Type? _______________

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? ____________

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? exterior

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? _______________

Are there odors in the building? Y / N
If yes, please describe: industrial machine

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? petroleum distillates

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: ____________
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other: _______
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other: _______

10. RELOCATION INFORMATION (for oil spill residential emergency) N/A

a. Provide reasons why relocation is recommended: ______________________________

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

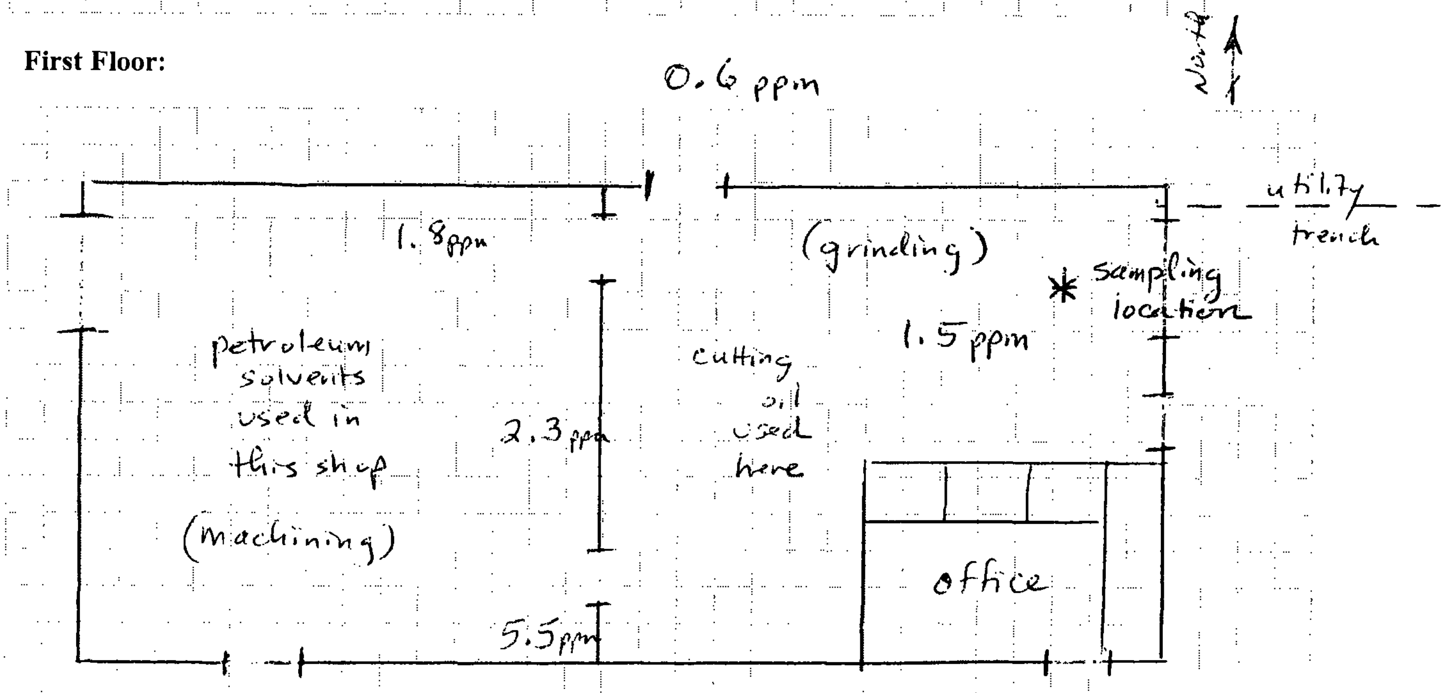
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

— NO BASEMENT —

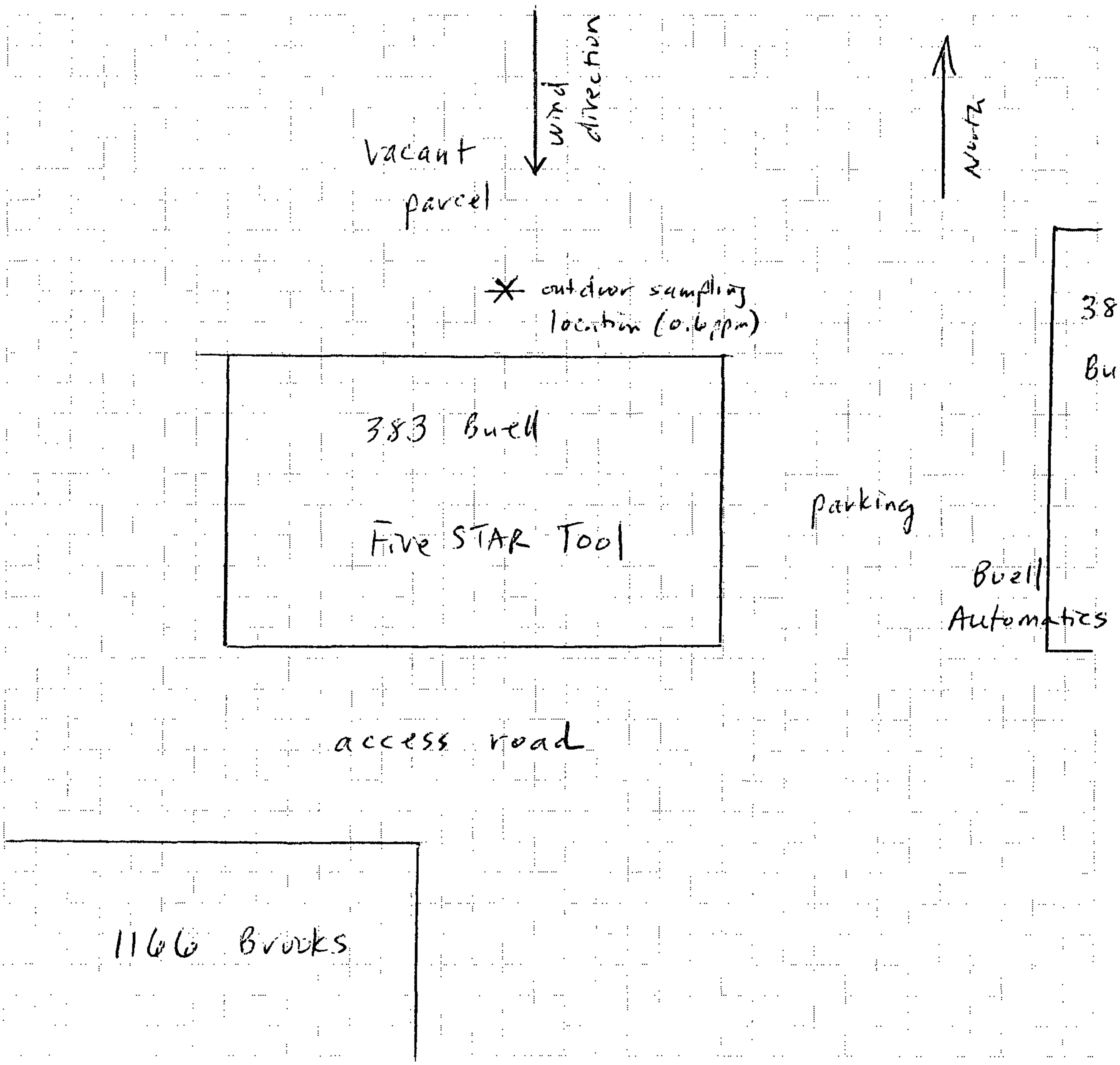
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement *to* help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: MiniRae Model 2000

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Machining	Way Oil	55g	u	mineral oil	1.8	N
"	Clean Kool,	5 g	u	triethanolamine,	1.8	N
	cutting fluid			glycol		
"	misc. paints,	16oz	u	ethylbenzene, xylenes	2.3	N
	stains					
"	acetone	32oz	u	acetone	5.5	N
"	rust inhibitor	11oz	u	mineral spirits, petroleum	5.5	N
				oil		
grinding	grinding oil	55g	u/uo	mineral oil	1.3	N

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

1 Mustard Street, Suite 250 Rochester, NY 14609-6925 (585) 288-5380 ph (585) 288-8475 fax

Columbia Analytical Services INC.
An Employee - Owned Company

May 2, 2005

RECEIVED

MAY 04 2005

Stantec

Mr. Pete Smith
Stantec Consulting Group, Inc.
85 Metro Park
Rochester , NY 14623-2674

Re: Buell Automatics # 190500033
CAS Submission #R2525535 / P2500665

Dear Mr. Smith,

Enclosed is the analytical data report for the above referenced project. The samples were analyzed by the CAS- Simi Valley laboratory. Data was initially emailed to your company. All data was reviewed prior to submission.

Please contact me at (585)-288-5380 ext. 134 if you have questions regarding this information.

Sincerely,
COLUMBIA ANALYTICAL SERVICES

Karen Bunker

Karen Bunker
Project Manager

Enc.

2665 Park Center Drive, Suite D   Simi Valley, California 93065   (805) 526-7161 ph   (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

Client:	STANTEC	Date of Report:	04/22/05
Address:	85 Metro Park	Date Received:	03/31/05
	Rochester, NY 14623	CAS Project No:	P2500665
Contact:	Peter Smith	Purchase Order:	Verbal
Client Project ID:	Buell Automatics/190500033	New York Lab ID:	11221

Three (3) Stainless Steel Summa Canisters labeled: "32905-1" "32905-2" "32905-3"

The samples were received at the laboratory under chain of custody on March 31, 2005. The samples were received intact. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time that they were received at the laboratory.

Volatile Organic Compound Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for selected volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-15. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheets. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Reviewed and Approved:

Rusty Bravo
Analytical Chemist
Air Quality Laboratory

Reviewed and Approved:

Chris Parnell
GCMS-VOA Team Leader
Air Quality Laboratory

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **32905-1**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2500665
CAS Sample ID: P2500665-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00672

Date Collected: 3/29/05
Date Received: 3/31/05
Date(s) Analyzed: 4/7/05
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Pi 1 = -1.3 Pf 1 = 3.5

D.F. = 1.36

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	1.4	ND	0.53	
75-34-3	1,1-Dichloroethane	**4.2**	1.4	**1.0**	0.34	
156-59-2	cis-1,2-Dichloroethene	**9.1**	1.4	**2.3**	0.34	
79-01-6	Trichloroethene	**340**	1.4	**63**	0.25	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KMH Date: 04/14/05

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **32905-2**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2500665
CAS Sample ID: P2500665-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00669

Date Collected: 3/29/05
Date Received: 3/31/05
Date(s) Analyzed: 4/5/05
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -2.9 Pf 1 = 3.5

D.F. = 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	1.5	ND	0.60	
75-34-3	1,1-Dichloroethane	ND	1.5	ND	0.38	
156-59-2	cis-1,2-Dichloroethene	**1.6**	1.5	**0.40**	0.39	
79-01-6	Trichloroethene	ND	1.5	ND	0.29	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KWH Date: 04/14/05

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **32905-3**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2500665
CAS Sample ID: P2500665-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00706

Date Collected: 3/29/05
Date Received: 3/31/05
Date(s) Analyzed: 4/7/05
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -4.4 Pf 1 = 3.5

D.F. = 1.77

CAS #	Compound	Result $\mu g/m^3$	MRL $\mu g/m^3$	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	1.8	ND	0.69	
75-34-3	1,1-Dichloroethane	ND	1.8	ND	0.44	
156-59-2	cis-1,2-Dichloroethene	ND	1.8	ND	0.45	
79-01-6	Trichloroethene	ND	1.8	ND	0.33	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KWH Date: 04/14/05

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **32905-3**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2500665
CAS Sample ID: P2500665-003DUP

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00706

Date Collected: 3/29/05
Date Received: 3/31/05
Date(s) Analyzed: 4/7/05
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -4.4 Pf 1 = 3.5

D.F. = 1.77

CAS #	Compound	Result $\mu g/m^3$	MRL $\mu g/m^3$	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	1.8	ND	0.69	
75-34-3	1,1-Dichloroethane	ND	1.8	ND	0.44	
156-59-2	cis-1,2-Dichloroethene	ND	1.8	ND	0.45	
79-01-6	Trichloroethene	ND	1.8	ND	0.33	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KUH Date: 041405

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **Method Blank**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2500665
CAS Sample ID: P050404-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 4/4/05
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	**Compound**	**Result µg/m³**	MRL µg/m³	**Result ppbV**	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39	
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25	
79-01-6	Trichloroethene	ND	1.0	ND	0.19	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit.**
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: KLH Date: 04/14/05

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **Method Blank**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2500665
CAS Sample ID: P050407-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date(s) Analyzed: 4/7/05
Volume(s) Analyzed: 1.00 Liter(s)

D.F. = 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39	
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25	
79-01-6	Trichloroethene	ND	1.0	ND	0.19	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: ωH Date: 041405

Client: **Stantec**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2500665

Surrogate Spike Recovery Results

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Summa Canister(s)
Test Notes:

Date Collected: 3/29/05
Date Received: 3/31/05
Date Analyzed: 4/4 - 4/7/05

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4		Toluene-d8		Bromofluorobenzene		Data Qualifier
		% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	
Method Blank	P050404-MB	**105**	70-140	**101**	70-140	**96**	70-140	
Method Blank	P050407-MB	**101**	70-140	**99**	70-140	**96**	70-140	
Lab Control Sample	P050404-LCS	**100**	70-140	**100**	70-140	**101**	70-140	
Lab Control Sample	P050407-LCS	**99**	70-140	**99**	70-140	**98**	70-140	
32905-1	P2500665-001	**99**	70-140	**97**	70-140	**97**	70-140	
32905-2	P2500665-002	**100**	70-140	**99**	70-140	**94**	70-140	
32905-3	P2500665-003	**100**	70-140	**99**	70-140	**96**	70-140	
32905-3	P2500665-003DUP	**100**	70-140	**99**	70-140	**96**	70-140	

Verified By: KLH Date: 04-14-05

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **Lab Control Sample**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2500665
CAS Sample ID: P050404-LCS

Laboratory Control Sample (LCS) Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 4/4/05
Volume(s) Analyzed: NA Liter

CAS #	Compound	Amount Spiked ng	Amount Recovered ng	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	25.50	25.91	**102**	74-134	
75-34-3	1,1-Dichloroethane	26.25	26.65	**102**	77-129	
156-59-2	cis-1,2-Dichloroethene	26.00	27.07	**104**	79-132	
79-01-6	Trichloroethene	26.00	26.43	**102**	80-134	

Verified By: KLH Date: 04/14/05

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Stantec**
Client Sample ID: **Lab Control Sample**
Client Project ID: **Buell Automatics/190500033**

CAS Project ID: P2500665
CAS Sample ID: P050407-LCS

Laboratory Control Sample (LCS) Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5973/HP6890/MS3
Analyst: Rusty Bravo
Sampling Media: Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 4/7/05
Volume(s) Analyzed: NA Liter

CAS #	Compound	Amount Spiked ng	Amount Recovered ng	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	25.50	25.99	**102**	74-134	
75-34-3	1,1-Dichloroethane	26.25	25.86	**99**	77-129	
156-59-2	cis-1,2-Dichloroethene	26.00	26.38	**101**	79-132	
79-01-6	Trichloroethene	26.00	25.94	**100**	80-134	

Verified By: KUH Date: 04/14/05

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Stantec Consulting Limited   Work order: P2500665

Project: Buell Automatics/190500033

Sample(s) received on: 3/31/05   Date opened: 3/31/05   by: kmh

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client or as required by the method/SOP.

		Yes	No	N/A
1	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? ______ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? ______ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
2	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
	Cooler Temperature NA °C			
	Blank Temperature NA °C			
9	Is pH (acid) **preservation** necessary, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** (acid) preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Required pH	pH (as received, if required)	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2500665-001			NA	
P2500665-002			NA	
P2500665-003			NA	

Explain any discrepancies: (include lab sample ID numbers):

Columbia Analytical Services

Air Quality Laboratory
2665 Park Center Drive, Suite D
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Chain of Custody Record & Analytical Service Request

Page 1 of 1

Requested Turnaround Time by Close of Business Day (Surcharges) Please Circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (15%) 10 Day-Standard

CAS Project No. P2500665

CAS Contact: KAREN BUNKER

Reporting Information (Company Name & Address)
Stantec
85 Metro Park
Rochester, NY 14623
Attention: Peter Smith

P.O. # / Billing Information

Project Name: Buell Automatics

Project Number: 190500033

Phone (585) 475-1440 Fax (585) 424-5951

Email Address for Result Reporting: phsmith@stantec.com

Sampler (Print & Sign): Peter Smith / Peter Smith

Analysis Method and/or Analytes: TO-15 site-specific list: TCE, cis-1,2 DCE; 1,1-DCA, VC. "

Client Sample ID	Date Collected	Time Collected	Lab Sample No.	Sample Type (Air/Liquid/Solid/Tube)	Canister ID (Bar Code#)	Flow Controller (Bar Code #)	Sample Volume	TO-15 site-specific	list: TCE, cis-1,2 DCE;	1,1-DCA, VC. "		Comments e.g. Preservative or specific instructions
32905-1	3/29/05			Air	AC00672	FC00017						sub-slab
32905-2	3/29/05			Air	AC00669	FC00066						indoor
32905-3	3/29/05			Air	AC00706	FC00329						ambient

Report Tier Levels - please select
Tier I - (default if not specified) ____
Tier II (QC forms) ____
Tier III (QC, Raw Data, Spectra) 10% Surcharge ✓
Other ____

EDD required Yes / No
Type: ____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Pete Smith	3/30/05	12:00	Kelley McElhinney	03/31/05	10am

Cooler / Blank Temperature ____ °C

September 24, 2004

Mr. Bart Putzig, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, New York 14414-9519

RE: Final Sub-Slab Soil Gas Survey Report (Revised)
Comfort Inn, 395 Buell Road **16059**
Rochester, NY

Dear Bart:

On behalf of Buell Automatics, Stantec (formerly Sear-Brown) is pleased to submit this Sub-Slab Soil Gas Survey Report for the Comfort Inn, 395 Buell Road (Figure 1).

Background

Stantec submitted a draft Work Plan to the New York State Department of Environmental Conservation (Department) on September 10, 2003 for a sub-slab soil gas survey at the Comfort Inn located at 395 Buell Road. On September 24, 2003 you informed us on behalf of Frank Sowers, that we should proceed to contact the owner of the Comfort Inn property in order to request permission to conduct the sub-slab soil gas survey on their property. Additional comments from the Department on the draft work plan were formally issued in a letter dated October 10, 2003.

On October 7, 2003, Stantec spoke to Mr. Bruce Sahs of Hudson Hotels, who works for Mr. Robert Liu, the owner of the Comfort Inn Property, 395 Buell Road (Figure 1). Stantec explained the need for the Sub-Slab Soil Gas Survey at the Comfort Inn property and what it would involve, and forwarded a letter dated October 7, 2003 to Mr. Liu c/o Mr. Sahs along with a permission form for signature and return.

On October 16, 2003, Stantec received the signed permission form to conduct the building survey. Along with that form was a request for an Access Agreement and a Certificate of Insurance. Stantec subsequently forwarded an Access Agreement and the Insurance Certificate to Hudson Hotels and received the executed Access Agreement on October 22, 2003.

On October 27, 2003, Stantec contacted Mr. Christopher Burns, Executive Vice-President of Hudson Hotels Corporation, to schedule an initial site visit as a precursor to the Sub-Slab Soil Gas Survey at the Comfort Inn. With the assistance of Mr. Burns, Stantec coordinated an initial site walk-through with Mr. Frank Sowers (Department), Mr. Joe Albert (MCDOH), Mr. Gary Lawton (Buell Automatics) and the hotel manager, Ms. Carmen Medina (Comfort Inn).

The initial building walk-through occurred on October 30, 2003. Messrs. Dave Belaskas and Pete Smith represented Stantec. Mr. Wayne Naylor, maintenance supervisor, provided access to areas of interest within the hotel. Prior to the walk-through, Stantec had contacted the Town of Gates Building Department and Fire Marshal for any available drawings, plans or records for 395 Brooks Avenue. However, no such records were available. In addition, Mr. Naylor had no such plans.

The hotel consists of two buildings connected by a walkway (Figure 2). The main building is situated in an east-west orientation near the northerly property boundary. The main building is a two-story concrete block structure containing the hotel lobby, offices, guest rooms and a small basement maintenance office/utility room. The basement utility room is located under the eastern end of the building along the northern wall.

Building construction is slab-on-grade, except for the basement area. The basement utility room is a floating slab with concrete block walls. Underground public utilities observed in the utility room included gas, water and sewer. A gas-fired boiler is used for domestic hot water only. All other heating and ventilation in the building is via individual room console units. No central HVAC system is present.

The utility room in the basement contained storage for various cleaning agents (carpet shampoo, drain cleaners) including a product called Orange Sol, a degreasing solvent. Other products included paint, plaster and miscellaneous maintenance items. These containers were compiled in a preliminary product inventory.

Upon access to the building, air quality was screened using a calibrated HNu photoionization detector (PID) equipped with an 11.8 eV lamp. Background air quality was measured in the exterior stairwell outside the utility room. Air was screened just above significant cracks in the floor in the utility room; utility wall penetrations; and sumps. No PID readings above background measurements were noted.

Two sumps were observed at the time of the October 30, 2003 walk through. Sump #1 is in the stairwell leading to the utility room (along the north wall), and Sump #2 is in the southwest corner of the basement utility room along an interior wall. Their approximate locations are depicted on Figure 2. Both sumps contained water with operational sump pumps. Mr. Naylor noted that Sump #1 runs regularly and cycles more frequently during rainfall events. The interior sump (Sump #2) runs less frequently.

Stantec entered hotel guest rooms 128 and 122 on the north side of the ground floor towards the west end of the building. This area was chosen based upon interpreted groundwater flow vectors that extend from the impacted portion of the Buell Automatics property toward the west end of the building. Guest rooms 128 and 122 and the exit between Rooms 114 and 116 were screened with the PID. No PID readings above background measurements were noted.

At the conclusion of the initial building walk through, the agencies requested that water samples be collected and analyzed from the sumps in the basement utility room. In addition, it was requested that two indoor air samples and two sub-slab soil gas samples be collected from a westerly guest room and the basement utility room. In addition, an ambient air sample was requested from outside the building for background purposes.

During a November 4, 2003 telephone conversation with Mr. Sowers, it was agreed that the Department and the DOH would be willing to allow modification of the scope of the sump water sampling program in the Comfort Inn basement utility room by reducing the Quality Assurance/Quality Control (QA/QC) requirements that will be needed. Specifically, QA/QC reporting requirements were reduced from ASP protocols to standard reporting requirements as per SW846 using EPA Method 8260. However, the DOH requested that both sub-slab vapor testing and indoor air quality testing be performed in both the basement utility room and a room on the west end of the building. Stantec revised the Work Plan to reflect the changes to the QA/QC requirements for the Sub-Slab Soil Gas Survey at the Comfort Inn and submitted it on December 31, 2003, subsequent to the execution of the Brownfield Cleanup Agreement.

The Department responded on January 15, 2004 and indicated that "based upon the information and representations given in the Work Plan and verbal representations from Stantec that each Summa Canister will be equipped with an in-line vacuum gauge, the Work Plan is hereby approved."

Field Activities

Sump Water Sampling

Two groundwater sump samples were collected by Stantec from the Comfort Inn basement utility room on January 26, 2004. Messrs. Frank Sowers (Department) and Joe Albert (MCDOH) were present. Each sump was screened with a PID; neither sump yielded readings above background levels. Water in each sump was evacuated prior to sampling by manually activating each sump pump. Samples BU-SW1-W and BU-SW2-W were collected from Sump #1 and Sump #2, respectively, and forwarded with trip blanks to Columbia Analytical Services (CAS) for analysis of Target Compound List (TCL) Volatile Organic Compounds (VOCs) by EPA Method 8260.

Sub-Slab Soil Gas Sampling

Sub-slab soil gas sampling was performed by Stantec at the Comfort Inn between January 26 – 28, 2004. Messrs. Frank Sowers and Joe Albert were present at the time of sampling. Holes were drilled through the concrete floors in the basement utility room and in Room 124 on January 26, 2004. Room 122, as specified in the work plan, was unavailable. Therefore, sampling was performed in adjacent Room 124. Following the penetration of the floor, ¼-inch HDPE tubing was installed with non-shrinking hydraulic cement at each location. Tubing was then plugged with a metal screw and allowed to equilibrate for approximately 48 hours.

Stantec returned to perform air sampling on January 28, 2004. The initial product inventory, that was compiled for the basement utility room, was updated at this time at the request of MCDOH. A summary of the product inventory is presented in Table 1. Soil gas sample SG-1 and building air sample BA-1 were collected in Room 124. Soil gas sample SG-2 and building air sample BA-2 were collected in the basement. Background air sample BK-1 was collected outside, north of the building, at the west end of the Comfort Inn parking lot (upwind). All samples were collected over a period of approximately two hours and monitored with in-line gauges. With the exception of SG-2, each summa canister had an initial vacuum reading of approximately 30 inches of Hg. SG-2, however, had an initial reading of 16 inches of Hg. The CAS Air Quality lab in California subsequently determined that the gauge used for SG-2 was operating properly and therefore, at the request of the DEC, SG-2 and co-located sample BA-2 were scheduled for re-sampling.

The re-sampling of the basement air samples was performed by Stantec on Friday, February 6, 2004 using the same methods and tubing which had been plugged and left in place previously. Mr. Frank Sowers was present at the time of sampling. Soil gas sample SG-2A and building air sample BA-2A were collected in the basement over a period of approximately two hours and monitored with in-line gauges.

All summa canister samples were submitted to Columbia Analytical Services Air Quality Laboratory in Simi Valley, California, a New York State-approved laboratory (NY Lab. Id No: 11221). Analysis was requested to be performed by USEPA Method TO-15 for the following site-specific VOCs: Trichloroethene (TCE), cis-1,2-Dichloroethene (cis-1,2-DCE), 1,1-Dichloroethane (1,1-DCA), and Vinyl Chloride (VC). Based upon initial sump water sample results, the list of reported compounds for air was expanded to include Tetrachloroethene (also known as Perchloroethene or PCE) and trans-1,2-Dichloroethene (trans-1,2-DCE).

Analytical Results

Sump Water

Analytical sump water results from the Comfort Inn are summarized in Table 2. A copy of the laboratory analytical reports are presented in Appendix A.

Three TCL VOCs were reported in both of the basement utility room sump water samples submitted for analysis: PCE, TCE and trans-1,2-DCE. The three compounds were reported at concentrations ranging from 67 micrograms per liter (ug/l) to 120 ug/l. Each of the reported concentrations of the three compounds were higher than their respective NYSDEC Class GA groundwater standards (5 ug/l for each compound).

Unexpectedly, the most abundant compound reported in the sump water is PCE (100-120 ug/l), a dry-cleaning solvent. PCE has not been reported originating in groundwater at Buell Automatics. TCE, although the predominant compound present at the Buell Automatics site, also is commonly found as a breakdown product of PCE. Similarly, trans-1,2-DCE, is also commonly found as a breakdown product of PCE, and has only been reported at very low levels in groundwater at the Buell Automatics site.

Based upon the product inventory for the Comfort Inn (see Table 1), it does not appear that the products and chemicals that are presently stored in the basement at the Comfort Inn are the source of the PCE. It should also be noted that the higher concentrations were reported in sump water sample BU-SW-2-W which was collected from Sump #2, located in the southwest corner of the utility room along an interior wall. Lower concentrations were reported from Sump #1 located in the stairwell leading to the utility room along the exterior north wall.

Soil Gas and Ambient Air

Analytical soil gas and ambient air results from the Comfort Inn are summarized in Table 3. The laboratory was able to attain Method Reporting Limits (MRLs) of <1.0 ug/m^3, which are comparable to those typically achieved for indoor air samples for all but one of the summa canister samples. Contaminant levels reported in the sub-slab sample SG-2A, which was collected in the basement utility room, resulted in higher MRLs.

Three of the five air samples (SG-1, SG-2A and BA-2A) were reported to contain detectable concentrations of target VOCs. No detectable concentrations of target compounds were reported for BA-1 and BK-1. According to the NYSDOH, guidance values for sub-slab air quality and ambient air quality data are currently under review and the reported occurrences of target VOCs will be evaluated on a case by case basis.

A total of four VOCs were reported in the air samples that were submitted for analysis: PCE, TCE, cis-1,2-DCE; and trans-1,2-DCE. Once again, PCE was reported at the highest concentration. PCE was reported in both soil gas samples and also in the ambient air sample BA-2A from the basement. The concentration of PCE in sub-slab soil gas was reported to range from 0.79 micrograms/cubic meter (ug/m^3) in SG-1 collected beneath Room 124 to 21,000 ug/m^3 in SG-2A collected beneath the basement utility room. PCE was reported in ambient air in BA-2A in the basement utility room at 1.1 ug/m^3.

TCE was reported in both sub-slab, soil gas samples. The concentration of TCE in sub-slab soil gas was reported to range from 4.3 ug/m^3 in SG-1 collected beneath Room 124 to 9,900 ug/m^3 in SG-2A collected beneath the basement utility room. No TCE was reported above detection limits in either of the building air samples.

Both cis-1,2-DCE and trans-1,2-DCE were reported to be present in only the basement utility room sub-slab soil gas sample SG-24.

With the exception of the reported presence of cis-1,2-DCE, the sub-slab soil gas data appear to reflect the contaminants that are reported in the basement sump water samples. Similar to the sump water data, it appears that a source of PCE, unrelated to the Buell Automatics site, has resulted in the majority, if not all of the impacts observed beneath, and within the basement utility room.

Conclusions

A low level TCE concentration (4.3 ug/m3) has been reported in the sub-slab soil gas sample (SG-1) collected beneath the west end of the Comfort Inn building. However, no contaminants were reported above detection limits in the corresponding building air sample. As a result, the Buell Automatics site does not appear to be adversely affecting air quality within the breathing zone on the west end of the Comfort Inn building, which is downgradient from the Buell Automatics site.

The survey yielded unexpected findings of PCE in sump water samples, sub-slab soil gas and the building air sample within the basement utility room. The higher sump water concentrations were reported in sample BU-SW2-W which was collected from Sump #2, located in the southwest corner of the utility room along an interior wall. Lower sump water concentrations were reported from Sump #1 located in the stairwell leading to the utility room along the exterior north wall.

Given the available information, Buell Automatics is not the likely source of the reported PCE related impacts. Therefore, Buell Automatics does not believe that it should be responsible for additional investigations or remedial measures associated with the PCE related impacts at the Comfort Inn building.

Should you have any questions or require further information, I would welcome your calls at 585-475-1440, ext. 760.

Sincerely,

Michael P. Storonsky
Senior Associate

Enclosures:

Figures
Figure 1 – Aerial Photo of Comfort Inn, 395 Buell Rd.
Figure 2 – Sample Location Plan

Tables
Table 1 – Comfort Inn Product Inventory
Table 2 – Summary of Sump Water Sampling Results
Table 3 - Summary of Sub-Slab and Ambient Air Quality Results

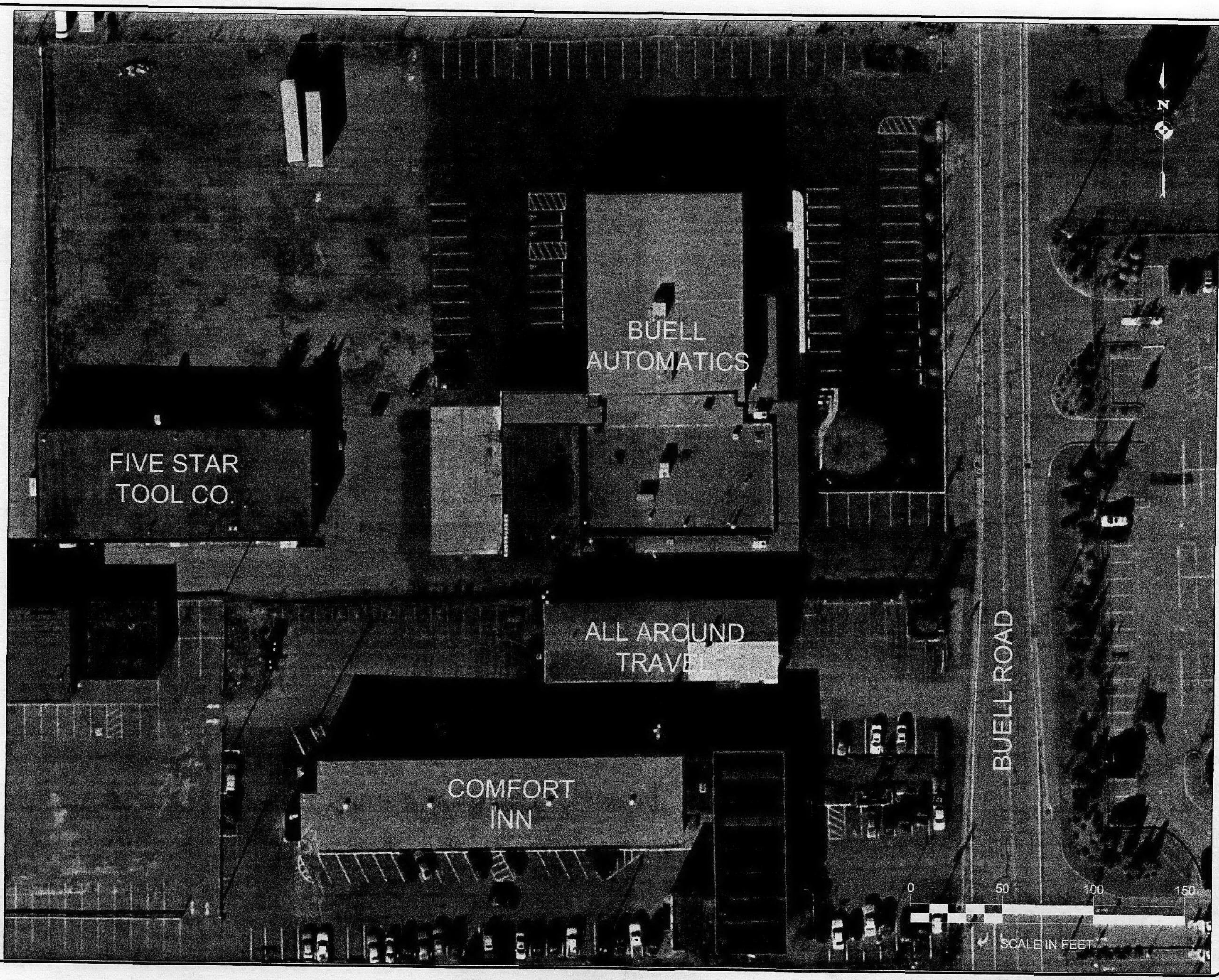
Appendices
Appendix A – Analytical Laboratory Reports

cc: Frank Sowers, P.E. (NYSDEC – Avon)
Andrew English (NYSDEC – Albany)
James Charles Esq. (NYSDEC – Buffalo)
Gary Litwin (NYSDOH – Troy)
Mark Van Valkenberge (NYSDOH – Troy)
Joseph Albert (MCDOH – Rochester)
Ralph Van Houton (NYSDOH – Rochester)
Richard Lawton (Buell Automatics)
Jerry Greenfield, Esq. (Chamberlain, D'Amanda, Oppenheimer & Greenfield)
Linda Shaw, Esq. (Knauf Shaw LLP)
File

MPS:PHS:L\jobs\16059\docs\Voluntary Investigation\Comfort Inn\Comfort Inn Soil Gas Report.doc

Plotting Parameters
Plotted By:
Dwg File: L:\JOBS\16059\civil\Work Nov. 2003\Fig1.dwg
Plotted: Mar 09, 2004 - 9:27am

Profile:
Land Desktop
Node: PC0077



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DRAWING ALTERATION

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF LICENSED ARCHITECT, PROFESSIONAL ENGINEER, LANDSCAPE ARCHITECT, OR LAND SURVEYOR TO ALTER ANY ITEM ON THIS DOCUMENT IN ANY WAY.

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	REVISIONS	DATE	BY

PROJECT ENGINEER/ARCHITECT
P. SMITH
PROJECT MANAGER
M. Storonsky

DRAWN BY
A. LESS
SCALE
1"=50'
FIRST ISSUE DATE
11/03

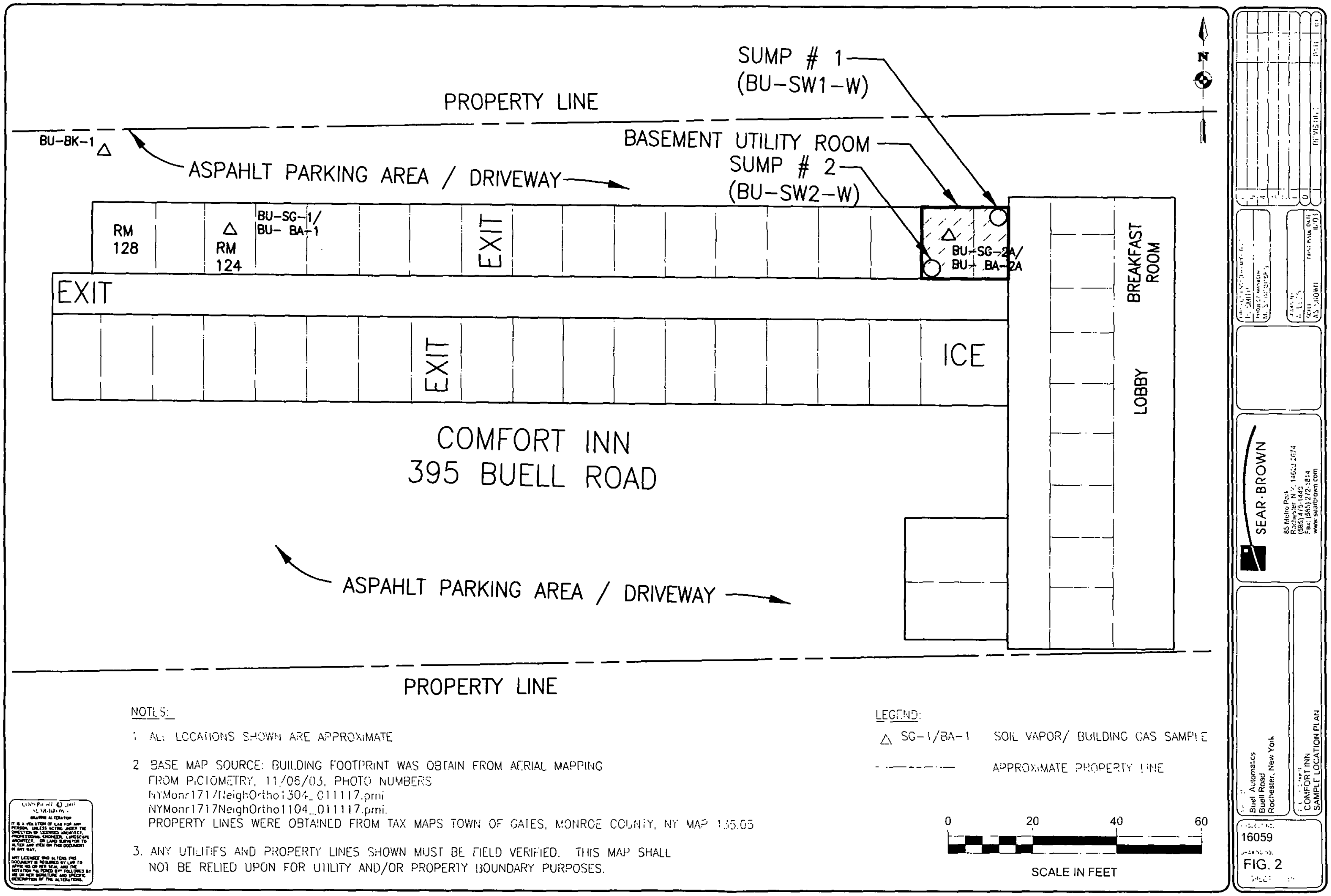
SEAR·BROWN
85 Metro Park
Rochester, N.Y. 14623-2674
(585) 475-1440
Fax: (585) 272-1814
www.searbrown.com

PROJECT
Buell Automatics
Buell Road
Rochester, New York

TITLE OF DRAWING
AERIAL PHOTO OF COMFORT INN,
395 BUELL ROAD

PROJECT NO.
16059

DRAWING NO.
FIG. 1



SUMP # 1
(BU-SW1-W)
PROPERTY LINE
BU-BK-1
BASEMENT UTILITY ROOM
SUMP # 2
(BU-SW2-W)
ASPAHLT PARKING AREA / DRIVEWAY
RM 128
RM 124
BU-SG-1/
BU-BA-1
EXIT
BU-SG-2A/
BU-BA-2A
BREAKFAST ROOM
EXIT
EXIT
ICE
LOBBY
COMFORT INN
395 BUELL ROAD
ASPAHLT PARKING AREA / DRIVEWAY
PROPERTY LINE
N
NOTES:
1. ALL LOCATIONS SHOWN ARE APPROXIMATE
2. BASE MAP SOURCE: BUILDING FOOTPRINT WAS OBTAIN FROM AERIAL MAPPING FROM PICTOMETRY, 11/06/03, PHOTO NUMBERS NYMonr1717NeighOrtho1304_011117.pmi NYMonr1717NeighOrtho1104_011117.pmi. PROPERTY LINES WERE OBTAINED FROM TAX MAPS TOWN OF GATES, MONROE COUNTY, NY MAP 135.05
3. ANY UTILITIES AND PROPERTY LINES SHOWN MUST BE FIELD VERIFIED. THIS MAP SHALL NOT BE RELIED UPON FOR UTILITY AND/OR PROPERTY BOUNDARY PURPOSES.
LEGEND:
SG-1/BA-1 SOIL VAPOR/ BUILDING GAS SAMPLE
APPROXIMATE PROPERTY LINE
0 20 40 60
SCALE IN FEET
SEAR·BROWN
85 Metro Park
Rochester NY 14623 2674
(585) 475-1440
Fax (585) 272-1814
www.searbrown.com
Buell Automatics
Buell Road
Rochester, New York
COMFORT INN
SAMPLE LOCATION PLAN
16059

FIG. 2

TABLE 1
COMFORT INN PRODUCT INVENTORY
January 28, 2004
395 Buell Road
Rochester, NY

1. 5-gallon – All Purpose Joint Compound
2. Two 1-gallon – Latex Paint cans
3. 1 pt. container of wood finish (minwax)
4. 1 pt. Container of wood finish (minwax)
5. 1 qt. Latex paint
6. 1 qt. Bathroom mildew paint
7. 1 qt. Spackling paste
8. 1 qt. Rustoleum paint
9. 1-gallon can – stain
10. ½ bag dry adhesive
11. 1 bag sand finish additive
12. 1-gallon wall covering adhesive
13. 1-gallon swift set sand mix
14. 1 qt. Wood patch
15. Two 1-gallon containers Durabond 45
16. 1-gallon wall covering adhesive
17. 1-gallon all purpose joint compound
18. 1 pt. Wall paper stripper
19. 1 pt. Accelerator
20. 1 pt. Acrylic grout additive
21. 1 pt. Wood finish
22. 1 bag floor grout
23. 8 oz. grout cleanup concentrate
24. Two 5-gallon containers latex paint
25. Eight (8) aerosol paint containers
26. Fifteen (15) all purpose batteries
27. 1 pt. Stain remover
28. Twenty-seven (27) caulk/adhesive tubes
29. 1-gallon latex paint
30. 1.5 oz. Box of Decon (mice killing pellets)
31. 2 oz. Contact cement
32. 2 oz. 3-in-1 motor oil
33. 16 oz. Multi-purpose rug sealant
34. 4 oz. All purpose cement
35. 1 pt. Caulk
36. 8 oz. WD-40
37. 8 oz. Cleaner (aerosol)
38. 4 oz. Rubber cement
39. 8 oz. WD-40
40. 12 oz. Drylock masonry etch cleaner
41. 12 oz. WD-40
42. 2 oz. Enviro-duster (air duster) (aerosol)
43. 10 oz. Aerosol paint container
44. 10 oz. Aerosol paint container
45. ½ pt. Wood patch
46. 4 oz. Plaster enamel
47. 1 qt. Cleaning alcohol
48. Five (5) 10 oz. aerosol paint cans
49. 14 oz. Plumber's putty
50. Two (2) 15 oz. Aerosol fly killing containers
51. 16 oz. Wasp and yellow jacket killer aerosol
52. 2 oz. Superwrench penetrant cleaner
53. 8 oz. Oil-based enamel
54. 1 qt. Paint
55. 1-gallon Bio-clean (environ. friendly bacteria eliminator)
56. 12 oz. Foam sealant
57. 32 oz. Muriatic acid
58. Two 1-gallon car wax
59. Two 1-gallon carpet sanitizer
60. 1-gallon spot remover carpet cleaner
61. 1-gallon solvent cleaner
62. 1-gallon detergent cleaner
63. 1-gallon latex paint
64. Two 1-gallon carpet cleaner concentrate
65. 1 lb. concrete finisher
66. 1-gallon liquid bonding admixture (for concrete setting process)
67. Seven (7) containers of 409/windex/resolve mixtures
68. Two 16 oz. professional strength drain opener
69. 10 oz. bleach
70. Two 1-gallon containers stain remover
71. 1-gallon latex paint
72. Sixteen bags of salt pellets

TABLE 2
SUMMARY OF SUMP WATER SAMPLING RESULTS
Comfort Inn
Rochester, NY

Parameter	SUMP WATER SAMPLES BU-SW1-W	BU-SW2-W	TRIP BLANK	NYSDEC Groundwater Standards and Guidance Values [1]
Acetone	20 U	20 U	20 U	50 (G)
Benzene	5.0 U	5.0 U	5.0 U	1
Bromodichloromethane	5.0 U	5.0 U	5.0 U	50 (G)
Bromoform	5.0 U	5.0 U	5.0 U	50 (G)
Bromomethane	5.0 U	5.0 U	5.0 U	5
2-Butanone	10 U	10 U	10 U	NS
Carbon Disulfide	10 U	10 U	10 U	60 (G)
Carbon Tetrachloride	5.0 U	5.0 U	5.0 U	5
Chlorobenzene	5.0 U	5.0 U	5.0 U	5
Chloroethane	5.0 U	5.0 U	5.0 U	5
Chloroform	5.0 U	5.0 U	5.0 U	7
Chloromethane	5.0 U	5.0 U	5.0 U	NS
Dibromochloromethane	5.0 U	5.0 U	5.0 U	50 (G)
1,1-Dichloroethane	5.0 U	5.0 U	5.0 U	5
1,2-Dichloroethane	5.0 U	5.0 U	5.0 U	1
1,1-Dichloroethene	5.0 U	5.0 U	5.0 U	5
trans-1,2-Dichloroethene	***69***	***89***	5.0 U	5
cis-1,2-Dichloroethene	5.0 U	5.0 U	5.0 U	5
1,2-Dichloropropane	5.0 U	5.0 U	5.0 U	1
trans-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	0.4 (-cis and -trans)
cis-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	0.4 (-cis and -trans)
Ethylbenzene	5.0 U	5.0 U	5.0 U	5
2-Hexanone	10 U	10 U	10 U	50 (G)
Methylene Chloride	5.0 U	5.0 U	5.0 U	5
4-Methyl-2-Pentanone	10 U	10 U	10 U	NA
Styrene	5.0 U	5.0 U	5.0 U	5
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	5.0 U	5
Tetrachloroethene	***100***	***120***	5.0 U	5
Toluene	5.0 U	5.0 U	5.0 U	5
1,1,1-Trichloroethane	5.0 U	5.0 U	5.0 U	5
1,1,2-Trichloroethane	5.0 U	5.0 U	5.0 U	1
Trichloroethene	***67***	***100***	5.0 U	5
Vinyl Chloride	5.0 U	5.0 U	5.0 U	2
o-Xylene	5.0 U	5.0 U	5.0 U	5 (total xylenes)
m/p-Xylenes	5.0 U	5.0 U	5.0 U	5 (total xylenes)

Notes:
1. NYSDEC. October 22, 1993. Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Reissued June 1998. April 2000 Addendum.
2. All results are expressed in micrograms per liter (ug/L), which is equivalent to parts per billion (ppb).
3. **Bold-faced** values are samples that have been detected.
4. **Bold-faced,** Underlined, and *Italicized* values are samples that have been detected and exceed the Class GA groundwater standards and guidance values.
5. "J" indicates an estimated value.
6. (G) indicates guidance value.
7. NA indicates the POC groundwater standard is Not Applicable.
8. "U" indicates that the analyte was analyzed but not detected.
9. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
10. NS = No Standard.

TABLE 3
SUMMARY OF SUB-SLAB AND AMBIENT AIR QUALITY SAMPLING RESULTS

Comfort Inn
Rochester, NY

	SG-1				BA-1				SG-2A				BA-2A				BK-1			
VOC Compounds	**Result µg/m³**	MRL µg/m³	**Result ppbV**	MRL ppbV	**Result µg/m³**	MRL µg/m³	**Result ppbV**	MRL ppbV	**Result µg/m³**	MRL µg/m³	**Result ppbV**	MRL ppbV	**Result µg/m³**	MRL µg/m³	**Result ppbV**	MRL ppbV	**Result µg/m³**	MRL µg/m³	**Result ppbV**	MRL ppbV
Vinyl Chloride	ND	0.71	ND	0.28	ND	0.74	ND	0.29	ND	130	ND	52	ND	0.68	ND	0.27	ND	0.63	ND	0.24
1,1-Dichloroethane	ND	0.71	ND	0.17	ND	0.74	ND	0.18	ND	130	ND	33	ND	0.68	ND	0.17	ND	0.63	ND	0.15
cis-1,2-Dichloroethene	ND	0.71	ND	0.18	ND	0.74	ND	0.19	**5,200**	130	**1,300**	33	ND	0.68	ND	0.17	ND	0.63	ND	0.16
trans-1,2-Dichloroethene	ND	0.71	ND	0.18	ND	0.74	ND	0.19	**160**	130	**41**	33	ND	0.68	ND	0.17	ND	0.63	ND	0.16
Trichloroethene	**4.3**	0.71	**0.80**	0.13	ND	0.74	ND	0.14	**9,900**	130	**1,800**	25	ND	0.68	ND	0.13	ND	0.63	ND	0.12
Tetrachloroethene	**0.79**	0.71	**0.12**	0.10	ND	0.74	ND	0.11	**21,000**	130	**3,100**	19	**1.1**	0.68	**0.16**	0.10	ND	0.63	ND	0.09

Notes:
1. ND = Compound was analyzed for, but not detected above the method reporting limit.
2. MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
3. Samples analyzed by EPA Method TO-15.

Columbia Analytical Services inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

February 17, 2004

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SEAR-BROWN

Mr. Peter Smith
Sear-Brown Group
85 Metro Park
Rochester, NY 14623

PROJECT:BUELL AUTOMATICS #16059
Submission #:R2419990

Dear Mr. Smith

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Karen Bunker

Karen Bunker
Project Manager

Enc.

Columbia Analytical Services inc.

1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : Sear-Brown Group
Project Reference: BUELL AUTOMATICS #16059
Lab Submission # : R2419990
Project Manager : Karen Bunker
Reported : 02/17/04

Report Contains a total of 14 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. Michael K. Perry

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2419990

Lab ID	Client ID
704203	BU-SW1
704204	BU-SW2
704205	Trip Blank

Water samples were collected by Sear Brown on 1/26/04 and received at CAS on the same day. All samples were received at a cooler temperature of 2°C. Custody seals were intact on the cooler upon receipt.

VOLATILE ORGANICS

Two (2) waters and (1) Trip Blank were analyzed using SW-846 method 8260B for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were run for each sample.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

All samples were run within the 14 day holding time for the method.

Run QC is included in the report. All Blank Spike recoveries were within acceptance limits.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for this analysis. The up to 15 of the largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound. "D" flags indicate an additional dilution was analyzed. No hits were found for any of these samples.

The Laboratory Method Blank and Trip Blank were free of contamination from Target Compounds and TIC's.

No problems were encountered during the analysis of these samples.

Columbia Analytical Services INC.
An Employee - Owned Company

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.

P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - As specified in Case Narrative.

* - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

Army Corp of Engineers Validated
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited

NELAP Accredited
New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

H:\GROUP\FORMS\QUALIF_O.DOC

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/17/04

Sear-Brown Group
Project Reference: BUELL AUTOMATICS #16059
Client Sample ID : BU-SW1

Date Sampled : 01/26/04 08:45 **Order #:** 704203 **Sample Matrix:** WATER
Date Received: 01/26/04 **Submission #:** R2419990 **Analytical Run** 100405

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/30/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	69	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	100	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	67	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	101	%
TOLUENE-D8	(88 - 124 %)	100	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	111	%

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-SW1

Lab Name: cas/roch Contract: SEARB

Lab Code: 10145 Case No.: R4-19990 SAS No.: ______ SDG No.: ______

Matrix: (soil/water) WATER Lab Sample ID: 704203 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3671.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. ______ Date Analyzed: 01/30/04

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/17/04

Sear-Brown Group
Project Reference: BUELL AUTOMATICS #16059
Client Sample ID : BU-SW2

Date Sampled : 01/26/04 08:50 **Order #:** 704204 **Sample Matrix:** WATER
Date Received: 01/26/04 **Submission #:** R2419990 **Analytical Run** 100405

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/30/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	89	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	120	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	100	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	101	%
TOLUENE-D8	(88 - 124 %)	99	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	110	%

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-SW2

Lab Name: cas/roch Contract: SEARB

Lab Code: 10145 Case No.: R4-19990 SAS No.: ______ SDG No.: ______

Matrix: (soil/water) WATER Lab Sample ID: 704204 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3672.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. ______ Date Analyzed: 01/30/04

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

7

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/17/04

Sear-Brown Group
Project Reference: BUELL AUTOMATICS #16059
Client Sample ID : TRIP BLANK

Date Sampled : 01/26/04 **Order #:** 704205 **Sample Matrix:** WATER
Date Received: 01/26/04 **Submission #:** R2419990 **Analytical Run** 100405

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/30/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	102	%
TOLUENE-D8	(88 - 124 %)	100	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	111	%

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLK

Lab Name: cas/roch Contract: SEARB

Lab Code: 10145 Case No.: R4-19990 SAS No.: ______ SDG No.: ______

Matrix: (soil/water) WATER Lab Sample ID: 704205 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3670.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. ______ Date Analyzed: 01/30/04

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 706905 ANALYTICAL RUN # : 100405

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 01/30/04			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	105	50 - 150
BENZENE	20.0	87	70 - 130
BROMODICHLOROMETHANE	20.0	103	70 - 130
BROMOFORM	20.0	100	70 - 130
BROMOMETHANE	20.0	90	50 - 150
2-BUTANONE (MEK)	20.0	102	50 - 150
CARBON DISULFIDE	20.0	107	70 - 130
CARBON TETRACHLORIDE	20.0	88	70 - 130
CHLOROBENZENE	20.0	85	70 - 130
CHLOROETHANE	20.0	88	70 - 130
CHLOROFORM	20.0	95	70 - 130
CHLOROMETHANE	20.0	91	70 - 130
DIBROMOCHLOROMETHANE	20.0	97	70 - 130
1,1-DICHLOROETHANE	20.0	90	70 - 130
1,2-DICHLOROETHANE	20.0	105	70 - 130
1,1-DICHLOROETHENE	20.0	83	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	93	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	82	70 - 130
1,2-DICHLOROPROPANE	20.0	88	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	92	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	95	70 - 130
ETHYLBENZENE	20.0	83	70 - 130
2-HEXANONE	20.0	100	70 - 130
METHYLENE CHLORIDE	20.0	97	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	103	70 - 130
STYRENE	20.0	84	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	93	70 - 130
TETRACHLOROETHENE	20.0	82	70 - 130
TOLUENE	20.0	84	70 - 130
1,1,1-TRICHLOROETHANE	20.0	83	70 - 130
1,1,2-TRICHLOROETHANE	20.0	95	70 - 130
TRICHLOROETHENE	20.0	84	70 - 130
VINYL CHLORIDE	20.0	83	70 - 130
O-XYLENE	20.0	83	70 - 130
M+P-XYLENE	40.0	83	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/17/04

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 706904 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 100405

DATE ANALYZED : 01/30/04
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	102	%
TOLUENE-D8	(88 - 124 %)	101	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	110	%

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MET BLK

Lab Name: cas/roch Contract: SEARB

Lab Code: 10145 Case No.: R4-19990 SAS No.: ______ SDG No.: ______

Matrix: (soil/water) WATER Lab Sample ID: met blk

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3662.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. ______ Date Analyzed: 01/30/04

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

Columbia Analytical Services INC.
An Employee - Owned Company
www.caslab.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (585) 288-5380 • 800-695-7222 x11 • FAX (585) 288-8475

PAGE 1 OF 1

SR #

CAS Contact

Project Name: Buell Automatics
Project Number: 16059
Project Manager: Mike Storonsky
Report CC:
Company/Address: Sear-Brown, 85 Metro Park, Rochester, NY 14623
Phone #: 585-475-1440
FAX#: 585-424-5951
Sampler's Signature: D. Meyer / Peter Smith
Sampler's Printed Name: Duann Meyer / Peter Smith

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 (TCL VOC's using Method 8260 + TICs)

Analysis columns: GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP; GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP; GC VOA's ☐ 8021 ☐ 601/602; PESTICIDES ☐ 8081 ☐ 608 ☐ CLP; PCB's ☐ 8082 ☐ 608 ☐ CLP; METALS, TOTAL (List in comments below); METALS, DISSOLVED (List in comments below); TCL VOC's using Method 8260 + TICs

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	TCL VOC's 8260 + TICs	REMARKS/ ALTERNATE DESCRIPTION
BU-SW1	704203	1-26-04	0845	W	3	X	
BU-SW2	704204	1-26-04	0850	W	3	X	
Trip blank	704205	–	–	W	3	X	
Cooler blank		–	–	W	1		

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other ____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
___ I. Results Only
X II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata X Yes ___ No

INVOICE INFORMATION
PO# 16059
BILL TO: Mike Storonsky, 85 Metro Pk, Rochester, NY 14623
SUBMISSION #: R2419900

SAMPLE RECEIPT: CONDITION/COOLER TEMP: 2°C
CUSTODY SEALS: Y N

	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	D. Meyer	[signature]				
Printed Name	Duann Meyer	Gregory O. Esmerian				
Firm	Sear-Brown	CAS				
Date/Time	1-26-04 / 10:30	1-26-04 10:30				

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

#1050

SCOC-1102-08

Cooler Receipt And Preservation Check Form

Project/Client Sear Brown Submission Number R2419990.

Cooler received on 1-26-04 by: AC COURIER: CAS UPS FEDEX CD&L CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did any VOA vials have significant air bubbles? YES NO N/A
5. Were Ice or **Ice packs** present? YES NO
6. Where did the bottles originate? CAS/ROC, CLIENT
7. Temperature of cooler(s) upon receipt: 2° ___ ___ ___ ___

Is the temperature within 0° - 6° C?: Yes Yes Yes Yes Yes

If No, Explain Below No No No No No

Date/Time Temperatures Taken: 1-26-04 @ 10:35

Thermometer ID: 161 or IR GUN Reading From: Temp Blank or Sample Bottle

If out of Temperature, Client Approval to Run Samples ______

Cooler Breakdown: Date : 1/26/04 by: [illegible]

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies: ______

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3					
2	H_2SO_4					
Residual Chlorine (+/-)	for TCN & Phenol					
5-9**	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH ______

**If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				
<2				

Other Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Sear Brown**
Client Sample ID: **SG-2A**
Client Project ID: **Buell Automatics/16059**

CAS Project ID: P2400261
CAS Sample ID: P2400261-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00491

Date Collected: 2/6/04
Date Received: 2/9/04
Date(s) Analyzed: 2/18/04
Volume(s) Analyzed: 0.0050 Liter(s)

Pi 1 = -0.9 Pf 1 = 3.5

D.F. = 1.32

CAS #	**Compound**	**Result** $\mu g/m^3$	MRL $\mu g/m^3$	**Result ppbV**	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	130	ND	52	
75-34-3	1,1-Dichloroethane	ND	130	ND	33	
156-60-5	trans-1,2-Dichloroethene	**160**	130	**41**	33	
156-59-2	cis-1,2-Dichloroethene	**5,200**	130	**1,300**	33	
79-01-6	Trichloroethene	**9,900**	130	**1,800**	25	
127-18-4	Tetrachloroethene	**21,000**	130	**3,100**	19	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:________________ Date:__________

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Sear Brown**
Client Sample ID: **BA-2A**
Client Project ID: **Buell Automatics/16059**

CAS Project ID: P2400261
CAS Sample ID: P2400261-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00530

Date Collected: 2/6/04
Date Received: 2/9/04
Date(s) Analyzed: 2/18/04
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -1.3 Pf 1 = 3.5

D.F. = 1.36

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.68	ND	0.27	
75-34-3	1,1-Dichloroethane	ND	0.68	ND	0.17	
156-60-5	trans-1,2-Dichloroethene	ND	0.68	ND	0.17	
156-59-2	cis-1,2-Dichloroethene	ND	0.68	ND	0.17	
79-01-6	Trichloroethene	ND	0.68	ND	0.13	
127-18-4	Tetrachloroethene	**1.1**	0.68	**0.16**	0.10	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:________________ Date:__________

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Sear-Brown**
Client Sample ID: **BA-1**
Client Project ID: **Buell Road - Comfort Inn/16059**

CAS Project ID: P2400191
CAS Sample ID: P2400191-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00042

Date Collected: 1/28/04
Date Received: 1/30/04
Date(s) Analyzed: 2/10/04
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -2.3 Pf 1 = 3.5

D.F. = 1.47

CAS #	**Compound**	**Result** **µg/m³**	MRL µg/m³	**Result** **ppbV**	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.74	ND	0.29	
75-34-3	1,1-Dichloroethane	ND	0.74	ND	0.18	
156-60-5	trans-1,2-Dichloroethene	ND	0.74	ND	0.19	
156-59-2	cis-1,2-Dichloroethene	ND	0.74	ND	0.19	
79-01-6	Trichloroethene	ND	0.74	ND	0.14	
127-18-4	Tetrachloroethene	ND	0.74	ND	0.11	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:____________________ Date:______________

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Sear-Brown**
Client Sample ID: **SG-1**
Client Project ID: **Buell Road - Comfort Inn/16059**

CAS Project ID: P2400191
CAS Sample ID: P2400191-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: SC00394

Date Collected: 1/28/04
Date Received: 1/30/04
Date(s) Analyzed: 2/10/04
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -1.8 Pf 1 = 3.5

D.F. = 1.41

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.71	ND	0.28	
75-34-3	1,1-Dichloroethane	ND	0.71	ND	0.17	
156-60-5	trans-1,2-Dichloroethene	ND	0.71	ND	0.18	
156-59-2	cis-1,2-Dichloroethene	ND	0.71	ND	0.18	
79-01-6	Trichloroethene	**4.3**	0.71	**0.80**	0.13	
127-18-4	Tetrachloroethene	**0.79**	0.71	**0.12**	0.10	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:________________ Date:________

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Sear-Brown**
Client Sample ID: **BK-1**
Client Project ID: **Buell Road - Comfort Inn/16059**

CAS Project ID: P2400191
CAS Sample ID: P2400191-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/HP5972/HP5890 II+/MS2
Analyst: Michelle Sakamoto
Sampling Media: Summa Canister
Test Notes:
Container ID: AC00376

Date Collected: 1/28/04
Date Received: 1/30/04
Date(s) Analyzed: 2/10/04
Volume(s) Analyzed: 1.00 Liter(s)

Pi 1 = -0.1 Pf 1 = 3.5

D.F. = 1.25

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.63	ND	0.24	
75-34-3	1,1-Dichloroethane	ND	0.63	ND	0.15	
156-60-5	trans-1,2-Dichloroethene	ND	0.63	ND	0.16	
156-59-2	cis-1,2-Dichloroethene	ND	0.63	ND	0.16	
79-01-6	Trichloroethene	ND	0.63	ND	0.12	
127-18-4	Tetrachloroethene	ND	0.63	ND	0.09	

ND = Compound was analyzed for, but not detected above the **laboratory reporting limit**.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:________________ Date:__________

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix E

IRM Final Engineering Report Excerpts

INTERIM REMEDIAL MEASURES
FINAL ENGINEERING REPORT

NYSDEC SITE NO. V00330-8
BROWNFIELD CLEANUP AGREEMENT INDEX NO. B8-0576-00-04A

BUELL AUTOMATICS, INC.
381 BUELL ROAD
ROCHESTER, NEW YORK 14624

MARCH 2004

Prepared for:

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
6274 EAST AVON-LIMA ROAD
AVON, NEW YORK 14414

Prepared on Behalf of:

BUELL AUTOMATICS, INC.
381 BUELL ROAD
ROCHESTER, NEW YORK 14624

Prepared by:

SEAR-BROWN
85 METRO PARK
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TABLE 1a
SUMMARY OF PID HEADSPACE READINGS: IRM EXCAVATION (ppm)
Brownfields Cleanup Program
381 Buell Road
Rochester, NY

Excavation Location	Depth (ft. bgs)	PID Readings	
		Peak (ppm)	Background (ppm)
BU-SWALL-S	6.0	350.0	1.0
BU-SEWALL-S	5.4	560.0	1.0
BU-SEBOTT-S	6.5	600.0	1.0
BU-SWWALL-S	5.3	460.0	1.0
BU-WWALL-S	4.3	500.0	1.0
BU-NWWALL-BOTT-S	6.5	5.5	1.0
BU-NWWALL-SHAL-S	4.6	5.1	1.0
BU-PIER-NSHAL-S	2.8	79.4	1.0
BU-PIER-NMID-S	5.0	42.8	1.0
BU-NWALL-S	5.0	4.7	1.0
BU-EXCDUP-S	5.0	3.4	1.0
BU-NEWALL-S	5.4	21.7	1.0
BU-WWALL2-S	3.6	37.0	1.0
BU-WBOTT-S	6.8	6.8	1.0
BU-RW1-BOTT-S	6.0	3.9	1.0

Notes:
1. ft. bgs = feet below ground surface.
2. ppm = parts per million.
3. PID data collected with ThermoEnvironmental meter equipped with 11.8 eV lamp.

TABLE 9a
SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN SOIL: GEOPROBE BORINGS (ug/kg)

Brownfields Cleanup Program
381 Buell Road
Rochester, New York

Sample ID / Sample Depth (ft. bgs)	SAMPLE LOCATIONS (December 24, 2003)						SAMPLE LOCATIONS (December 31, 2003)						Rec. Soil Cleanup Obj. (1)
	BU-GP1-S3BOTT-S 12.0 - 13.7	BU-GP2-S2TOP-S 5.0 - 7.0	BU-GP3-S1TOP-S 1.3 - 2.3	BU-GP3-S1MID-S 2.3 - 4.0	BU-GP3-S1BOTT-S 4.0 - 5.3	BU-GP3-S2BOTT-S 8.0 - 9.3	BU-GP-5-S 9.0 - 9.5	BU-GP-5-S 12.0 - 12.6	D323 08 GP5 (14-14.5) *DEC Sample*	BU-GP-6-S 10.0 - 10.5	BU-GP-8-S 7.5 - 8.0	BU-GP-10-S 19.8 - 20.0	
Analyte													
Acetone	**6.3** J	120 U	14,000 U	2,900 U	**38**	**29** J	28,000 U	**6** J	**6** J	**5** J	1,500 U	**12**	200
Benzene	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	60
Bromodichloromethane	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
Bromoform	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
Bromomethane	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
2-Butanone	**1.2** J	**13** J	6,800 U	1,500 U	**3.8** J	58 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	300
Carbon Disulfide	12 U	59 U	6,800 U	1,500 U	13 U	58 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	2,700
Carbon Tetrachloride	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	600
Chlorobenzene	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	1,700
Chloroethane	5.9 U	**11** J N	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	1,900
Chloroform	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	300
Chloromethane	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
Dibromochloromethane	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
1,1-Dichloroethane	5.9 U	30 U	***880*** J	730 U	**6.8**	**6.5** J	28,000 U	12 U	12 U	12 U	1,500 U	11 U	200
1,2-Dichloroethane	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	100
1,1-Dichloroethene	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	400
trans-1,2-Dichloroethene	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	300
cis-1,2-Dichloroethene	5.9 U	15 U	***67,000***	**4,400**	**26**	29 U	28,000 U	**9** J	12 U	**7** J	**1,600**	**19**	10,000 *
1,2-Dichloropropane	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
trans-1,3-Dichloropropene	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
cis-1,3-Dichloropropene	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
Ethylbenzene	5.9 U	**190**	3,400 U	730 U	6.5 U	**20** J	28,000 U	12 U	12 U	12 U	1,500 U	11 U	5,500
2-Hexanone	12 U	59 U	6,800 U	1,500 U	13 U	58 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
Methylene Chloride	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	**1** J	12 U	**2** J	1,500 U	**2** J	100
4-Methyl-2-Pentanone	12 U	59 U	6,800 U	1,500 U	13 U	58 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	1,000
Styrene	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
1,1,2,2-Tetrachloroethane	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	600
Tetrachloroethene	5.9 U	30 U	**810** J	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	***2,000***	11 U	1,400
Toluene	5.9 U	30 U	3,400 U	730 U	**1.4** J	29 U	28,000 U	12 U	12 U	12 U	**270** J	11 U	1,500
1,1,1-Trichloroethane	5.9 U	30 U	***3,500***	**340** J	6.5 U	29 U	***3,800*** J	12 U	12 U	12 U	***4,100***	11 U	800
1,1,2-Trichloroethane	5.9 U	30 U	3,400 U	730 U	6.5 U	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	10,000 *
Trichloroethene	5.9 U	**20** J	***120,000***	***8,600***	**21**	**8.0** J	***350,000***	**32**	12 U	**12** J	***320,000*** D	**20**	700
Vinyl Chloride	5.9 U	30 U	3,400 U	***360*** J	**17**	29 U	28,000 U	12 U	12 U	12 U	1,500 U	11 U	200
o-Xylene	5.9 U	**46**	3,400 U	730 U	**2.2** J	**22** J	28,000 U	12 U	12 U	12 U	1,500 U	11 U	1,200
m/p-Xylenes	5.9 U	**450**	3,400 U	730 U	6.5 U	**21** J	28,000 U	12 U	12 U	12 U	**160** J	11 U	1,200
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	10,000 *
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	10,000 *
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	1,600
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	8,500
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	7,900
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	10,000 *
1,2-Dibromoethane	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	10,000 *
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	2,300
Methyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	10,000 *
Methyl tert-Butyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	120
Methylcyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	10,000 *
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	10,000 *
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	6,000
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	12 U	NA	NA	NA	3,400
Total VOC TICs	0	***143,200***	***67,100***	**1,540**	**1,678**	***13,320***	***49,000***	**9**	0	0	***58,700***	0	10,000 *
PID Readings (ppm)	**5.0**	**30**	**250**	**33**	**19**	**13**	**8,000**	**4.0**		**22**	**77**	**0.0**	

Notes:
1. NYSDEC. January 24, 1994. Determination of Soil Cleanup Objectives and Cleanup Levels, Division of Hazardous Waste Remediation. Technical and Administrative Guidance Memorandum (TAGM 4046) HWR 94-4046 (Revised July 2001).
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are analytes that have been detected.
4. **Bold-faced**, Underlined, and *Italicized* values are analytes that have been detected and exceed the TAGM recommended soil cleanup objective.
5. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
6. "J" indicates an estimated value.
7. "U" indicates that the analyte was analyzed but not detected.
8. " * " As per TAGM 4046, both individual VOCs and the sum of VOCs may not exceed 10,000 ppb.
9. bgs = below ground surface
10. "NA" indicates sample was not analyzed for listed analyte.
11. PID Readings (ppm) = Headspace measurements taken in parts per million (ppm) with a Photoionization Detector (PID).

TABLE 9b

SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN SOIL: MONITORING WELL BORINGS (ug/kg)

Brownfields Cleanup Program
381 Buell Road
Rochester, New York

	INVESTIGATION SAMPLE LOCATIONS													IRM (Dec. 30, 2003)		
Identifier	**BU-MW2D-S**	**BU-MW6-S**	**BU-MW7-S**	**BU-MW8-S**	**BU-MW9-S**	**BU-MW10-S**	**BU-MW11-S**	**BU-MW12-S**	**BU-XX-S-DU**	**BU-MW13-S**	**BU-MW14-S**	**BU-MW15-S**	**BU-S-DUP**	**BU-RW1-BOTT-S**	**D323 07 RW1-BOTT** *DEC Sample*	**Rec. Soil Cleanup Obj.** [1]
Sample Depth (ft. bgs)	**8.0 - 10.0**	**15.0 - 15.9**	**16.0 - 18.0**	**16.0 - 18.0**	**4.0 - 6.0**	**8.0 - 10.0**	**10.0 - 12.0**	**4.0 - 5.3**	**12.0 - 14.0**	**6.0 - 8.0**	**15.2 - 16.0**	**11.5 - 12.0**	**11.5 - 12.0**	**6.0**		
Analyte																
Acetone	12 U	11 U	**26** B	**96** B	12 U	11 U	12 U	**17** B	**21** B	**19** B	10 U	**4** J	**4** J	**15**	**32**	200
Benzene	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	60
Bromodichloromethane	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
Bromoform	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
Bromomethane	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
2-Butanone	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	**4** J	300
Carbon Disulfide	12 U	11 U	**2** J	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	2,700
Carbon Tetrachloride	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	600
Chlorobenzene	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	1,700
Chloroethane	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	1,900
Chloroform	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	300
Chloromethane	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
Dibromochloromethane	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
1,1-Dichloroethane	12 U	11 U	11 U	**23** J	**28**	**45**	12 U	12 U	12 U	12 U	10 U	10 U	10 U	**2** J	**2** J	200
1,2-Dichloroethane	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	100
1,1-Dichloroethene	12 U	11 U	11 U	**24** J	12 U	**5** J	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	400
trans-1,2-Dichloroethene	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	300
cis-1,2-Dichloroethene	**190**	**4** J	11 U	**480** U	**90**	**890** D	**11** J	12 U	12 U	12 U	10 U	10 U	10 U	**7** J	**7** J	10,000 *
1,2-Dichloropropane	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
trans-1,3-Dichloropropene	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
cis-1,3-Dichloropropene	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
Ethylbenzene	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	5,500
2-Hexanone	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
Methylene Chloride	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	100
4-Methyl-2-Pentanone	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	1,000
Styrene	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
1,1,2,2-Tetrachloroethane	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	600
Tetrachloroethene	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	1,400
Toluene	12 U	11 U	11 U	6 J	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	1,500
1,1,1-Trichloroethane	12 U	11 U	11 U	60 U	12 U	**4** J	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	800
1,1,2-Trichloroethane	12 U	11 U	11 U	60 U	12 U	**19**	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	10,000 *
Trichloroethene	12 U	**4** J	11 U	***<u>22,000</u>*** **D**	**9** J	**440** D	12 U	12 U	12 U	12 U	10 U	10 U	10 U	**61**	**25**	700
Vinyl Chloride	12 U	11 U	11 U	60 U	**6** J	**28**	**4** J	12 U	12 U	12 U	10 U	10 U	10 U	**5** J	13 U	200
o-Xylene	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	1,200
m/p-Xylenes	12 U	11 U	11 U	60 U	12 U	11 U	12 U	12 U	12 U	12 U	10 U	10 U	10 U	12 U	13 U	1,200
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**8** J	10,000 *
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	10,000 *
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	1,600
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	8,500
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	7,900
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	10,000 *
1,2-Dibromoethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	10,000 *
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	2,300
Methyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	10,000 *
Methyl tert-Butyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	120
Methylcyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**12** J	10,000 *
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	10,000 *
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	6,000
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13 U	3,400
Total VOC TICs	0	**11**	0	0	**10**	**71**	**16**	0	0	0	0	0	0	1,008	1,069	10,000 *
PID Readings (ppm)	**23.3**	**0**	**0**	**3**	**1**	**14**	**0**	**0**	**0**	**0**	**0**	**0**		**3.9**		

Notes:

1. NYSDEC. January 24, 1994. Determination of Soil Cleanup Objectives and Cleanup Levels, Division of Hazardous Waste Remediation. Technical and Administrative Guidance Memorandum (TAGM 4046) HWR 94-4046 (Revised July 2001).
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are analytes that have been detected.
4. **Bold-faced**, <u>Underlined</u>, and *Italicized* values are analytes that have been detected and exceed the TAGM recommended soil cleanup objective.
5. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
6. BU-XX-S-DU is a duplicate analysis of sample BU-MW-12-S.
7. BU-S-DUP is a duplicate analysis of sample BU-MW15-S.
8. "J" indicates an estimated value.
9. "U" indicates that the analyte was analyzed but not detected.
10. "B" indicates the analyte was found in the associated blank.
11. * - As per TAGM 4046, both individual VOCs and the sum of VOCs may not exceed 10,000 ppb.
12. BU-RW1-BOTT-S was collected as part of the Interim Remedial Measures excavation sampling; RW-1 was installed manually.
13. bgs = below ground surface
14. "NA" indicates sample was not analyzed for listed analyte.
15. PID Readings (ppm) - Headspace measurements taken in parts per million (ppm) with a Photoionization Detector (PID).

TABLE 10
SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN SOIL: IRM EXCAVATION (ug/kg)
Brownfields Cleanup Program
381 Buell Road
Rochester, New York

	SAMPLE LOCATIONS														
	WALL SAMPLES														
Identifier	BU-SWALL-S	D323 01	D323 01DL	BU-SEWALL-S	BU-SWWALL-S	BU-WWALL-S	BU-NWWALL-SHAL-S	D323 03	BU-NWALL-S	BU-EXCDUP-S	D323 04	BU-NEWALL-S	BU-WWALL2-S	D323 05	Rec. Soil
EPA Sample No.	SWALLS	South Wall	South Wall	SEWALLS	SWWALLS	WWALLS	NWWALL-SHALS	N Side Seep	NWALL-S	EXCDUP-S	N Sidewall	NEWALL-S	WWALL2-S	W Sidewall	Cleanup
Sample Depth (ft. bgs)	6.0	5.0-6.0	5.0-6.0	5.4	5.3	4.3	4.6	5.0	5.0	5.0	5.0	5.4	3.6	Added Area	Obj. (1)
		DEC Sample	*DEC Sample*					*DEC Sample*			*DEC Sample*			*DEC Sample*	
Analyte															
Acetone	**21**	**46 J**	1,500 U	7,400 U	1,500 U	1,500 U	**29**	**10 J**	**79**	**34**	**30 J**	**84 J**	**18 J**	**40**	200
Benzene	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	**3 J**	25 U	26 U	27 U	66 U	62 U	23 U	12 U	60
Bromodichloromethane	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
Bromoform	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
Bromomethane	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
2-Butanone	**4 J**	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	**4 J**	66 U	**8 J**	23 U	**6 J**	300
Carbon Disulfide	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	2,700
Carbon Tetrachloride	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	600
Chlorobenzene	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	1,700
Chloroethane	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	1,900
Chloroform	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	300
Chloromethane	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
Dibromochloromethane	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
1,1-Dichloroethane	12 U	60 U	1,500 U	***880*** J	1,500 U	1,500 U	**22 J**	25 U	26 U	27 U	66 U	62 U	**4 J**	12 U	200
1,2-Dichloroethane	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	100
1,1-Dichloroethene	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	400
trans-1,2-Dichloroethene	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	300
cis-1,2-Dichloroethene	**11 J**	**230**	1,500 U	***150,000***	**1,100 J**	**1,800**	**89**	**12 J**	26 U	27 U	**46 J**	**17 J**	**270**	**8 J**	10,000 *
1,2-Dichloropropane	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
trans-1,3-Dichloropropene	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
cis-1,3-Dichloropropene	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
Ethylbenzene	12 U	**65**	1,500 U	**940 J**	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	**44 J**	23 U	12 U	5,500
2-Hexanone	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
Methylene Chloride	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	100
4-Methyl-2-Pentanone	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	1,000
Styrene	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
1,1,2,2-Tetrachloroethane	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	600
Tetrachloroethene	12 U	**77**	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	1,400
Toluene	12 U	**11 J**	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	1,500
1,1,1-Trichloroethane	12 U	**44 J**	1,500 U	***6,500*** J	1,500 U	1,500 U	26 U	25 U	26 U	27 U	**7 J**	62 U	23 U	12 U	800
1,1,2-Trichloroethane	12 U	60 U	1,500 U	7,400 U	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	62 U	23 U	12 U	10,000 *
Trichloroethene	**24**	***2,800*** E	***1,700*** D	***110,000*** J	***5,300*** J	***13,000***	26 U	**78**	26 U	27 U	**29 J**	**240 J**	**280**	**24**	700
Vinyl Chloride	12 U	60 U	1,500 U	***3,000*** J	1,500 U	1,500 U	**65**	25 U	26 U	27 U	66 U	62 U	23 U	12 U	200
o-Xylene	**2 J**	**100**	1,500 U	***2,000*** J	1,500 U	1,500 U	26 U	25 U	26 U	27 U	**10 J**	**69 J**	23 U	12 U	1,200
m/p-Xylenes	**2 J**	**86**	1,500 U	***2,300*** J	1,500 U	1,500 U	26 U	25 U	26 U	27 U	66 U	**40 J**	23 U	12 U	1,200
Cyclohexane	NA	60 U	1,500 U	NA	NA	NA	NA	**8 J**	NA	NA	66 U	NA	NA	12 U	10,000 *
1,2-Dibromo-3 chloropropane	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	
1,3-Dichlorobenzene	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	1,600
1,4-Dichlorobenzene	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	8,500
1,2-Dichlorobenzene	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	7,900
Dichlorodifluoromethane	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	10,000 *
1,2-Dibromoethane	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	10,000 *
Isopropylbenzene	NA	**130**	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	2,300
Methylacetate	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	10,000 *
Methyl tert-Butyl Ether	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	120
Methylcyclohexane	NA	**49 J**	1,500 U	NA	NA	NA	NA	**27**	NA	NA	**8 J**	NA	NA	12 U	10,000 *
Trichlorofluoromethane	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	10,000 *
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	60 U	1,500 U	NA	NA	NA	NA	**4 J**	NA	NA	66 U	NA	NA	12 U	6,000
1,2,4-Trichlorobenzene	NA	60 U	1,500 U	NA	NA	NA	NA	25 U	NA	NA	66 U	NA	NA	12 U	3,400
Total VOC TICs	**5,460**	***80,500***	***154,700***	***623,000*** D	**5,410**	**7,640**	**3,460**	**2,206**	**2,361**	**2,301**	**8,150**	***58,300***	**13**	**7**	10,000 *
PID Readings	350			560	460	500	5.1		4.7	3.4		21.7	37.0		

Notes:
1. NYSDEC. January 24, 1994. Determination of Soil Cleanup Objectives and Cleanup Levels. Division of Hazardous Waste Remediation, Technical and Administrative Guidance Memorandum (TAGM 4046) HWR 94-4046 (Revised July 2001).
2. All results are expressed in micrograms per kilogram (ug/kg), which is equivalent to parts per billion.
3. **Bold-faced** values are analytes that have been detected.
4. **Bold-faced, Underlined,** and *Italicized* values are analytes that have been detected and exceed the TAGM recommended soil cleanup objective.
5. "D" indicates reanalysis of sample with additional dilution to address exceedance of instrument calibration range.
6. BU-XX-S-DU is a duplicate analysis of sample BU-MW-12-S.
7. BU-S-DUP is a duplicate analysis of sample BU-MW15-S.
8. "J" indicates an estimated value.
9. "U" indicates that the analyte was analyzed but not detected.
10. "B" indicates the analyte was found in the associated blank.
11. * - As per TAGM 4046, both individual VOCs and the sum of VOCs may not exceed 10,000 ppb.
12. "E" indicates that the analyte concentration exceeded the calibration range of the instrument for that specific analysis.

TABLE 10

SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN SOIL: IRM EXCAVATION (ug/kg)

Brownfields Cleanup Program
381 Buell Road
Rochester, New York

	SAMPLE LOCATIONS								
	BOTTOM SAMPLES						PIER SAMPLES		
Identifier	BU-SEBOTT-S	D323 02	D323 02DL	BU-NWWALL-BOTT-S	BU-WBOTT-S	D323 06	BU-PIER-NSHAL-S	BU-PIER-NMID-S	Rec. Soil
EPA Sample No.	SEBOTTS	South End	South End	WALL-BOTT	WBOTT2-S	W Side Bott	NSHAL-S	NMID-S	Cleanup
Sample Depth (ft. bgs)	6.5	Bott of Exc	Bott of Exc	6.5	6.8	Added Area	2.8	5.0	Obj. (1)
		DEC Sample	*DEC Sample*			*DEC Sample*			
Analyte									
Acetone	7,400 U	6,000 U	7,400 U	**53**	**8 J**	**5 J**	1,500 UJ	1,500 UJ	200
Benzene	7,400 U	6,000 U	7,400 U	**3 J**	25 U	12 U	1,500 UJ	1,500 UJ	60
Bromodichloromethane	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
Bromoform	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
Bromomethane	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
2-Butanone	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	300
Carbon Disulfide	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	2,700
Carbon Tetrachloride	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	600
Chlorobenzene	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	1,700
Chloroethane	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	1,900
Chloroform	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	300
Chloromethane	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
Dibromochloromethane	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
1,1-Dichloroethane	***1,400*** J	***1,200*** J	***1,000*** JD	**10 J**	25 U	12 U	1,500 UJ	1,500 UJ	200
1,2-Dichloroethane	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	100
1,1-Dichloroethene	***890*** J	***610*** J	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	400
trans-1,2-Dichloroethene	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	300
cis-1,2-Dichloroethene	***190,000***	***150,000*** E	***140,000*** D	**5 J**	**57**	**7 J**	**1,700**	**2,000**	10,000 *
1,2-Dichloropropane	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
trans-1,3-Dichloropropene	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
cis-1,3-Dichloropropene	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
Ethylbenzene	**1,900 J**	**1,800 J**	**1,500 JD**	24 U	25 U	12 U	1,500 UJ	**160 J**	5,500
2-Hexanone	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
Methylene Chloride	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	100
4-Methyl-2-Pentanone	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	1,000
Styrene	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
1,1,2,2-Tetrachloroethane	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	600
Tetrachloroethene	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	**540 J**	1,500 UJ	1,400
Toluene	**840 J**	**730 J**	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	1,500
1,1,1-Trichloroethane	***7,100*** J	***7,700***	***7,600*** D	24 U	25 U	12 U	**450 J**	1,500 UJ	800
1,1,2-Trichloroethane	7,400 U	6,000 U	7,400 U	24 U	25 U	12 U	1,500 UJ	1,500 UJ	10,000 *
Trichloroethene	7,400 U	***1,500*** J	***1,100*** JD	**9 J**	**100**	**8 J**	***140,000***	**390 J**	700
Vinyl Chloride	***5,100*** J	6,000 U	7,400 U	**11 J**	25 U	12 U	1,500 UJ	1,500 UJ	200
o-Xylene	***3,500*** J	***3,900*** J	***3,400*** JD	24 U	25 U	12 U	1,500 UJ	**380 J**	1,200
m/p-Xylenes	***4,000*** J	***4,400*** J	***3,700*** JD	24 U	25 U	12 U	1,500 UJ	**450 J**	1,200
Cyclohexane	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	10,000 *
1,2-Dibromo-3-chloropropane	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	10,000 *
1,3-Dichlorobenzene	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	1,600
1,4-Dichlorobenzene	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	8,500
1,2-Dichlorobenzene	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	7,900
Dichlorodifluoromethane	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	10,000 *
1,2-Dibromoethane	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	10,000 *
Isopropylbenzene	NA	**1,800 J**	**1,500 JD**	NA	NA	12 U	NA	NA	2,300
Methylacetate	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	10,000 *
Methyl tert-Butyl Ether	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	120
Methylcyclohexane	NA	**800 J**	7,400 U	NA	NA	12 U	NA	NA	10,000 *
Trichlorofluoromethane	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	10,000 *
1,1,2-Trichloro- 1,2,2-Trifluoroethane	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	6,000
1,2,4-Trichlorobenzene	NA	6,000 U	7,400 U	NA	NA	12 U	NA	NA	3,400
Total VOC TICs	***820,000***	***852,000***	***1,208,000***	3,760	49	0	***26,400***	***147,300***	10,000 *
PID Readings	600			5.5	6.8		79.4	42.8	

Notes:
1. NYSDEC. January 24, 1994. Determination of *Soil Cleanup Objectives* and *Cleanup Levels*, Division of Hazardous Waste Remediation, Technical and Administrative Guidance Memorandum (TAGM 4046) HWR 94-4046 (Revised July 2001).
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7. BU-S-DUP is a duplicate analysis of sample BU-MW15-S.
8. "J" indicates an estimated value.
9. "U" indicates that the analyte was analyzed but not detected.
10. "B" indicates the analyte was found in the associated blank.
11. * = As per TAGM 4046, both individual VOCs and the sum of VOCs may not exceed 10,000 ppb.
12. "E" indicates an estimated value.

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix F

Grain Size Data

3rd rock

580 Olean Road
East Aurora, NY 14052
phone/fax: (716) 655.4933
www.soilstesting.com

Soil • Aggregate • Geosynthetic ***Testing***

February 3, 2004

RECEIVED
FEB 0 4 2004
SEAR-BROWN

Mr. Peter Smith
Sear Brown
85 Metro Park
Rochester, New York 14623

Re: Soil Testing Report – Grain Size Analyses

Dear Mr. Smith:

Enclosed are the soil testing results for eight samples from borings and monitoring wells collected by you. 3rd Rock received the samples on January 16, 2004. Also included is the invoice for this testing. If you should need any further assistance, please contact me.

Sincerely,
3rd Rock, LLC

Jeanne M. Asquith
Laboratory Manager

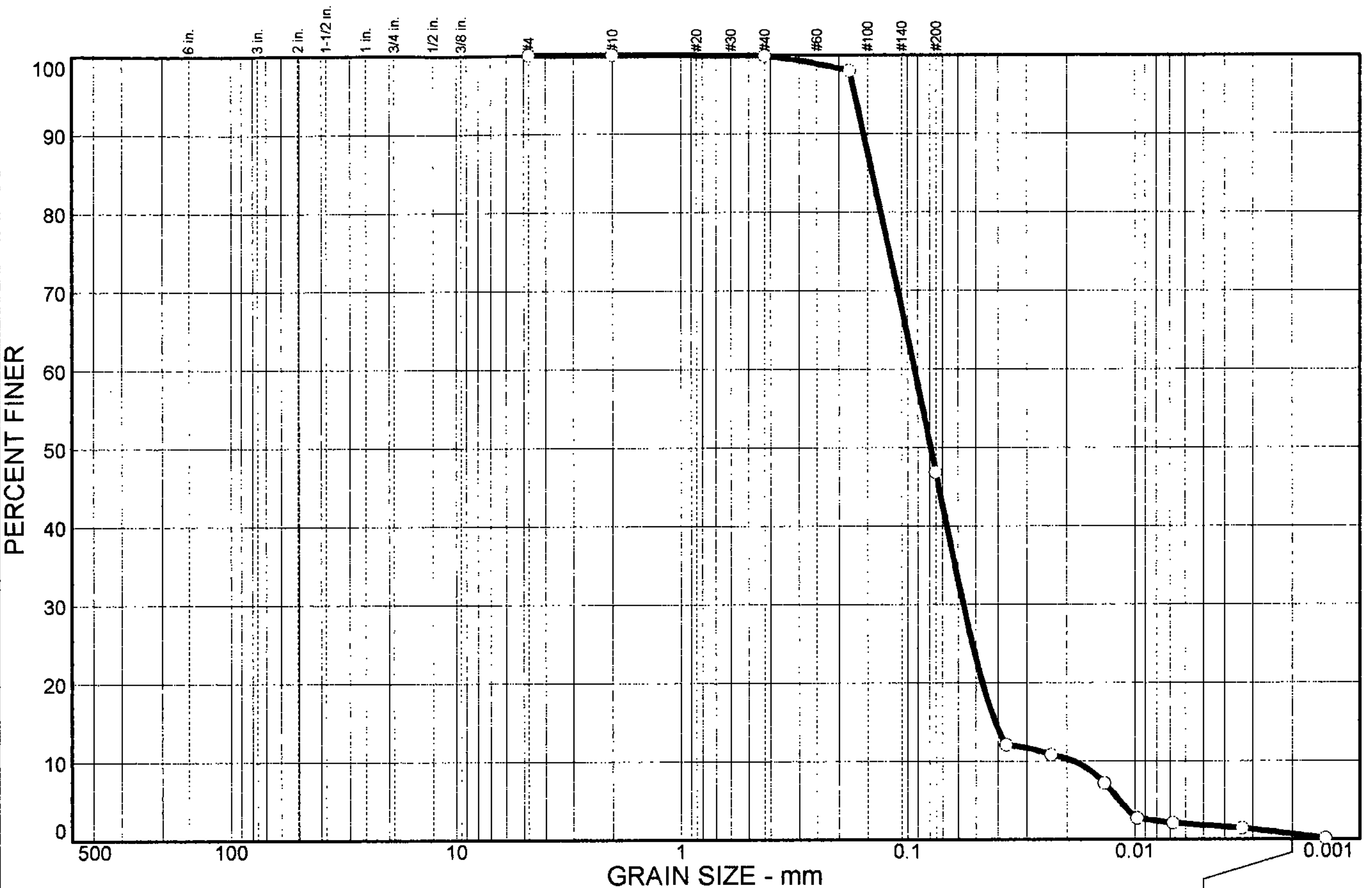
3rd rock

Summary of Grain Size Analyses
Sear Brown

Project No.: 16059

Sample No.	Depth Range, ft	Gravel %	Sand %	Silt %	Clay %	Color Description
MW-8	10-14'	0.0	53.2	46.1	0.7	Reddish Brown Silty Fine Sand
MW-8 (A)	20-22'	1.6	31.5	64.9	2.0	Light Brown Sandy Silt
MW-8 (B)	20-22'	2.4	6.5	52.0	39.1	Grayish Brown Clayey Silt
MW-2D	12-16'	0.0	64.9	34.0	1.1	Brown Silty Fine Sand
MW-2D	20-24'	1.7	7.8	63.7	26.8	Gray Clayey Silt
MW-2D	33-37'	24.5	47.2	27.4	0.9	Gray Silty Sand with Gravel
B-29	5.5-6'	0.0	18.2	81.7	0.1	Brown Sandy Silt
B-29	7.5-8'	0.0	6.2	47.2	46.6	Reddish Brown Silty Clay

Particle Size Distribution Report



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.1	53.1	46.1	0.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#40	99.9		
#80	98.0		
#200	46.8		

* (no specification provided)

Soil Description

ID#04-001

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.143 D_{60}= 0.0933 D_{50}= 0.0790
D_{30}= 0.0568 D_{15}= 0.0411 D_{10}= 0.0186
C_u= 5.01 C_c= 1.86

Classification

USCS= AASHTO=

Remarks

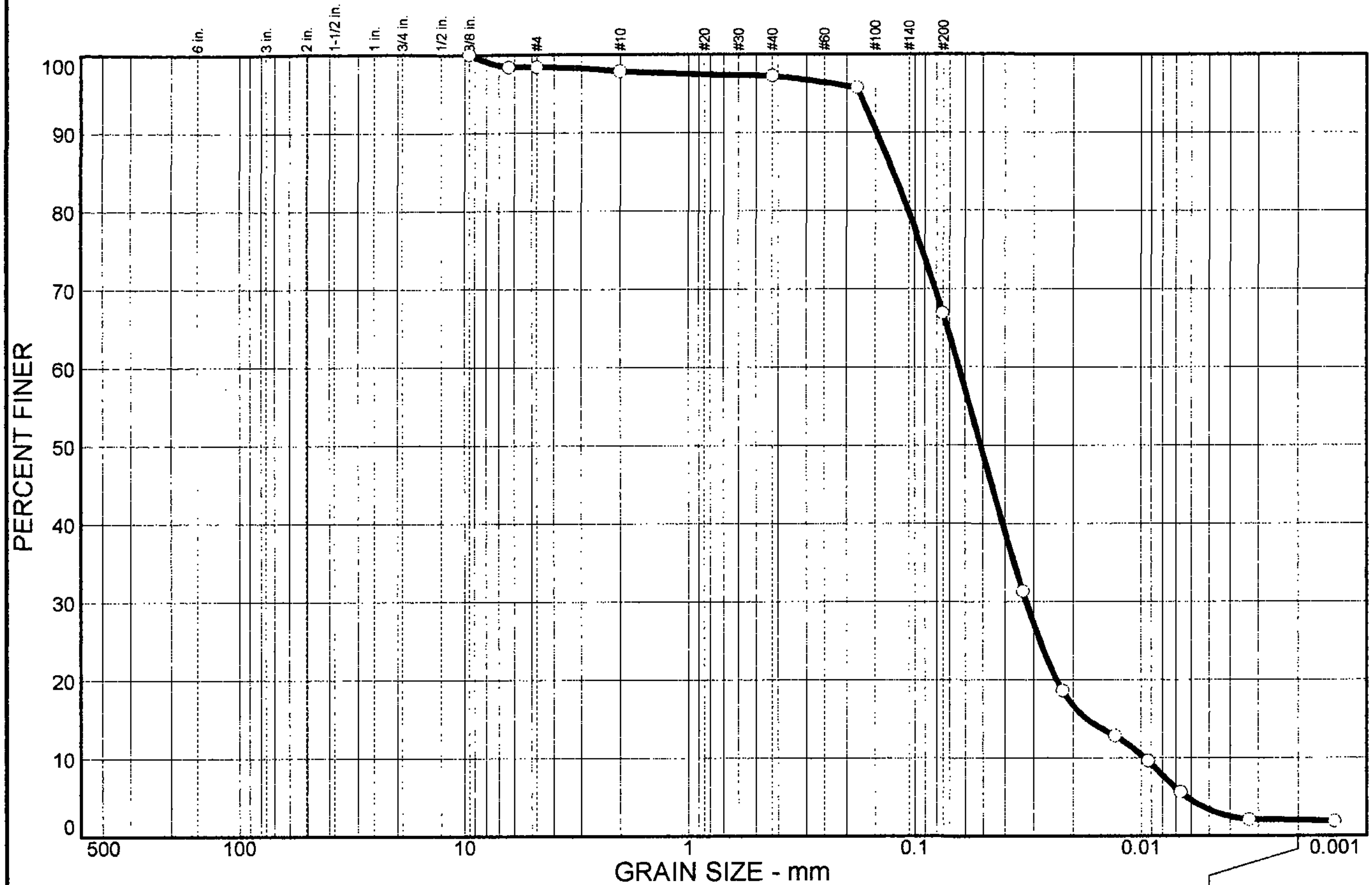
Reddish Brown Silty Fine Sand

Sample No.: MW-8 **Source of Sample:** **Date:** 1/16/04
Location: **Elev./Depth:** 10-14'

3rd Rock, LLC

Client: Sear Brown
Project: 16059
Project No: 04-001 **Plate**

Particle Size Distribution Report



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	1.6	0.6	0.6	30.3	64.9	2.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
1/4 in.	98.4		
#4	98.4		
#10	97.8		
#40	97.2		
#80	95.7		
#200	66.9		

* (no specification provided)

Soil Description

ID#04-002

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.125 D_{60}= 0.0638 D_{50}= 0.0511
D_{30}= 0.0322 D_{15}= 0.0174 D_{10}= 0.0096
C_u= 6.63 C_c= 1.69

Classification

USCS= AASHTO=

Remarks

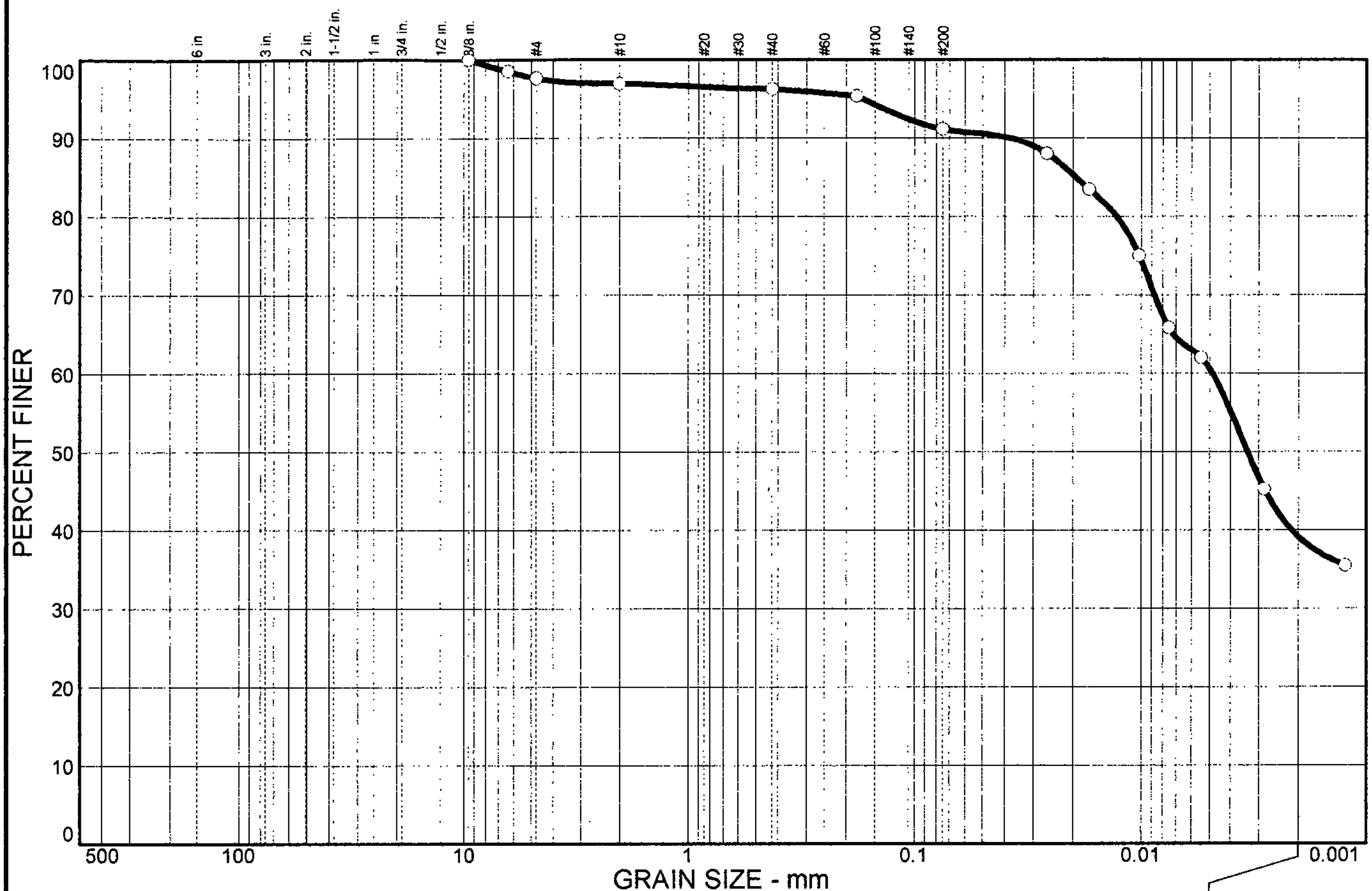
Light Brown Sandy Silt

Sample No.: MW-8(A) **Source of Sample:** **Date:** 1/23/04
Location: **Elev./Depth:** 20-22'

3rd Rock, LLC

Client: Sear Brown
Project: 16059
Project No: 04-001 **Plate**

Particle Size Distribution Report



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	2.4	0.7	0.7	5.1	52.0	39.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
1/4 in.	98.5		
#4	97.6		
#10	96.9		
#40	96.2		
#80	95.3		
#200	91.1		

* (no specification provided)

Soil Description

ID#04-008

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.0195 D_{60}= 0.0048 D_{50}= 0.0034
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

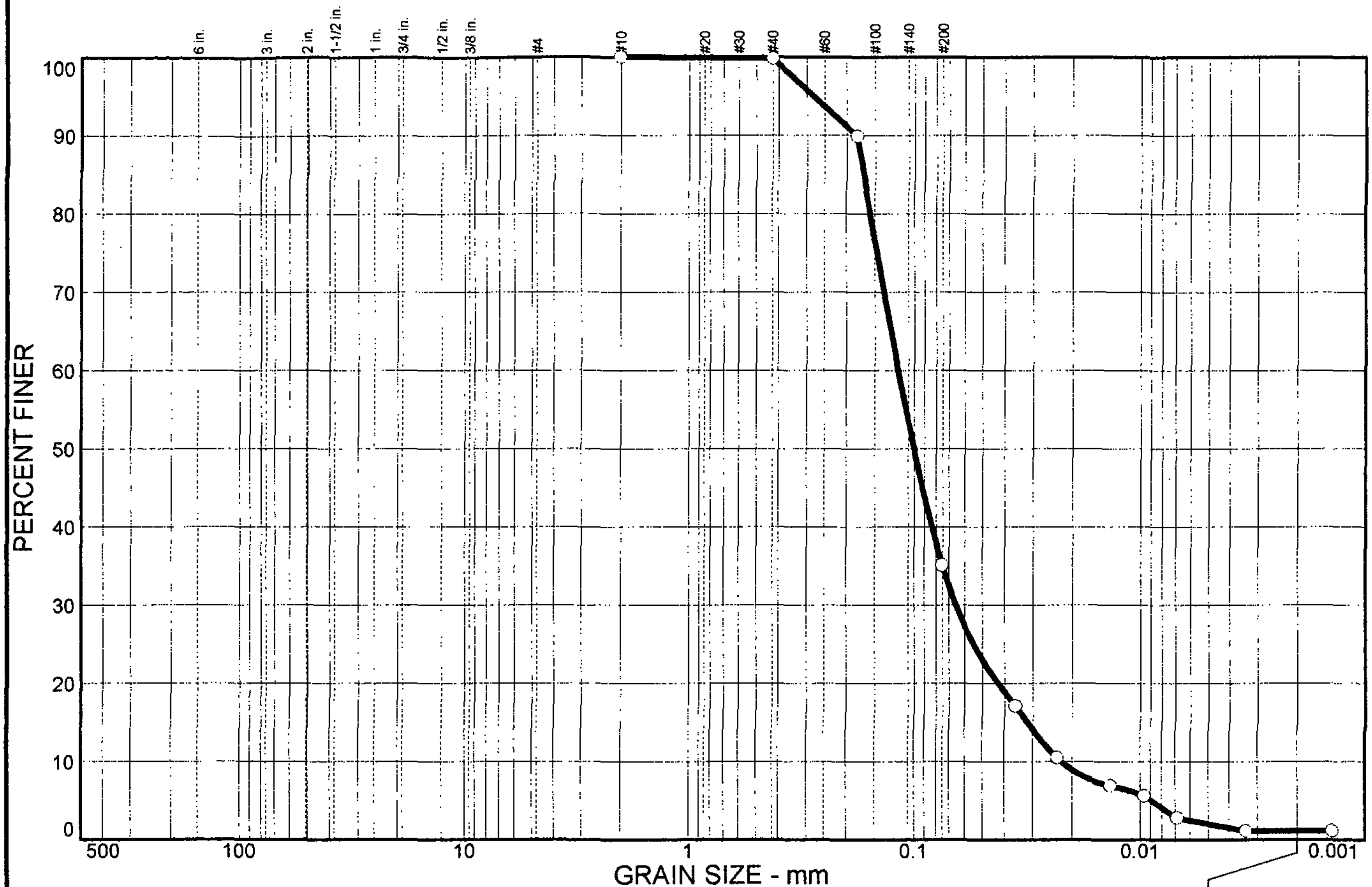
Grayish Brown Clayey Silt

Sample No.: MW-8(B) **Source of Sample:** **Date:** 1/23/04
Location: **Elev./Depth:** 20-22'

3rd Rock, LLC

Client: Sear Brown
Project: 16059
Project No: 04-001 **Plate**

Particle Size Distribution Report



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.2	64.7	34.0	1.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	99.8		
#80	89.9		
#200	35.1		

* (no specification provided)

Soil Description

ID#04-003

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.168 D_{60}= 0.118 D_{50}= 0.100
D_{30}= 0.0653 D_{15}= 0.0315 D_{10}= 0.0222
C_u= 5.31 C_c= 1.63

Classification

USCS= AASHTO=

Remarks

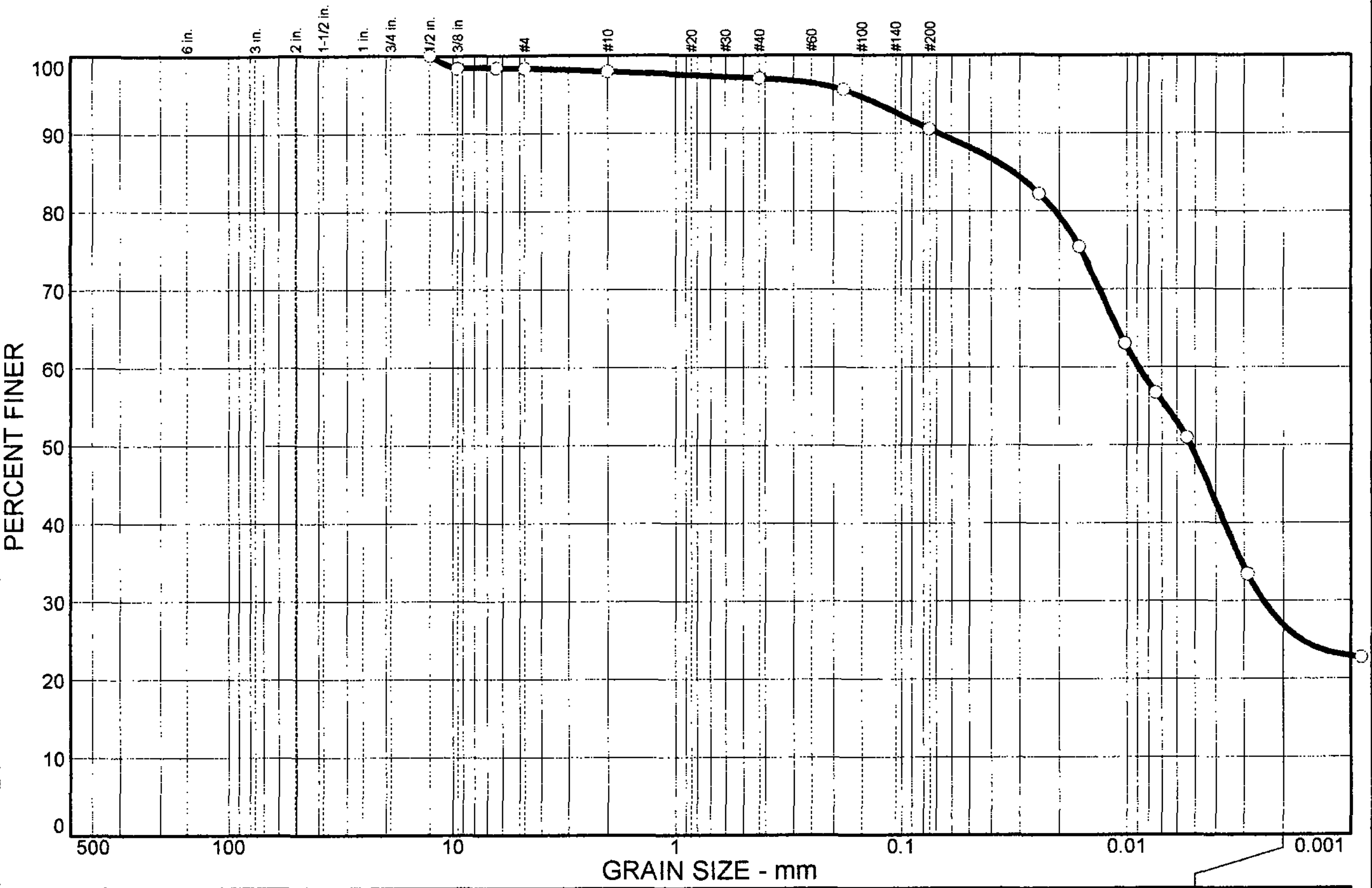
Brown Silty Fine Sand

Sample No.: MW-2D **Source of Sample:** **Date:** 1/21/04
Location: **Elev./Depth:** 12-16'

3rd Rock, LLC

Client: Sear Brown
Project: 16059
Project No: 04-001 **Plate**

Particle Size Distribution Report



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	1.7	0.4	0.9	6.5	63.7	26.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2 in.	100.0		
3/8 in.	98.4		
1/4 in.	98.4		
#4	98.3		
#10	97.9		
#40	97.0		
#80	95.5		
#200	90.5		

* (no specification provided)

Soil Description

ID#04-004

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.0322 D_{60}= 0.0089 D_{50}= 0.0052
D_{30}= 0.0025 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

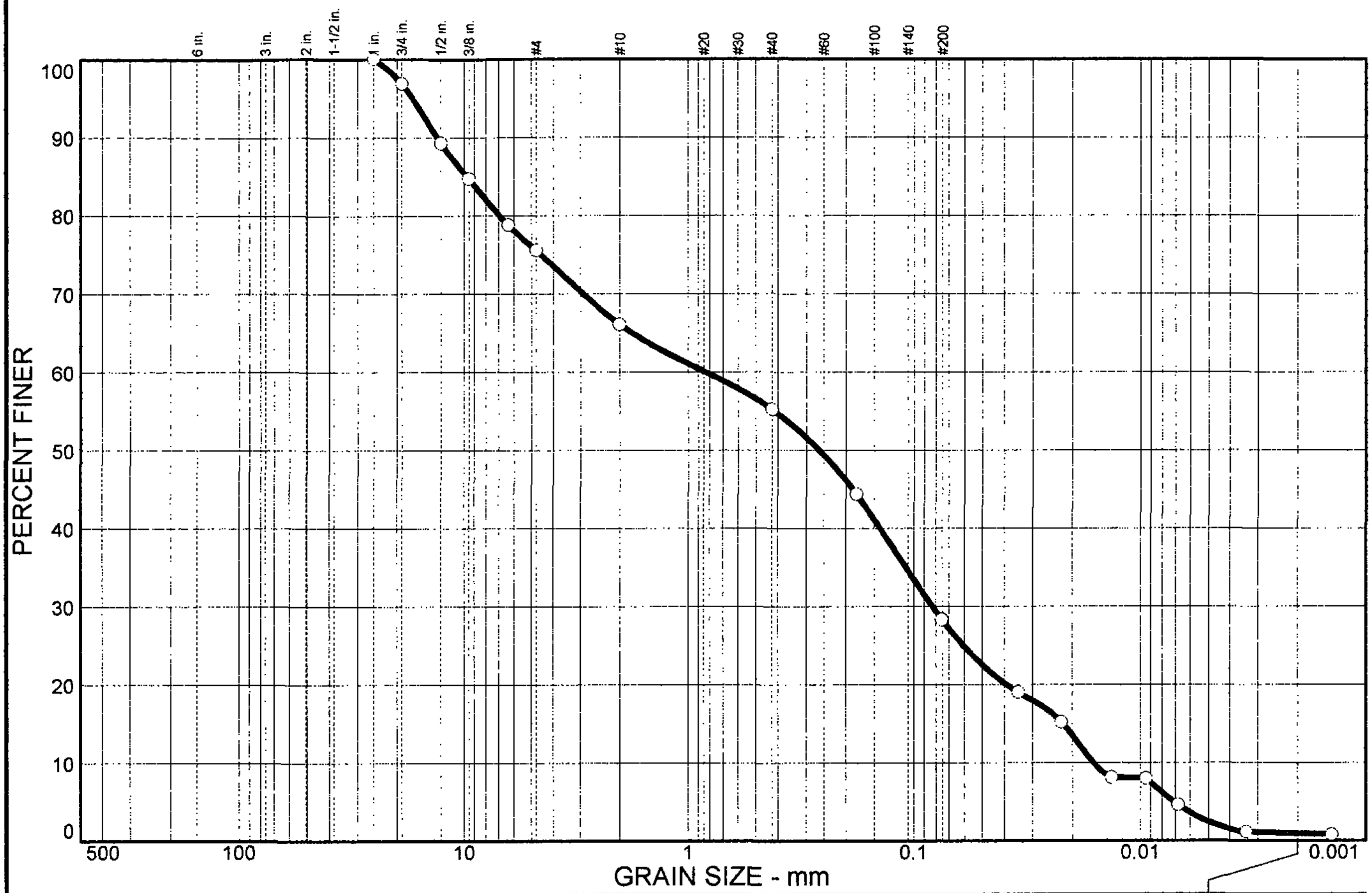
Gray Clayey Silt

Sample No.: MW-2D **Source of Sample:** **Date:** 1/23/04
Location: **Elev./Depth:** 20-24'

3rd Rock, LLC

Client: Sear Brown
Project: 16059
Project No: 04-001 **Plate**

Particle Size Distribution Report



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	3.1	21.4	9.4	10.9	26.9	27.4	0.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1 in.	100.0		
3/4 in.	96.9		
1/2 in.	89.3		
3/8 in.	84.7		
1/4 in.	78.8		
#4	75.5		
#10	66.1		
#40	55.2		
#80	44.4		
#200	28.3		

* (no specification provided)

Soil Description

ID#04-005

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 9.72 D_{60}= 0.836 D_{50}= 0.263
D_{30}= 0.0828 D_{15}= 0.0220 D_{10}= 0.0161
C_u= 51.99 C_c= 0.51

Classification

USCS= AASHTO=

Remarks

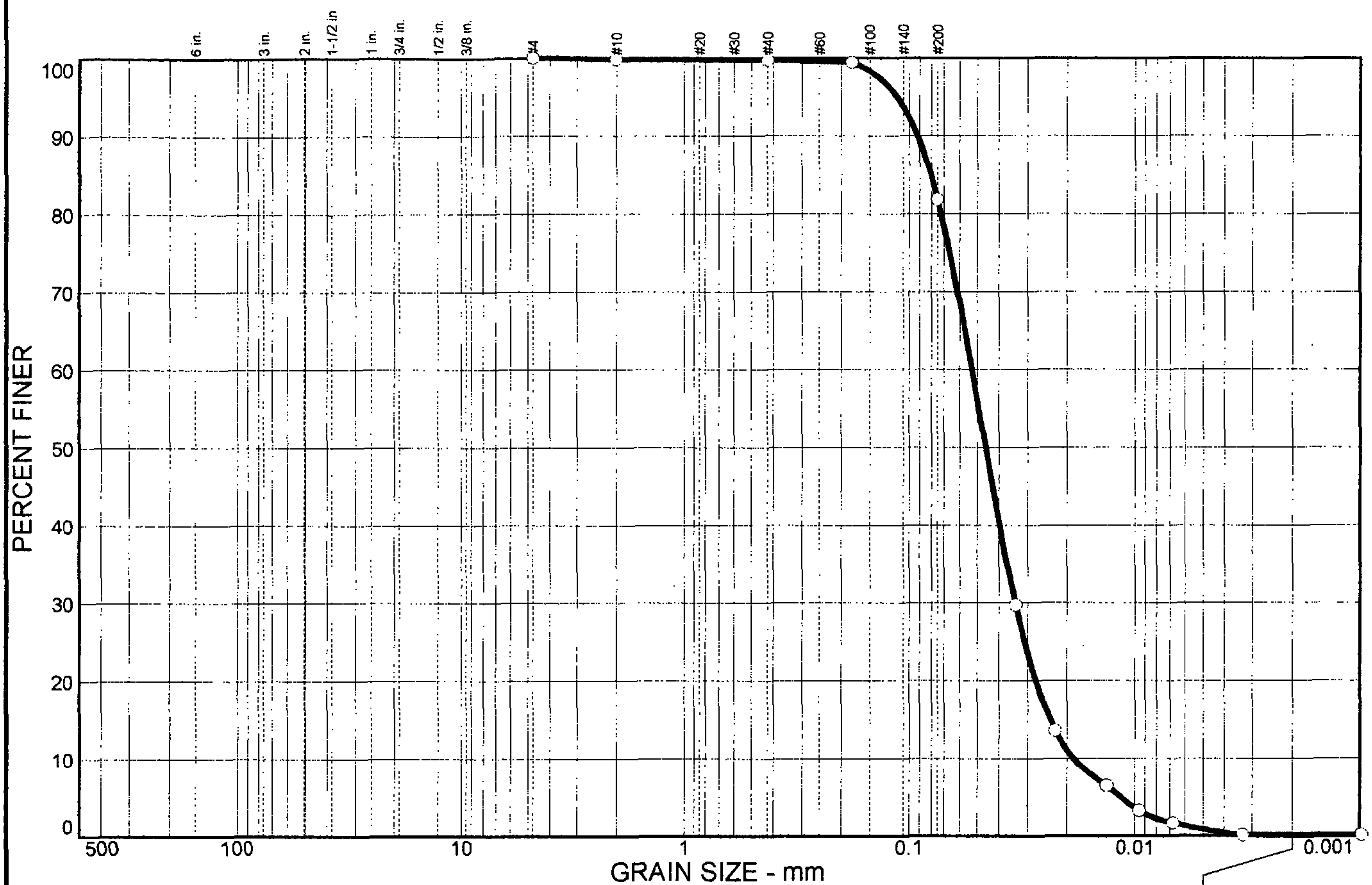
Gray Silty Sand with Gravel

Sample No.: MW-2D **Source of Sample:** **Date:** 1/21/04
Location: **Elev./Depth:** 33-37'

3rd Rock, LLC

Client: Sear Brown
Project: 16059
Project No: 04-001 **Plate**

Particle Size Distribution Report



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.2	0.1	17.9	81.7	0.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#40	99.7		
#80	99.4		
#200	81.8		

* (no specification provided)

Soil Description

ID#04-006

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.0804 D_{60}= 0.0529 D_{50}= 0.0459
D_{30}= 0.0338 D_{15}= 0.0238 D_{10}= 0.0187
C_u= 2.83 C_c= 1.16

Classification

USCS= AASHTO=

Remarks

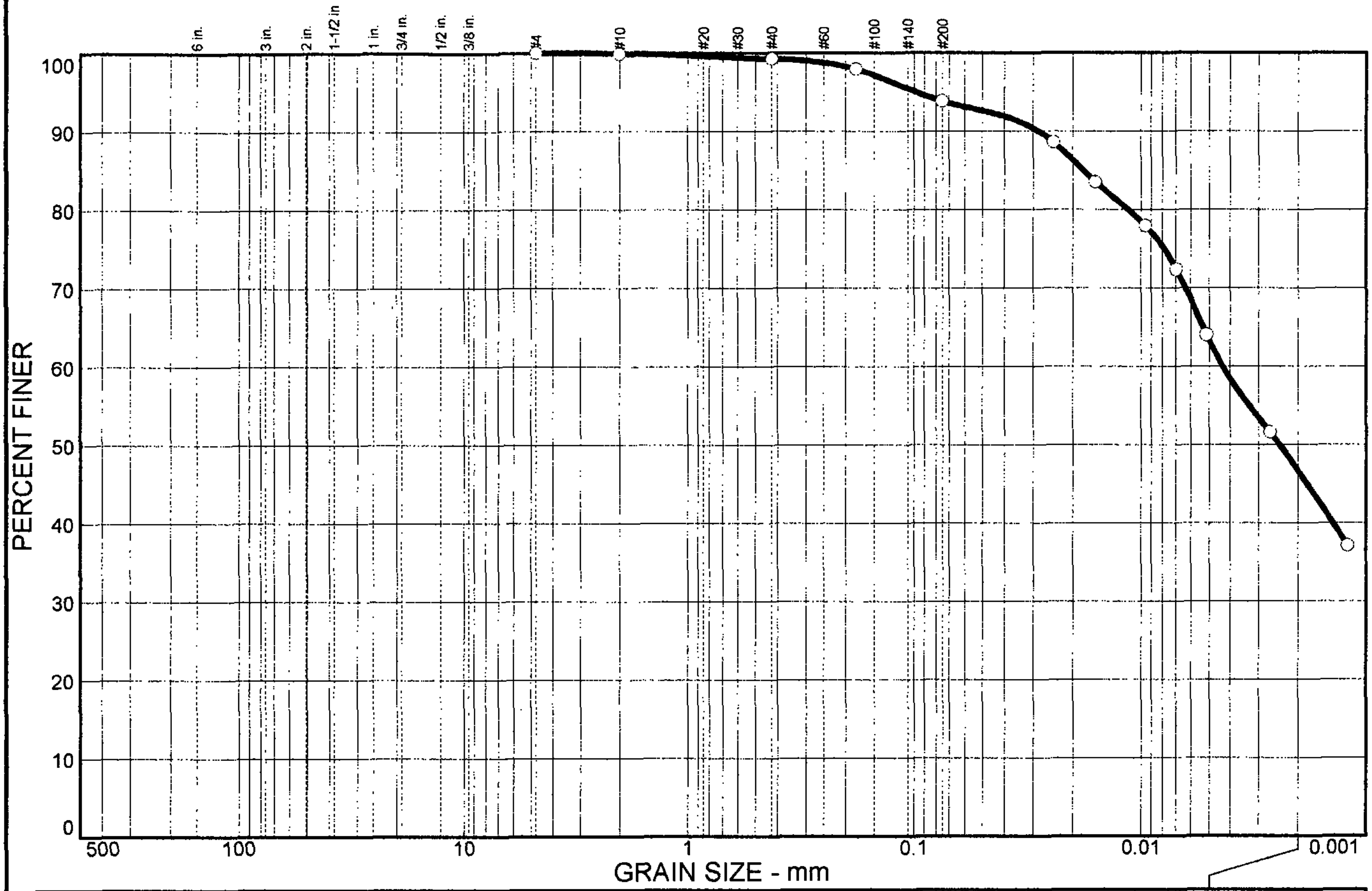
Brown Sandy Silt

Sample No.: B-29 **Source of Sample:** **Date:** 1/16/04
Location: **Elev./Depth:** 5.5-6'

3rd Rock, LLC

Client: Sear Brown
Project: 16059
Project No: 04-001 **Plate**

Particle Size Distribution Report



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	0.7	5.4	47.2	46.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#40	99.2		
#80	97.9		
#200	93.8		

* (no specification provided)

Soil Description

ID#04-007

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.0180 D_{60}= 0.0043 D_{50}= 0.0024
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Reddish Brown Silty Clay

Sample No.: B-29 **Source of Sample:** **Date:** 1/23/04
Location: **Elev./Depth:** 7.5-8'

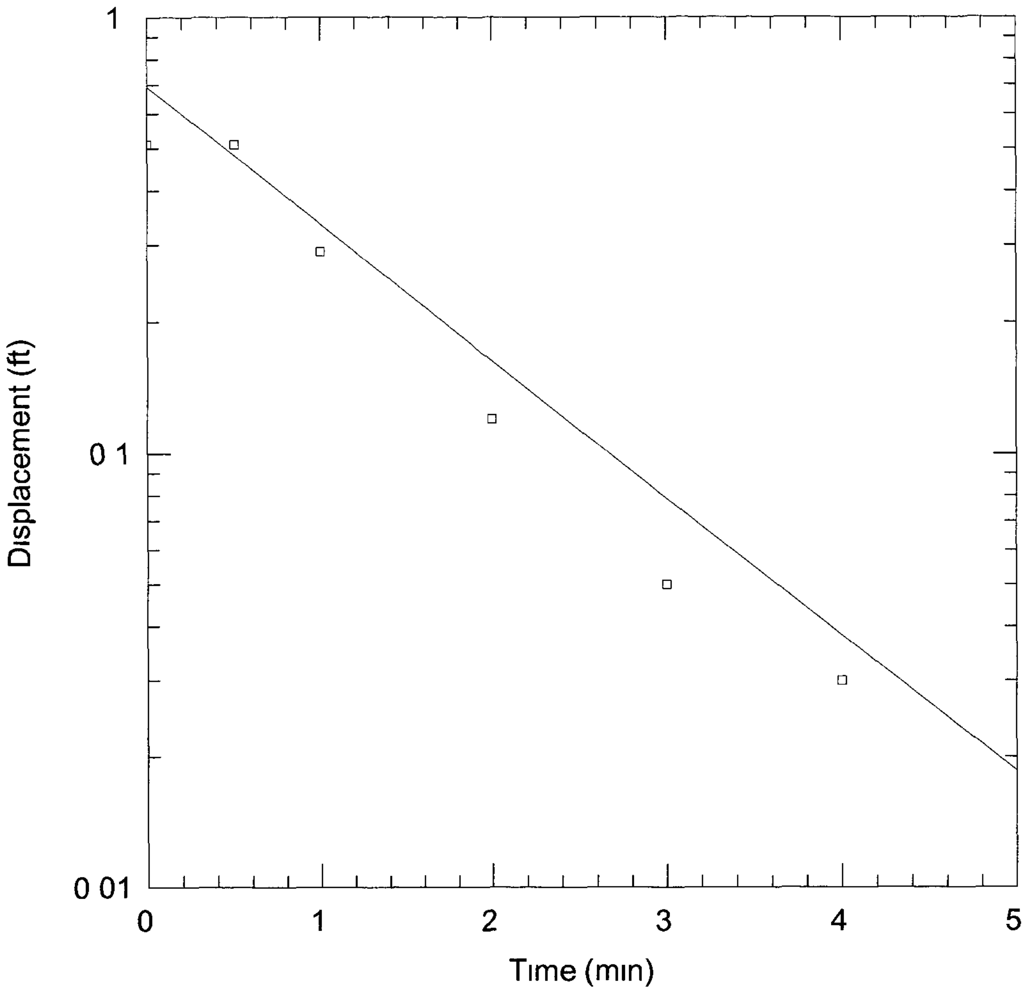
3rd Rock, LLC

Client: Sear Brown
Project: 16059
Project No: 04-001 **Plate**

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix G

Slug Test Data



MW-2 FALLING HEAD TEST

Data Set U \16059\data\Slug test\MW2fall aqt
Date 11/28/06 Time 09 13 24

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Buell Road, Rocheter, NY
Test Well MW-2
Test Date 10/30/02

AQUIFER DATA

Saturated Thickness 36 39 ft Anisotropy Ratio (Kz/Kr) 1

WELL DATA (MW-2)

Initial Displacement 0 51 ft
Total Well Penetration Depth 36 39 ft
Casing Radius 0 083 ft
Static Water Column Height 36 39 ft
Screen Length 10 ft
Wellbore Radius 0 333 ft

SOLUTION

Aquifer Model Unconfined Solution Method Hvorslev

K = 0 0005184 cm/sec y0 = 0 6918 ft

Data Set: U:\16059\data\Slug test\MW2fall.aqt
Title: MW-2 Falling Head Test
Date: 11/28/06
Time: 09:13:29

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Buell Road, Rocheter, NY
Test Date: 10/30/02
Test Well: MW-2

AQUIFER DATA

Saturated Thickness: 36.39 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-2

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.51 ft
Static Water Column Height: 36.39 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 36.39 ft

No. of Observations: 6

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	0.51	3.	0.05
1.	0.29	4.	0.03
2.	0.12	5.	0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 4.096

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0005184	cm/sec
y0	0.6918	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0005184	2.734E-5	cm/sec
y0	0.6918	0.04136	ft

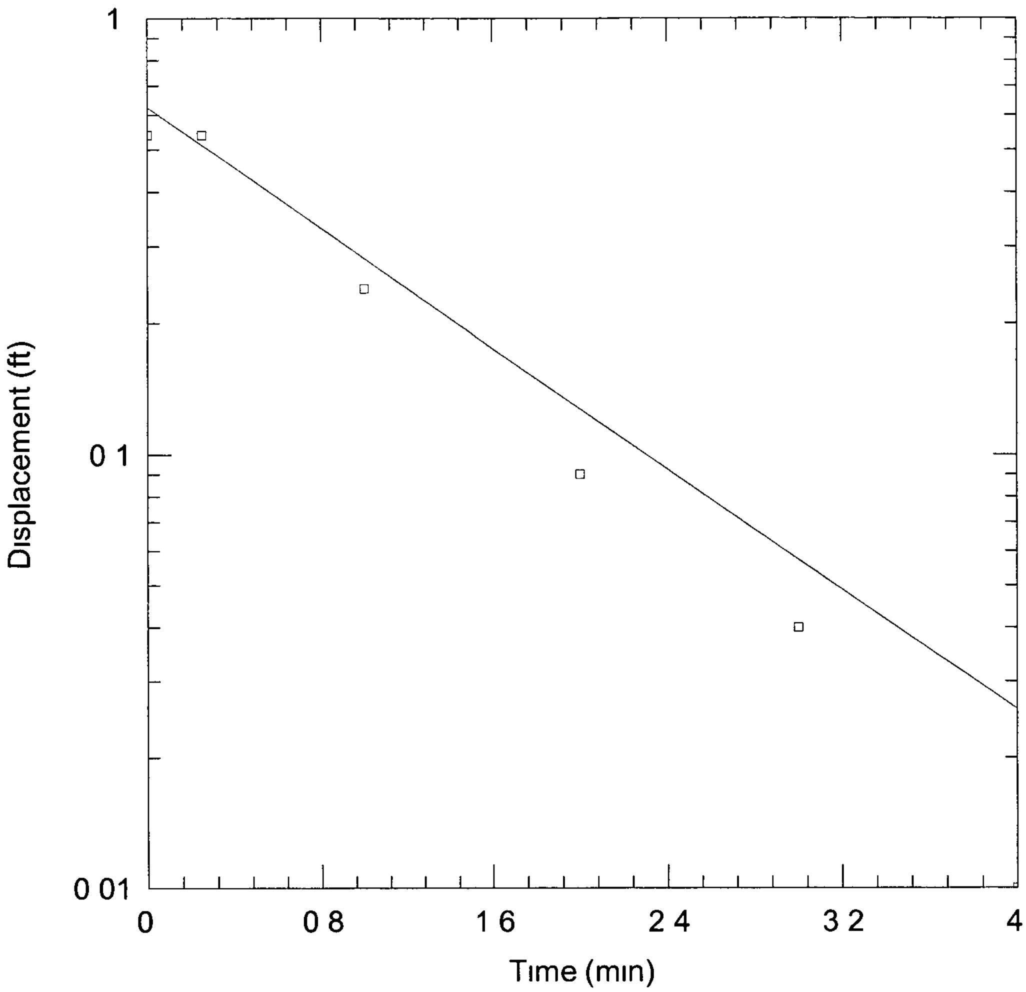
Parameter Correlations

	K	y0
K	1.00	0.92
y0	0.92	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . . 0.000158 ft^2
Variance . . . . 5.266E-5 ft^2
Std. Deviation . . . . 0.007257 ft
Mean . . . . -0.0003924 ft
No. of Residuals 5
No. of Estimates 2



MW-2 RISINGHEAD TEST

Data Set U \16059\data\Slug test\MW2rising aqt
Date 11/28/06 Time 09 14 21

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Buell Road, Rocheter, NY
Test Well MW-2
Test Date 10/30/02

AQUIFER DATA

Saturated Thickness 36 39 ft
Anisotropy Ratio (Kz/Kr) 1

WELL DATA (MW-2)

Initial Displacement 0 54 ft
Total Well Penetration Depth 36 39 ft
Casing Radius 0 083 ft
Static Water Column Height 36 39 ft
Screen Length 10 ft
Wellbore Radius 0 333 ft

SOLUTION

Aquifer Model Unconfined
Solution Method Hvorslev

K = 0 0005702 cm/sec
y0 = 0 6245 ft

Data Set: U:\16059\data\Slug test\MW2rising.aqt
Title: MW-2 RisingHead Test
Date: 11/28/06
Time: 09:14:28

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Buell Road, Rocheter, NY
Test Date: 10/30/02
Test Well: MW-2

AQUIFER DATA

Saturated Thickness: 36.39 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-2

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.54 ft
Static Water Column Height: 36.39 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 36.39 ft

No. of Observations: 5

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.25	0.54	3.	0.04
1.	0.24	4.	0.01
2.	0.09		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 4.096

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0005702	cm/sec
y0	0.6245	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0005702	2.324E-5	cm/sec
y0	0.6245	0.03027	ft

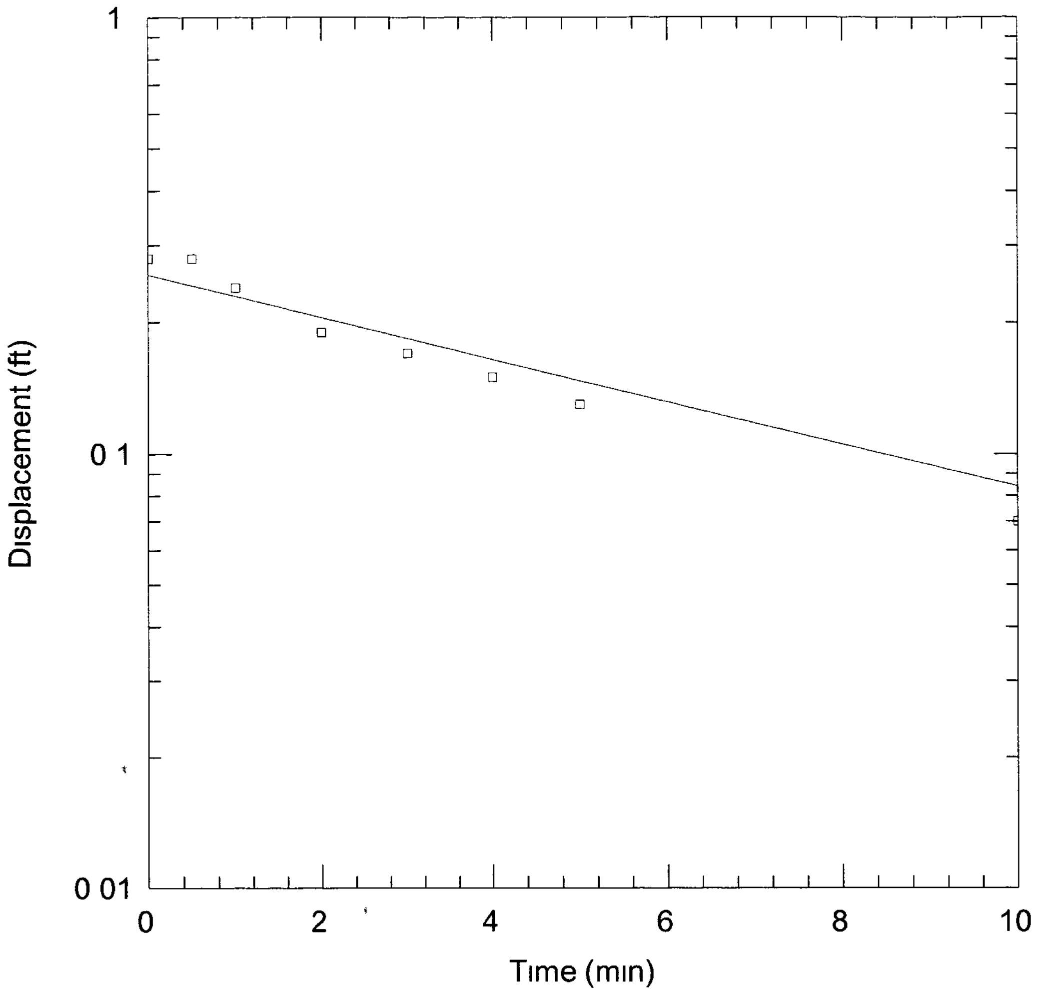
Parameter Correlations

	K	y0
K	1.00	0.94
y0	0.94	1.00

Residual Statistics

for weighted residuals

Sum of Squares ...... 3.87E-5 ft^2
Variance .... 1.935E-5 ft^2
Std. Deviation .... 0.004399 ft
Mean .... -0.0001527 ft
No. of Residuals 4
No. of Estimates 2



MW-6 FALLING HEAD TEST

Data Set U \16059\data\Slug test\mw6fall aqt
Date 11/28/06 Time 09 54 12

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Rochester, New York
Test Well MW-6
Test Date 11/26/02

AQUIFER DATA

Saturated Thickness 4 32 ft
Anisotropy Ratio (Kz/Kr) 0 1

WELL DATA (MW-6)

Initial Displacement 0 28 ft
Total Well Penetration Depth 4 32 ft
Casing Radius 0 08 ft
Static Water Column Height 4 32 ft
Screen Length 14 ft
Wellbore Radius 0 33 ft
Gravel Pack Porosity 0 3

SOLUTION

Aquifer Model Unconfined
Solution Method Hvorslev

K = 0 0003336 cm/sec
y0 = 0 2568 ft

Data Set: U:\16059\data\Slug test\mw6fall.aqt
Title: MW-6 Falling Head Test
Date: 11/28/06
Time: 09:54:16

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Rochester, New York
Test Date: 11/26/02
Test Well: MW-6

AQUIFER DATA

Saturated Thickness: 4.32 ft
Anisotropy Ratio (Kz/Kr): 0.1

SLUG TEST WELL DATA

Test Well: : MW-6

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.28 ft
Static Water Column Height: 4.32 ft
Casing Radius: 0.08 ft
Wellbore Radius: 0.33 ft
Well Skin Radius: 0.33 ft
Screen Length: 14. ft
Total Well Penetration Depth: 4.32 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1927 ft
Gravel Pack Porosity: 0.3

No. of Observations: 7

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	0.28	4.	0.15
1.	0.24	5.	0.13
2.	0.19	10.	0.07
3.	0.17		

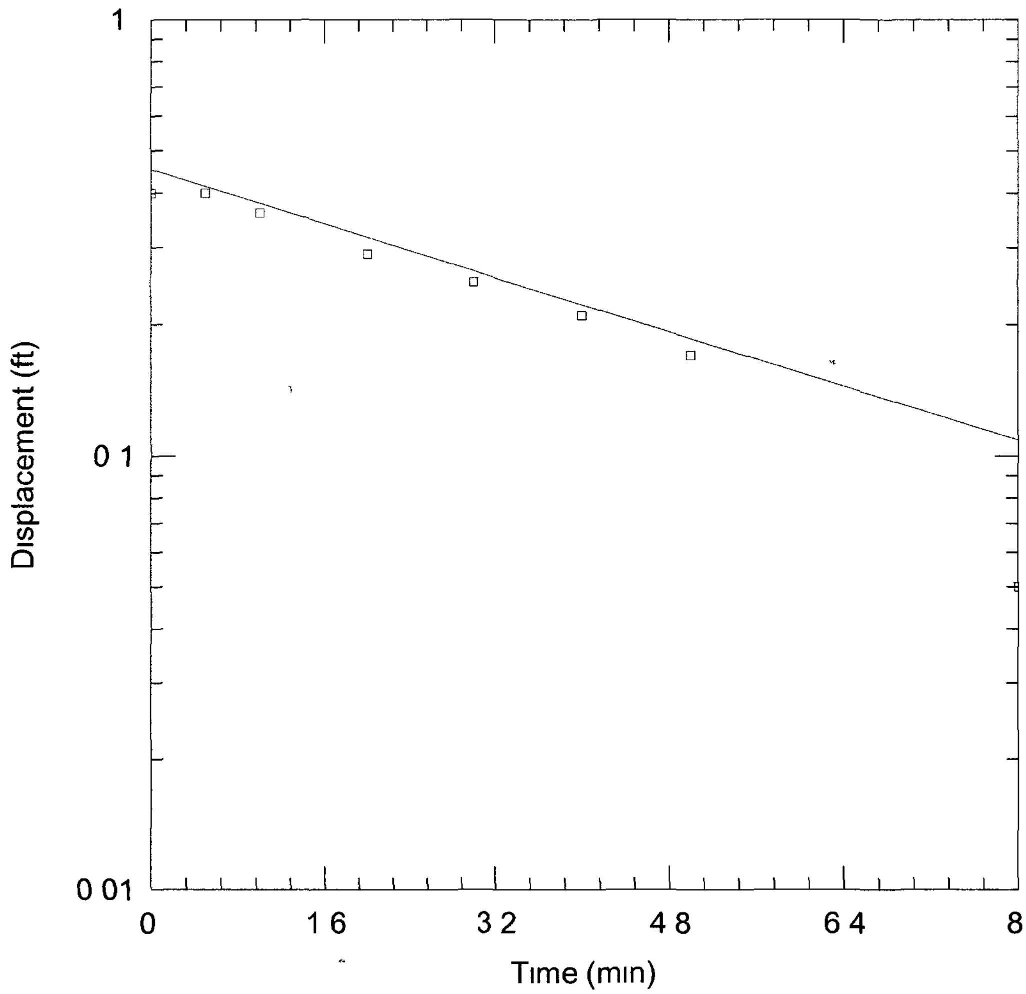
SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 4.441

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0003336	cm/sec



MW-6 RISING HEAD TEST

Data Set U \16059\data\Slug test\mw6rising aqt
Date 11/28/06 Time 09 53 49

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Rochester, New York
Test Well MW-6
Test Date 11/26/02

AQUIFER DATA

Saturated Thickness 4 32 ft Anisotropy Ratio (Kz/Kr) 0 1

WELL DATA (MW-6)

Initial Displacement 0 4 ft
Total Well Penetration Depth 4 32 ft
Casing Radius 0 08 ft
Static Water Column Height 4 32 ft
Screen Length 14 ft
Wellbore Radius 0 33 ft
Gravel Pack Porosity 0 3

SOLUTION

Aquifer Model Unconfined Solution Method Hvorslev

K = 0 0005339 cm/sec y0 = 0 453 ft

Data Set: U:\16059\data\Slug test\mw6rising.aqt
Title: MW-6 Rising Head Test
Date: 11/28/06
Time: 09:53:53

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Rochester, New York
Test Date: 11/26/02
Test Well: MW-6

AQUIFER DATA

Saturated Thickness: 4.32 ft
Anisotropy Ratio (Kz/Kr): 0.1

SLUG TEST WELL DATA

Test Well: : MW-6

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.4 ft
Static Water Column Height: 4.32 ft
Casing Radius: 0.08 ft
Wellbore Radius: 0.33 ft
Well Skin Radius: 0.33 ft
Screen Length: 14. ft
Total Well Penetration Depth: 4.32 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1927 ft
Gravel Pack Porosity: 0.3

No. of Observations: 7

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	0.4	4.	0.21
1.	0.36	5.	0.17
2.	0.29	8.	0.05
3.	0.25		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 4.441

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0005339	cm/sec

y0	0.453	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0005339	5.951E-5	cm/sec
y0	0.453	0.02939	ft

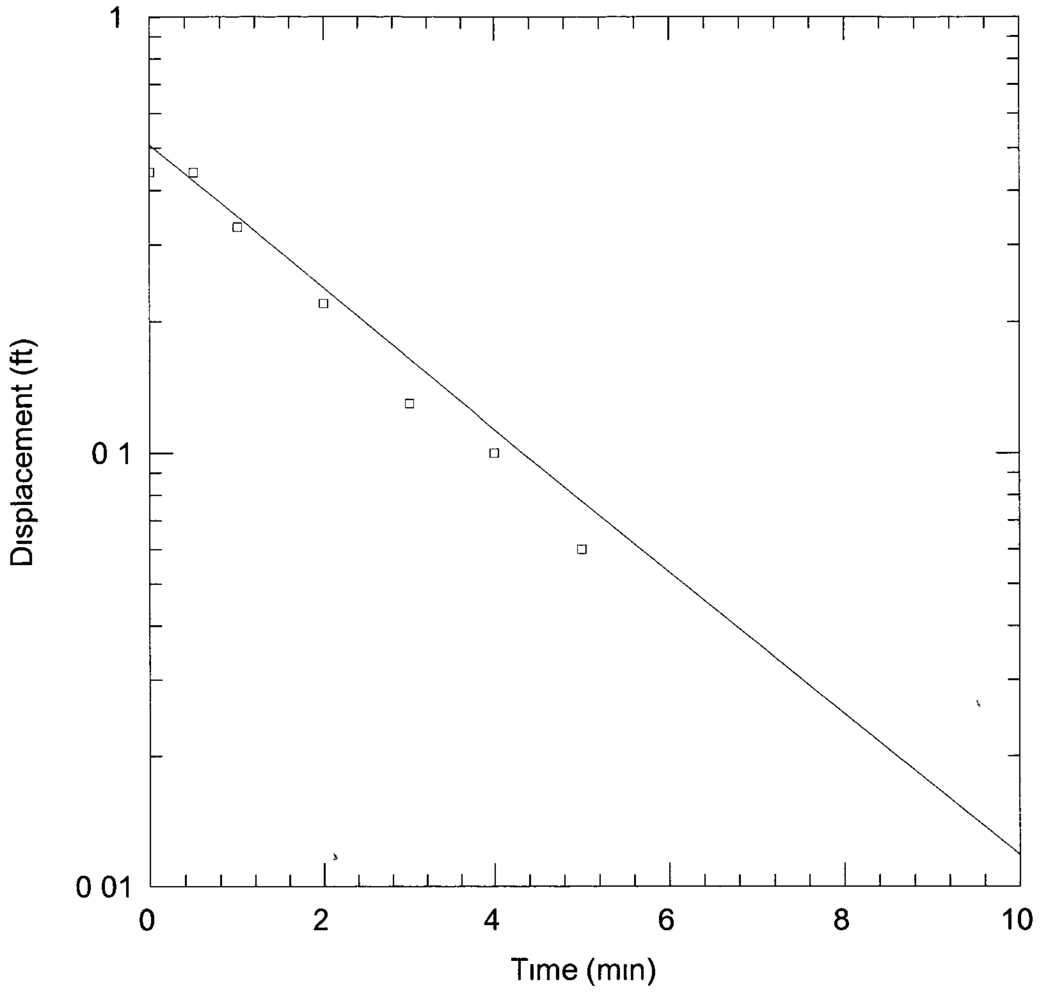
Parameter Correlations

	K	y0
K	1.00	0.84
y0	0.84	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . . 0.001707 ft^2
Variance . . . . 0.0004267 ft^2
Std. Deviation . . . . 0.02066 ft
Mean . . . . -0.001575 ft
No. of Residuals 6
No. of Estimates 2



MW-7 FALLING HEAD TEST

Data Set U \16059\data\Slug test\mw7fall aqt
Date 11/28/06 Time 09 52 53

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Rochester, New York
Test Well MW-7
Test Date 11/26/02

AQUIFER DATA

Saturated Thickness 15 52 ft
Anisotropy Ratio (Kz/Kr) 0 1

WELL DATA (MW-7)

Initial Displacement 0 44 ft
Total Well Penetration Depth 15 52 ft
Casing Radius 0 08 ft
Static Water Column Height 15 52 ft
Screen Length 15 ft
Wellbore Radius 0 33 ft

SOLUTION

Aquifer Model Unconfined
Solution Method Hvorslev

K = 0 0002306 cm/sec
y0 = 0 5075 ft

Data Set: U:\16059\data\Slug test\mw7fall.aqt
Title: MW-7 Falling Head Test
Date: 11/28/06
Time: 09:52:58

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Rochester, New York
Test Date: 11/26/02
Test Well: MW-7

AQUIFER DATA

Saturated Thickness: 15.52 ft
Anisotropy Ratio (Kz/Kr): 0.1

SLUG TEST WELL DATA

Test Well: : MW-7

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.44 ft
Static Water Column Height: 15.52 ft
Casing Radius: 0.08 ft
Wellbore Radius: 0.33 ft
Well Skin Radius: 0.33 ft
Screen Length: 15. ft
Total Well Penetration Depth: 15.52 ft

No. of Observations: 7

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	0.44	4.	0.1
1.	0.33	5.	0.06
2.	0.22	10.	0.
3.	0.13		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 5.661

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0002306	cm/sec
y0	0.5075	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0002306	1.023E-5	cm/sec
y0	0.5075	0.01852	ft

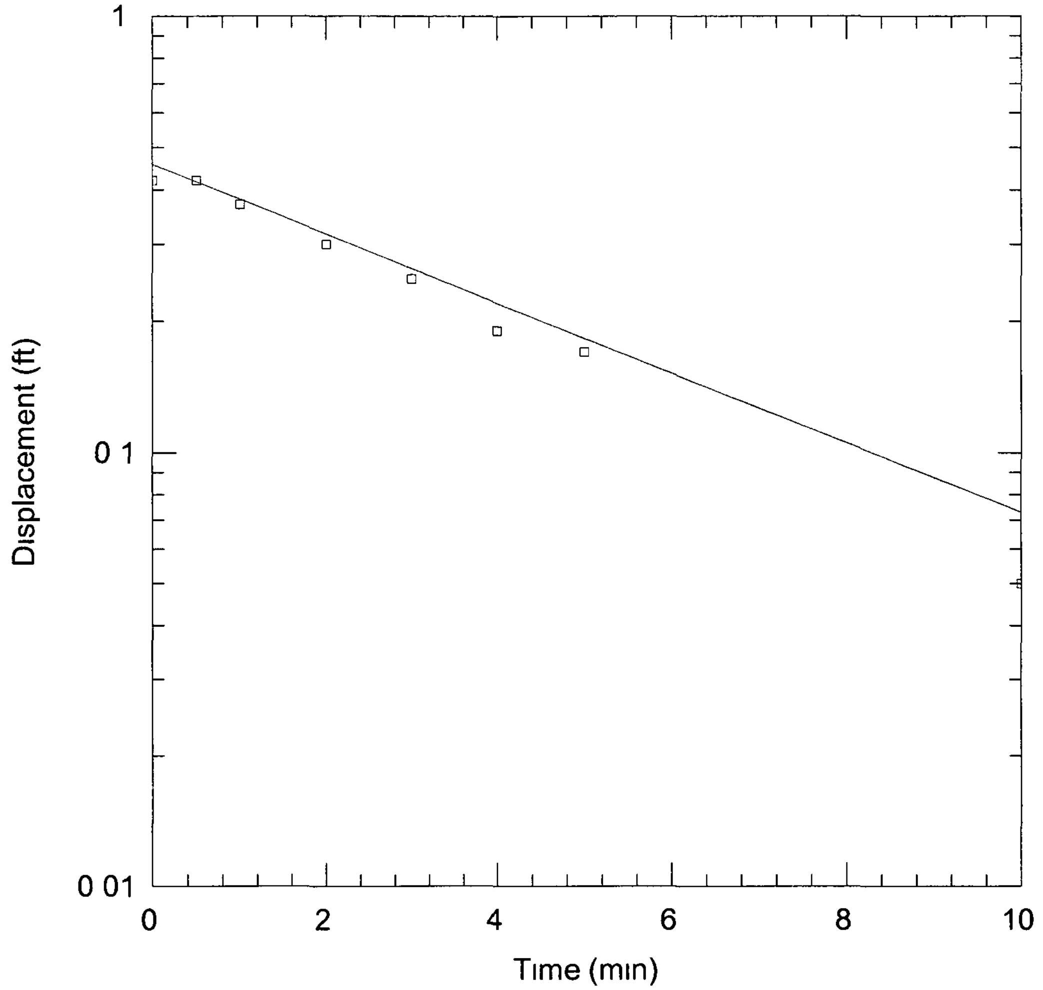
Parameter Correlations

	K	y0
K	1.00	0.87
y0	0.87	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . . 0.0002508 ft^2
Variance . . . . 6.271E-5 ft^2
Std. Deviation . . . . 0.007919 ft
Mean . . . . -0.0008163 ft
No. of Residuals 6
No. of Estimates 2



MW-7 RISING HEAD TEST

Data Set U \16059\data\Slug test\mw7rising aqt
Date 11/28/06 Time 09 52 28

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Rochester, New York
Test Well MW-7
Test Date 11/26/02

AQUIFER DATA

Saturated Thickness 15 52 ft Anisotropy Ratio (Kz/Kr) 0 1

WELL DATA (MW-7)

Initial Displacement 0 42 ft Static Water Column Height 15 52 ft
Total Well Penetration Depth 15 52 ft Screen Length 15 ft
Casing Radius 0 08 ft Wellbore Radius 0 33 ft

SOLUTION

Aquifer Model Unconfined Solution Method Hvorslev

K = 0 0001126 cm/sec y0 = 0 4576 ft

Data Set: U:\16059\data\Slug test\mw7rising.aqt
Title: MW-7 Rising Head Test
Date: 11/28/06
Time: 09:52:34

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Rochester, New York
Test Date: 11/26/02
Test Well: MW-7

AQUIFER DATA

Saturated Thickness: 15.52 ft
Anisotropy Ratio (Kz/Kr): 0.1

SLUG TEST WELL DATA

Test Well: : MW-7

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.42 ft
Static Water Column Height: 15.52 ft
Casing Radius: 0.08 ft
Wellbore Radius: 0.33 ft
Well Skin Radius: 0.33 ft
Screen Length: 15. ft
Total Well Penetration Depth: 15.52 ft

No. of Observations: 7

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	0.42	4.	0.19
1.	0.37	5.	0.17
2.	0.3	10.	0.05
3.	0.25		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 5.661

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0001126	cm/sec
y0	0.4576	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0001126	4.705E-6	cm/sec
y0	0.4576	0.01082	ft

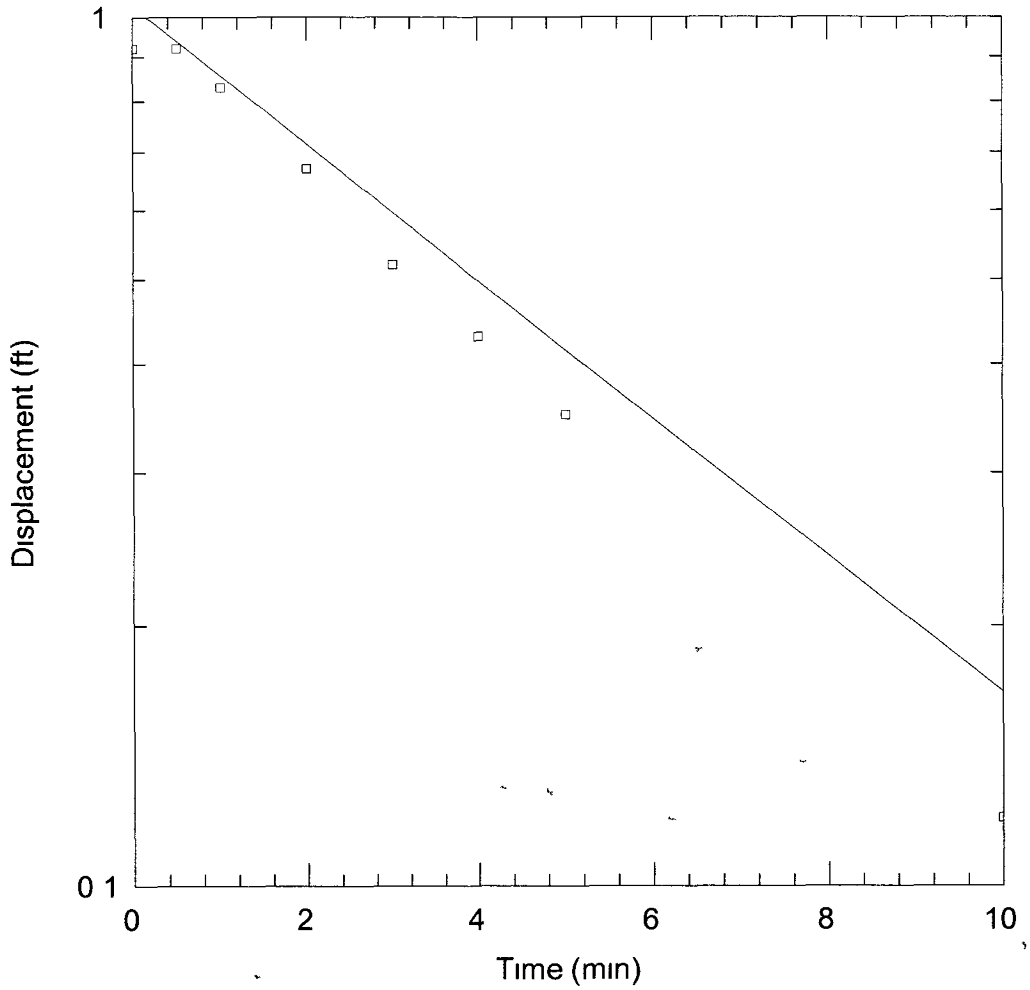
Parameter Correlations

	K	y0
K	1.00	0.84
y0	0.84	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . . 0.0002294 ft^2
Variance . . . . 5.736E-5 ft^2
Std. Deviation . . . . 0.007574 ft
Mean . . . . -0.0004269 ft
No. of Residuals 6
No. of Estimates 2



MW-8 FALLING HEAD TEST	
Data Set U \16059\data\Slug test\mw8fall aqt	
Date 11/28/06	Time 09 47 13

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Buell Road, Rochester New York
Test Well MW-8
Test Date 10/30/02

AQUIFER DATA

Saturated Thickness 9 85 ft	Anisotropy Ratio (Kz/Kr) 1

WELL DATA (MW-8)

Initial Displacement 0 92 ft	Static Water Column Height 9 85 ft
Total Well Penetration Depth 9 85 ft	Screen Length 10 ft
Casing Radius 0 083 ft	Wellbore Radius 0 333 ft
	Gravel Pack Porosity 0 3

SOLUTION

Aquifer Model Unconfined	Solution Method Hvorslev
K = 0 0007179 cm/sec	y0 = 1 028 ft

Data Set: U:\16059\data\Slug test\mw8fall.aqt
Title: MW-8 Falling Head Test
Date: 11/28/06
Time: 09:47:18

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Buell Road, Rochester New York
Test Date: 10/30/02
Test Well: MW-8

AQUIFER DATA

Saturated Thickness: 9.85 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-8

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.92 ft
Static Water Column Height: 9.85 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 9.85 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1952 ft
Gravel Pack Porosity: 0.3

No. of Observations: 7

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	0.92	4.	0.43
1.	0.83	5.	0.35
2.	0.67	10.	0.12
3.	0.52		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 4.096

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0007179	cm/sec

y0	1.028	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0007179	1.091E-5	cm/sec
y0	1.028	0.007472	ft

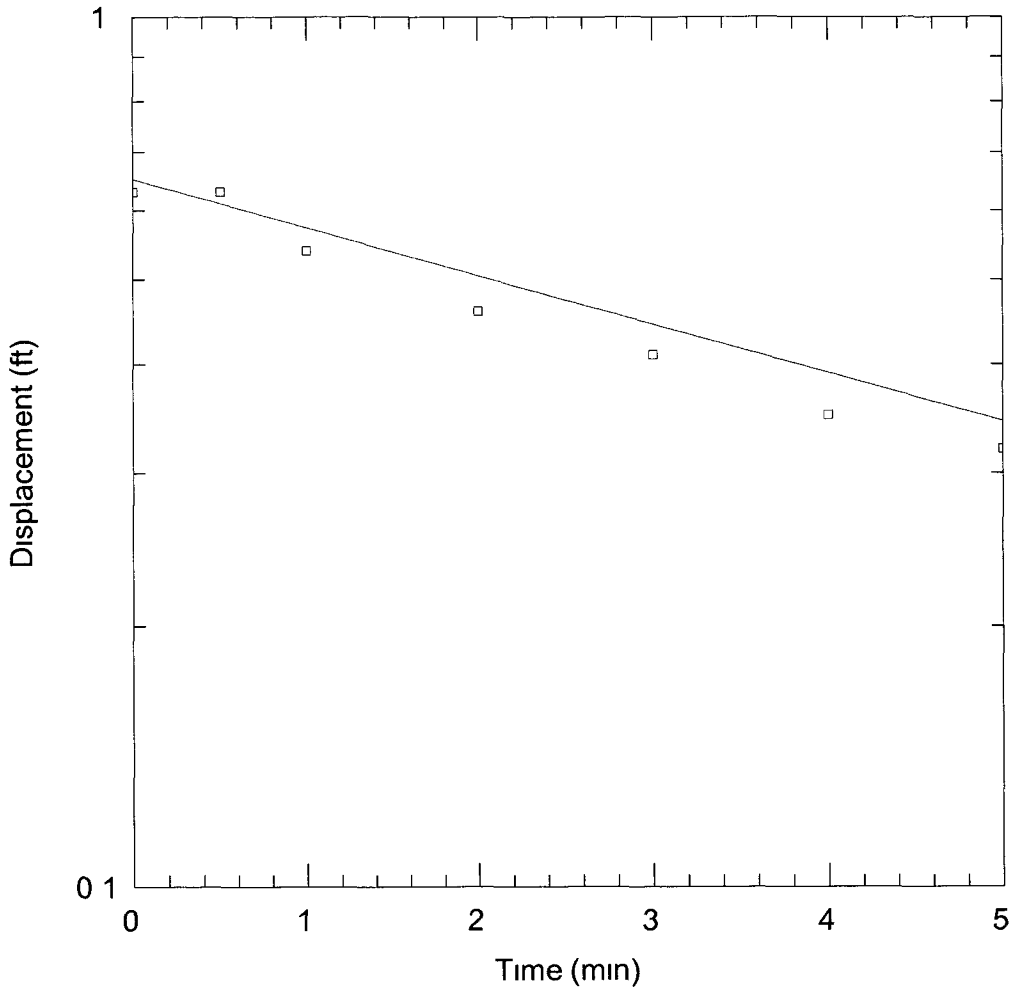
Parameter Correlations

	K	y0
K	1.00	0.76
y0	0.76	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . . 0.0002864 ft^2
Variance . . . . 5.727E-5 ft^2
Std. Deviation . . . . 0.007568 ft
Mean . . . . 0.0003445 ft
No. of Residuals 7
No. of Estimates 2



MW-8 RISING HEAD TEST

Data Set U \16059\data\Slug test\mw8rising aqt
Date 11/28/06 Time 09 47 33

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Buell Road, Rochester New York
Test Well MW-8
Test Date 10/30/02

AQUIFER DATA

Saturated Thickness 9 85 ft
Anisotropy Ratio (Kz/Kr) 1

WELL DATA (MW-8)

Initial Displacement 0 63 ft
Total Well Penetration Depth 9 85 ft
Casing Radius 0 083 ft
Static Water Column Height 9 85 ft
Screen Length 10 ft
Wellbore Radius 0 333 ft
Gravel Pack Porosity 0 3

SOLUTION

Aquifer Model Unconfined
Solution Method Hvorslev
K = 0 0005053 cm/sec
y0 = 0 6516 ft

Data Set: U:\16059\data\Slug test\mw8rising.aqt
Title: MW-8 Rising Head Test
Date: 11/28/06
Time: 09:47:37

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Buell Road, Rochester New York
Test Date: 10/30/02
Test Well: MW-8

AQUIFER DATA

Saturated Thickness: 9.85 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-8

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.63 ft
Static Water Column Height: 9.85 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 9.85 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1952 ft
Gravel Pack Porosity: 0.3

No. of Observations: 6

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	0.63	3.	0.41
1.	0.54	4.	0.35
2.	0.46	5.	0.32

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 4.096

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0005053	cm/sec
y0	0.6516	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0005053	4.288E-5	cm/sec
y0	0.6516	0.01987	ft

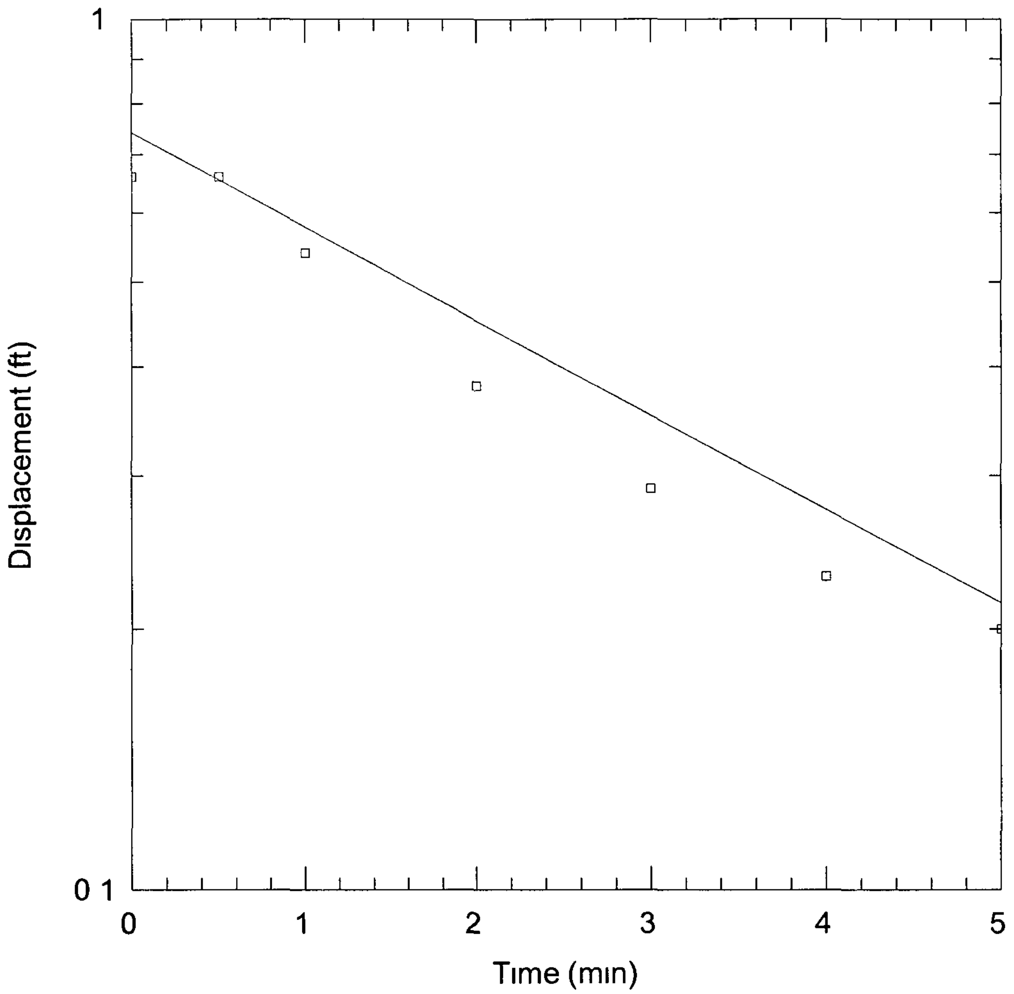
Parameter Correlations

	K	y0
K	1.00	0.80
y0	0.80	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . . 0.001751 ft^2
Variance . . . . 0.0004378 ft^2
Std. Deviation . . . . 0.02092 ft
Mean . . . . 0.0003066 ft
No. of Residuals 6
No. of Estimates 2



MW-9 FALLING HEAD TEST

Data Set U \16059\data\Slug test\mw9fall aqt
Date 11/28/06 Time 09 48 36

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Buell Road, Rochester New York
Test Well MW-9
Test Date 10/30/02

AQUIFER DATA

Saturated Thickness 10 01 ft Anisotropy Ratio (Kz/Kr) 1

WELL DATA (MW-9)

Initial Displacement 0 66 ft
Total Well Penetration Depth 10 01 ft
Casing Radius 0 083 ft
Static Water Column Height 10 01 ft
Screen Length 10 ft
Wellbore Radius 0 333 ft

SOLUTION

Aquifer Model Unconfined Solution Method Hvorslev

K = 0 0001778 cm/sec y0 = 0 7412 ft

Data Set: U:\16059\data\Slug test\mw9fall.aqt
Title: MW-9 Falling Head Test
Date: 11/28/06
Time: 09:48:40

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Buell Road, Rochester New York
Test Date: 10/30/02
Test Well: MW-9

AQUIFER DATA

Saturated Thickness: 10.01 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-9

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.66 ft
Static Water Column Height: 10.01 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 10.01 ft

No. of Observations: 6

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	0.66	3.	0.29
1.	0.54	4.	0.23
2.	0.38	5.	0.2

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 4.096

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0001778	cm/sec
y0	0.7412	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0001778	1.317E-5	cm/sec
y0	0.7412	0.02939	ft

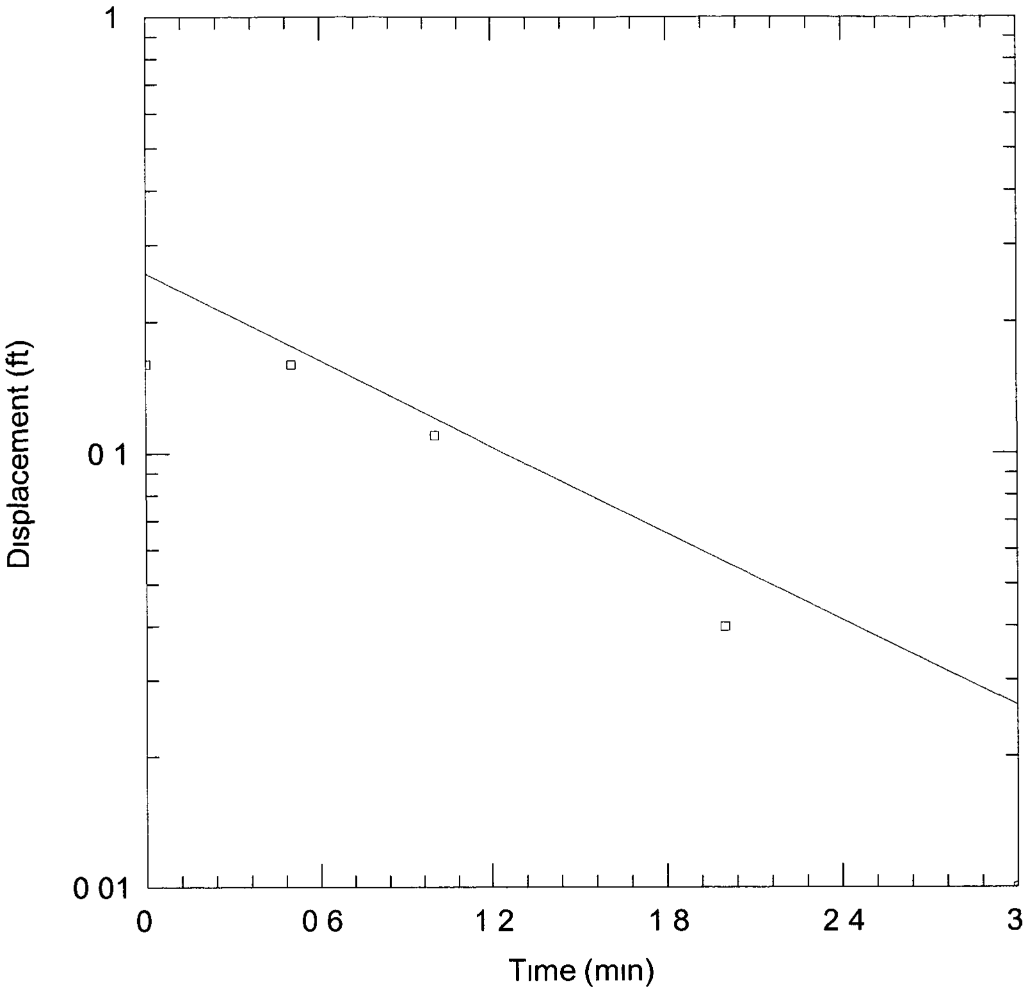
Parameter Correlations

	K	y0
K	1.00	0.77
y0	0.77	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . . 0.002652 ft^2
Variance . . . . 0.000663 ft^2
Std. Deviation . . . . 0.02575 ft
Mean . . . . 0.001707 ft
No. of Residuals 6
No. of Estimates 2



MW-9 RISING HEAD TEST

Data Set U \16059\data\Slug test\mw9rising aqt
Date 11/28/06 Time 09 48 57

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 16059
Location Buell Road, Rochester New York
Test Well MW-9
Test Date 10/30/02

AQUIFER DATA

Saturated Thickness 10 01 ft Anisotropy Ratio (Kz/Kr) 1

WELL DATA (MW-9)

Initial Displacement 0 16 ft
Total Well Penetration Depth 10 01 ft
Casing Radius 0 083 ft
Static Water Column Height 10 01 ft
Screen Length 10 ft
Wellbore Radius 0 333 ft

SOLUTION

Aquifer Model Unconfined Solution Method Hvorslev
K = 0 0005456 cm/sec y0 = 0 2581 ft

Data Set: U:\16059\data\Slug test\mw9rising.aqt
Title: MW-9 Rising Head Test
Date: 11/28/06
Time: 09:49:03

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 16059
Location: Buell Road, Rochester New York
Test Date: 10/30/02
Test Well: MW-9

AQUIFER DATA

Saturated Thickness: 10.01 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-9

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 0.16 ft
Static Water Column Height: 10.01 ft
Casing Radius: 0.083 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 10.01 ft

No. of Observations: 4

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	0.16	2.	0.04
1.	0.11	3.	0.01

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 4.096

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0005456	cm/sec
y0	0.2581	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0005456	5.358E-5	cm/sec
y0	0.2581	0.019	ft

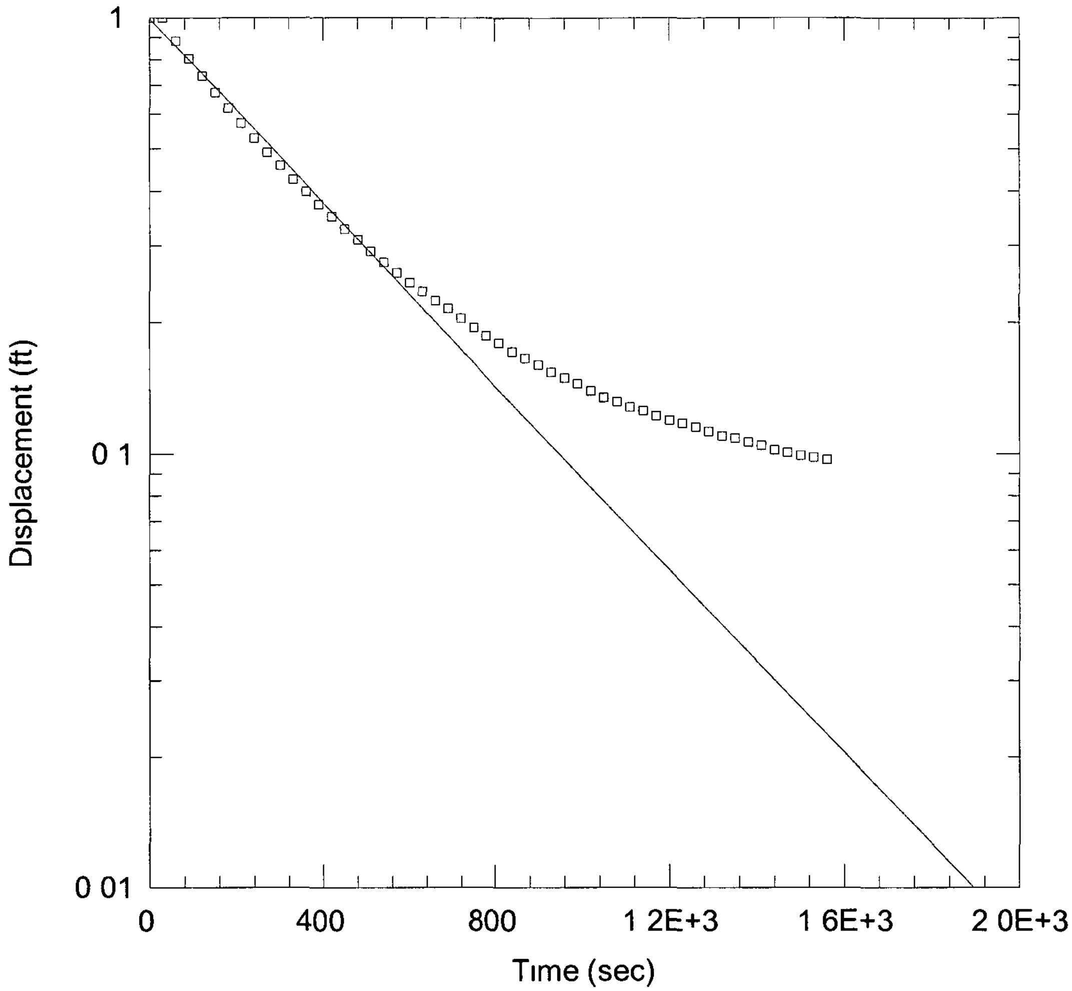
Parameter Correlations

	K	y0
K	1.00	0.87
y0	0.87	1.00

Residual Statistics

for weighted residuals

Sum of Squares . . . . . . 0.0001003 ft^2
Variance . . . . 5.017E-5 ft^2
Std. Deviation . . . . 0.007083 ft
Mean . . . . -0.001091 ft
No. of Residuals 4
No. of Estimates 2



MW-17 FALLING HEAD TEST

Data Set U \16059\data\Slug test\mw17fall aqt
Date 11/28/06 Time 09 50 04

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 190500033
Location Rochester, NY
Test Well MW-17
Test Date 4/28/06

AQUIFER DATA

Saturated Thickness 13 75 ft Anisotropy Ratio (Kz/Kr) 1

WELL DATA (MW-17)

Initial Displacement 1 ft Static Water Column Height 13 75 ft
Total Well Penetration Depth 13 75 ft Screen Length 10 ft
Casing Radius 0 0833 ft Wellbore Radius 0 333 ft

SOLUTION

Aquifer Model Unconfined Solution Method Hvorslev
K = 0 0001051 cm/sec y0 = 0 9946 ft

Data Set: U:\16059\data\Slug test\mw17fall.aqt
Title: MW-17 Falling Head Test
Date: 11/28/06
Time: 09:50:11

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 190500033
Location: Rochester, NY
Test Date: 4/28/06
Test Well: MW-17

AQUIFER DATA

Saturated Thickness: 13.75 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-17

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 1. ft
Static Water Column Height: 13.75 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 13.75 ft

No. of Observations: 53

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
1.	1.	810.	0.1792
30.	0.9994	840.	0.1713
60.	0.8844	870.	0.1654
90.	0.8039	900.	0.1599
120.	0.7341	930.	0.1537
150.	0.673	960.	0.1491
180.	0.6194	990.	0.1449
210.	0.5719	1020.	0.1393
240.	0.5285	1050.	0.1347
270.	0.4909	1080.	0.1317
300.	0.458	1110.	0.128
330.	0.426	1140.	0.1255
360.	0.3994	1170.	0.1221
390.	0.3725	1200.	0.1193
420.	0.3501	1230.	0.1177
450.	0.3274	1260.	0.1153
480.	0.3096	1290.	0.1125
510.	0.291	1320.	0.1099

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
540.	0.2749	1350.	0.1086
570.	0.2601	1380.	0.1065
600.	0.2469	1410.	0.1046
630.	0.2356	1440.	0.1022
660.	0.2244	1470.	0.1008
690.	0.2153	1500.	0.0992
720.	0.2046	1530.	0.0982
750.	0.1947	1560.	0.097
780.	0.1862		

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
Shape Factor: 4.096

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0001051	cm/sec
y0	0.9946	ft

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	
K	0.0001051	2.879E-6	cm/sec
y0	0.9946	0.01996	ft

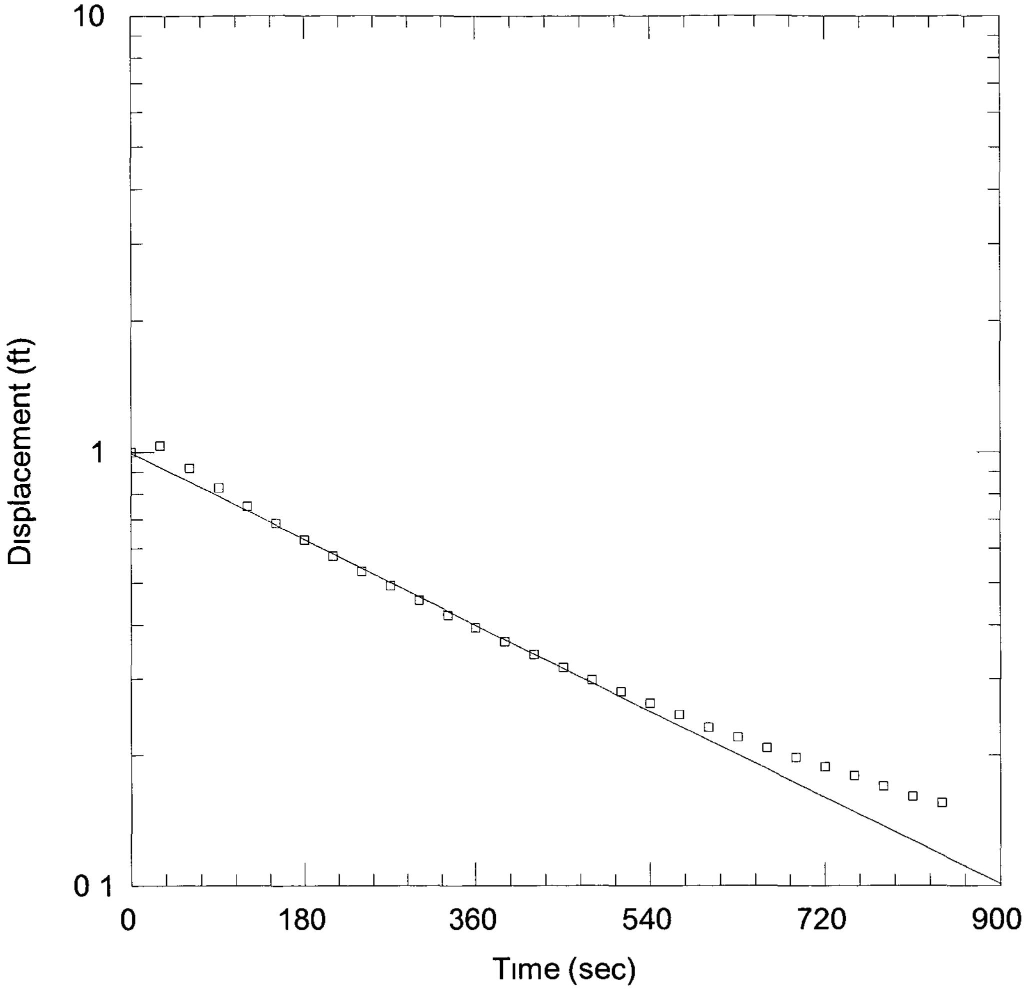
Parameter Correlations

	K	y0
K	1.00	0.69
y0	0.69	1.00

Residual Statistics

for weighted residuals

Sum of Squares ...... 0.08842 ft^2
Variance .... 0.001734 ft^2
Std. Deviation .... 0.04164 ft
Mean .... 0.01233 ft
No. of Residuals 53
No. of Estimates 2



MW-17 RISING HEAD TEST

Data Set U \16059\data\Slug test\mw17rising aqt
Date 11/28/06 Time 09 50 28

PROJECT INFORMATION

Company Stantec
Client Buell Automatics
Project 190500033
Location Rochester, NY
Test Well MW-17
Test Date 4/28/06

AQUIFER DATA

Saturated Thickness 13 75 ft
Anisotropy Ratio (Kz/Kr) 1

WELL DATA (MW-17)

Initial Displacement 1 ft
Total Well Penetration Depth 13 75 ft
Casing Radius 0 0833 ft
Static Water Column Height 13 75 ft
Screen Length 10 ft
Wellbore Radius 0 333 ft

SOLUTION

Aquifer Model Unconfined
Solution Method Hvorslev
K = 0 00011 cm/sec
y0 = 0 9946 ft

Data Set: U:\16059\data\Slug test\mw17rising.aqt
Title: MW-17 Rising Head Test
Date: 11/28/06
Time: 09:50:33

PROJECT INFORMATION

Company: Stantec
Client: Buell Automatics
Project: 190500033
Location: Rochester, NY
Test Date: 4/28/06
Test Well: MW-17

AQUIFER DATA

Saturated Thickness: 13.75 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-17

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 1. ft
Static Water Column Height: 13.75 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.333 ft
Well Skin Radius: 0.333 ft
Screen Length: 10. ft
Total Well Penetration Depth: 13.75 ft

No. of Observations: 28

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
30.	1.033	450.	0.3188
60.	0.9171	480.	0.2989
90.	0.8266	510.	0.2804
120.	0.7508	540.	0.2638
150.	0.6855	570.	0.2486
180.	0.6286	600.	0.232
210.	0.5764	630.	0.2201
240.	0.5318	660.	0.2078
270.	0.4925	690.	0.1978
300.	0.456	720.	0.1882
330.	0.4206	750.	0.1793
360.	0.3935	780.	0.1694
390.	0.3656	810.	0.1605
420.	0.3415	840.	0.1552

SOLUTION

Aquifer Model: Unconfined

Solution Method: Hvorslev
Shape Factor: 4.096

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.00011	cm/sec
y0	0.9946	ft

Appendix H

Analytical Laboratory Summaries

Note: Because of the large size of Appendix H, the analytical laboratory summaries are not included in this copy of the report. A full and complete copy of Appendix H has been submitted as a separate file. The Appendix H file is named as follows:

Report.C828114.2007-12-05.RevRIR_AppendixH.pdf.

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix I

Data Usability Reports

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, N. Y. 12853
Phone 518-251-4429
Facsimile 518-251-4428

November 6, 2002

Peter Smith
Sear-Brown Group
85 Metro Park Rd.
Rochester, NY 14623

RE: **D**ata **U**sability **S**ummary **R**eport for Buell Automatics site
CAS Sub. Nos. R2212007, R2213195, and R2213646

Dear Mr. Smith:

Review has been completed for the data packages generated by Columbia Analytical Services which pertain to samples collected 5/21/02 through 9/12/02 at the Buell Automatics site. Five aqueous and five soil samples were processed for full TCL/TAL analytes. Thirteen aqueous samples were processed for TCL volatiles; six of those were also analyzed for TCL semivolatiles. Ten soil samples were processed for TCL volatiles and TCL semivolatiles, and two of those were analyzed for PCBs. Three soil samples were processed for full TCL/TAL without pesticides, and three other soil samples were processed for full TCL/TAL without pesticides or PCBs. Rinse, trip, and cooler blanks were also analyzed. Methodologies used are those of the NYSDEC ASP 1995.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with limited review of sample raw data, and some review of associated QC raw data. Full validation has not been performed. However, the reported summary tables have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicates
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Instrumental Tunes
* Calibration Standards
* Instrument IDLs

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

In summary, most sample analyte values/reporting limits are usable as reported, or with minor qualification as estimated ("J" qualifier) due to processing or matrix effects. No data are rejected.

The following text discusses quality issues of concern.

Copies of the sample summary forms and lab narratives are attached to this text, and should be reviewed in conjunction with this report.

General

Correlations for all analytes in soil field duplicates XX-S-DU/MW-12-S show acceptable results. Correlations for all analytes in aqueous field duplicates XX-DU-GW/MW-2 also show acceptable values, with the exception of those for vinyl chloride (54%RPD) and cis-1,2-dichloroethane (52%RPD). Results for these two analytes in that parent sample and its field duplicate are qualified estimated.

Overall accuracy and precision results were acceptable, and there does not appear to be a significant matrix effect on sample reported results.

Sample IDs noted below are prefixed by "BU-".

TCL Volatiles by 95-1

Due to repeated elevated surrogate recoveries, results for detected (vinyl chloride, cis-1,2-dichloroethene, ethylbenzene, m,p-xylene, and o-xylene) in B-11-S are qualified estimated ("J"), with a possible high bias.

Reported results for analytes reported with the laboratory "E" qualifier are to be derived from the dilution analyses of the samples. All other results can be used from the initial analyses. The following samples are affected:

Sample ID	Analyte	Value, ug/kg or ugL
MW-8-S	trichloroethene	22,000
MW-10-S	cis(1,2-dichloroethene)	890
	trichloroethene	440
B-11-GW	cis(1,2-dichloroethene)	280
B-17-GW	cis(1,2-dichloroethene)	700
	vinyl chloride	1300
	1,1-dichloroethane	240
B-8-S	trichloroethene	14,000,000
MW-2	vinyl chloride	470
	cis(1,2-dichloroethene)	4200
MW-9	cis(1,2-dichloroethene)	220

Due to presence in associated blanks, acetone detections in samples collected in May and September are considered contamination and results are to be edited to reflect nondetection ("U") at either the CRDL or the originally reported concentration, whichever is greater.

Similarly the detection of carbon disulfide in MW-7S is also to be edited to nondetection ("U").

The detection reported for cis(1,2-dichloroethene) in MW-12 should edited to nondetection ("10 U") as the response may be carryover from the previous sample (undiluted MW-9).

Tentatively Identified Compounds (TICs) flagged as "B" by the laboratory, or identified as isopropanol (isopropyl alcohol) are considered contamination (indicated by presence in associated blanks), and results of those TICs should be rejected from consideration as sample components.

Matrix spikes of soil samples MW-8-S (low and medium), B-16-S (low), B-9-S (medium), aqueous samples B-11-GW and MW-13, and rinse blank XX-S-RB showed acceptable recoveries and duplicate correlations.

Holding time and instrument tune criteria were met. Internal standard recoveries were within required range. Initial and continuing calibration standards showed acceptable response factors, linearity, and daily variances that do not significantly impact reported results.

Some of the samples were processed as a medium level due to high concentrations of matrix interferences.

The entry for dilution factor for MW-8 should have been "20".

Semivolatile Analyses by ASP 95-2

Some of the soil samples collected in August were extracted in a batch in which the method blank and spiked blank showed poor and comparable recoveries for surrogate and matrix spike analytes (all were above 18%). The samples and the sample matrix spikes produced acceptable and comparable recoveries. The reextractions of the samples and associated QC show acceptable recoveries, but were performed outside the usable holding time. Evaluation of the data show the initial blank and spiked blank failures are extract specific, and do not imply lack of integrity of the associated samples. The acceptable results of the sample matrix spikes and all sample surrogates in the initial extraction allow for batch acceptance, and no qualification is recommended. Initial results (not "-RE") should be used for those samples.

Sample B-16-S exhibited two elevated internal standard recoveries. Sample reported results are unaffected, as the only detection (a phthalate) is already qualified estimated due to value below CRDL.

Matrix spikes of B-16-S, MW-8S, and MW-13-GW show acceptable accuracy and precision, with the exception of slightly elevated recoveries or duplicate correlations for analytes not detected in the samples. Reported results are unaffected.

Due to low recoveries (20% to 36%, below 41%) in the associated spiked blank control, the results for n-nitroso-di-n-propylamine for all samples collected in May and September are qualified estimated ("UJ"), with a low bias.

The detections of di-n-butylphthalate in the samples are considered contamination and edited to nondetection ("U") at the CRDL.

Tentatively Identified Compounds (TICs) flagged as "A" or "B" by the laboratory are considered extraction artifacts or contamination (indicated by presence in associated blanks), and results should be rejected as sample components.

Initial and continuing calibration standards showed acceptable response factors, linearity, and daily variances that do not significantly impact reported results. Instrument tune criteria were met.

TCL Pesticide/PCB Analyses by 95-3

Due to the matrix effect on baseline response and potential masking of analyte response, the pesticide/PCB reporting limits in sample B-16-S are to be qualified estimated ("UJ").

Due to the matrix effect on baseline response and potential masking of analyte response, the pesticide/PCB reporting limits for the following analytes in sample MW-10-S are to be qualified estimated ("UJ"): endosulfan I, dieldrin, endrin,m 4,4'-DDD, and 4,4'-DDT.

Pesticide matrix spikes of MW-8S and MW-13, and Aroclor 1260 matrix spikes of B-16-S show acceptable accuracy and precision.

Holding times were met, and blanks show no contamination. Calibration standards showed acceptable linearity and consistency, and instrument performance (resolution and breakdown) and cleanup recoveries were good.

Although the laboratory deliverables meet requirements, they do not allow for independent verification of nondetected results in samples showing matrix responses (integration output is edited to reflect only detections reported by analyst). If full validation is required, some additional raw data items would be needed.

One of the samples was doubled spiked with surrogates, creating a less strict monitoring compound evaluation. Review of the sample data indicates no significant effect on the sample reported results.

TAL Metals/CN by CLP-M

Metals/cyanide matrix spikes for MW-8-S low recovery for antimony (40%), and elevated recovery for manganese (156%). Results for those two elements in the samples are therefore qualified estimated ("J" and "UJ"). Matrix spike metal and cyanide recoveries of MW-13, and ICP post-digest recoveries of B-13-S and B-16-S were acceptable. Duplicate correlations were acceptable for all.

The ICP serial dilutions of MW-8-S, B-13-S, and MW-13 showed all acceptable correlations.

GFAA post-digest spikes for the following analyte results were low (below 85%, but above 64%), and results are to be qualified estimated ("J" or "UJ"):
selenium in MW-7-S, MW-8-S, MW-12-S, MW-13, MW-2, MW-8, and DU-GW
thallium in MW-8S, MW-13S, and MW-S-DU

Holding times and instrument performance were acceptable.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

Judy Harry

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #:55341 CASE No.:
SUBMISSION R2212007
CLIENT: Sear-Brown Group
CLIENT REP: Karen Bunker
PROJECT: BUELL AUTOMATICS

BATCH COMPLETE: __yes_________
DISKETTE REQUESTED: Y__x_ N____
DATE: 05/28/02
CUSTODY SEAL: PRESENT/ABSENT:
CHAIN OF CUSTODY: PRESENT/ABSENT:

DATE REVISED:
DATE DUE: 6/11/02
PROTOCOL: ASP-B
SHIPPING No.:

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS	% SOLIDS	REMARKS SAMPLE CONDITION
553417	BU-MW7-S	SOIL	95-1, 95-2, mets, TCN	5/21/02	5/21/02		✓	
553421	BU-MW8-S	SOIL	QC,95-1, 95-2,95-3 mets,TCN	5/21/02	5/21/02		✓	
553430	BU-MW12-S	SOIL	95-1, 95-2, mets, TCN	5/22/02	5/22/02		✓	
553431	BU-MW13-S	SOIL	95-1, 95-2,95-3 mets, TCN	5/21/02	5/21/02		✓	
553432	BU-XX-S-DU	SOIL	95-1,95-2,mets,tcn-95-3 [illegible]	5/22/02	5/22/02		✓	
553433	BU-XX-S-RB	WATER	95-1, 95-2,95-3 mets TCN	5/22/02	5/22/02			
553434	COOLER BLANK	WATER	95-1	5/22/02	5/22/02			

005

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #:574625 | BATCH COMPLETE: YES | DATE REVISED: 8/13/02
SUBMISSION R2213195 | DISKETTE REQUESTED: Y X N | DATE DUE: 4 WEEKS
CLIENT: Sear-Brown Group | DATE: 8/9/02 | PROTOCOL: ASP-B
CLIENT REP: Karen Bunker | CUSTODY SEAL: PRESENT/ABSENT: | SHIPPING No.:
PROJECT: BUELL AUTOMATICS | CHAIN OF CUSTODY: PRESENT/ABSENT: | SUMMARY PKG: Y X N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS	% SOLIDS	REMARKS SAMPLE CONDITION
574625	BU-MW2D-S	SOIL	95-1, 95-2	8/5/02	8/6/02			
574626	BU-MW10-S	SOIL	95-1, 95-2,TAL INOR 95-3	8/5/02	8/6/02			
574627	BU-MW9-S	SOIL	95-1, 95-2	8/6/02	8/6/02			
574628	COOLER BLANK	WATER	95-1					
575470	BU-MW11-S	SOIL	95-1, 95-2	8/7/02	8/9/02			
575471	BU-MW6-S	SOIL	95-1, 95-2	8/8/02	8/9/02			
575472	BU-B11-S	SOIL	95-1, 95-2	8/8/02	8/9/02			
575474	BU-B11-GW	WATER	95-1 MS/MSD	8/8/02	8/9/02			
575475	BU-B12-S	SOIL	95-1,95-2	8/8/02	8/9/02			
575477	BU-B13-S	SOIL	95-1, 95-2,TAL INOR 95-3	8/8/02	8/9/02			
575478	BU-B13-GW	WATER	95-1	8/8/02	8/9/02			
575481	BU-B14-S	SOIL	95-1, 95-2,TAL INOR 95-3PCB	8/8/02	8/9/02			
575482	BU-B14-GW	WATER	95-1	8/8/02	8/9/02			
575483	BU-B18-S	SOIL	95-1, 95-2,TAL INOR 95-3PCB	8/8/02	8/9/02			
575484	BU-B18-GW	WATER	95-1	8/8/02	8/9/02			
575485	TRIP BLANK	WATER	95-1	8/8/02	8/9/02			
575806	BU-B15-S	SOIL	95-1,95-2,95-3PCB'S	8/9/02	8/9/02			
575809	BU-B15-GW	WATER	95-1	8/9/02	8/9/02			
575817	BU-B16-S QC	SOIL	95-1,95-2,95-3PCB'S QC	8/9/02	8/9/02			
575820	BU-B16-GW	WATER	95-1	8/9/02	8/9/02			
575823	BU-B17-S	SOIL	95-1,95-2,95-3PCB'S,TAL INOR	8/9/02	8/9/02			
575824	BU-B17-GW	WATER	95-1	8/9/02	8/9/02			
575825	TRIP BLANK	WATER	95-1	8/9/02	8/9/02			
575826	BU-B16-W-RB	WATER	95-1	8/9/02	8/9/02			
576163	BU-B8-S	SOIL	95-1,95-2	8/12/02	8/12/02			
576164	BU-B-9-S	SOIL	95-1,95-2	8/12/02	8/12/02			
576165	BU-10-S	SOIL	95-1,95-2,95-3PCB Pest 8/14/02 RJS ,TAL INORG	8/12/02	8/12/02			
			AS PER CLIENT:					
			VOC'S B-11- B18 ELEVATED					

90

574625.XLS 8/13/02

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #:582995	BATCH C OMPLETE: yES	DATE REVISED: 9/16/02
SUBMISSION R2213646	DISKETTE REQUESTED: Y_X__ N____	DATE DUE: 4WEEKS
CLIENT: Sear-Brown Group	DATE: 9/13/02	PROTOCOL: ASP-B
CLIENT REP: Karen Bunker	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: BUELL AUTOMATICS #16059	CHAIN OF CUSTODY: PRESENT/ABSENT:	SUMMARY PKG: Y_X___ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS	% SOLIDS	REMARKS SAMPLE CONDITION
582995	BU-MW2-GW	WATER	95-1, 95-2, 95-3	9/10/02	9/10/02			
582996	BU-MW5-GW	WATER	95-1, 95-2, 95-3	9/10/02	9/10/02			
582997	BU-MW8-GW	WATER	95-1, 95-2, 95-3	9/10/02	9/10/02			
582998	BU-MW13-GW	WATER	95-1, 95-2, 95-3 QC	9/10/02	9/10/02			
582999	BU-XX-GW-DU	WATER	95-1, 95-2 95-3	9/10/02	9/10/02			
583000	TRIP BLANK	WATER	95-1	9/10/02	9/10/02			
583001	COOLER BLANK	WATER	95-1	9/11/02	9/11/02			
583615	BU-MW10-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583617	BU-MW9-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583618	BU-MW12-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583619	BU-MW7-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583621	BU-MW6-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583622	BU-MW1-GW	WATER	95-1, 95-2	9/12/02	9/12/02			
583636	BU-MW13-GW	WATER	TAL INORGANICS QC	9/12/02	9/12/02			
583637	BU-MW2-GW	WATER	TAL INORGANICS	9/12/02	9/12/02			
583638	BU-MW5-GW	WATER	TAL INORGANICS	9/12/02	9/12/02			
583640	BU-MW8-GW	WATER	TAL INORGANICS	9/12/02	9/12/02			
583641	BU-DUP-GW	WATER	TAL INORGANICS	9/12/02	9/12/02			
583664	TRIP BLANK	WATER	95-1	9/12/02	9/12/02			

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2212007
SDG#: 55341

Soil and water samples were collected by Sear Brown on 05/21-22/02 and received at CAS on the same day as sampled in good condition at cooler temperatures of 2 and 6 °C respectively. The CAS CLP Batching sheet is included for a cross-reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were intact upon receipt. All soil results are reported on a dry weight basis.

VOLATILE ORGANICS

Five (5) soil samples, one (1) water and a Cooler Blank were analyzed by NYS ASP Method 95-1 for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were also done.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

All samples were run within holding time for ASP protocol.

Site Specific QC was performed on soil location BU-MW8-S (CAS Order # 553421) and water location BU-XX-S-RB (CAS Order # 553433). All Matrix Spike and Matrix Spike Duplicate recoveries and RPD values were within limits except for the soil Trichloroethene that was spiked overrange. The MS and MSD were repeated on a diluted sample and were acceptable. Both sets of QC data are included in the package. All Blank Spike recoveries were within acceptance limits.

The water vial was tested for preservation after analysis and had a pH of <2.

Hits below the CRDL are flagged as "J".

Hits above the calibration range of the standards are flagged as "E". The sample is then reanalyzed at a dilution and reported with the suffix "DL" on the location ID.

The Method Blank from 5/28/02 contained a hit for Acetone at the detection limit of the compound. All Acetone hits in the samples are flagged as "B", found in the associated blank.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for 95-1 analysis. The 10 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analyte detected was quantitated based on the closest internal standard and has been reported flagged with a "J" as estimated.

The Cooler Blank for this project had 2 TIC's in the Library Search labeled as "unknown Freon." This was apparently due to a faulty cooler unit and therefore the hits should be considered a probable laboratory contaminant. No samples were affected.

No other problems were encountered during the analysis of these samples.

1 Mustard Street, Suite 250 ▪ Rochester, NY 14609-6925 ▪ Telephone (585) 288-5380 ▪ Fax (585) 288-8475

SEMIVOLATILE ORGANICS

Five (5) soils and one (1) water sample were analyzed for Target Compound List (TCL) of volatile organics by NYS ASP 95-2. Library Searches were also done.

All DFTPP tuning criteria were within acceptance limits.

The initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within QC limits.

All samples were analyzed within ASP holding times.

Site QC was performed on location BU-MW8-S (CAS Order # 553421). All Matrix Spike and Matrix Spike Duplicate recoveries were within limits. All Relative Percent Difference values exceeded limits. The MSD recoveries were generally lower recoveries than the MS sample. All RPD values are flagged as "*".

Method Blanks were free from contamination down to the CRDL. Hits were detected below the CRDL for Di -N-Butylphthate and are flagged as "J". Two Library Search TIC compounds were detected in SBLK1.

The Blank Spike recoveries for SBLK1 were all within QC limits except for N-Nitroso-Di-n-propylamine which was outside limits for the Spike and Duplicate Spike recoveries. The exceedences have been flagged with an "*". The percent RPD's were all acceptable. SBLK2 was not spiked.

The GPC Blank contained a hit for Bis-(2-ethylhexyl)Phthalate of 11 ppb greater than the limit of 10 ppb. Affected samples are flagged as "B" for hits of this compound.

Library Searches against the NBS/EPA library were conducted on all samples, reanalyzes, and blanks for 95-2 analysis. The 25 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analyte detected was quantitated based on the closest internal standard and has been reported flagged with a "J" as estimated. A presumed identification of a compound is also flagged as "N".

No other analytical or QC problems were encountered.

PESTICIDE/PCB ANALYSIS

Two (2) soils and one (1) water sample were analyzed for Pesticides/PCBs by NYS ASP 95-3.

The initial and continuing calibration criteria were met for all analytes.

ASP holding times for these methods were met.

All surrogate standard recoveries were within QC limits. The sample BU-MW8-S and LCSD were double spiked with surrogates. The recoveries were adjusted accordingly.

Matrix Spike and Matrix Spike Duplicates were performed on location BU-MW8-S (CAS Order # 553433). All recoveries and RPD's were within acceptance limits. The Blank Spike (LCS) for this run had acceptable recoveries. The Blank Spike Duplicate (LCSD) was not spiked due to laboratory error. The % RPD's cannot be calculated accurately due to this error.

No other analytical or QC problems were encountered.

METALS ANALYSIS

Five (5) soil and one (1) water sample were analyzed for TAL Metals using NYSDEC 1995 ASP protocol. Mercury was analyzed by the cold vapor methodology. Arsenic, Selenium, and Thallium were analyzed by GFAA and all other metals were analyzed by ICP.

The matrix spike and duplicate analyses was performed on sample BU-MW8-S (CAS Order # 553433) . All blank spike recoveries (LCS) were within QC limits. All Matrix Spike Recoveries were within QC limits except the Matrix spike recoveries for Antimony and Manganese. These results were flagged with an "N". The matrix spike recovery for Aluminum, Calcium, Magnesium, and Iron could not be accurately calculated due to the amount of analyte detected in the sample versus the spike amount added. The percent RPD from the duplicate analyses were all within the 20 % QC limit. Several Selenium and Thallium results were flagged with a "W" indicating the GFAA post digestion spike was low.

The protocol holding time was met for all samples.

No other analytical or QC problems were encountered.

MISC. INORGANIC ANALYSES

Five (5) soils and one (1) water sample were analyzed for Total Cyanide by SW-846 method 9012 using NYSDEC 1995 ASP protocol.

Site specific QC was analyzed on sample BU-MW8-S. All Matrix spike and Blank Spike recoveries (LCS) were acceptable.

The holding time was met for all samples.

No other analytical or QC problems were encountered.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package, has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Michael K. Perry
Laboratory Manager

7/9/02
Date

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2213195
SDG#: 574625

Soil and water samples were collected by Sear Brown on 8/5-9/02 and 8/12/02 and received at CAS over the period 8/6, 9, 12/02. All samples were received unbroken, in good condition at cooler temperatures ranging from 2 - 5 °C. The CAS CLP Batching Form is included as a Cross Reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were intact on all coolers upon receipt for all samples except for one location and trip blank received on 8/9/02, which did not have a seal on the cooler. All soil results are reported on a dry weight basis. An ASP deliverable package B is provided.

VOLATILE ORGANICS

Sixteen (16) soil samples, ten (10) waters and a Cooler Blank were analyzed by NYS ASP Method 95-1 for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were also performed.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable except for B11-S Bromofluorobenzene (CAS Order # 574472) which was above acceptance limits. The recovery has been flagged "*" on Form 2B. The repeat analysis confirmed the exceedence and "B11-SRE" is also flagged as "*".

All samples were run within holding time for ASP protocol.

Site Specific QC was performed on low level soil location BU-16-S (CAS Order # 575817), water location BU-B11-GW (CAS Order # 575474) and medium level soil location BU-B-9-S. All Matrix Spike and Matrix Spike Duplicate recoveries and RPD values were within limits for all compounds. All Blank Spike recoveries were within acceptance limits.

The water vials were tested for preservation after analysis to preserve the integrity of the samples. Six were found to have a pH of >2, however all were run within 7 days of sample collection.

Hits below the CRDL are flagged as "J".

Hits above the calibration range of the standards are flagged as "E". The sample is then reanalyzed at a dilution and reported with the suffix "DL" on the location ID. Analytes are flagged with a "D".

All Method Blanks were free from Target Compound contamination. Low Level soil blanks 01, 02, and 03 contained hits for the TIC compound 1-Propanol. Medium Level soil blank 2 contained a TIC hit for an unknown compound.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for 95-1 analysis. The 15 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analyte detected was quantitated based on the closest internal standard and has been reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

Medium level soils were analyzed using 1 gram of representative sample. Low level soils were analyzed using 5 grams of representative sample. All data is reported based on the dry weight calculation for the sample. The % Moisture is noted on the soil Form 1.

The Cooler Blank for this project was free of contamination from Target Compounds and TIC's.

The Trip Blanks and Rinse Blank were free of contamination from Target Compounds and TIC's.

No other problems were encountered during the analysis of these samples.

SEMIVOLATILE ORGANICS

Sixteen (16) soils were analyzed for Target Compound List (TCL) of volatile organics by NYS ASP 95-2. Library Searches were also performed. A GPC cleanup was done on all soil samples.

All DFTPP tuning criteria were within acceptance limits.

The initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within QC limits except for the following:

Soil Blank1-S1, S4, S5, S6; Soil Blank1MS – S1, S4, S5, S6; MW9-S-S4; B-9-S - S5; and 10-S -S5.

All exceedences were flagged with an "*" on Form 2D. Location B8-SRE (CAS Order # 576163) surrogates were all diluted and flagged as "D".

The Blank Spike recoveries for SBLK1MS were all within QC limits except for N-Nitroso-Di-n-propylamine, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, and Acenaphthene. The exceedences have been flagged with an "*". The Blank Spike recoveries for SBLK1MSRE were all within QC limits except 4-Chloro-3-methylphenol, 4-Nitrophenol, and Pentachlorophenol, which were outside acceptance limits, high. No data was affected. They were flagged with an "*".

All samples were initially extracted and analyzed within ASP holding times. All samples were re-extracted and the analysis was repeated due to the surrogate failures and the blank spike failures. This re-extraction was done outside of holding time. The re-extracted sample is designated with the suffix "RE". Both sets of data are included in the report package and both sets agree numerically.

Several samples were re-extracted and reanalyzed at dilutions due to matrix interference from non-target analytes.

Site QC was performed on location BU16-S (CAS Order # 575817). All Matrix Spike and Matrix Spike Duplicate recoveries were within limits. All Relative Percent Difference values were within limits except for 4-Chloro-3-methylphenol and Acenapthene. The RPD is flagged as "*". All MS/MSD recoveries and RPD values were within limits for the repeated analysis, B16-SRE.

Method Blanks were free from contamination down to the CRDL. One and three Library Search TIC compounds were detected respectively in SBLK1 and SBLK1RE.

Library Searches against the NBS/EPA library were conducted on all samples, reanalyzes, and blanks for 95-2 analysis. The 30 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analyte detected was quantitated based on the closest internal standard and has been reported flagged with a "J" as estimated. A presumed identification of a compound is also flagged as "N".

No other analytical or QC problems were encountered.

PESTICIDE/PCB ANALYSIS

Three (3) soil samples were analyzed for Pesticides/PCBs by NYS ASP 95-3. Five (5) additional samples were analyzed for PCB's only by the same method. Location BU-10-S was extracted for PCB's only in error. Therefore Site Specific Pesticide QC was not performed on this location' only PCB matrix QC was done. The extract was analyzed for Pesticides/PCB's as requested by the client.

The initial and continuing calibration criteria were met for all analytes.

ASP holding times for these methods were met.

All surrogate standard recoveries were within QC limits.

Blank Spike and Blank Spike Duplicates were performed for Pests/PCB's. All recoveries and RPD's were within acceptance limits. The Blank Spike (LCS) for this run had acceptable recoveries.

Site QC was performed for PCB's. Matrix Spike and Matrix Spike Duplicate were done for location BU-B16S (CAS Order # 575817). The Recoveries and RPD are within QC acceptance limits.

No other analytical or QC problems were encountered.

METALS ANALYSIS

Six (6) soil samples were analyzed for TAL Metals using NYSDEC 1995 ASP protocol. Mercury was analyzed by the cold vapor methodology and all other metals were analyzed by ICP.

All blank spike recoveries (LCS) were within QC limits.

The protocol holding time was met for all samples.

No other analytical or QC problems were encountered.

MISC. INORGANIC ANALYSES

Six (6) soil samples were analyzed for Total Cyanide by SW-846 method 9012 using NYSDEC 1995 ASP protocol.

Blank Spike recoveries (LCS) were acceptable.

The holding time was met for all samples.

No other analytical or QC problems were encountered.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package, has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Laboratory Manager

10/10/02
Date

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2213646
SDG#: 582995

Water samples were collected by Sear Brown on 9/10-12/02 and received at CAS on 9/10 & 12/02. All samples were received unbroken, in good condition at cooler temperatures ranging from 0 - 6 °C. The CAS CLP Batching Form is included as a Cross Reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were intact on all coolers upon receipt.

VOLATILE ORGANICS

Thirteen (13) waters and a Cooler Blank were analyzed using NYS ASP Method 95-1 for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were also performed.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

All samples were run within holding time for ASP protocol.

Site Specific QC was performed on location BU-MW-13-GW (CAS Order # 582998). All Matrix Spike and Matrix Spike Duplicate recoveries and RPD values were within limits for all compounds. All Blank Spike recoveries were within acceptance limits.

The water vials were tested for preservation after analysis to preserve the integrity of the samples. All Samples were found to have a pH of <2, except for three that were analyzed within 7 days of sample collection.

Hits below the CRDL are flagged as "J".

Hits above the calibration range of the standards are flagged as "E". The sample is then reanalyzed at a dilution and reported with the suffix "DL" on the location ID. Affected analytes are flagged with a "D" on the reanalysis form.

All Method Blanks were free from Target Compound contamination.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for 95-1 analysis. The 15 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analyte detected was quantitated based on the closest internal standard and has been reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

The Cooler Blank for this project was free of contamination from Target Compounds and TIC's.

Trip Blank (9/10/02) had a hit for Acetone. Both Trip Blanks (9/10/02 and 9/12/02) had a TIC hit for Isopropyl Alcohol.

No other problems were encountered during the analysis of these samples.

SEMIVOLATILE ORGANICS

Eleven (11) waters were analyzed for Target Compound List (TCL) of volatile organics using NYS ASP 95-2. Library Searches were also performed.

All DFTPP tuning criteria were within acceptance limits.

The initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within QC limits.

Site Specific QC was performed on location BU-MW-13GW (CAS Order #582998). All Matrix Spike and Matrix Spike Duplicate recoveries were within limits except for 4-Nitrophenol for both the MS and MSD. The recoveries are flagged "*". All Relative Percent Difference (RPD) calculations were within limits. The Blank Spike recoveries for SBLK1 and SBLK2 (spike and duplicate) were all within QC limits except for N-Nitroso-Di-n-propylamine and 4-Nitrophenol. For SBLK2 (S & D), Pentachlorophenol was also outside limits. The exceedences have been flagged with an "*". No Acid Extractable compounds were detected in the associated samples, therefore the data was acceptable.

All samples were extracted and analyzed within ASP holding times.

Method Blanks were free from contamination down to the CRDL. Di-n-Butylphthalate was detected below the CRDL for method blanks SBLK1 and SBLK2. Six (6) and four (4) Library Search TIC unknown compounds were detected respectively in SBLK1 and SBLK2. All sample hits for these compounds have been flagged "B" to denote blank contamination.

Library Searches against the NBS/EPA library were conducted on all samples, reanalyzes, and blanks for 95-2 analysis. The 30 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analyte detected was quantitated based on the closest internal standard and has been reported flagged with a "J" as estimated. A presumed identification of a compound is also flagged as "N".

No other analytical or QC problems were encountered.

PESTICIDE/PCB ANALYSIS

Five (5) water samples were analyzed for Pesticides/PCBs using NYS ASP 95-3.

The initial and continuing calibration criteria were met for all analytes.

ASP holding times for these methods were met.

All surrogate standard recoveries were within QC limits.

A Sulfur cleanup was done on all samples.

Site Specific QC was performed on location BU-MW13-GW (CAS Order #582998). All Matrix Spike and Matrix Spike Duplicate recoveries were within acceptance limits. All RPD values were acceptable. The Blank Spike (LCS) for this run had acceptable recoveries.

All Method Blanks were free of contamination.

No other analytical or QC problems were encountered.

METALS ANALYSIS

Five (5) water samples were analyzed for TAL Metals using NYSDEC 1995 ASP protocol. Mercury was analyzed by the cold vapor methodology, Selenium was analyzed by furnace, and all other metals were analyzed by ICP.

All Initial and Continuing Calibration Verifications were within acceptance limits.

Site Specific QC was performed on location BU-MW-13-GW (CAS Order # 583636). Calcium, Magnesium, and Sodium were spiked at levels less than 5 times the concentration of the sample. All Duplicate Relative Percent Difference (RPD) calculations were within limits. The Selenium (furnace) Post Digestion Spike was outside limits. The associated sample data is flagged as "W". All Laboratory Control Sample (LCS) recoveries were within limits.

Method Blanks were free from contamination for all compounds down to the CRDL (Contract Required Detection Limit). Hits were noted between the CRDL and the Instrument Detection Limit (IDL) for some of the following Initial, Continuing or Prep Blanks: Arsenic, Antimony, Iron, Lead, Potassium, and Mercury. The affected blanks have been flagged as "B".

Samples with hits between the CRDL and IDL are also flagged as "B" for the appropriate metal.

The protocol holding time was met for all samples.

No other analytical or QC problems were encountered.

MISC. INORGANIC ANALYSES

Five (5) water samples were analyzed for Total Cyanide by SW-846 method 9012 using NYSDEC 1995 ASP protocol.

Site Specific QC was performed on location BU-MW13-GW (CAS Order# 583636). The spike recovery was within acceptance limits. Blank Spike recoveries (LCS) were acceptable.

The holding time was met for all samples.

No other analytical or QC problems were encountered.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package, has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Laboratory Manager

10/25/02
Date

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, N. Y. 12853
Phone 518-251-4429
Facsimile 518-251-4428

November 6, 2002

Peter Smith
Sear-Brown Group
85 Metro Park Rd.
Rochester, NY 14623

RE: **Data Usability Summary Report for Buell Automatics site**
CAS Sub. Nos. R2212007, R2213195, and R2213646

Dear Mr. Smith:

Review has been completed for the data packages generated by Columbia Analytical Services which pertain to samples collected 5/21/02 through 9/12/02 at the Buell Automatics site. Five aqueous and five soil samples were processed for full TCL/TAL analytes. Thirteen aqueous samples were processed for TCL volatiles; six of those were also analyzed for TCL semivolatiles. Ten soil samples were processed for TCL volatiles and TCL semivolatiles, and two of those were analyzed for PCBs. Three soil samples were processed for full TCL/TAL without pesticides, and three other soil samples were processed for full TCL/TAL without pesticides or PCBs. Rinse, trip, and cooler blanks were also analyzed. Methodologies used are those of the NYSDEC ASP 1995.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with limited review of sample raw data, and some review of associated QC raw data. Full validation has not been performed. However, the reported summary tables have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicates
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Instrumental Tunes
* Calibration Standards
* Instrument IDLs

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

In summary, most sample analyte values/reporting limits are usable as reported, or with minor qualification as estimated ("J" qualifier) due to processing or matrix effects. No data are rejected.

The following text discusses quality issues of concern.

Copies of the sample summary forms and lab narratives are attached to this text, and should be reviewed in conjunction with this report.

General

Correlations for all analytes in soil field duplicates XX-S-DU/MW-12-S show acceptable results. Correlations for all analytes in aqueous field duplicates XX-DU-GW/MW-2 also show acceptable values, with the exception of those for vinyl chloride (54%RPD) and cis-1,2-dichloroethane (52%RPD). Results for these two analytes in that parent sample and its field duplicate are qualified estimated.

Overall accuracy and precision results were acceptable, and there does not appear to be a significant matrix effect on sample reported results.

Sample IDs noted below are prefixed by "BU-".

TCL Volatiles by 95-1

Due to repeated elevated surrogate recoveries, results for detected (vinyl chloride, cis-1,2-dichloroethene, ethylbenzene, m,p-xylene, and o-xylene) in B-11-S are qualified estimated ("J"), with a possible high bias.

Reported results for analytes reported with the laboratory "E" qualifier are to be derived from the dilution analyses of the samples. All other results can be used from the initial analyses. The following samples are affected:

Sample ID	Analyte	Value, ug/kg or ugL
MW-8-S	trichloroethene	22,000
MW-10-S	cis(1,2-dichloroethene)	890
	trichloroethene	440
B-11-GW	cis(1,2-dichloroethene)	280
B-17-GW	cis(1,2-dichloroethene)	700
	vinyl chloride	1300
	1,1-dichloroethane	240
B-8-S	trichloroethene	14,000,000
MW-2	vinyl chloride	470
	cis(1,2-dichloroethene)	4200
MW-9	cis(1,2-dichloroethene)	220

Due to presence in associated blanks, acetone detections in samples collected in May and September are considered contamination and results are to be edited to reflect nondetection ("U") at either the CRDL or the originally reported concentration. whichever is greater.

Similarly the detection of carbon disulfide in MW-7S is also to be edited to nondetection ("U").

The detection reported for cis(1,2-dichloroethene) in MW-12 should edited to nondetection ("10 U") as the response may be carryover from the previous sample (undiluted MW-9).

Tentatively Identified Compounds (TICs) flagged as "B" by the laboratory, or identified as isopropanol (isopropyl alcohol) are considered contamination (indicated by presence in associated blanks), and results of those TICs should be rejected from consideration as sample components.

Matrix spikes of soil samples MW-8-S (low and medium), B-16-S (low), B-9-S (medium), aqueous samples B-11-GW and MW-13, and rinse blank XX-S-RB showed acceptable recoveries and duplicate correlations.

Holding time and instrument tune criteria were met. Internal standard recoveries were within required range. Initial and continuing calibration standards showed acceptable response factors, linearity, and daily variances that do not significantly impact reported results.

Some of the samples were processed as a medium level due to high concentrations of matrix interferences.

The entry for dilution factor for MW-8 should have been "20".

Semivolatile Analyses by ASP 95-2

Some of the soil samples collected in August were extracted in a batch in which the method blank and spiked blank showed poor and comparable recoveries for surrogate and matrix spike analytes (all were above 18%). The samples and the sample matrix spikes produced acceptable and comparable recoveries. The reextractions of the samples and associated QC show acceptable recoveries, but were performed outside the usable holding time. Evaluation of the data show the initial blank and spiked blank failures are extract specific, and do not imply lack of integrity of the associated samples. The acceptable results of the sample matrix spikes and all sample surrogates in the initial extraction allow for batch acceptance, and no qualification is recommended. Initial results (not "-RE") should be used for those samples.

Sample B-16-S exhibited two elevated internal standard recoveries. Sample reported results are unaffected, as the only detection (a phthalate) is already qualified estimated due to value below CRDL.

Matrix spikes of B-16-S, MW-8S, and MW-13-GW show acceptable accuracy and precision, with the exception of slightly elevated recoveries or duplicate correlations for analytes not detected in the samples. Reported results are unaffected.

Due to low recoveries (20% to 36%, below 41%) in the associated spiked blank control, the results for n-nitroso-di-n-propylamine for all samples collected in May and September are qualified estimated ("UJ"), with a low bias.

The detections of di-n-butylphthalate in the samples are considered contamination and edited to nondetection ("U") at the CRDL.

Tentatively Identified Compounds (TICs) flagged as "A" or "B" by the laboratory are considered extraction artifacts or contamination (indicated by presence in associated blanks), and results should be rejected as sample components.

Initial and continuing calibration standards showed acceptable response factors, linearity, and daily variances that do not significantly impact reported results. Instrument tune criteria were met.

TCL Pesticide/PCB Analyses by 95-3

Due to the matrix effect on baseline response and potential masking of analyte response, the pesticide/PCB reporting limits in sample B-16-S are to be qualified estimated ("UJ").

Due to the matrix effect on baseline response and potential masking of analyte response, the pesticide/PCB reporting limits for the following analytes in sample MW-10-S are to be qualified estimated ("UJ"): endosulfan I, dieldrin, endrin,m 4,4'-DDD, and 4,4'-DDT.

Pesticide matrix spikes of MW-8S and MW-13, and Aroclor 1260 matrix spikes of B-16-S show acceptable accuracy and precision.

Holding times were met, and blanks show no contamination. Calibration standards showed acceptable linearity and consistency, and instrument performance (resolution and breakdown) and cleanup recoveries were good.

Although the laboratory deliverables meet requirements, they do not allow for independent verification of nondetected results in samples showing matrix responses (integration output is edited to reflect only detections reported by analyst). If full validation is required, some additional raw data items would be needed.

One of the samples was doubled spiked with surrogates, creating a less strict monitoring compound evaluation. Review of the sample data indicates no significant effect on the sample reported results.

TAL Metals/CN by CLP-M

Metals/cyanide matrix spikes for MW-8-S low recovery for antimony (40%), and elevated recovery for manganese (156%). Results for those two elements in the samples are therefore qualified estimated ("J" and "UJ"). Matrix spike metal and cyanide recoveries of MW-13, and ICP post-digest recoveries of B-13-S and B-16-S were acceptable. Duplicate correlations were acceptable for all.

The ICP serial dilutions of MW-8-S, B-13-S, and MW-13 showed all acceptable correlations.

GFAA post-digest spikes for the following analyte results were low (below 85%, but above 64%), and results are to be qualified estimated ("J" or "UJ"):
selenium in MW-7-S, MW-8-S, MW-12-S, MW-13, MW-2, MW-8, and DU-GW
thallium in MW-8S, MW-13S, and MW-S-DU

Holding times and instrument performance were acceptable.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

Judy Harry

Data Validation Services

120 Cobble Creek Road   P. O. Box 208
North Creek, NY   12853
Phone (518) 251-4429
Fax (518) 251-4428

LETTER OF TRANSMITTAL

TO:	Peter Smith
COMPANY:	Sear-Brown Group
FROM:	Judy Harry
DATE:	11-08-02
ENCLOSED:	DUSR for Buell Rd. site
	Associated invoice
COMMENTS:	As faxed

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, NY 12853
Phone (518) 251-4429
Facsimile (518) 251-4428

Facsimile Transmission

TO: Peter Smith

COMPANY: Sear-Brown Group

FAX NUMBER: 585 475 5951

FROM: Judy Harry

DATE: 11-08-02

No. of pages (including cover): 9

Includes all data received to date.

COMMENTS: Narrative section of the Buell Automatics DUSR

I will ship the original for Monday delivery.

Let me know if you want me to apply qualifiers/edits to hardcopy of results tables.

Original to follow __No _X__Yes

G #:55341 CASE No.:	BATCH COMPLETE: yes		DATE REVISED:
IBMISSION R2212007	DISKETTE REQUESTED: Y x N		DATE DUE: 6/11/02
IENT: Sear-Brown Group	DATE: 05/28/02		PROTOCOL: ASP-B
IENT REP: Karen Bunker	CUSTODY SEAL: PRESENT/ABSENT:		SHIPPING No.:
ROJECT: BUELL AUTOMATICS	CHAIN OF CUSTODY: PRESENT/ABSENT:		

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS	% SOLIDS	REMARKS SAMPLE CONDITION
553417	BU-MW7-S	SOIL	95-1, 95-2, mets, TCN	5/21/02	5/21/02		✓	
553421	BU-MW8-S	SOIL	QC,95-1, 95-2,95-3 mets,TCN	5/21/02	5/21/02		✓	
553430	BU-MW12-S	SOIL	95-1, 95-2, mets, TCN	5/22/02	5/22/02		✓	
553431	BU-MW13-S	SOIL	95-1, 95-2,95-3 mets, TCN	5/21/02	5/21/02		✓	
553432	BU-XX-S-DU	SOIL	95-1,95-2,mets,tcn	5/22/02	5/22/02		✓	
553433	BU-XX-S-RB	WATER	95-1, 95-2,95-3 mets TCN	5/22/02	5/22/02			
553434	COOLER BLANK	WATER	95-1	5/22/02	5/22/02			

SDG #: 574625
SUBMISSION R2213195
CLIENT: Sear-Brown Group
CLIENT REP: Karen Bunker
PROJECT: BUELL AUTOMATICS

BATCH COMPLETE: YES
DISKETTE REQUESTED: Y X N
DATE: 8/9/02
CUSTODY SEAL: PRESENT/ABSENT:
CHAIN OF CUSTODY: PRESENT/ABSENT:

DATE REVISED: 8/13/02
DATE DUE: 4 WEEKS
PROTOCOL: ASP-B
SHIPPING No.:
SUMMARY PKG: Y X N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS	% SOLIDS	REMARKS SAMPLE CONDITION
574625	BU-MW2D-S	SOIL	95-1, 95-2	8/5/02	8/6/02			
574626	BU-MW10-S	SOIL	95-1, 95-2, TAL INOR 95-3	8/5/02	8/6/02			
574627	BU-MW9-S	SOIL	95-1, 95-2	8/6/02	8/6/02			
574628	COOLER BLANK	WATER	95-1					
575470	BU-MW11-S	SOIL	95-1, 95-2	8/7/02	8/9/02			
575471	BU-MW6-S	SOIL	95-1, 95-2	8/8/02	8/9/02			
575472	BU-B11-S	SOIL	95-1, 95-2	8/8/02	8/9/02			
575474	BU-B11-GW	WATER	95-1 MS/MSD	8/8/02	8/9/02			
575475	BU-B12-S	SOIL	95-1, 95-2	8/8/02	8/9/02			
575477	BU-B13-S	SOIL	95-1, 95-2, TAL INOR 95-3	8/8/02	8/9/02			
575478	BU-B13-GW	WATER	95-1	8/8/02	8/9/02			
575481	BU-B14-S	SOIL	95-1, 95-2, TAL INOR 95-3PCB	8/8/02	8/9/02			
575482	BU-B14-GW	WATER	95-1	8/8/02	8/9/02			
575483	BU-B18-S	SOIL	95-1, 95-2, TAL INOR 95-3PCB	8/8/02	8/9/02			
575484	BU-B18-GW	WATER	95-1	8/8/02	8/9/02			
575485	TRIP BLANK	WATER	95-1	8/8/02	8/9/02			
575806	BU-B15-S	SOIL	95-1, 95-2, 95-3PCB'S	8/9/02	8/9/02			
575809	BU-B15-GW	WATER	95-1	8/9/02	8/9/02			
575817	BU-B16-S QC	SOIL	95-1, 95-2, 95-3PCB'S QC	8/9/02	8/9/02			
575820	BU-B16-GW	WATER	95-1	8/9/02	8/9/02			
575823	BU-B17-S	SOIL	95-1, 95-2, 95-3PCB'S, TAL INOR	8/9/02	8/9/02			
575824	BU-B17-GW	WATER	95-1	8/9/02	8/9/02			
575825	TRIP BLANK	WATER	95-1	8/9/02	8/9/02			
575826	BU-B16-W-RB	WATER	95-1	8/9/02	8/9/02			
576163	BU-B8-S	SOIL	95-1, 95-2	8/12/02	8/12/02			
576164	BU-B-9-S	SOIL	95-1, 95-2	8/12/02	8/12/02			
576165	BU-10-S	SOIL	95-1, 95-2, 95-3PCB'S, TAL INORG	8/12/02	8/12/02			
			AS PER CLIENT:					
			VOC'S B-11- B18 ELEVATED					

574625.XLS 8/13/02

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #: 582995	BATCH COMPLETE: yES	DATE REVISED: 9/16/02
SUBMISSION R2213646	DISKETTE REQUESTED: Y_X__ N____	DATE DUE: 4WEEKS
CLIENT: Sear-Brown Group	DATE: 9/13/02	PROTOCOL: ASP-B
CLIENT REP: Karen Bunker	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: BUELL AUTOMATICS #16059	CHAIN OF CUSTODY: PRESENT/ABSENT:	SUMMARY PKG: Y_X___ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS	% SOLIDS	REMARKS SAMPLE CONDITION
582995	BU-MW2-GW	WATER	95-1, 95-2, 95-3	9/10/02	9/10/02			
582996	BU-MW5-GW	WATER	95-1, 95-2, 95-3	9/10/02	9/10/02			
582997	BU-MW8-GW	WATER	95-1, 95-2, 95-3	9/10/02	9/10/02			
582998	BU-MW13-GW	WATER	95-1, 95-2, 95-3 QC	9/10/02	9/10/02			
582999	BU-XX-GW-DU	WATER	95-1, 95-2 95-3	9/10/02	9/10/02			
583000	TRIP BLANK	WATER	95-1	9/10/02	9/10/02			
583001	COOLER BLANK	WATER	95-1	9/11/02	9/11/02			
583615	BU-MW10-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583617	BU-MW9-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583618	BU-MW12-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583619	BU-MW7-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583621	BU-MW6-GW	WATER	95-1, 95-2	9/11/02	9/12/02			
583622	BU-MW1-GW	WATER	95-1, 95-2	9/12/02	9/12/02			
583636	BU-MW13-GW	WATER	TAL INORGANICS QC	9/12/02	9/12/02			
583637	BU-MW2-GW	WATER	TAL INORGANICS	9/12/02	9/12/02			
583638	BU-MW5-GW	WATER	TAL INORGANICS	9/12/02	9/12/02			
583640	BU-MW8-GW	WATER	TAL INORGANICS	9/12/02	9/12/02			
583641	BU-DUP-GW	WATER	TAL INORGANICS	9/12/02	9/12/02			
583664	TRIP BLANK	WATER	95-1	9/12/02	9/12/02			

006

11/08/2002 12:23 5182514428 1DATA VALIDATION SER PAGE 04

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, NY 12853
Phone (518) 251-4429
Facsimile (518) 251-4428

RECEIVED
OCT 14 2003
SEAR·BROWN

LETTER OF TRANSMITTAL

TO: Peter Smith

COMPANY: Sear Brown Group

FROM: Judy Harry

DATE: 10-10-03

ENCLOSED: DUSR for the Buell Automatics

Associated red-ink edited report forms

Associated invoice

COMMENTS: This covers all packages received to date for this project

Ship via: US Express____ UPS _____ US Priority__√___ Fed Ex____Other _____

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, N. Y. 12853
Phone 518-251-4429
Facsimile 518-251-4428

October 9, 2003

Peter Smith
Sear Brown Group
85 Metro Park
Rochester, NY 14623

RE: **D**ata **U**sability **S**ummary **R**eport for Buell Automatics
CAS SDG Nos. R231842, R2316048, and R2316744

Dear Mr. Smith:

Review has been completed for the data packages generated by Columbia Analytical Laboratories that pertain to samples collected 2/25/03, 3/13/03, 5/3/03, and 5/5/03 at the Buell Automatics site. Eighteen soil and seven aqueous samples were processed for TCL volatiles by NYSDEC ASP CLP method 95-1. Two of those soils and two other soils were analyzed for TPH by NYS310-13. Trip and cooler blanks were also processed.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Instrumental Tunes
* Calibration Standards
* Instrument IDLs

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

In summary, sample analyte values/reporting limits are usable as reported, or usable with qualification as estimated ("J" qualifier) due to typical processing or matrix effects.

Copies of the laboratory case narratives and laboratory sample ID summaries are attached to this text, and should be reviewed in conjunction with this report. Included with this submission are red-ink edited sample report forms, showing edits and qualifications recommended within this report.

The following text discusses quality issues of concern. Sample IDs noted below are prefixed by "BU-".

General

The custody pertaining to samples collected in May do not show the time of collection. These entries should have been present.

TCL Volatiles Analyses by ASP 95-1

Surrogate and internal standard recoveries were acceptable. Holding times were met, with the exception of the analysis for B27-W. The pH of this sample was elevated above 2, and the analysis was performed eight days from sample receipt, ten from collection. Results for seven aromatic analytes in that sample are to be qualified estimated ("UJ" and "J"), with a possible low bias.

Sample matrix spikes were performed on soil samples MW-14S and B-31-S, and aqueous samples MW-14-GW and B-27-W. Accuracy and precision were acceptable, with the exception of an elevated duplicate correlation for an analyte not detected in the parent sample MW-14-GW, and one low recovery for chlorobenzene (70% {and 76%}, below 75%) not detected in B-27-W.

Blind field duplicates were performed on aqueous samples MW-15-GW and B-19-W, and on soil samples BU-MW-14-S and B-32-S. Correlations were acceptable for all.

Low level detections of xylenes in the February cooler blank do not affect associated sample results, which show no detection of those analytes.

Results for analytes initially reported with the "E" flag are to be derived from the dilution analyses of the samples. They include the following:

Sample	Analyte	Result, ug/kg
B-24-S	cis-1,2-dichloroethene	360
B-23-S	cis-1,2-dichloroethene	84,000
B-23-S	1,1,1-trichloroethane	67,000
B-23-S	trichloroethene	820,000

Surrogate and internal standard recoveries, and instrument tunes were acceptable.

Calibrations standards showed acceptable responses, with the exception of that for bromoform (34%D and 31%D) in 5/9/03 and 5/14/03 calibrations. Results for that analyte in samples B-22-S, B-28-S, B-30-S, B-21-S, and B-25-S are qualified as estimated ("UJ"), with a possible low bias.

TPH Analyses

Sample TPH patterns do not match standards for Fuel Oil #2, kerosene, gasoline, Nocor 60, motor oil, or lube. The results are quantitated as hydrocarbons, and quantitative values should be considered as estimated ("J").

Matrix spikes of Fuel Oil #2 in DUP-S show good recoveries and correlations. Holding times and instrumental processing was acceptable. Blanks show no contamination.

Blind field duplicate correlation for BU-B32-S shows variance of 50%RPD. The values are already qualified estimated due to poor pattern match.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

Judy Harry

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #: 622294	BATCH COMPLETE: __yes_________	DATE REVISED:
SUBMISSION R2315842	DISKETTE REQUESTED: Y__X_ N____	DATE DUE: 2 WEEK DATA, STND REPORT
CLIENT: Sear-Brown Group	DATE: 2/27/03	PROTOCOL: ASPB
CLIENT REP: Karen Bunker	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: BUELL AUTOMATICS #16059	CHAIN OF CUSTODY: PRESENT/ABSENT:	SUMMARY PKG: Y___X_ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS SAMPLE CONDITION
622294	BU-MW15-S	SOIL	95-1, DWPS	2/26/03	2/26/03			
622295	BU-MW14-S	SOIL	95-1, DWPS MS/MSD	2/26/03	2/26/03			
622296	BU-S-DUP	SOIL	95-1, DWPS	2/26/03	2/26/03			
622297	COOLER BLANK	WATER	95-1		2/26/03			

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #: 625776
SUBMISSION R2316048
CLIENT: Sear-Brown Group
CLIENT REP: Karen Bunker
PROJECT: BUELL AUTOMATICS #16059

BATCH COMPLETE: __yes________
DISKETTE REQUESTED: Y__X_ N____
DATE: 03/13/03
CUSTODY SEAL: PRESENT/ABSENT:
CHAIN OF CUSTODY: PRESENT/ABSENT:

DATE REVISED:
DATE DUE: 2 WEEK DATA, STND PACK
PROTOCOL: ASPB
SHIPPING No.:
SUMMARY PKG: Y___X_ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS SAMPLE CONDITION
625776	BU-MW15-GW	WATER	95-1	3/13/03	3/13/03			
625777	BU-MW14-GW	WATER	95-1 MS/MSD	3/13/03	3/13/03			
625778	BU-MW11-GW	WATER	95-1	3/13/03	3/13/03			
625779	BU-DUP-GW	WATER	95-1	3/13/03	3/13/03			
625780	TRIP BLANK	WATER	95-1	3/13/03	3/13/03			
625781	COOLER BLANK	WATER	95-1	3/13/03	3/13/03			

3/13/03

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #: 638680	BATCH COMPLETE: __yes_________	DATE REVISED:
SUBMISSION R2316744	DISKETTE REQUESTED: Y__X_ N____	DATE DUE: 2 WEEK DATA, 4 WK REPORT
CLIENT: Sear-Brown Group	DATE:5/6/03	PROTOCOL: ASPB
CLIENT REP: Karen Bunker	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: BUELL #16059	CHAIN OF CUSTODY: PRESENT/ABSENT:	SUMMARY PKG: Y____X__ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS SAMPLE CONDITION
638680	BU-B21-S	SOIL	95-1, DWPS	5/3/03	5/5/03			
638681	BU-B24-S	SOIL	95-1, DWPS	5/3/03	5/5/03			
638682	BU-B25-S	SOIL	95-1, DWPS	5/3/03	5/5/03			
638683	BU-B26-S	SOIL	95-1, DWPS	5/3/03	5/5/03			
638685	BU-B27-S	SOIL	TPH 310.13 DWPS	5/3/03	5/5/03			
638686	BU-B28-S	SOIL	95-1, DWPS	5/3/03	5/5/03			
638687	BU-B29-S	SOIL	95-1, DWPS	5/3/03	5/5/03			
638688	BU-B30-S	SOIL	95-1, DWPS	5/3/03	5/5/03			
638689	BU-B27-W	WATER	95-1 MS/MSD	5/3/03	5/5/03			
638690	BU-DUP-W	WATER	95-1	5/3/03	5/5/03			
638691	BU-B19-W	WATER	95-1	5/5/03	5/5/03			
638692	TRIP BLANK	WATER	95-1	5/5/03	5/5/03			
638693	BU-B19-S	SOIL	95-1, DWPS	5/5/03	5/5/03			
638694	BU-B20-S	SOIL	TPH-310.13, DWPS	5/5/03	5/5/03			
638695	BU-B31-S	SOIL	95-1. DWPS MS/MSD	5/5/03	5/5/03			
638696	BU-B32-S	SOIL	95-1, 310.13,DWPS	5/5/03	5/5/03			
638697	BU-DUP-S	SOIL	95-1, 310.13, DWPS	5/5/03	5/5/03			
638698	BU-B33-S	SOIL	95-1, DWPS	5/5/03	5/5/03			
638699	BU-B34-S	SOIL	95-1, DWPS	5/5/03	5/5/03			
638700	BU-B22-S	SOIL	95-1, DWPS	5/5/03	5/5/03			
638701	BU-B23-S	SOIL	95-1, DWPS	5/5/03	5/5/03			
638702	COOLER BLANK	WATER	95-1	5/3/03	5/5/03			
			Compare TPH to 3 Standards supplied by client 5/6/03 CR					

040

5/6/03

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2315842

Lab ID #	Client ID #
622294	BU-MW15-S
622295	BU-MW14-S
622296	BU-S-DUP
622297	COOLER BLANK

Three (3) soil samples were collected by Sear Brown on 2/26/03 and received at CAS on the same day as sampled. The samples were received unbroken at a cooler temperature of 6°C. The CAS CLP Batching Form is included as a Cross Reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were intact on the cooler upon receipt. All soil results are reported on a dry weight basis. An ASP deliverable package B is provided.

VOLATILE ORGANICS

Three (3) soil samples and a Cooler Blank were analyzed by NYS ASP Method 95-1 for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were also performed.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

The samples were run within the ASP holding time.

Location BU-MW14-S (CAS Order # 622295) was analyzed for site specific QC. Matrix Spike and Matrix Spike Duplicate recoveries and Relative Percent Difference (RPD) values are all within acceptance limits. Reference Spike recoveries are acceptable.

Hits below the CRDL are flagged as "J".

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for 95-1 analysis. The 15 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analyte detected is quantitated based on the closest internal standard and reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

The Cooler Blank for this project was free of contamination from Target Compounds and TIC's down to the CRDL. A hit for m+p Xylene was detected below the CRDL and has been flagged as "J".

No other problems were encountered during the analysis of these samples.

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2316048
SDG#: 625776

Water samples were collected by Sear Brown on 3/13/03 and received at CAS on the same day as collected. All samples were received unbroken, in good condition at a cooler temperature of 5°C. The CAS CLP Batching Form is included as a Cross Reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were intact on all coolers upon receipt.

VOLATILE ORGANICS

Four (4) waters, one (1) Trip Blank and a Cooler Blank were analyzed using NYS ASP Method 95-1 for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were also performed. The Cooler Blank is placed in storage with the samples and analyzed along with them to verify that no contamination problems exist. This is a requirement for ASP protocol.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

All samples were run within holding time for ASP protocol.

Site Specific QC was performed on location BU-MW-14-GW (CAS Order # 625777). All Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries and Relative Percent Difference (RPD) values were within limits for all compounds except for Benzene. The RPD calculation has been flagged "*". All Blank Spike recoveries were within acceptance limits.

The water vials were tested for preservation after analysis to preserve the integrity of the samples. All samples were found preserved to a pH of <2.

Hits below the CRDL are flagged as "J", estimated.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for 95-1 analysis. The 15 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

The Trip Blank and Cooler Blank for this project was free of contamination from Target Compounds and TIC's. All Method Blanks were free from Target Compound contamination.

No other problems were encountered during the analysis of these samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package, has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry — 4/4/03

Michael K. Perry
Laboratory Manager

Date

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2316744
SDG#: 638680

Water samples were collected by Sear Brown on 5/3-5/03 and received at CAS on 5/5/03. All samples were received unbroken, in good condition at a cooler temperature of 6°C. The CAS CLP Batching Form is included as a Cross Reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were intact on all coolers upon receipt. All soils are reported on a dry weight basis for all analyses. Soil samples were analyzed for Percent Solids which was used to calculate the dry weight for each location.

VOLATILE ORGANICS

Fifteen (15) soils, three () waters, one (1) Trip Blank and a Cooler Blank were analyzed using NYS ASP Method 95-1 for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were also performed. The Cooler Blank is placed in storage with the samples and analyzed along with them to verify that no contamination problems exist. This is a requirement for ASP protocol.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

All samples were run within holding time for ASP protocol.

Site Specific QC was performed on location BU-B27-W (CAS Order # 638689) for the water matrix and BU-B31-S (CAS Order #638695) for the soil matrix. All Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries and Relative Percent Difference (RPD) values were within limits for all compounds except for the Chlorobenzene MS on the water sample. The spike recovery has been flagged "*". All Blank Spike recoveries were within acceptance limits.

Locations B24-S and B23-S (CAS Order #s 638681 and 638701 respectively) had hits above the calibration range of the instrument. The compounds have been flagged as "E". The samples were repeated at dilutions appropriate for the concentrations. Both sets of data are included in the package. The diluted samples are denoted as B-24SDL and B23-SDL. The hits in the diluted samples are flagged as "D".

The water vials were tested for preservation after analysis to preserve the integrity of the samples. Water samples were found preserved to a pH of <2 except for BU-B27-W (CAS Order # 638689). This sample was run on 5/13/03, the eighth day from sample receipt, outside the 7 day holding time for unpreserved samples.

Hits below the CRDL are flagged as "J", estimated.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for 95-1 analysis. The 15 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

The Trip Blank and Cooler Blank for this project were free of contamination from Target Compounds and TIC's. All Method Blanks were free from Target Compound contamination.

No other problems were encountered during the analysis of these samples.

Extractable Organics

Four (4) soil samples were analyzed for Total Petroleum Hydrocarbons by NYS method 310-13. The samples were compared to the CAS standards of Fuel Oil #2/Diesel Fuel, Gasoline, Kerosene, and Lube oil as well as 3 additional standards which were provided by the client. All samples, however, were quantitated as "N-Dodecane", a carbon chain, since none of the chromatograms of the samples matched the standards.

Site QC was performed on location BU-DUP-S (CAS Order # 638697). The MS and MSD were both acceptable. The RPD was within acceptance limits. Both the Blank Spike and the Blank Spike Duplicate recoveries were within limits.

The Laboratory Method Blank was free from contamination.

No other problems were encountered during the analysis of these samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package, has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Michael K. Perry
Laboratory Manager

6/11/03
Date

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW15-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r23-15842 SAS No.: SDG No.: 622294

Matrix: (soil/water) SOIL Lab Sample ID: 622294 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A6342.D

Level: (low/med) LOW Date Received: 02/26/03

% Moisture: not dec. 4.3 Date Analyzed: 03/03/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW15-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r23-15842 SAS No.: SDG No.: 622294

Matrix: (soil/water) SOIL Lab Sample ID: 622294 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A6342.D

Level: (low/med) LOW Date Received: 02/26/03

% Moisture: not dec. 4.3 Date Analyzed: 03/03/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-DUP

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r23-15842 SAS No.: SDG No.: 622294

Matrix: (soil/water) SOIL Lab Sample ID: 622296 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A6344.D

Level: (low/med) LOW Date Received: 02/26/03

% Moisture: not dec. 4.5 Date Analyzed: 03/03/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	4	J
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-DUP

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r23-15842 SAS No.: ______ SDG No.: 622294

Matrix: (soil/water) SOIL Lab Sample ID: 622296 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A6344.D

Level: (low/med) LOW Date Received: 02/26/03

% Moisture: not dec. 4.5 Date Analyzed: 03/03/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COOLER BLANK

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r23-15842 SAS No.: SDG No.: 622294

Matrix: (soil/water) SOIL Lab Sample ID: 622297 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A6348.D

Level: (low/med) LOW Date Received: 02/26/03

% Moisture: not dec. 0 Date Analyzed: 03/03/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	2	J
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

COOLER BLANK

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r23-15842 SAS No.: ______ SDG No.: 622294

Matrix: (soil/water) SOIL Lab Sample ID: 622297 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A6348.D

Level: (low/med) LOW Date Received: 02/26/03

% Moisture: not dec. 0 Date Analyzed: 03/03/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

FORM I VOA-TIC ASP 2000

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-15

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-16048 SAS No.: SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625776 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6624.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	6	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-15

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-1604t SAS No.: ______ SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625776 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6624.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. ______ Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-14

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-1604E SAS No.: SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625777 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6625.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	100	
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	3	J
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	3	J
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	12	
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-14

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-16048 SAS No.: ______ SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625777 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6625.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. ______ Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-11

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-1604E SAS No.: SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625778 2.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6628.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	15	
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	160	
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	7	J
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	33	
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	29	
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
MW-11

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-1604 SAS No.: SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625778 2.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6628.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-1604 SAS No.: SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625779 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6629.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	5	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-1604ε SAS No.: ______ SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625779 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6629.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. ______ Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-16046 SAS No.: SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625780 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6630.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-1604 SAS No.: SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625780 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6630.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COOLER BLANK

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-1604ξ SAS No.: SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625781 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6631.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

COOLER BLANK

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r23-1604℃ SAS No.: ______ SDG No.: 625776

Matrix: (soil/water) WATER Lab Sample ID: 625781 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A6631.D

Level: (low/med) LOW Date Received: 03/13/03

% Moisture: not dec. ______ Date Analyzed: 03/19/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B21-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638680 2.0

Sample wt/vol: 2.5 (g/ml) G Lab File ID: A9561.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 18.9 Date Analyzed: 05/08/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0 DAL 6

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	25	U
75-01-4	Vinyl chloride	25	U
75-00-3	Chloroethane	25	U
74-83-9	Bromomethane	25	U
67-64-1	Acetone	59	
75-09-2	Methylene chloride	25	U
75-15-0	Carbon disulfide	25	U
78-93-3	2-Butanone	25	U
156-59-2	cis-1,2-Dichloroethene	230	
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
71-55-6	1,1,1-Trichloroethane	25	U
71-43-2	Benzene	25	U
79-01-6	Trichloroethene	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
124-48-1	Dibromochloromethane	25	U
75-25-2	Bromoform	25	U J
108-10-1	4-Methyl-2-pentanone	25	U
108-88-3	Toluene	25	U
591-78-6	2-Hexanone	25	U
127-18-4	Tetrachloroethene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
108-38-3/106-42-3	(m+p)Xylene	25	U
100-42-5	Styrene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
95-47-6	o-Xylene	25	U
156-60-5	trans-1,2-Dichloroethene	25	U
75-35-4	1,1-Dichloroethene	25	U
75-34-3	1,1-Dichloroethane	8	J
56-23-5	Carbon tetrachloride	25	U
78-87-5	1,2-Dichloropropane	25	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B21-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638680 2.0

Sample wt/vol: 2.5 (g/ml) G Lab File ID: A9561.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 18.9 Date Analyzed: 05/08/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0 bA6/6

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 14

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown cyclic hydrocarbon	19.91	360	J
2. 002847-72-5	Decane, 4-methyl-	20.52	470	JN
3.	unknown alkane c11	20.99	230	J
4. 000493-02-7	Naphthalene, decahydro-, trans-	22.26	530	JN
5.	unknown branched cyclic alkane	22.43	280	J
6.	unknown hydrocarbon	22.56	480	J
7. 000506-52-5	1-Hexacosanol	22.79	540	JN
8.	unknown hydrocarbon	23.41	380	J
9.	unknown hydrocarbon	23.59	700	J
10.	unknown hydrocarbon	24.02	480	J
11. 006044-71-9	Dodecane, 6-methyl-	24.92	390	JN
12.	unknown hydrocarbon	25.11	370	J
13.	unknown alkane	26.12	500	J
14.	unknown hydrocarbon	26.42	290	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B24-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638681 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9573.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 17.3 Date Analyzed: 05/09/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	12	U
75-09-2	Methylene chloride	12	U
75-15-0	Carbon disulfide	12	U
78-93-3	2-Butanone	12	U
156-59-2	cis-1,2-Dichloroethene	360 ~~290~~	~~E~~
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	84	
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
108-38-3/106-42-3	(m+p)Xylene	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
95-47-6	o-Xylene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	2	J
56-23-5	Carbon tetrachloride	12	U
78-87-5	1,2-Dichloropropane	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B24-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638681 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9573.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 17.3 Date Analyzed: 05/09/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B25-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638682 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9563.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 16.8 Date Analyzed: 05/08/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	21	
75-09-2	Methylene chloride	12	U
75-15-0	Carbon disulfide	12	U
78-93-3	2-Butanone	12	U
156-59-2	cis-1,2-Dichloroethene	2	J
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	3	J
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U J
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
108-38-3/106-42-3	(m+p)Xylene	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
95-47-6	o-Xylene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
78-87-5	1,2-Dichloropropane	12	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B25-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638682 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9563.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 16.8 Date Analyzed: 05/08/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B26-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638683 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9587.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 12.3 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	1400	U
75-01-4	Vinyl chloride	1400	U
74-83-9	Bromomethane	1400	U
75-00-3	Chloroethane	1400	U
75-35-4	1,1-Dichloroethene	1400	U
67-64-1	Acetone	1400	U
75-15-0	Carbon disulfide	1400	U
75-09-2	Methylene chloride	1400	U
156-60-5	trans-1,2-Dichloroethene	1400	U
75-34-3	1,1-Dichloroethane	1400	U
78-93-3	2-Butanone	1400	U
156-59-2	cis-1,2-Dichloroethene	2000	
67-66-3	Chloroform	1400	U
107-06-2	1,2-Dichloroethane	1400	U
71-55-6	1,1,1-Trichloroethane	1400	U
56-23-5	Carbon tetrachloride	1400	U
71-43-2	Benzene	1400	U
79-01-6	Trichloroethene	18000	
78-87-5	1,2-Dichloropropane	1400	U
75-27-4	Bromodichloromethane	1400	U
10061-01-5	cis-1,3-Dichloropropene	1400	U
10061-02-6	trans-1,3-Dichloropropene	1400	U
79-00-5	1,1,2-Trichloroethane	1400	U
124-48-1	Dibromochloromethane	1400	U
75-25-2	Bromoform	1400	U
108-10-1	4-Methyl-2-pentanone	1400	U
108-88-3	Toluene	1400	U
127-18-4	Tetrachloroethene	1400	U
591-78-6	2-Hexanone	1400	U
108-90-7	Chlorobenzene	1400	U
100-41-4	Ethylbenzene	1400	U
108-38-3/106-42-3	(m+p)Xylene	1400	U
95-47-6	o-Xylene	1400	U
100-42-5	Styrene	1400	U
79-34-5	1,1,2,2-Tetrachloroethane	1400	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B26-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638683 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9587.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 12.3 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 7

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	19.97	1300	JN
2. 001120-21-4	Undecane	22.41	2000	JN
3.	unknown hydrocarbon	22.85	780	J
4.	unknown hydrocarbon	23.64	930	J
5. 004292-92-6	Cyclohexane, pentyl-	23.72	830	JN
6.	unknown hydrocarbon	24.08	870	J
7. 000112-40-3	Dodecane	24.66	920	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B28-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638686 2.5

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9557.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 23.2 Date Analyzed: 05/08/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	33	U
75-01-4	Vinyl chloride	33	U
75-00-3	Chloroethane	33	U
74-83-9	Bromomethane	33	U
67-64-1	Acetone	57	
75-09-2	Methylene chloride	33	U
75-15-0	Carbon disulfide	33	U
78-93-3	2-Butanone	33	U
156-59-2	cis-1,2-Dichloroethene	29	J
67-66-3	Chloroform	33	U
107-06-2	1,2-Dichloroethane	33	U
71-55-6	1,1,1-Trichloroethane	33	U
71-43-2	Benzene	33	U
79-01-6	Trichloroethene	33	U
75-27-4	Bromodichloromethane	33	U
10061-01-5	cis-1,3-Dichloropropene	33	U
10061-02-6	trans-1,3-Dichloropropene	33	U
79-00-5	1,1,2-Trichloroethane	33	U
124-48-1	Dibromochloromethane	33	U
75-25-2	Bromoform	33	U J
108-10-1	4-Methyl-2-pentanone	33	U
108-88-3	Toluene	29	J
591-78-6	2-Hexanone	33	U
127-18-4	Tetrachloroethene	20	J
108-90-7	Chlorobenzene	33	U
100-41-4	Ethylbenzene	61	
108-38-3/106-42-3	(m+p)Xylene	250	
100-42-5	Styrene	33	U
79-34-5	1,1,2,2-Tetrachloroethane	33	U
95-47-6	o-Xylene	130	
156-60-5	trans-1,2-Dichloroethene	33	U
75-35-4	1,1-Dichloroethene	33	U
75-34-3	1,1-Dichloroethane	6	J
56-23-5	Carbon tetrachloride	33	U
78-87-5	1,2-Dichloropropane	33	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B28-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638686 2.5

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9557.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 23.2 Date Analyzed: 05/08/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	19.93	4400	JN
2. 002847-72-5	Decane, 4-methyl-	20.53	1100	JN
3. 000108-67-8	Benzene, 1,3,5-trimethyl-	20.73	1200	JN
4. 001678-93-9	Cyclohexane, butyl-	21.21	750	JN
5. 000141-93-5	Benzene, 1,3-diethyl-	22.16	690	JN
6.	unknown aromatic	22.26	700	J
7. 001120-21-4	Undecane	22.36	4300	JN
8.	unknown aromatic	22.57	930	J
9.	unknown hydrocarbon	22.80	1400	J
10.	unknown hydrocarbon	23.42	740	J
11.	unknown hydrocarbon	23.59	1200	J
12.	unknown hydrocarbon	24.02	990	J
13. 000112-40-3	Dodecane	24.60	2400	JN
14. 000934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	24.77	1000	JN
15. 000629-50-5	Tridecane	26.59	700	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B29-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638687 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9588.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 20.1 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1600	U
75-01-4	Vinyl chloride	1600	U
74-83-9	Bromomethane	1600	U
75-00-3	Chloroethane	1600	U
75-35-4	1,1-Dichloroethene	1600	U
67-64-1	Acetone	1600	U
75-15-0	Carbon disulfide	1600	U
75-09-2	Methylene chloride	1600	U
156-60-5	trans-1,2-Dichloroethene	1600	U
75-34-3	1,1-Dichloroethane	1600	U
78-93-3	2-Butanone	1600	U
156-59-2	cis-1,2-Dichloroethene	1600	U
67-66-3	Chloroform	1600	U
107-06-2	1,2-Dichloroethane	1600	U
71-55-6	1,1,1-Trichloroethane	1600	U
56-23-5	Carbon tetrachloride	1600	U
71-43-2	Benzene	1600	U
79-01-6	Trichloroethene	1600	U
78-87-5	1,2-Dichloropropane	1600	U
75-27-4	Bromodichloromethane	1600	U
10061-01-5	cis-1,3-Dichloropropene	1600	U
10061-02-6	trans-1,3-Dichloropropene	1600	U
79-00-5	1,1,2-Trichloroethane	1600	U
124-48-1	Dibromochloromethane	1600	U
75-25-2	Bromoform	1600	U
108-10-1	4-Methyl-2-pentanone	1600	U
108-88-3	Toluene	1600	U
127-18-4	Tetrachloroethene	1600	U
591-78-6	2-Hexanone	1600	U
108-90-7	Chlorobenzene	1600	U
100-41-4	Ethylbenzene	740	J
108-38-3/106-42-3	(m+p)Xylene	1600	U
95-47-6	o-Xylene	1600	U
100-42-5	Styrene	1600	U
79-34-5	1,1,2,2-Tetrachloroethane	1600	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B29-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638687 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9588.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 20.1 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000108-67-8	Benzene, 1,3,5-trimethyl-	20.78	35000	JN
2. 001678-93-9	Cyclohexane, butyl-	21.26	20000	JN
3. 000091-17-8	Naphthalene, decahydro-	22.31	33000	JN
4. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.62	42000	JN
5. 000099-87-6	Benzene, 1-methyl-4-(1-methylet	22.86	36000	JN
6. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	23.01	28000	JN
7.	unknown branched aromatic hydr	23.49	24000	J
8.	unknown hydrocarbon	23.65	47000	J
9. 000527-53-7	Benzene, 1,2,3,5-tetramethyl-	23.95	25000	JN
10.	unknown hydrocarbon	24.08	42000	J
11.	unknown hydrocarbon	24.59	20000	J
12.	unknown aromatic hydrocarbon	24.70	21000	J
13. 000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	24.84	58000	JN
14. 000091-20-3	Naphthalene	26.18	29000	JN
15.	unknown hydrocarbon	26.48	30000	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B30-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638688 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9558.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 16.1 Date Analyzed: 05/08/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	24	U
75-01-4	Vinyl chloride	24	U
75-00-3	Chloroethane	24	U
74-83-9	Bromomethane	24	U
67-64-1	Acetone	85	
75-09-2	Methylene chloride	24	U
75-15-0	Carbon disulfide	24	U
78-93-3	2-Butanone	13	J
156-59-2	cis-1,2-Dichloroethene	24	U
67-66-3	Chloroform	24	U
107-06-2	1,2-Dichloroethane	24	U
71-55-6	1,1,1-Trichloroethane	24	U
71-43-2	Benzene	24	U
79-01-6	Trichloroethene	24	U
75-27-4	Bromodichloromethane	24	U
10061-01-5	cis-1,3-Dichloropropene	24	U
10061-02-6	trans-1,3-Dichloropropene	24	U
79-00-5	1,1,2-Trichloroethane	24	U
124-48-1	Dibromochloromethane	24	U
75-25-2	Bromoform	24	U J
108-10-1	4-Methyl-2-pentanone	24	U
108-88-3	Toluene	6	J
591-78-6	2-Hexanone	24	U
127-18-4	Tetrachloroethene	24	U
108-90-7	Chlorobenzene	24	U
100-41-4	Ethylbenzene	13	J
108-38-3/106-42-3	(m+p)Xylene	34	
100-42-5	Styrene	24	U
79-34-5	1,1,2,2-Tetrachloroethane	24	U
95-47-6	o-Xylene	47	
156-60-5	trans-1,2-Dichloroethene	24	U
75-35-4	1,1-Dichloroethene	24	U
75-34-3	1,1-Dichloroethane	24	U
56-23-5	Carbon tetrachloride	24	U
78-87-5	1,2-Dichloropropane	24	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B30-S

Lab Name: cas\roch   Contract: sear-brown

Lab Code: 10145   Case No.: r3-16744   SAS No.: ______   SDG No.: 638680

Matrix: (soil/water) SOIL   Lab Sample ID: 638688 2.0

Sample wt/vol: 5.0 (g/ml) G   Lab File ID: A9558.D

Level: (low/med) LOW   Date Received: 05/05/03

% Moisture: not dec. 16.1   Date Analyzed: 05/08/03

GC Column: db-624 ID: 0.32 (mm)   Dilution Factor: 1.0

Soil Extract Volume 1 (uL)   Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	19.57	450	J
2.	unknown cyclic hydrocarbon	19.91	690	J
3. 002847-72-5	Decane, 4-methyl-	20.52	680	JN
4. 000108-67-8	Benzene, 1,3,5-trimethyl-	20.72	370	JN
5. 001678-93-9	Cyclohexane, butyl-	21.20	400	JN
6.	unknown alkane	21.51	350	J
7. 000141-93-5	Benzene, 1,3-diethyl-	22.15	330	JN
8. 000493-02-7	Naphthalene, decahydro-, trans-	22.25	430	JN
9. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.56	520	JN
10.	unknown hydrocarbon	22.79	670	J
11.	unknown hydrocarbon	23.41	410	J
12.	unknown hydrocarbon	23.58	670	J
13.	unknown hydrocarbon	24.01	550	J
14. 000527-84-4	Benzene, 1-methyl-2-(1-methylet	24.77	410	JN
15. 006044-71-9	Dodecane, 6-methyl-	24.93	340	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B27-W

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) WATER Lab Sample ID: 638689 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A9611.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. Date Analyzed: 05/13/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	13	
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	UJ
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U J
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
108-90-7	Chlorobenzene	10	U J
100-41-4	Ethylbenzene	10	U J
108-38-3/106-42-3	(m+p)Xylene	10	U J
95-47-6	o-Xylene	10	U J
100-42-5	Styrene	10	U J
79-34-5	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B27-W

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) WATER Lab Sample ID: 638689 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A9611.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. Date Analyzed: 05/13/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000108-67-8	Benzene, 1,3,5-trimethyl-	20.74	26	JN
2. 000526-73-8	Benzene, 1,2,3-trimethyl-	21.63	18	JN
3. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.59	12	JN
4. 025155-15-1	Benzene, methyl(1-methylethyl)-	22.82	16	JN
5. 002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	22.97	11	JN
6.	unknown aromatic hydrocarbon	23.25	10	J
7.	unknown hydrocarbon	23.44	10	J
8.	unknown hydrocarbon	23.62	22	J
9. 000095-93-2	Benzene, 1,2,4,5-tetramethyl-	23.91	11	JN
10.	unknown hydrocarbon	24.04	14	J
11. 000095-93-2	Benzene, 1,2,4,5-tetramethyl-	24.80	35	JN
12. 006044-71-9	Dodecane, 6-methyl-	24.94	18	JN
13. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	25.20	11	JN
14. 000091-20-3	Naphthalene	26.15	26	JN
15.	unknown hydrocarbon	27.78	10	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-W

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) WATER Lab Sample ID: 638690 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A9610.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. ______ Date Analyzed: 05/13/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	4	J
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	4	J
108-38-3/106-42-3	(m+p)Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP-W

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) WATER Lab Sample ID: 638690 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A9610.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. ______ Date Analyzed: 05/13/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000103-65-1	Benzene, propyl-	19.62	8	JN
2. 000611-14-3	Benzene, 1-ethyl-2-methyl-	19.85	6	JN
3. 000108-67-8	Benzene, 1,3,5-trimethyl-	20.74	44	JN
4. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.59	7	JN
5. 002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	22.76	6	JN
6. 000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	22.82	7	JN
7. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	22.97	12	JN
8.	unknown aromatic hydrocarbon	23.25	9	J
9. 000527-53-7	Benzene, 1,2,3,5-tetramethyl-	23.80	7	JN
10. 000527-53-7	Benzene, 1,2,3,5-tetramethyl-	23.91	9	JN
11.	unknown aromatic hydrocarbon	24.84	23	J
12. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	25.21	10	JN
13.	unknown aromatic	25.81	8	J
14. 000091-20-3	Naphthalene	26.15	8	JN
15. 001680-51-9	Naphthalene, 1,2,3,4-tetrahydro-	27.78	6	JN

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B19-W

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) WATER Lab Sample ID: 638691 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A9599.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	4	J
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	4	J
108-38-3/106-42-3	(m+p)Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B19-W

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) WATER Lab Sample ID: 638691 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A9599.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. ________ Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ________ (uL) Soil Aliquot Volume: ________ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000103-65-1	Benzene, propyl-	19.64	9	JN
2. 000095-63-6	Benzene, 1,2,4-trimethyl-	20.77	45	JN
3.	unknown aromatic hydrocarbon	22.09	6	J
4. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.61	7	JN
5. 000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	22.78	6	JN
6. 000535-77-3	Benzene, 1-methyl-3-(1-methylet	22.84	8	JN
7. 000535-77-3	Benzene, 1-methyl-3-(1-methylet	22.99	12	JN
8.	unknown hydrocarbon	23.27	9	J
9. 000095-93-2	Benzene, 1,2,4,5-tetramethyl-	23.82	8	JN
10. 000527-53-7	Benzene, 1,2,3,5-tetramethyl-	23.94	10	JN
11. 000874-35-1	1H-Indene, 2,3-dihydro-5-methyl-	24.86	11	JN
12. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	25.23	11	JN
13.	unknown hydrocarbon	25.83	7	J
14. 000091-20-3	Naphthalene	26.17	10	JN
15. 002809-64-5	Naphthalene, 1,2,3,4-tetrahydro-	27.80	7	JN

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) WATER Lab Sample ID: 638692 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A9600.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. Date Analyzed: 05/13/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) WATER Lab Sample ID: 638692 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A9600.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. ______ Date Analyzed: 05/13/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B19-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638693 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9589.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 19.4 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	1600	U
75-01-4	Vinyl chloride	1600	U
74-83-9	Bromomethane	1600	U
75-00-3	Chloroethane	1600	U
75-35-4	1,1-Dichloroethene	1600	U
67-64-1	Acetone	1600	U
75-15-0	Carbon disulfide	1600	U
75-09-2	Methylene chloride	1600	U
156-60-5	trans-1,2-Dichloroethene	1600	U
75-34-3	1,1-Dichloroethane	1600	U
78-93-3	2-Butanone	1600	U
156-59-2	cis-1,2-Dichloroethene	1600	U
67-66-3	Chloroform	1600	U
107-06-2	1,2-Dichloroethane	1600	U
71-55-6	1,1,1-Trichloroethane	1600	U
56-23-5	Carbon tetrachloride	1600	U
71-43-2	Benzene	1600	U
79-01-6	Trichloroethene	1900	
78-87-5	1,2-Dichloropropane	1600	U
75-27-4	Bromodichloromethane	1600	U
10061-01-5	cis-1,3-Dichloropropene	1600	U
10061-02-6	trans-1,3-Dichloropropene	1600	U
79-00-5	1,1,2-Trichloroethane	1600	U
124-48-1	Dibromochloromethane	1600	U
75-25-2	Bromoform	1600	U
108-10-1	4-Methyl-2-pentanone	1600	U
108-88-3	Toluene	1600	U
127-18-4	Tetrachloroethene	1600	U
591-78-6	2-Hexanone	1600	U
108-90-7	Chlorobenzene	1600	U
100-41-4	Ethylbenzene	480	J
108-38-3/106-42-3	(m+p)Xylene	1600	U
95-47-6	o-Xylene	1600	U
100-42-5	Styrene	1600	U
79-34-5	1,1,2,2-Tetrachloroethane	1600	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B19-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638693 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9589.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 19.4 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown alkane	19.97	30000	J
2. 000108-67-8	Benzene, 1,3,5-trimethyl-	20.77	17000	JN
3. 001678-93-9	Cyclohexane, butyl-	21.26	23000	JN
4.	unknown hydrocarbon	22.31	38000	J
5. 001120-21-4	Undecane	22.40	25000	JN
6.	unknown cyclic hydrocarbon	22.48	13000	J
7. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.61	31000	JN
8.	unknown hydrocarbon	22.85	32000	J
9. 000535-77-3	Benzene, 1-methyl-3-(1-methylet	22.99	16000	JN
10.	unknown hydrocarbon	23.48	14000	J
11.	unknown hydrocarbon	23.63	31000	J
12.	unknown cyclic alkane	23.72	16000	J
13.	unknown hydrocarbon	24.08	26000	J
14.	unknown hydrocarbon	25.23	16000	J
15. 000091-20-3	Naphthalene	26.18	12000	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B31-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638695 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9574.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 15 Date Analyzed: 05/09/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	42	
75-09-2	Methylene chloride	12	U
75-15-0	Carbon disulfide	12	U
78-93-3	2-Butanone	4	J
156-59-2	cis-1,2-Dichloroethene	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
108-38-3/106-42-3	(m+p)Xylene	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
95-47-6	o-Xylene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
78-87-5	1,2-Dichloropropane	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B31-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638695 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9574.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 15 Date Analyzed: 05/09/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 004291-80-9	Cyclohexane, 1-methyl-3-propyl-	19.91	39	JN
2. 002847-72-5	Decane, 4-methyl-	20.53	52	JN
3.	unknown alkane	20.99	28	J
4. 000493-02-7	Naphthalene, decahydro-, trans-	22.26	56	JN
5. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.56	57	JN
6.	unknown hydrocarbon	22.79	62	J
7. 000527-84-4	Benzene, 1-methyl-2-(1-methylet	22.94	28	JN
8.	unknown hydrocarbon	23.42	43	J
9.	unknown hydrocarbon	23.59	81	J
10. 004292-92-6	Cyclohexane, pentyl-	23.67	29	JN
11.	unknown hydrocarbon	24.02	51	J
12. 006044-71-9	Dodecane, 6-methyl-	24.92	63	JN
13.	unknown cyclic hydrocarbon	25.12	52	J
14.	unknown alkane	26.13	72	J
15.	unknown hydrocarbon	27.76	30	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B32-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638696 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9590.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 20 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	1600	U
75-01-4	Vinyl chloride	1600	U
74-83-9	Bromomethane	1600	U
75-00-3	Chloroethane	1600	U
75-35-4	1,1-Dichloroethene	1600	U
67-64-1	Acetone	1600	U
75-15-0	Carbon disulfide	1600	U
75-09-2	Methylene chloride	1600	U
156-60-5	trans-1,2-Dichloroethene	1600	U
75-34-3	1,1-Dichloroethane	1600	U
78-93-3	2-Butanone	1600	U
156-59-2	cis-1,2-Dichloroethene	1600	U
67-66-3	Chloroform	1600	U
107-06-2	1,2-Dichloroethane	1600	U
71-55-6	1,1,1-Trichloroethane	1600	U
56-23-5	Carbon tetrachloride	1600	U
71-43-2	Benzene	1600	U
79-01-6	Trichloroethene	1600	U
78-87-5	1,2-Dichloropropane	1600	U
75-27-4	Bromodichloromethane	1600	U
10061-01-5	cis-1,3-Dichloropropene	1600	U
10061-02-6	trans-1,3-Dichloropropene	1600	U
79-00-5	1,1,2-Trichloroethane	1600	U
124-48-1	Dibromochloromethane	1600	U
75-25-2	Bromoform	1600	U
108-10-1	4-Methyl-2-pentanone	1600	U
108-88-3	Toluene	1600	U
127-18-4	Tetrachloroethene	1600	U
591-78-6	2-Hexanone	1600	U
108-90-7	Chlorobenzene	1600	U
100-41-4	Ethylbenzene	500	J
108-38-3/106-42-3	(m+p)Xylene	1600	U
95-47-6	o-Xylene	1600	U
100-42-5	Styrene	1600	U
79-34-5	1,1,2,2-Tetrachloroethane	1600	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B32-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638696 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9590.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 20 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown cyclic hydrocarbon	19.51	16000	J
2.	unknown cyclic hydrocarbon	19.95	25000	J
3. 001678-93-9	Cyclohexane, butyl-	21.26	21000	JN
4. 000493-02-7	Naphthalene, decahydro-, trans-	22.31	32000	JN
5. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.61	41000	JN
6.	unknown cyclic hydrocarbon	22.85	24000	J
7. 000535-77-3	Benzene, 1-methyl-3-(1-methylet	23.00	25000	JN
8.	unknown hydrocarbon	23.63	43000	J
9. 004292-92-6	Cyclohexane, pentyl-	23.73	22000	JN
10.	unknown hydrocarbon	24.08	38000	J
11. 000095-93-2	Benzene, 1,2,4,5-tetramethyl-	24.84	31000	JN
12. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	25.24	22000	JN
13.	unknown hydrocarbon	25.95	19000	J
14. 000091-20-3	Naphthalene	26.18	26000	JN
15.	unknown hydrocarbon	26.48	27000	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638697 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9591.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 21.7 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	1600	U
75-01-4	Vinyl chloride	1600	U
74-83-9	Bromomethane	1600	U
75-00-3	Chloroethane	1600	U
75-35-4	1,1-Dichloroethene	1600	U
67-64-1	Acetone	1600	U
75-15-0	Carbon disulfide	1600	U
75-09-2	Methylene chloride	1600	U
156-60-5	trans-1,2-Dichloroethene	1600	U
75-34-3	1,1-Dichloroethane	1600	U
78-93-3	2-Butanone	1600	U
156-59-2	cis-1,2-Dichloroethene	1600	U
67-66-3	Chloroform	1600	U
107-06-2	1,2-Dichloroethane	1600	U
71-55-6	1,1,1-Trichloroethane	1600	U
56-23-5	Carbon tetrachloride	1600	U
71-43-2	Benzene	1600	U
79-01-6	Trichloroethene	1600	U
78-87-5	1,2-Dichloropropane	1600	U
75-27-4	Bromodichloromethane	1600	U
10061-01-5	cis-1,3-Dichloropropene	1600	U
10061-02-6	trans-1,3-Dichloropropene	1600	U
79-00-5	1,1,2-Trichloroethane	1600	U
124-48-1	Dibromochloromethane	1600	U
75-25-2	Bromoform	1600	U
108-10-1	4-Methyl-2-pentanone	1600	U
108-88-3	Toluene	1600	U
127-18-4	Tetrachloroethene	1600	U
591-78-6	2-Hexanone	1600	U
108-90-7	Chlorobenzene	1600	U
100-41-4	Ethylbenzene	490	J
108-38-3/106-42-3	(m+p)Xylene	1600	U
95-47-6	o-Xylene	1600	U
100-42-5	Styrene	1600	U
79-34-5	1,1,2,2-Tetrachloroethane	1600	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638697 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9591.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 21.7 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown cyclic hydrocarbon	19.95	24000	J
2. 001678-93-9	Cyclohexane, butyl-	21.26	20000	JN
3. 000493-02-7	Naphthalene, decahydro-, trans-	22.31	31000	JN
4. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.61	40000	JN
5.	unknown cyclic hydrocarbon	22.84	23000	J
6. 000535-77-3	Benzene, 1-methyl-3-(1-methylet	22.99	23000	JN
7.	unknown hydrocarbon	23.64	42000	J
8. 004292-92-6	Cyclohexane, pentyl-	23.73	21000	JN
9.	unknown hydrocarbon	24.08	37000	J
10. 000095-93-2	Benzene, 1,2,4,5-tetramethyl-	24.83	31000	JN
11. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	25.24	21000	JN
12.	unknown aromatic	25.95	19000	J
13. 000091-20-3	Naphthalene	26.18	24000	JN
14.	unknown aromatic	26.48	27000	J
15.	unknown aromatic	27.81	15000	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B33-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638698 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9575.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 19.2 Date Analyzed: 05/09/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	16	
75-09-2	Methylene chloride	12	U
75-15-0	Carbon disulfide	12	U
78-93-3	2-Butanone	12	U
156-59-2	cis-1,2-Dichloroethene	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
108-38-3/106-42-3	(m+p)Xylene	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
95-47-6	o-Xylene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
78-87-5	1,2-Dichloropropane	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B33-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638698 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9575.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 19.2 Date Analyzed: 05/09/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 4

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	22.80	6	J
2.	unknown hydrocarbon	23.59	6	J
3. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	24.82	11	JN
4. 004912-92-9	1H-Indene, 2,3-dihydro-1,1-dimet	25.78	7	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B34-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638699 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9592.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 20.3 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	1600	U
75-01-4	Vinyl chloride	1600	U
74-83-9	Bromomethane	1600	U
75-00-3	Chloroethane	1600	U
75-35-4	1,1-Dichloroethene	1600	U
67-64-1	Acetone	1600	U
75-15-0	Carbon disulfide	1600	U
75-09-2	Methylene chloride	1600	U
156-60-5	trans-1,2-Dichloroethene	1600	U
75-34-3	1,1-Dichloroethane	1600	U
78-93-3	2-Butanone	1600	U
156-59-2	cis-1,2-Dichloroethene	1600	U
67-66-3	Chloroform	1600	U
107-06-2	1,2-Dichloroethane	1600	U
71-55-6	1,1,1-Trichloroethane	1600	U
56-23-5	Carbon tetrachloride	1600	U
71-43-2	Benzene	1600	U
79-01-6	Trichloroethene	1600	U
78-87-5	1,2-Dichloropropane	1600	U
75-27-4	Bromodichloromethane	1600	U
10061-01-5	cis-1,3-Dichloropropene	1600	U
10061-02-6	trans-1,3-Dichloropropene	1600	U
79-00-5	1,1,2-Trichloroethane	1600	U
124-48-1	Dibromochloromethane	1600	U
75-25-2	Bromoform	1600	U
108-10-1	4-Methyl-2-pentanone	1600	U
108-88-3	Toluene	1600	U
127-18-4	Tetrachloroethene	1600	U
591-78-6	2-Hexanone	1600	U
108-90-7	Chlorobenzene	1600	U
100-41-4	Ethylbenzene	890	J
108-38-3/106-42-3	(m+p)Xylene	1600	U
95-47-6	o-Xylene	1600	U
100-42-5	Styrene	1600	U
79-34-5	1,1,2,2-Tetrachloroethane	1600	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B34-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638699 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9592.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 20.3 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000108-67-8	Benzene, 1,3,5-trimethyl-	20.78	21000	JN
2. 000493-02-7	Naphthalene, decahydro-, trans-	22.30	27000	JN
3. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.61	36000	JN
4. 000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	22.84	30000	JN
5. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	22.99	20000	JN
6.	unknown aromatic	23.28	19000	J
7.	unknown aromatic	23.48	19000	J
8.	unknown hydrocarbon	23.64	34000	J
9. 004292-92-6	Cyclohexane, pentyl-	23.73	18000	JN
10. 000527-53-7	Benzene, 1,2,3,5-tetramethyl-	23.95	17000	JN
11.	unknown hydrocarbon	24.08	33000	J
12. 000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	24.83	32000	JN
13. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	25.24	18000	JN
14. 000091-20-3	Naphthalene	26.18	20000	JN
15.	unknown hydrocarbon	26.48	19000	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B22-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638700 5.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9620.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 22.5 Date Analyzed: 05/14/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	65	U
75-01-4	Vinyl chloride	65	U
75-00-3	Chloroethane	65	U
74-83-9	Bromomethane	65	U
67-64-1	Acetone	65	U
75-09-2	Methylene chloride	65	U
75-15-0	Carbon disulfide	65	U
78-93-3	2-Butanone	65	U
156-59-2	cis-1,2-Dichloroethene	65	U
67-66-3	Chloroform	65	U
107-06-2	1,2-Dichloroethane	65	U
71-55-6	1,1,1-Trichloroethane	65	U
71-43-2	Benzene	65	U
79-01-6	Trichloroethene	65	U
75-27-4	Bromodichloromethane	65	U
10061-01-5	cis-1,3-Dichloropropene	65	U
10061-02-6	trans-1,3-Dichloropropene	65	U
79-00-5	1,1,2-Trichloroethane	65	U
124-48-1	Dibromochloromethane	65	U
75-25-2	Bromoform	65	U J
108-10-1	4-Methyl-2-pentanone	65	U
108-88-3	Toluene	65	U
591-78-6	2-Hexanone	65	U
127-18-4	Tetrachloroethene	65	U
108-90-7	Chlorobenzene	65	U
100-41-4	Ethylbenzene	65	U
108-38-3/106-42-3	(m+p)Xylene	65	U
100-42-5	Styrene	65	U
79-34-5	1,1,2,2-Tetrachloroethane	65	U
95-47-6	o-Xylene	65	U
156-60-5	trans-1,2-Dichloroethene	65	U
75-35-4	1,1-Dichloroethene	65	U
75-34-3	1,1-Dichloroethane	65	U
56-23-5	Carbon tetrachloride	65	U
78-87-5	1,2-Dichloropropane	65	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. B22-S

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638700 5.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9620.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 22.5 Date Analyzed: 05/14/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 001331-43-7	Cyclohexane, diethyl-	19.39	140	JN
2.	unknown cyclic	19.71	140	J
3.	unknown alkane	20.85	210	J
4.	unknown hydrocarbon	21.15	140	J
5.	unknown cyclic hydrocarbon	21.30	170	J
6.	unknown hydrocarbon	21.78	150	J
7. 000493-02-7	Naphthalene, decahydro-, trans-	22.26	590	JN
8.	unknown cyclic hydrocarbon	22.80	230	J
9.	unknown hydrocarbon	23.58	630	J
10. 002958-76-1	Naphthalene, decahydro-2-methy	24.03	480	JN
11.	unknown hydrocarbon	24.83	180	J
12.	unknown hydrocarbon	25.12	140	J
13.	unknown hydrocarbon	25.89	130	J
14. 015869-94-0	Octane, 3,6-dimethyl-	26.13	880	JN
15.	unknown branched alkane	27.92	280	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B23-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638701 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9594.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 16.2 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500	U
75-01-4	Vinyl chloride	1500	U
74-83-9	Bromomethane	1500	U
75-00-3	Chloroethane	1500	U
75-35-4	1,1-Dichloroethene	1500	U
67-64-1	Acetone	1500	U
75-15-0	Carbon disulfide	1500	U
75-09-2	Methylene chloride	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	2400	
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	84000 ~~83000~~	~~E~~
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	67000 ~~67000~~	~~E~~
56-23-5	Carbon tetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	920,000 ~~480000~~	~~E~~
78-87-5	1,2-Dichloropropane	1500	U
75-27-4	Bromodichloromethane	1500	U
10061-01-5	cis-1,3-Dichloropropene	1500	U
10061-02-6	trans-1,3-Dichloropropene	1500	U
79-00-5	1,1,2-Trichloroethane	1500	U
124-48-1	Dibromochloromethane	1500	U
75-25-2	Bromoform	1500	U
108-10-1	4-Methyl-2-pentanone	1500	U
108-88-3	Toluene	1500	U
127-18-4	Tetrachloroethene	1500	U
591-78-6	2-Hexanone	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U
108-38-3/106-42-3	(m+p)Xylene	1500	U
95-47-6	o-Xylene	1500	U
100-42-5	Styrene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B23-S

Lab Name: cas\roch Contract: searb

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638701 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: A9594.D

Level: (low/med) MED Date Received: 05/05/03

% Moisture: not dec. 16.2 Date Analyzed: 05/12/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	19.97	6500	JN
2. 001120-21-4	Undecane	22.40	6000	JN

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COOLER BLANK

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638702 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9621.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 0 Date Analyzed: 05/14/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

COOLER BLANK

Lab Name: cas\roch Contract: sear-brown

Lab Code: 10145 Case No.: r3-16744 SAS No.: ______ SDG No.: 638680

Matrix: (soil/water) SOIL Lab Sample ID: 638702 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A9621.D

Level: (low/med) LOW Date Received: 05/05/03

% Moisture: not dec. 0 Date Analyzed: 05/14/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD NYSDOH 310-13
Reported: 06/09/03

Sear-Brown Group
Project Reference: BUELL #16059
Client Sample ID : BU-B27-S

Date Sampled :	05/03/03	**Order #:**	638685	**Sample Matrix:**	SOIL/SEDIMENT
Date Received:	05/05/03	**Submission #:**	R2316744	**Percent Solid:**	84.4

DATE EXTRACTED : 05/14/03
DATE ANALYZED : 05/20/03
ANALYTICAL DILUTION: 10.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
AS N-DODECANE	100000	6600000 J	UG/KG
FUEL OIL #2/DIESEL FUEL	100000	1200000 U	UG/KG
GASOLINE	100000	1200000 U	UG/KG
KEROSENE	100000	1200000 U	UG/KG
LUBE OIL	100000	1200000 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD NYSDOH 310-13
Reported: 06/09/03

Sear-Brown Group
Project Reference: BUELL #16059
Client Sample ID : BU-B20-S

Date Sampled : 05/05/03 **Order #:** 638694 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/05/03 **Submission #:** R2316744 **Percent Solid:** 85.1

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/14/03			
DATE ANALYZED : 05/20/03			
ANALYTICAL DILUTION: 20.00			Dry Weight
AS N-DODECANE	100000	19000000 J	UG/KG
FUEL OIL #2/DIESEL FUEL	100000	2400000 U	UG/KG
GASOLINE	100000	2400000 U	UG/KG
KEROSENE	100000	2400000 U	UG/KG
LUBE OIL	100000	2400000 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD NYSDOH 310-13
Reported: 06/09/03

Sear-Brown Group
Project Reference: BUELL #16059
Client Sample ID : BU-B32-S

Date Sampled : 05/05/03 **Order #:** 638696 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/05/03 **Submission #:** R2316744 **Percent Solid:** 80.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/14/03			
DATE ANALYZED : 05/20/03			
ANALYTICAL DILUTION: 20.00			Dry Weight
AS N-DODECANE	100000	14000000 J	UG/KG
FUEL OIL #2/DIESEL FUEL	100000	2500000 U	UG/KG
GASOLINE	100000	2500000 U	UG/KG
KEROSENE	100000	2500000 U	UG/KG
LUBE OIL	100000	2500000 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD NYSDOH 310-13
Reported: 06/09/03

Sear-Brown Group
Project Reference: BUELL #16059
Client Sample ID : BU-DUP-S

Date Sampled : 05/05/03 **Order #:** 638697 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/05/03 **Submission #:** R2316744 **Percent Solid:** 78.3

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/14/03			
DATE ANALYZED : 05/20/03			
ANALYTICAL DILUTION: 10.00			Dry Weight
AS N-DODECANE	100000	8400000 J	UG/KG
FUEL OIL #2/DIESEL FUEL	100000	1300000 U	UG/KG
GASOLINE	100000	1300000 U	UG/KG
KEROSENE	100000	1300000 U	UG/KG
LUBE OIL	100000	1300000 U	UG/KG

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, NY 12853
Phone (518) 251-4429
Facsimile (518) 251-4428

RECEIVED
MAR 1 7 2004
SEAR-BROWN

LETTER OF TRANSMITTAL

TO: Peter Smith

COMPANY: Sear Brown Group

FROM: Judy Harry

DATE: 03-10-04

ENCLOSED: DUSR for the Buell site
CAS Sub. Nos. R2319595, R2319657, R2319774, and R2419875

Associated qualified report forms

Copy of associated invoice (original sent to Dewitt)

COMMENTS:

Ship via: US Express__X__ UPS _____ US Priority____Fed Ex____Other ___

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, N. Y. 12853
Phone 518-251-4429
Facsimile 518-251-4428

March 10, 2004

Peter Smith
Sear Brown Group
85 Metro Park
Rochester, NY 14623

RE: **D**ata **U**sability **S**ummary **R**eport for Buell Automatics
CAS Sub. Nos. R2319595, R2319657, R2319774, and R2419875

Dear Mr. Smith:

Review has been completed for the data packages generated by Columbia Analytical Laboratories that pertain to samples collected 12/23/03 through 1/13/04 at the Buell Automatics site. Twenty soil (including one field duplicate) and two aqueous samples were processed for TCL volatiles by NYSDEC ASP CLP method 95-1. Six additional soil samples were processed by USEPA Method 8260B, in order to meet fast turnaround requirements. Trip and cooler blanks were also processed.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Data Completeness
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Instrumental Tunes
* Calibration Standards
* Instrument IDLs

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

In summary, sample analyte values/reporting limits are usable as reported, or usable with minor qualification as estimated ("J" qualifier) due to typical processing or matrix effects.

Copies of the laboratory case narratives and laboratory sample ID summaries are attached to this text, and should be reviewed in conjunction with this report. Included with this submission are red-ink edited sample report forms reflecting final results, showing edits and qualifications recommended within this report.

The following text discusses quality issues of concern. Sample IDs noted below are prefixed by "BU-".

General

Samples collected on 12/24/03, and submitted for fast turnaround, were received by the laboratory a few hours after collection at elevated temperature. The samples were in the process of cooling down and no qualification of their reported results is required. These samples were initially processed and reported as medium level analyses. The samples that show little or no detection at medium level were also analyzed by the low level procedure. These low level results are attached as the final sample results.

TCL Volatiles Analyses by ASP 95-1 and 8260B

Internal standard responses and retention times were acceptable. Instrumental tunes are compliant. Method, cooler, and trip blanks show no contamination.

NYSDEC ASP technical holding times from collection were met, with the exception of those for PIER-NSHAL-S and PIER-NMID-S, which were outside one day. Results for those two samples have been qualified as estimated ("UJ" and "J"), with a possible low bias.

Surrogate recoveries were within protocol requirements, with the exception of that for BFB in NEWALL-S, which was elevated at 116%, above 113%. Results for detected analytes in that sample are therefore qualified as estimated.

Sample matrix spikes were performed on soil samples WWALL-S, GP1-S3BOTT-S, and GP5-12-12.6'-S, and aqueous sample RW-1-W. Accuracy and precision were acceptable, with the exception of low recoveries for trichloroethene (both at 68%, below 71%) in the aqueous spikes. Therefore, the result for that compound in RW-1-W is qualified as estimated ("J").

Blind field duplicate correlation of soil sample NMWALL-S was acceptable. No aqueous correlation is available, but the project has historically shown good correlations.

Calibrations standards showed acceptable responses and linearity.

Results for analytes initially reported with the "E" flag are to be derived from the dilution analyses of the samples. All other analyte results can be derived from the lesser dilutions.

The detected value of trichloroethene in SWWALL-S is qualified as estimated ("J"), and may have a high bias due to potential carryover. This sample followed the initial analysis of a sample containing that analyte at concentrations above the linearity of the system.

The detection of chloroethane in GP2-S2-TOP-S is qualified as tentative in identification and estimated in value ("NJ") due to poor spectral quality.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG#:697119 CASE No.:	BATCH COMPLETE: __yes_________	DATE REVISED:
SUBMISSION R2319595	DISKETTE REQUESTED: Y__X_ N____	DATE DUE: 2 WEEK DATA,4 WEEK PKG
CLIENT: Sear-Brown Group	DATE: 12/31/03	PROTOCOL: ASP-B
CLIENT REP: Karen Bunker	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: BUELL #16059 IRM	CHAIN OF CUSTODY: PRESENT/ABSENT:	SUMMARY PKG: Y__X__ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS SAMPLE CONDITION
697119	BU-NWWALL-BOTT-S	SOIL	95-1, TIC'S, DWPS,	12/26/03	12/27/03			
697121	BU-NWWALL-SHAL-S	SOIL	95-1, TIC'S, DWPS,	12/26/03	12/27/03			
697123	BU-PIER-NSHAL-S	SOIL	95-1, TIC'S, DWPS,	12/26/03	12/27/03			
697126	BU-PIER-NMID-S	SOIL	95-1, TIC'S, DWPS,	12/26/03	12/27/03			
697127	BU-NWALL-S	SOIL	95-1, TIC'S, DWPS,	12/26/03	12/27/03			
697128	BU-NEWALL-S	SOIL	95-1, TIC'S, DWPS,	12/26/03	12/27/03			
697129	BU-EXCDUP-S	SOIL	95-1, TIC'S, DWPS,	12/26/03	12/27/03			
698901	BU-SWALL-S	SOIL	95-1, TIC'S, DWPS,	12/23/03	12/24/03			
698902	BU-SEWALL-S	SOIL	95-1, TIC'S, DWPS,	12/23/03	12/24/03			
698903	BU-SEBOTT-S	SOIL	95-1, TIC'S, DWPS,	12/24/03	12/24/03			
698904	BU-SWWALL-S	SOIL	95-1, TIC'S, DWPS,	12/24/03	12/24/03			
698905	BU-WWALL-S	SOIL	95-1, TIC'S, DWPS, QC	12/24/03	12/24/03			
699602	BU-WWALL2-S	SOIL	95-1, TIC'S, DWPS,	12/29/03	12/31/03			
699603	BU-WBOTT2-S	SOIL	95-1, TIC'S, DWPS,	12/29/03	12/31/03			
699604	BU-RW1-BOTT-S	SOIL	95-1, TIC'S, DWPS,	12/30/03	12/31/03			

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CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG#:698895 CASE No.:	BATCH COMPLETE: __yes________	DATE REVISED:
SUBMISSION R2319657	DISKETTE REQUESTED: Y_x__ N____	DATE DUE: rush 12/26/03, 4 week package
CLIENT: Sear	DATE: 12/29/03	PROTOCOL: sw-846, aspb del
CLIENT REP:	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: BUELL IRM	CHAIN OF CUSTODY: PRESENT/ABSENT:	SUMMARY PKG: Y__x__ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS SAMPLE CONDITION
698895	BU-GP2-S2TOP-S	SOIL	8260B, DWPS	12/24/03	12/24/03			
698896	BU-GP3-S1TOP-S	SOIL	8260B, DWPS	12/24/03	12/24/03			
698897	BU-GP3-S1MID-S	SOIL	8260B, DWPS	12/24/03	12/24/03			
698898	BU-GP3-S1BOTT-S	SOIL	8260B, DWPS	12/24/03	12/24/03			
698899	BU-GP3-S2BOTTS	SOIL	8260B, DWPS	12/24/03	12/24/03			
698900	BU-GP1-S3BOTT-S QC	SOIL	8260B, DWPS	12/24/03	12/24/03			
698906	TRIP BLANK	WATER	8260B, ~~DWPS~~ [illegible] 2/3/04	12/24/03	12/24/03			

Batchin1

12/29/03

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG#:700222 CASE No.:	BATCH COMPLETE: _______	DATE REVISED:
SUBMISSION R2419774	DISKETTE REQUESTED: Y_X__ N____	DATE DUE 4 WEEKS
CLIENT: Sear-Brown Group	DATE: 1/2/04	PROTOCOL: ASP-B
CLIENT REP: Karen Bunker	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: BUELL #16059	CHAIN OF CUSTODY: PRESENT/ABSENT:	SUMMARY PKG: Y_____ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS SAMPLE CONDITION
700222	BU-GP-5, 9-9.5'-S	SOIL	95,1, TIC'S, DWPS,	12/31/03	1/2/04			
700225	BU-GP-5, 12-12.6'-S QC	SOIL	95,1, TIC'S, DWPS,	12/31/03	1/2/04			
700226	BU-GP-6, 10-10.5'-S	SOIL	95,1, TIC'S, DWPS,	12/31/03	1/2/04			
700227	BU-GP-8, 7.5-8'-S	SOIL	95,1, TIC'S, DWPS,	12/31/03	1/2/04			
700230	BU-GP-10,19.8-20'-S	SOIL	95,1, TIC'S, DWPS,	12/31/03	1/2/04			

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG#:702133 CASE No.:	BATCH COMPLETE: ______	DATE REVISED:
SUBMISSION R2419875	DISKETTE REQUESTED: Y__X_ N____	DATE DUE: STD
CLIENT: Sear-Brown Group	DATE: 01/14/04	PROTOCOL: ASP-B
CLIENT REP: Karen Bunker	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: BUELL #16059	CHAIN OF CUSTODY: PRESENT/ABSENT:	SUMMARY PKG: Y_X___ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS SAMPLE CONDITION
702133	BU-RW-1-W	WATER	95-1 +TICS qc	1/13/04	1/14/04			
702134	BU-RW-2-W	WATER	95-1 +TICS	1/13/04	1/14/04			
702135	TRIP BLANK	WATER	95-1 +TICS	1/13/04	1/14/04			

4

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2319595
SDG#: 697119

Water samples were collected by Sear Brown over the period from 12/23-30/03 and received at CAS on 12/24-31/03. All samples were received unbroken, in good condition at a cooler temperature range of 0-1°C. The CAS CLP Batching Form is included as a Cross Reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were no used on the coolers. All soils are reported on a dry weight basis for all analyses. Soil samples were analyzed for Percent Solids which was used to calculate the dry weight for each location.

VOLATILE ORGANICS

Fifteen (15) soils were analyzed using NYS ASP Method 95-1 for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were also performed.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable except for except for location BU-NEWALL-S (CAS Order # 697128). The BFB was out high (116% limits 59-113) due to matrix interference of hydrocarbons which caused distortion. The Internal standards and first and second surrogates were within QC limits. The sample was not reanalyzed since a medium level dilution would not have provided better results and a lower dilution was not an option due to the interferences. The Form 2B has the recovery flagged as "*".

All samples were run within holding time for ASP protocol of 10 days from VTSR except for locations:

Client ID	CAS Order #	Days outside Holding time
BU-NWWALL-BOTT-S	697119	1
BU-NWWALL-SHAL-S	697121	1
BU-PIER-NSHAL-S	697123	2
BU-PIER-NMID-S	697126	2

Site Specific QC was performed on location BU-WWALLS (CAS Order # 698905). All Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries and Relative Percent Difference (RPD) values were within limits for all compounds. All Blank Spike recoveries were within acceptance limits.

Locations BU-PIER-NSHAL-S and BU-SEBOTT-S (CAS Order #s 697123 and 698903 respectively) had hits above the calibration range of the instrument. The compounds have been flagged as "E". The samples were repeated at dilutions appropriate for the concentrations. Both sets of data are included in the package. The diluted samples are denoted with the suffix "DL". The hits in the diluted samples are flagged as "D".

Hits below the CRDL are flagged as "J", estimated.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for 95-1 analysis. The 15 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Method Blanks were free from Target Compound contamination.

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2319595
SDG#: 697119

No Cooler Blank was set up with this SDG due to a laboratory error.

No other problems were encountered during the analysis of these samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package, has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Lisa Reyes for MKP — 2/3/04

Michael K. Perry
Laboratory Manager

Date

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2319657 SDG#: 698895

Water samples were collected by Sear Brown on 12/24/03 and received at CAS on the same day. All samples were received within hours of sampling unbroken at a cooler temperature of 15°C. The CAS CLP Batching Form is included as a Cross Reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were not used on the coolers. All soils are reported on a dry weight basis for all analyses. Soil samples were analyzed for Percent Solids which was used to calculate the dry weight for each location.

VOLATILE ORGANICS

Six (6) soils and one (1) Trip Blank were analyzed using SW-846 method 8260B for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were run for each sample This method was utilized in order to comply with the Rush Turn Around Time required by the client for these samples as per client instruction.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

All samples were run within the 14 day holding time for the method.

Site Specific QC was performed on location BU-GP1-S3BOTT-S (CAS Order # 698900). All Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries and Relative Percent Difference (RPD) values were within limits for all compounds. All Blank Spike recoveries were within acceptance limits.

Most locations were initially run at Medium dilutions and reported for the rush TAT requested by the client. Several samples were later repeated at lower dilutions or undiluted, to achieve and report lower detection limits. Both sets of data are included in the package.

Hits below the CRDL are flagged as "J", estimated.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for this analysis. The up to 20 of the largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound. "D" flags indicate an additional dilution was analyzed.

The Trip Blank was free of contamination from Target Compounds and TIC's. All Method Blanks were free from Target Compound contamination.

No problems were encountered during the analysis of these samples.

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic
SUBMISSION #: R2319774
SDG#: 700222

Water samples were collected by Sear Brown on 12/31/03 and received at CAS on 1/2/04. Samples were received in good condition, unbroken at a cooler temperature of 0°C. The CAS CLP Batching Form is included as a Cross Reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were not used on the coolers. All soils are reported on a dry weight basis for all analyses. Soil samples were analyzed for Percent Solids which was used to calculate the dry weight for each location.

VOLATILE ORGANICS

Five (5) soils were analyzed using ASP method 95-1 for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were run for each sample.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

All samples were run within the 10 day holding time from VTSR for this method.

Site Specific QC was performed on location BU-GP5-12-12.6'-S (CAS Order # 700225). All Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries and Relative Percent Difference (RPD) values were within limits for all compounds. All Blank Spike recoveries were within acceptance limits.

Samples were diluted as appropriate to bring target compounds into the calibration range of the standards. Hits outside the range are flagged as "E", estimated. These samples are then reanalyzed at the proper dilution for the overrange compound. Both sets of data are included in the report. Additional sample dilutions are reported with the suffix "DL" and hits for the second dilution are flagged as "D".

Hits below the CRDL are flagged as "J", estimated.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for 95-1 analysis. The 15 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

The Cooler Blank set up for the period 12/29/03-1/15/04 was free from contamination. Cooler Blank samples are required as per ASP Protocol.

No problems were encountered during the analysis of these samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package, has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

for MKP 2/9/04

Michael K. Perry
Laboratory Manager

Date

CASE NARRATIVE

COMPANY: Sear Brown
PROJECT: Buell Automatic #16059
SUBMISSION #: R2419875
SDG#: 702133

Water samples were collected by Sear Brown on 1/13/04 and received at CAS on 1/14/04. Samples were received in good condition, unbroken at a cooler temperature of 5°C. The CAS CLP Batching Form is included as a Cross Reference between Client ID and CAS Submission/Order # and analyses requested. Custody seals were not used on the coolers.

VOLATILE ORGANICS

Two (2) water samples and one (1) Trip Blank were analyzed using ASP method 95-1 for the Target Compound List (TCL) of Volatile Organic compounds. Library Searches were run for each sample.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

All samples were run within the 10 day holding time from VTSR for this method.

Site Specific QC was performed on location RW-1-W (CAS Order # 702133). All Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries were within limits except for Trichloroethene which was low for both the MS and MSD (68% - limits 71-120). Both recoveries were flagged as "*". All Relative Percent Difference (RPD) values were within limits for all compounds. All Blank Spike recoveries were within acceptance limits.

Samples were diluted as appropriate to bring target compounds into the calibration range of the standards. Hits below the CRDL are flagged as "J", estimated.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for 95-1 analysis. The 15 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound. No TIC's were found in these samples.

No Cooler Blank was set up due to a laboratory error. The Trip Blank and Laboratory Method Blanks were free of contamination.

No problems were encountered during the analysis of these samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package, has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Laboratory Manager

2/14/04
Date

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WWALL-BOTT

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697119 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3438.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 16.2 Date Analyzed: 01/07/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	24	U
75-01-4	Vinyl chloride	11	J
75-00-3	Chloroethane	24	U
74-83-9	Bromomethane	24	U
67-64-1	Acetone	53	
75-09-2	Methylene chloride	24	U
75-15-0	Carbon disulfide	24	U
78-93-3	2-Butanone	24	U
156-59-2	cis-1,2-Dichloroethene	5	J
67-66-3	Chloroform	24	U
107-06-2	1,2-Dichloroethane	24	U
71-55-6	1,1,1-Trichloroethane	24	U
71-43-2	Benzene	3	J
79-01-6	Trichloroethene	9	J
75-27-4	Bromodichloromethane	24	U
10061-01-5	cis-1,3-Dichloropropene	24	U
10061-02-6	trans-1,3-Dichloropropene	24	U
79-00-5	1,1,2-Trichloroethane	24	U
124-48-1	Dibromochloromethane	24	U
75-25-2	Bromoform	24	U
108-10-1	4-Methyl-2-pentanone	24	U
108-88-3	Toluene	24	U
591-78-6	2-Hexanone	24	U
127-18-4	Tetrachloroethene	24	U
108-90-7	Chlorobenzene	24	U
100-41-4	Ethylbenzene	24	U
108-38-3/106-42-3	(m+p)Xylene	24	U
100-42-5	Styrene	24	U
79-34-5	1,1,2,2-Tetrachloroethane	24	U
95-47-6	o-Xylene	24	U
156-60-5	trans-1,2-Dichloroethene	24	U
75-35-4	1,1-Dichloroethene	24	U
75-34-3	1,1-Dichloroethane	10	J
56-23-5	Carbon tetrachloride	24	U
78-87-5	1,2-Dichloropropane	24	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WWALL-BOTT

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697119 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3438.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 16.2 Date Analyzed: 01/07/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 004291-80-9	Cyclohexane, 1-methyl-3-propyl-	19.95	210	JN
2. 002847-72-5	Decane, 4-methyl-	20.57	340	JN
3. 017302-32-8	Nonane, 3,7-dimethyl-	21.03	160	JN
4. 001678-93-9	Cyclohexane, butyl-	21.25	140	JN
5.	unknown hydrocarbon	22.30	310	J
6.	unknown hydrocarbon	22.83	400	J
7.	unknown alkane	22.97	140	J
8. 017301-32-5	Undecane, 4,7-dimethyl-	23.10	140	JN
9.	unknown hydrocarbon	23.46	260	J
10.	unknown hydrocarbon	23.63	500	J
11. 004292-92-6	Cyclohexane, pentyl-	23.71	270	JN
12.	unknown hydrocarbon	24.07	270	J
13. 006044-71-9	Dodecane, 6-methyl-	24.96	220	JN
14.	unknown hydrocarbon	25.16	210	J
15.	unknown alkane	26.16	190	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NWWALL-SHALS

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697121 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3439.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 22.6 Date Analyzed: 01/07/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	26	U
75-01-4	Vinyl chloride	65	
75-00-3	Chloroethane	26	U
74-83-9	Bromomethane	26	U
67-64-1	Acetone	29	
75-09-2	Methylene chloride	26	U
75-15-0	Carbon disulfide	26	U
78-93-3	2-Butanone	26	U
156-59-2	cis-1,2-Dichloroethene	89	
67-66-3	Chloroform	26	U
107-06-2	1,2-Dichloroethane	26	U
71-55-6	1,1,1-Trichloroethane	26	U
71-43-2	Benzene	3	J
79-01-6	Trichloroethene	26	U
75-27-4	Bromodichloromethane	26	U
10061-01-5	cis-1,3-Dichloropropene	26	U
10061-02-6	trans-1,3-Dichloropropene	26	U
79-00-5	1,1,2-Trichloroethane	26	U
124-48-1	Dibromochloromethane	26	U
75-25-2	Bromoform	26	U
108-10-1	4-Methyl-2-pentanone	26	U
108-88-3	Toluene	26	U
591-78-6	2-Hexanone	26	U
127-18-4	Tetrachloroethene	26	U
108-90-7	Chlorobenzene	26	U
100-41-4	Ethylbenzene	26	U
108-38-3/106-42-3	(m+p)Xylene	26	U
100-42-5	Styrene	26	U
79-34-5	1,1,2,2-Tetrachloroethane	26	U
95-47-6	o-Xylene	26	U
156-60-5	trans-1,2-Dichloroethene	26	U
75-35-4	1,1-Dichloroethene	26	U
75-34-3	1,1-Dichloroethane	22	J
56-23-5	Carbon tetrachloride	26	U
78-87-5	1,2-Dichloropropane	26	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NWWALL-SHALS

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697121 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3439.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 22.6 Date Analyzed: 01/07/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 004291-80-9	Cyclohexane, 1-methyl-3-propyl-	19.94	190	JN
2. 002847-72-5	Decane, 4-methyl-	20.56	280	JN
3.	unknown alkane	21.03	130	J
4. 001678-93-9	Cyclohexane, butyl-	21.24	170	JN
5.	unknown hydrocarbon	22.30	250	J
6.	unknown hydrocarbon	22.60	150	J
7. 000506-51-4	1-Tetracosanol	22.83	340	JN
8.	unknown hydrocarbon	23.43	220	J
9.	unknown hydrocarbon	23.63	490	J
10.	unknown hydrocarbon	24.06	220	J
11.	unknown hydrocarbon	24.57	130	J
12. 000767-58-8	Indan, 1-methyl-	24.87	170	JN
13. 006044-71-9	Dodecane, 6-methyl-	24.96	260	JN
14.	unknown hydrocarbon	25.15	210	J
15. 062016-34-6	Octane, 2,3,7-trimethyl-	26.15	250	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NSHAL-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697123 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3453.D

Level: (low/med) MED Date Received: 12/27/03

% Moisture: not dec. 15.4 Date Analyzed: 01/08/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	CONCENTRATION (UG/KG)	Q
74-87-3	Chloromethane	1500	U J
75-01-4	Vinyl chloride	1500	U
75-00-3	Chloroethane	1500	U
74-83-9	Bromomethane	1500	U
67-64-1	Acetone	1500	U
75-09-2	Methylene chloride	1500	U
75-15-0	Carbon disulfide	1500	U
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	1700	
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	450	J
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	140,000 ~~100000~~	~~E~~
75-27-4	Bromodichloromethane	1500	U
10061-01-5	cis-1,3-Dichloropropene	1500	U
10061-02-6	trans-1,3-Dichloropropene	1500	U
79-00-5	1,1,2-Trichloroethane	1500	U
124-48-1	Dibromochloromethane	1500	U
75-25-2	Bromoform	1500	U
108-10-1	4-Methyl-2-pentanone	1500	U
108-88-3	Toluene	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	540	J
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U
108-38-3/106-42-3	(m+p)Xylene	1500	U
100-42-5	Styrene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
95-47-6	o-Xylene	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-35-4	1,1-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	1500	U
56-23-5	Carbon tetrachloride	1500	U
78-87-5	1,2-Dichloropropane	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NSHAL-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697123 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3453.D

Level: (low/med) MED Date Received: 12/27/03

% Moisture: not dec. 15.4 Date Analyzed: 01/08/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 14

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown alkane	19.96	4300	J
2. 002847-72-5	Decane, 4-methyl-	20.57	1200	JN
3.	unknown alkane	21.03	1100	J
4. 001678-93-9	Cyclohexane, butyl-	21.25	1400	JN
5. 000493-02-7	Naphthalene, decahydro-, trans-	22.30	1900	JN
6. 001120-21-4	Undecane	22.40	2400	JN
7.	unknown hydrocarbon	22.84	2100	J
8.	unknown hydrocarbon	23.27	1100	J
9.	unknown hydrocarbon	23.63	2700	J
10. 004292-92-6	Cyclohexane, pentyl-	23.71	1700	JN
11.	unknown hydrocarbon	24.07	2600	J
12.	unknown hydrocarbon	25.21	1000	J
13.	unknown hydrocarbon	26.20	1400	J
14.	unknown hydrocarbon	26.45	1500	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NMID-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697126 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3457.D

Level: (low/med) MED Date Received: 12/27/03

% Moisture: not dec. 17.4 Date Analyzed: 01/08/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	1500	U J
75-01-4	Vinyl chloride	1500	U
75-00-3	Chloroethane	1500	U
74-83-9	Bromomethane	1500	U
67-64-1	Acetone	1500	U
75-09-2	Methylene chloride	1500	U
75-15-0	Carbon disulfide	1500	U
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	2000	
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	390	J
75-27-4	Bromodichloromethane	1500	U
10061-01-5	cis-1,3-Dichloropropene	1500	U
10061-02-6	trans-1,3-Dichloropropene	1500	U
79-00-5	1,1,2-Trichloroethane	1500	U
124-48-1	Dibromochloromethane	1500	U
75-25-2	Bromoform	1500	U
108-10-1	4-Methyl-2-pentanone	1500	U
108-88-3	Toluene	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	160	J
108-38-3/106-42-3	(m+p)Xylene	450	J
100-42-5	Styrene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
95-47-6	o-Xylene	380	J
156-60-5	trans-1,2-Dichloroethene	1500	U
75-35-4	1,1-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	1500	U
56-23-5	Carbon tetrachloride	1500	U
78-87-5	1,2-Dichloropropane	1500	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NMID-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697126 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3457.D

Level: (low/med) MED Date Received: 12/27/03

% Moisture: not dec. 17.4 Date Analyzed: 01/08/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	19.96	32000	JN
2. 000108-67-8	Benzene, 1,3,5-trimethyl-	20.76	6700	JN
3. 001678-93-9	Cyclohexane, butyl-	21.23	9500	JN
4. 000141-93-5	Benzene, 1,3-diethyl-	22.18	5600	JN
5.	unknown hydrocarbon	22.29	5600	J
6. 001120-21-4	Undecane	22.39	18000	JN
7. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.59	8700	JN
8.	unknown hydrocarbon	22.83	9900	J
9.	unknown hydrocarbon	23.26	6900	J
10.	unknown hydrocarbon	23.45	6100	J
11.	unknown hydrocarbon	23.62	10000	J
12. 004292-92-6	Cyclohexane, pentyl-	23.70	6600	JN
13.	unknown hydrocarbon	24.06	9700	J
14. 002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	24.81	6200	JN
15.	unknown hydrocarbon	26.45	5800	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NWALL-S

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697127 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3413.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 22.6 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/KG	Q
74-87-3	Chloromethane	26	U
75-01-4	Vinyl chloride	26	U
75-00-3	Chloroethane	26	U
74-83-9	Bromomethane	26	U
67-64-1	Acetone	79	
75-09-2	Methylene chloride	26	U
75-15-0	Carbon disulfide	26	U
78-93-3	2-Butanone	26	U
156-59-2	cis-1,2-Dichloroethene	26	U
67-66-3	Chloroform	26	U
107-06-2	1,2-Dichloroethane	26	U
71-55-6	1,1,1-Trichloroethane	26	U
71-43-2	Benzene	26	U
79-01-6	Trichloroethene	26	U
75-27-4	Bromodichloromethane	26	U
10061-01-5	cis-1,3-Dichloropropene	26	U
10061-02-6	trans-1,3-Dichloropropene	26	U
79-00-5	1,1,2-Trichloroethane	26	U
124-48-1	Dibromochloromethane	26	U
75-25-2	Bromoform	26	U
108-10-1	4-Methyl-2-pentanone	26	U
108-88-3	Toluene	26	U
591-78-6	2-Hexanone	26	U
127-18-4	Tetrachloroethene	26	U
108-90-7	Chlorobenzene	26	U
100-41-4	Ethylbenzene	26	U
108-38-3/106-42-3	(m+p)Xylene	26	U
100-42-5	Styrene	26	U
79-34-5	1,1,2,2-Tetrachloroethane	26	U
95-47-6	o-Xylene	26	U
156-60-5	trans-1,2-Dichloroethene	26	U
75-35-4	1,1-Dichloroethene	26	U
75-34-3	1,1-Dichloroethane	26	U
56-23-5	Carbon tetrachloride	26	U
78-87-5	1,2-Dichloropropane	26	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NWALL-S

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697127 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3413.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 22.6 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown cyclic hydrocarbon	19.96	100	J
2. 002847-72-5	Decane, 4-methyl-	20.58	140	JN
3. 001678-93-9	Cyclohexane, butyl-	21.26	90	JN
4.	unknown hydrocarbon	22.31	150	J
5.	unknown cyclic hydrocarbon	22.48	120	J
6.	unknown hydrocarbon	22.61	210	J
7.	unknown hydrocarbon	22.84	240	J
8. 000527-84-4	Benzene, 1-methyl-2-(1-methylet	22.99	110	JN
9.	unknown hydrocarbon	23.47	130	J
10.	unknown hydrocarbon	23.65	260	J
11.	unknown hydrocarbon	24.07	190	J
12.	unknown hydrocarbon	24.82	91	J
13. 006044-71-9	Dodecane, 6-methyl-	24.97	210	JN
14.	unknown hydrocarbon	25.17	140	J
15. 005911-04-6	Nonane, 3-methyl-	26.16	180	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NEWALL-S

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697128 5.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3414.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 18.9 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	62	U
75-01-4	Vinyl chloride	62	U
75-00-3	Chloroethane	62	U
74-83-9	Bromomethane	62	U
67-64-1	Acetone	84	J
75-09-2	Methylene chloride	62	U
75-15-0	Carbon disulfide	62	U
78-93-3	2-Butanone	8	J
156-59-2	cis-1,2-Dichloroethene	17	J
67-66-3	Chloroform	62	U
107-06-2	1,2-Dichloroethane	62	U
71-55-6	1,1,1-Trichloroethane	62	U
71-43-2	Benzene	62	U
79-01-6	Trichloroethene	240	J
75-27-4	Bromodichloromethane	62	U
10061-01-5	cis-1,3-Dichloropropene	62	U
10061-02-6	trans-1,3-Dichloropropene	62	U
79-00-5	1,1,2-Trichloroethane	62	U
124-48-1	Dibromochloromethane	62	U
75-25-2	Bromoform	62	U
108-10-1	4-Methyl-2-pentanone	62	U
108-88-3	Toluene	62	U
591-78-6	2-Hexanone	62	U
127-18-4	Tetrachloroethene	62	U
108-90-7	Chlorobenzene	62	U
100-41-4	Ethylbenzene	44	J
108-38-3/106-42-3	(m+p)Xylene	40	J
100-42-5	Styrene	62	U
79-34-5	1,1,2,2-Tetrachloroethane	62	U
95-47-6	o-Xylene	69	J
156-60-5	trans-1,2-Dichloroethene	62	U
75-35-4	1,1-Dichloroethene	62	U
75-34-3	1,1-Dichloroethane	62	U
56-23-5	Carbon tetrachloride	62	U
78-87-5	1,2-Dichloropropane	62	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NEWALL-S

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697128 5.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3414.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 18.9 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown alkane	18.90	2600	J
2. 017301-94-9	Nonane, 4-methyl-	19.02	3000	JN
3. 004291-79-6	Cyclohexane, 1-methyl-2-propyl-	19.98	3400	JN
4. 002847-72-5	Decane, 4-methyl-	20.58	4200	JN
5. 000108-67-8	Benzene, 1,3,5-trimethyl-	20.78	4200	JN
6.	unknown alkane	21.05	2500	J
7. 001678-93-9	Cyclohexane, butyl-	21.27	5900	JN
8.	unknown alkane	21.42	3100	J
9.	unknown hydrocarbon	22.32	4200	J
10.	unknown hydrocarbon	22.62	4400	J
11.	unknown hydrocarbon	22.85	6600	J
12.	unknown hydrocarbon	22.99	3000	J
13.	unknown hydrocarbon	23.48	3500	J
14.	unknown hydrocarbon	23.65	4800	J
15.	unknown hydrocarbon	24.08	2900	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXCDUP-S

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697129 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3415.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 27 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	27	U
75-01-4	Vinyl chloride	27	U
75-00-3	Chloroethane	27	U
74-83-9	Bromomethane	27	U
67-64-1	Acetone	34	
75-09-2	Methylene chloride	27	U
75-15-0	Carbon disulfide	27	U
78-93-3	2-Butanone	4	J
156-59-2	cis-1,2-Dichloroethene	27	U
67-66-3	Chloroform	27	U
107-06-2	1,2-Dichloroethane	27	U
71-55-6	1,1,1-Trichloroethane	27	U
71-43-2	Benzene	27	U
79-01-6	Trichloroethene	27	U
75-27-4	Bromodichloromethane	27	U
10061-01-5	cis-1,3-Dichloropropene	27	U
10061-02-6	trans-1,3-Dichloropropene	27	U
79-00-5	1,1,2-Trichloroethane	27	U
124-48-1	Dibromochloromethane	27	U
75-25-2	Bromoform	27	U
108-10-1	4-Methyl-2-pentanone	27	U
108-88-3	Toluene	27	U
591-78-6	2-Hexanone	27	U
127-18-4	Tetrachloroethene	27	U
108-90-7	Chlorobenzene	27	U
100-41-4	Ethylbenzene	27	U
108-38-3/106-42-3	(m+p)Xylene	27	U
100-42-5	Styrene	27	U
79-34-5	1,1,2,2-Tetrachloroethane	27	U
95-47-6	o-Xylene	27	U
156-60-5	trans-1,2-Dichloroethene	27	U
75-35-4	1,1-Dichloroethene	27	U
75-34-3	1,1-Dichloroethane	27	U
56-23-5	Carbon tetrachloride	27	U
78-87-5	1,2-Dichloropropane	27	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXCDUP-S

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 697129 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3415.D

Level: (low/med) LOW Date Received: 12/27/03

% Moisture: not dec. 27 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 004291-80-9	Cyclohexane, 1-methyl-3-propyl-	19.96	110	JN
2. 002847-72-5	Decane, 4-methyl-	20.57	140	JN
3. 001678-93-9	Cyclohexane, butyl-	21.26	110	JN
4. 006975-98-0	Decane, 2-methyl-	21.57	73	JN
5.	unknown hydrocarbon	22.31	130	J
6.	unknown hydrocarbon	22.61	99	J
7. 000506-51-4	1-Tetracosanol	22.85	200	JN
8. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	22.99	99	JN
9.	unknown hydrocarbon	23.47	130	J
10.	unknown hydrocarbon	23.65	250	J
11.	unknown hydrocarbon	24.07	200	J
12.	unknown hydrocarbon	24.81	170	J
13. 006044-71-9	Dodecane, 6-methyl-	24.96	220	JN
14.	unknown hydrocarbon	25.16	160	J
15. 062016-34-6	Octane, 2,3,7-trimethyl-	26.15	210	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SWALLS

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 698901 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3383.D

Level: (low/med) LOW Date Received: 12/24/03

% Moisture: not dec. 17.5 Date Analyzed: 01/02/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	21	
75-09-2	Methylene chloride	12	U
75-15-0	Carbon disulfide	12	U
78-93-3	2-Butanone	4	J
156-59-2	cis-1,2-Dichloroethene	11	J
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	24	
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
108-38-3/106-42-3	(m+p)Xylene	2	J
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
95-47-6	o-Xylene	2	J
156-60-5	trans-1,2-Dichloroethene	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
78-87-5	1,2-Dichloropropane	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SWALLS

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 698901 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3383.D

Level: (low/med) LOW Date Received: 12/24/03

% Moisture: not dec. 17.5 Date Analyzed: 01/02/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	19.99	860	JN
2. 002847-72-5	Decane, 4-methyl-	20.60	240	JN
3. 006975-98-0	Decane, 2-methyl-	21.59	180	JN
4. 001120-21-4	Undecane	22.43	1200	JN
5.	unknown hydrocarbon	22.64	180	J
6.	unknown hydrocarbon	22.87	310	J
7.	unknown hydrocarbon	23.49	200	J
8.	unknown hydrocarbon	23.67	290	J
9. 007045-71-8	Undecane, 2-methyl-	23.89	160	JN
10.	unknown hydrocarbon	24.09	320	J
11. 000112-40-3	Dodecane	24.68	810	JN
12.	unknown aromatic hydrocarbon	24.85	170	J
13. 006044-71-9	Dodecane, 6-methyl-	24.99	190	JN
14.	unknown hydrocarbon	26.18	180	J
15. 000629-50-5	Tridecane	26.65	170	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SEWALLS

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 698902 625.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3363.D

Level: (low/med) MED Date Received: 12/24/03

% Moisture: not dec. 15.3 Date Analyzed: 12/31/03

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 625.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	7400	U
75-01-4	Vinyl chloride	3000	J
75-00-3	Chloroethane	7400	U
74-83-9	Bromomethane	7400	U
67-64-1	Acetone	7400	U
75-09-2	Methylene chloride	7400	U
75-15-0	Carbon disulfide	7400	U
78-93-3	2-Butanone	7400	U
156-59-2	cis-1,2-Dichloroethene	150000	
67-66-3	Chloroform	7400	U
107-06-2	1,2-Dichloroethane	7400	U
71-55-6	1,1,1-Trichloroethane	6500	J
71-43-2	Benzene	7400	U
79-01-6	Trichloroethene	110000	
75-27-4	Bromodichloromethane	7400	U
10061-01-5	cis-1,3-Dichloropropene	7400	U
10061-02-6	trans-1,3-Dichloropropene	7400	U
79-00-5	1,1,2-Trichloroethane	7400	U
124-48-1	Dibromochloromethane	7400	U
75-25-2	Bromoform	7400	U
108-10-1	4-Methyl-2-pentanone	7400	U
108-88-3	Toluene	7400	U
591-78-6	2-Hexanone	7400	U
127-18-4	Tetrachloroethene	7400	U
108-90-7	Chlorobenzene	7400	U
100-41-4	Ethylbenzene	940	J
108-38-3/106-42-3	(m+p)Xylene	2300	J
100-42-5	Styrene	7400	U
79-34-5	1,1,2,2-Tetrachloroethane	7400	U
95-47-6	o-Xylene	2000	J
156-60-5	trans-1,2-Dichloroethene	7400	U
75-35-4	1,1-Dichloroethene	7400	U
75-34-3	1,1-Dichloroethane	880	J
56-23-5	Carbon tetrachloride	7400	U
78-87-5	1,2-Dichloropropane	7400	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SEWALLS

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 698902 625.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3363.D

Level: (low/med) MED Date Received: 12/24/03

% Moisture: not dec. 15.3 Date Analyzed: 12/31/03

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 625.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	20.00	120000	JN
2. 000526-73-8	Benzene, 1,2,3-trimethyl-	20.81	32000	JN
3. 001678-93-9	Cyclohexane, butyl-	21.29	44000	JN
4. 000141-93-5	Benzene, 1,3-diethyl-	22.23	28000	JN
5.	unknown hydrocarbon	22.34	31000	J
6. 001120-21-4	Undecane	22.44	63000	JN
7. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.65	40000	JN
8.	unknown hydrocarbon	22.88	30000	J
9. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	23.03	24000	JN
10.	unknown hydrocarbon	23.31	34000	J
11.	unknown hydrocarbon	23.51	28000	J
12.	unknown hydrocarbon	23.67	48000	J
13.	unknown hydrocarbon	24.11	48000	J
14. 002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	24.85	31000	JN
15.	unknown hydrocarbon	26.49	22000	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SEBOTTS

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 698903 625.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3367.D

Level: (low/med) MED Date Received: 12/24/03

% Moisture: not dec. 16 Date Analyzed: 12/31/03

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 625.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	7400	U
75-01-4	Vinyl chloride	5100	J
75-00-3	Chloroethane	7400	U
74-83-9	Bromomethane	7400	U
67-64-1	Acetone	7400	U
75-09-2	Methylene chloride	7400	U
75-15-0	Carbon disulfide	7400	U
78-93-3	2-Butanone	7400	U
156-59-2	cis-1,2-Dichloroethene	190,000 ~~180000~~	~~E~~
67-66-3	Chloroform	7400	U
107-06-2	1,2-Dichloroethane	7400	U
71-55-6	1,1,1-Trichloroethane	7100	J
71-43-2	Benzene	7400	U
79-01-6	Trichloroethene	7400	U
75-27-4	Bromodichloromethane	7400	U
10061-01-5	cis-1,3-Dichloropropene	7400	U
10061-02-6	trans-1,3-Dichloropropene	7400	U
79-00-5	1,1,2-Trichloroethane	7400	U
124-48-1	Dibromochloromethane	7400	U
75-25-2	Bromoform	7400	U
108-10-1	4-Methyl-2-pentanone	7400	U
108-88-3	Toluene	840	J
591-78-6	2-Hexanone	7400	U
127-18-4	Tetrachloroethene	7400	U
108-90-7	Chlorobenzene	7400	U
100-41-4	Ethylbenzene	1900	J
108-38-3/106-42-3	(m+p)Xylene	4000	J
100-42-5	Styrene	7400	U
79-34-5	1,1,2,2-Tetrachloroethane	7400	U
95-47-6	o-Xylene	3500	J
156-60-5	trans-1,2-Dichloroethene	7400	U
75-35-4	1,1-Dichloroethene	890	J
75-34-3	1,1-Dichloroethane	1400	J
56-23-5	Carbon tetrachloride	7400	U
78-87-5	1,2-Dichloropropane	7400	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SEBOTTS

Lab Name: CAS\ROCH   Contract: SEARB

Lab Code: 10145   Case No.: R3-19595   SAS No.: ____   SDG No.: 697119

Matrix: (soil/water) SOIL   Lab Sample ID: 698903 625.0

Sample wt/vol: 4.0 (g/ml) G   Lab File ID: B3367.D

Level: (low/med) MED   Date Received: 12/24/03

% Moisture: not dec. 16   Date Analyzed: 12/31/03

GC Column: DB-624 ID: 0.32 (mm)   Dilution Factor: ~~1.0~~ 625.0

Soil Extract Volume 10000 (uL)   Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	19.99	150000	JN
2. 000526-73-8	Benzene, 1,2,3-trimethyl-	20.80	47000	JN
3. 001678-93-9	Cyclohexane, butyl-	21.28	75000	JN
4. 000141-93-5	Benzene, 1,3-diethyl-	22.22	40000	JN
5.	unknown hydrocarbon	22.33	39000	J
6. 001120-21-4	Undecane	22.43	59000	JN
7. 001074-17-5	Benzene, 1-methyl-2-propyl-	22.64	47000	JN
8.	unknown hydrocarbon	22.87	35000	J
9. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	23.02	34000	JN
10.	unknown hydrocarbon	23.31	53000	J
11.	unknown hydrocarbon	23.50	37000	J
12.	unknown hydrocarbon	23.66	61000	J
13.	unknown hydrocarbon	24.10	62000	J
14. 002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	24.85	43000	JN
15. 000091-20-3	Naphthalene	26.20	38000	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SWWALLS

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 698904 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3368.D

Level: (low/med) MED Date Received: 12/24/03

% Moisture: not dec. 19.2 Date Analyzed: 12/31/03

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500	U
75-01-4	Vinyl chloride	1500	U
75-00-3	Chloroethane	1500	U
74-83-9	Bromomethane	1500	U
67-64-1	Acetone	1500	U
75-09-2	Methylene chloride	1500	U
75-15-0	Carbon disulfide	1500	U
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	1100	J
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	5300	J
75-27-4	Bromodichloromethane	1500	U
10061-01-5	cis-1,3-Dichloropropene	1500	U
10061-02-6	trans-1,3-Dichloropropene	1500	U
79-00-5	1,1,2-Trichloroethane	1500	U
124-48-1	Dibromochloromethane	1500	U
75-25-2	Bromoform	1500	U
108-10-1	4-Methyl-2-pentanone	1500	U
108-88-3	Toluene	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U
108-38-3/106-42-3	(m+p)Xylene	1500	U
100-42-5	Styrene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
95-47-6	o-Xylene	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-35-4	1,1-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	1500	U
56-23-5	Carbon tetrachloride	1500	U
78-87-5	1,2-Dichloropropane	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SWWALLS

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 698904 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3368.D

Level: (low/med) MED Date Received: 12/24/03

% Moisture: not dec. 19.2 Date Analyzed: 12/31/03

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 4

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	19.98	2000	JN
2. 001120-21-4	Undecane	22.43	1700	JN
3. 000112-40-3	Dodecane	24.66	790	JN
4. 000091-20-3	Naphthalene	26.19	920	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WWALLS

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 698905 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3369.D

Level: (low/med) MED Date Received: 12/24/03

% Moisture: not dec. 18.9 Date Analyzed: 12/31/03

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500	U
75-01-4	Vinyl chloride	1500	U
75-00-3	Chloroethane	1500	U
74-83-9	Bromomethane	1500	U
67-64-1	Acetone	1500	U
75-09-2	Methylene chloride	1500	U
75-15-0	Carbon disulfide	1500	U
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	1800	
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	13000	
75-27-4	Bromodichloromethane	1500	U
10061-01-5	cis-1,3-Dichloropropene	1500	U
10061-02-6	trans-1,3-Dichloropropene	1500	U
79-00-5	1,1,2-Trichloroethane	1500	U
124-48-1	Dibromochloromethane	1500	U
75-25-2	Bromoform	1500	U
108-10-1	4-Methyl-2-pentanone	1500	U
108-88-3	Toluene	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U
108-38-3/106-42-3	(m+p)Xylene	1500	U
100-42-5	Styrene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
95-47-6	o-Xylene	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-35-4	1,1-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	1500	U
56-23-5	Carbon tetrachloride	1500	U
78-87-5	1,2-Dichloropropane	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WWALLS

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 698905 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3369.D

Level: (low/med) MED Date Received: 12/24/03

% Moisture: not dec. 18.9 Date Analyzed: 12/31/03

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 6

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	19.99	1100	JN
2. 001120-21-4	Undecane	22.42	2100	JN
3.	unknown hydrocarbon	23.71	1200	J
4. 000112-40-3	Dodecane	24.67	1500	JN
5. 000091-20-3	Naphthalene	26.19	770	JN
6. 000629-50-5	Tridecane	26.65	970	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WWALL2-S

Lab Name: CAS/ROCH   Contract: SEARB

Lab Code: 10145   Case No.: R3-19595   SAS No.: ______   SDG No.: 697119

Matrix: (soil/water) SOIL   Lab Sample ID: 699602 2.0

Sample wt/vol: 5.0 (g/ml) G   Lab File ID: B3416.D

Level: (low/med) LOW   Date Received: 12/31/03

% Moisture: not dec. 13.4   Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm)   Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume ______ (uL)   Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	23	U
75-01-4	Vinyl chloride	23	U
75-00-3	Chloroethane	23	U
74-83-9	Bromomethane	23	U
67-64-1	Acetone	18	J
75-09-2	Methylene chloride	23	U
75-15-0	Carbon disulfide	23	U
78-93-3	2-Butanone	23	U
156-59-2	cis-1,2-Dichloroethene	270	
67-66-3	Chloroform	23	U
107-06-2	1,2-Dichloroethane	23	U
71-55-6	1,1,1-Trichloroethane	23	U
71-43-2	Benzene	23	U
79-01-6	Trichloroethene	280	
75-27-4	Bromodichloromethane	23	U
10061-01-5	cis-1,3-Dichloropropene	23	U
10061-02-6	trans-1,3-Dichloropropene	23	U
79-00-5	1,1,2-Trichloroethane	23	U
124-48-1	Dibromochloromethane	23	U
75-25-2	Bromoform	23	U
108-10-1	4-Methyl-2-pentanone	23	U
108-88-3	Toluene	23	U
591-78-6	2-Hexanone	23	U
127-18-4	Tetrachloroethene	23	U
108-90-7	Chlorobenzene	23	U
100-41-4	Ethylbenzene	23	U
108-38-3/106-42-3	(m+p)Xylene	23	U
100-42-5	Styrene	23	U
79-34-5	1,1,2,2-Tetrachloroethane	23	U
95-47-6	o-Xylene	23	U
156-60-5	trans-1,2-Dichloroethene	23	U
75-35-4	1,1-Dichloroethene	23	U
75-34-3	1,1-Dichloroethane	4	J
56-23-5	Carbon tetrachloride	23	U
78-87-5	1,2-Dichloropropane	23	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WWALL2-S

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 699602 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3416.D

Level: (low/med) LOW Date Received: 12/31/03

% Moisture: not dec. 13.4 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown alkane	26.16	13	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBOTT2-S

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 699603 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3440.D

Level: (low/med) LOW Date Received: 12/31/03

% Moisture: not dec. 19.2 Date Analyzed: 01/07/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	25	U
75-01-4	Vinyl chloride	25	U
75-00-3	Chloroethane	25	U
74-83-9	Bromomethane	25	U
67-64-1	Acetone	8	J
75-09-2	Methylene chloride	25	U
75-15-0	Carbon disulfide	25	U
78-93-3	2-Butanone	25	U
156-59-2	cis-1,2-Dichloroethene	57	
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
71-55-6	1,1,1-Trichloroethane	25	U
71-43-2	Benzene	25	U
79-01-6	Trichloroethene	100	
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
124-48-1	Dibromochloromethane	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-pentanone	25	U
108-88-3	Toluene	25	U
591-78-6	2-Hexanone	25	U
127-18-4	Tetrachloroethene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
108-38-3/106-42-3	(m+p)Xylene	25	U
100-42-5	Styrene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
95-47-6	o-Xylene	25	U
156-60-5	trans-1,2-Dichloroethene	25	U
75-35-4	1,1-Dichloroethene	25	U
75-34-3	1,1-Dichloroethane	25	U
56-23-5	Carbon tetrachloride	25	U
78-87-5	1,2-Dichloropropane	25	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WBOTT2-S

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 699603 2.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3440.D

Level: (low/med) LOW Date Received: 12/31/03

% Moisture: not dec. 19.2 Date Analyzed: 01/07/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 062016-34-6	Octane, 2,3,7-trimethyl-	26.15	22	JN
2.	unknown hydrocarbon	27.79	27	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW1-BOTTS

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 699604 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3418.D

Level: (low/med) LOW Date Received: 12/31/03

% Moisture: not dec. 19.1 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	5	J
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	15	
75-09-2	Methylene chloride	12	U
75-15-0	Carbon disulfide	12	U
78-93-3	2-Butanone	12	U
156-59-2	cis-1,2-Dichloroethene	7	J
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	61	
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
108-38-3/106-42-3	(m+p)Xylene	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
95-47-6	o-Xylene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	2	J
56-23-5	Carbon tetrachloride	12	U
78-87-5	1,2-Dichloropropane	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RW1-BOTTS

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19595 SAS No.: ______ SDG No.: 697119

Matrix: (soil/water) SOIL Lab Sample ID: 699604 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3418.D

Level: (low/med) LOW Date Received: 12/31/03

% Moisture: not dec. 19.1 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 004291-80-9	Cyclohexane, 1-methyl-3-propyl-	19.96	50	JN
2. 002847-72-5	Decane, 4-methyl-	20.57	72	JN
3.	unknown alkane	21.03	35	J
4. 001678-93-9	Cyclohexane, butyl-	21.25	41	JN
5.	unknown hydrocarbon	22.31	65	J
6.	unknown hydrocarbon	22.61	78	J
7. 000506-51-4	1-Tetracosanol	22.84	93	JN
8.	unknown alkane	23.10	35	J
9.	unknown hydrocarbon	23.46	65	J
10.	unknown hydrocarbon	23.64	130	J
11.	unknown hydrocarbon	24.07	79	J
12.	unknown hydrocarbon	24.87	41	J
13. 006044-71-9	Dodecane, 6-methyl-	24.96	73	JN
14.	unknown hydrocarbon	25.16	69	J
15.	unknown alkane	26.16	82	J

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/03/04

Sear-Brown Group
Project Reference: BUELL #16059 IRM
Client Sample ID : BU-GP2-S2TOP-S

Date Sampled : 12/24/03 10:52 **Order #:** 698895 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 12/24/03 **Submission #:** R2319657 **Percent Solid:** 84.4

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 12/26/03			
ANALYTICAL DILUTION: 5.00			Dry Weight
ACETONE	20	120 U	UG/KG
BENZENE	5.0	30 U	UG/KG
BROMODICHLOROMETHANE	5.0	30 U	UG/KG
BROMOFORM	5.0	30 U	UG/KG
BROMOMETHANE	5.0	30 U	UG/KG
2-BUTANONE (MEK)	10	13 J	UG/KG
CARBON DISULFIDE	10	59 U	UG/KG
CARBON TETRACHLORIDE	5.0	30 U	UG/KG
CHLOROBENZENE	5.0	30 U	UG/KG
CHLOROETHANE	5.0	11 J N	UG/KG
CHLOROFORM	5.0	30 U	UG/KG
CHLOROMETHANE	5.0	30 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	30 U	UG/KG
1,1-DICHLOROETHANE	5.0	30 U	UG/KG
1,2-DICHLOROETHANE	5.0	30 U	UG/KG
1,1-DICHLOROETHENE	5.0	30 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	15 J	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	30 U	UG/KG
1,2-DICHLOROPROPANE	5.0	30 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	30 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	30 U	UG/KG
ETHYLBENZENE	5.0	190	UG/KG
2-HEXANONE	10	59 U	UG/KG
METHYLENE CHLORIDE	5.0	30 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	59 U	UG/KG
STYRENE	5.0	30 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	30 U	UG/KG
TETRACHLOROETHENE	5.0	30 U	UG/KG
TOLUENE	5.0	30 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	30 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	30 U	UG/KG
TRICHLOROETHENE	5.0	20 J	UG/KG
VINYL CHLORIDE	5.0	30 U	UG/KG
O-XYLENE	5.0	46	UG/KG
M+P-XYLENE	5.0	450	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	93	%
TOLUENE-D8	(83 - 117 %)	103	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	100	%

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP2-S2TOPS

Lab Name: cas/roch Contract: SEARB

Lab Code: 10145 Case No.: R3-19657 SAS No.: ______ SDG No.: 698895

Matrix: (soil/water) SOIL Lab Sample ID: 698895 250.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3290.D

Level: (low/med) MED Date Received: ______

% Moisture: not dec. 15.6 Date Analyzed: 12/24/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown aliphatic hydrocarbon	18.05	5300	J
2.	unknown aliphatic hydrocarbon	18.32	4600	J
3. 001678-92-8	Cyclohexane, propyl-	18.62	5400	JN
4.	unknown aliphatic hydrocarbon	18.93	8200	J
5.	unknown c10 aliphatic	19.04	8700	J
6.	unknown cyclic hydrocarbon	20.01	9700	J
7. 002847-72-5	Decane, 4-methyl-	20.61	4400	JN
8. 000095-63-6	Benzene, 1,2,4-trimethyl-	20.81	7500	JN
9. 001678-93-9	Cyclohexane, butyl-	21.30	12000	JN
10. 000105-05-5	Benzene, 1,4-diethyl-	22.24	4900	JN
11. 000493-02-7	Naphthalene, decahydro-, trans-	22.35	7700	JN
12.	unknown cyclic hydrocarbon	22.51	4000	J
13.	unknown aromatic hydrocarbon	22.64	8800	J
14.	unknown hydrocarbon	22.88	11000	J
15. 000535-77-3	Benzene, 1-methyl-3-(1-methylet	23.03	4900	JN
16.	unknown hydrocarbon	23.32	5200	J
17.	unknown hydrocarbon	23.51	6300	J
18.	unknown hydrocarbon	23.67	10000	J
19.	unknown cyclic hydrocarbon	23.76	6300	J
20. 002958-76-1	Naphthalene, decahydro-2-methy	24.12	8300	JN

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/03/04

Sear-Brown Group
Project Reference: BUELL #16059 IRM
Client Sample ID : BU-GP3-S1TOP-S

Date Sampled : 12/24/03 11:00 **Order #:** 698896 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 12/24/03 **Submission #:** R2319657 **Percent Solid:** 91.6

ANALYTE	PQL	RESULT		UNITS
DATE ANALYZED : 12/24/03				
ANALYTICAL DILUTION: 625.00				Dry Weight
ACETONE	20	14000	U	UG/KG
BENZENE	5.0	3400	U	UG/KG
BROMODICHLOROMETHANE	5.0	3400	U	UG/KG
BROMOFORM	5.0	3400	U	UG/KG
BROMOMETHANE	5.0	3400	U	UG/KG
2-BUTANONE (MEK)	10	6800	U	UG/KG
CARBON DISULFIDE	10	6800	U	UG/KG
CARBON TETRACHLORIDE	5.0	3400	U	UG/KG
CHLOROBENZENE	5.0	3400	U	UG/KG
CHLOROETHANE	5.0	3400	U	UG/KG
CHLOROFORM	5.0	3400	U	UG/KG
CHLOROMETHANE	5.0	3400	U	UG/KG
DIBROMOCHLOROMETHANE	5.0	3400	U	UG/KG
1,1-DICHLOROETHANE	5.0	880	J	UG/KG
1,2-DICHLOROETHANE	5.0	3400	U	UG/KG
1,1-DICHLOROETHENE	5.0	3400	U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	67000		UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	3400	U	UG/KG
1,2-DICHLOROPROPANE	5.0	3400	U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	3400	U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	3400	U	UG/KG
ETHYLBENZENE	5.0	3400	U	UG/KG
2-HEXANONE	10	6800	U	UG/KG
METHYLENE CHLORIDE	5.0	3400	U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	6800	U	UG/KG
STYRENE	5.0	3400	U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	3400	U	UG/KG
TETRACHLOROETHENE	5.0	810	J	UG/KG
TOLUENE	5.0	3400	U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	3500		UG/KG
1,1,2-TRICHLOROETHANE	5.0	3400	U	UG/KG
TRICHLOROETHENE	5.0	120000		UG/KG
VINYL CHLORIDE	5.0	3400	U	UG/KG
O-XYLENE	5.0	3400	U	UG/KG
M+P-XYLENE	5.0	3400	U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	104	%
TOLUENE-D8	(83 - 117 %)	105	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	102	%

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: GP3-S1TOPS

Lab Name: cas/roch Contract: SEARB

Lab Code: 10145 Case No.: R3-19657 SAS No.: ______ SDG No.: 698895

Matrix: (soil/water) SOIL Lab Sample ID: 698896 625.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3291.D

Level: (low/med) MED Date Received: ______

% Moisture: not dec. 8.4 Date Analyzed: 12/24/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 11

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown aliphatic	20.00	11000	J
2. 002847-72-5	Decane, 4-methyl-	20.61	3600	JN
3. 001678-93-9	Cyclohexane, butyl-	21.30	7700	JN
4. 000493-02-7	Naphthalene, decahydro-, trans-	22.35	4700	JN
5. 001120-21-4	Undecane	22.44	8800	JN
6.	unknown aromatic hydrocarbon	22.64	5500	J
7.	unknown hydrocarbon	22.88	5900	J
8.	unknown hydrocarbon	23.51	3600	J
9.	unknown hydrocarbon	23.67	6100	J
10.	unknown cyclic hydrocarbon	23.76	4400	J
11. 002958-76-1	Naphthalene, decahydro-2-methy	24.12	5800	JN

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/03/04

Sear-Brown Group
Project Reference: BUELL #16059 IRM
Client Sample ID : BU-GP3-S1MID-S

Date Sampled : 12/24/03 11:02 **Order #:** 698897 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 12/24/03 **Submission #:** R2319657 **Percent Solid:** 86.1

DATE ANALYZED : 12/24/03
ANALYTICAL DILUTION: 125.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	2900 U	UG/KG
BENZENE	5.0	730 U	UG/KG
BROMODICHLOROMETHANE	5.0	730 U	UG/KG
BROMOFORM	5.0	730 U	UG/KG
BROMOMETHANE	5.0	730 U	UG/KG
2-BUTANONE (MEK)	10	1500 U	UG/KG
CARBON DISULFIDE	10	1500 U	UG/KG
CARBON TETRACHLORIDE	5.0	730 U	UG/KG
CHLOROBENZENE	5.0	730 U	UG/KG
CHLOROETHANE	5.0	730 U	UG/KG
CHLOROFORM	5.0	730 U	UG/KG
CHLOROMETHANE	5.0	730 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	730 U	UG/KG
1,1-DICHLOROETHANE	5.0	730 U	UG/KG
1,2-DICHLOROETHANE	5.0	730 U	UG/KG
1,1-DICHLOROETHENE	5.0	730 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	4400	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	730 U	UG/KG
1,2-DICHLOROPROPANE	5.0	730 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	730 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	730 U	UG/KG
ETHYLBENZENE	5.0	730 U	UG/KG
2-HEXANONE	10	1500 U	UG/KG
METHYLENE CHLORIDE	5.0	730 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	1500 U	UG/KG
STYRENE	5.0	730 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	730 U	UG/KG
TETRACHLOROETHENE	5.0	730 U	UG/KG
TOLUENE	5.0	730 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	340 J	UG/KG
1,1,2-TRICHLOROETHANE	5.0	730 U	UG/KG
TRICHLOROETHENE	5.0	8600	UG/KG
VINYL CHLORIDE	5.0	360 J	UG/KG
O-XYLENE	5.0	730 U	UG/KG
M+P-XYLENE	5.0	730 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	102	%
TOLUENE-D8	(83 - 117 %)	101	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	106	%

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP3-S1MIDS

Lab Name: cas/roch   Contract: SEARB

Lab Code: 10145   Case No.: R3-19657   SAS No.: ____   SDG No.: 698895

Matrix: (soil/water) SOIL   Lab Sample ID: 698897 125.0

Sample wt/vol: 4.0 (g/ml) G   Lab File ID: B3288.D

Level: (low/med) MED   Date Received: ____

% Moisture: not dec. 13.9   Date Analyzed: 12/24/03

GC Column: db-624 ID: 0.32 (mm)   Dilution Factor: 1.0

Soil Extract Volume 10000 (uL)   Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 001120-21-4	Undecane	22.44	810	JN
2. 000112-40-3	Dodecane	24.69	730	JN

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/03/04

Sear-Brown Group
Project Reference: BUELL #16059 IRM
Client Sample ID : BU-GP3-S1BOTT-S

Date Sampled : 12/24/03 11:03 **Order #:** 698898 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 12/24/03 **Submission #:** R2319657 **Percent Solid:** 77.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 12/26/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	38	UG/KG
BENZENE	5.0	6.5 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.5 U	UG/KG
BROMOFORM	5.0	6.5 U	UG/KG
BROMOMETHANE	5.0	6.5 U	UG/KG
2-BUTANONE (MEK)	10	3.8 J	UG/KG
CARBON DISULFIDE	10	13 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.5 U	UG/KG
CHLOROBENZENE	5.0	6.5 U	UG/KG
CHLOROETHANE	5.0	6.5 U	UG/KG
CHLOROFORM	5.0	6.5 U	UG/KG
CHLOROMETHANE	5.0	6.5 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.5 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.8	UG/KG
1,2-DICHLOROETHANE	5.0	6.5 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.5 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	26	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.5 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.5 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.5 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.5 U	UG/KG
ETHYLBENZENE	5.0	6.5 U	UG/KG
2-HEXANONE	10	13 U	UG/KG
METHYLENE CHLORIDE	5.0	6.5 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	13 U	UG/KG
STYRENE	5.0	6.5 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.5 U	UG/KG
TETRACHLOROETHENE	5.0	6.5 U	UG/KG
TOLUENE	5.0	1.4 J	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.5 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.5 U	UG/KG
TRICHLOROETHENE	5.0	21	UG/KG
VINYL CHLORIDE	5.0	17	UG/KG
O-XYLENE	5.0	2.2 J	UG/KG
M+P-XYLENE	5.0	6.5 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	99	%
TOLUENE-D8	(83 - 117 %)	100	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	93	%

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P3-S1BOTTSDL

Lab Name: CAS-ROC Contract: SEARB

Lab Code: 10145 Case No.: R3-19657 SAS No.: SDG No.: 698895

Matrix: (soil/water) SOIL Lab Sample ID: 698898 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: H3811.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. 23 Date Analyzed: 12/26/03

GC Column: ZB624 ID: 0.32 (mm) Dilution Factor: ~~5.0~~ 1.0 (BA 1/26)

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Hydrocarbon	17.93	33	JD
2. 017301-94-9	Nonane, 4-methyl-	18.33	100	JND
3. 005911-04-6	Nonane, 3-methyl-	18.59	31	JND
4. 002847-72-5	Decane, 4-methyl-	19.88	120	JND
5. 001678-93-9	Cyclohexane, butyl-	20.67	77	JND
6.	Unknown Hydrocarbon	21.80	99	JD
7.	Unknown Alkane	22.15	63	JD
8.	Unknown Hydrocarbon	22.29	54	JD
9.	Unknown Alkane	22.42	88	JD
10.	Unknown Hydrocarbon	22.78	79	JD
11.	Unknown Alkane	22.99	100	JD
12.	Unknown Hydrocarbon	23.13	180	JD
13.	Unknown Hydrocarbon	23.58	69	JD
14.	Unknown Hydrocarbon	24.21	39	JD
15. 006044-71-9	Dodecane, 6-methyl-	24.31	210	JND
16.	Unknown Hydrocarbon	24.62	38	JD
17.	Unknown Hydrocarbon	24.96	42	JD
18.	Unknown Cyclic Alkane	25.55	98	JD
19.	Unknown Alkane	25.68	120	JD
20.	Unknown Alkane	28.39	38	JD

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/03/04

Sear-Brown Group
Project Reference: BUELL #16059 IRM
Client Sample ID : BU-GP3-S2BOTTS

Date Sampled : 12/24/03 11:10 **Order #:** 698899 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 12/24/03 **Submission #:** R2319657 **Percent Solid:** 85.5

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 12/26/03			
ANALYTICAL DILUTION: 5.00			Dry Weight
ACETONE	20	29 J	UG/KG
BENZENE	5.0	29 U	UG/KG
BROMODICHLOROMETHANE	5.0	29 U	UG/KG
BROMOFORM	5.0	29 U	UG/KG
BROMOMETHANE	5.0	29 U	UG/KG
2-BUTANONE (MEK)	10	58 U	UG/KG
CARBON DISULFIDE	10	58 U	UG/KG
CARBON TETRACHLORIDE	5.0	29 U	UG/KG
CHLOROBENZENE	5.0	29 U	UG/KG
CHLOROETHANE	5.0	29 U	UG/KG
CHLOROFORM	5.0	29 U	UG/KG
CHLOROMETHANE	5.0	29 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	29 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.5 J	UG/KG
1,2-DICHLOROETHANE	5.0	29 U	UG/KG
1,1-DICHLOROETHENE	5.0	29 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	29 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	29 U	UG/KG
1,2-DICHLOROPROPANE	5.0	29 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	29 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	29 U	UG/KG
ETHYLBENZENE	5.0	20 J	UG/KG
2-HEXANONE	10	58 U	UG/KG
METHYLENE CHLORIDE	5.0	29 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	58 U	UG/KG
STYRENE	5.0	29 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	29 U	UG/KG
TETRACHLOROETHENE	5.0	29 U	UG/KG
TOLUENE	5.0	29 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	29 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	29 U	UG/KG
TRICHLOROETHENE	5.0	8.0 J	UG/KG
VINYL CHLORIDE	5.0	29 U	UG/KG
O-XYLENE	5.0	22 J	UG/KG
M+P-XYLENE	5.0	21 J	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	99	%
TOLUENE-D8	(83 - 117 %)	100	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	94	%

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P3-S2BOTTSDL

Lab Name: CAS-ROC Contract: SEARB

Lab Code: 10145 Case No.: R3-19657 SAS No.: SDG No.: 698895

Matrix: (soil/water) SOIL Lab Sample ID: 698899 5.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: H3810.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. 14.5 Date Analyzed: 12/26/03

GC Column: ZB624 ID: 0.32 (mm) Dilution Factor: 5.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 20

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Alkane	15.65	390	JD
2. 002216-33-3	Octane, 3-methyl-	15.89	370	JND
3.	Unknown Hydrocarbon	17.81	420	JD
4.	Unknown Hydrocarbon	17.93	440	JD
5. 017301-94-9	Nonane, 4-methyl-	18.33	2600	JND
6. 015869-94-0	Octane, 3,6-dimethyl-	18.59	760	JND
7. 002847-72-5	Decane, 4-methyl-	19.89	600	JND
8. 001678-93-9	Cyclohexane, butyl-	20.68	440	JND
9. 013151-35-4	Decane, 5-methyl-	20.73	450	JND
10. 001120-21-4	Undecane	21.72	680	JND
11.	Unknown Hydrocarbon	22.14	470	JD
12.	Unknown Hydrocarbon	22.30	470	JD
13.	Unknown Alkane	22.42	540	JD
14.	Unknown Hydrocarbon	22.77	390	JD
15.	Unknown Alkane	23.00	650	JD
16.	Unknown Hydrocarbon	23.12	1300	JD
17.	Unknown Hydrocarbon	23.58	400	JD
18. 017301-23-4	Undecane, 2,6-dimethyl-	24.31	850	JND
19.	Unknown Hydrocarbon	25.56	650	JD
20. 054105-67-8	Heptadecane, 2,6-dimethyl-	25.69	450	JND

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/03/04

Sear-Brown Group
Project Reference: BUELL #16059 IRM
Client Sample ID : BU-GP1-S3BOTT-S

Date Sampled : 12/24/03 10:50 **Order #:** 698900 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 12/24/03 **Submission #:** R2319657 **Percent Solid:** 84.1

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 12/26/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	6.3 J	UG/KG
BENZENE	5.0	5.9 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.9 U	UG/KG
BROMOFORM	5.0	5.9 U	UG/KG
BROMOMETHANE	5.0	5.9 U	UG/KG
2-BUTANONE (MEK)	10	1.2 J	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.9 U	UG/KG
CHLOROBENZENE	5.0	5.9 U	UG/KG
CHLOROETHANE	5.0	5.9 U	UG/KG
CHLOROFORM	5.0	5.9 U	UG/KG
CHLOROMETHANE	5.0	5.9 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.9 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.9 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.9 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.9 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.9 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.9 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.9 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.9 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.9 U	UG/KG
ETHYLBENZENE	5.0	5.9 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	5.9 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	5.9 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.9 U	UG/KG
TETRACHLOROETHENE	5.0	5.9 U	UG/KG
TOLUENE	5.0	5.9 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.9 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.9 U	UG/KG
TRICHLOROETHENE	5.0	5.9 U	UG/KG
VINYL CHLORIDE	5.0	5.9 U	UG/KG
O-XYLENE	5.0	5.9 U	UG/KG
M+P-XYLENE	5.0	5.9 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	92	%
TOLUENE-D8	(83 - 117 %)	98	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	95	%

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP1-S3BOTTS

Lab Name: CAS-ROC Contract: SEARB

Lab Code: 10145 Case No.: R3-19657 SAS No.: ______ SDG No.: 698895

Matrix: (soil/water) SOIL Lab Sample ID: 698900 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: H3812.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. 15.9 Date Analyzed: 12/26/03

GC Column: ZB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/28/04

Sear-Brown Group
Project Reference: BUELL #16059 IRM
Client Sample ID : BU-GP1-S3BOTT-S

Date Sampled : 12/24/03 10:50 **Order #:** 698900 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 12/24/03 **Submission #:** R2319657 **Percent Solid:** 84.1

DATE ANALYZED : 12/26/03
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	6.3 J	UG/KG
BENZENE	5.0	5.9 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.9 U	UG/KG
BROMOFORM	5.0	5.9 U	UG/KG
BROMOMETHANE	5.0	5.9 U	UG/KG
2-BUTANONE (MEK)	10	1.2 J	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.9 U	UG/KG
CHLOROBENZENE	5.0	5.9 U	UG/KG
CHLOROETHANE	5.0	5.9 U	UG/KG
CHLOROFORM	5.0	5.9 U	UG/KG
CHLOROMETHANE	5.0	5.9 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.9 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.9 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.9 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.9 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.9 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.9 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.9 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.9 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.9 U	UG/KG
ETHYLBENZENE	5.0	5.9 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	5.9 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	5.9 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.9 U	UG/KG
TETRACHLOROETHENE	5.0	5.9 U	UG/KG
TOLUENE	5.0	5.9 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.9 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.9 U	UG/KG
TRICHLOROETHENE	5.0	5.9 U	UG/KG
VINYL CHLORIDE	5.0	5.9 U	UG/KG
O-XYLENE	5.0	5.9 U	UG/KG
M+P-XYLENE	5.0	5.9 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	92	%
TOLUENE-D8	(83 - 117 %)	98	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	95	%

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP1-S3BOTTS

Lab Name: CAS-ROC Contract: SEARB

Lab Code: 10145 Case No.: R3-19657 SAS No.: SDG No.: 698895

Matrix: (soil/water) SOIL Lab Sample ID: 698900 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: H3812.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. 15.9 Date Analyzed: 12/26/03

GC Column: ZB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/03/04

Sear-Brown Group
Project Reference: BUELL IRM
Client Sample ID : TRIP BLANK

Date Sampled : 12/24/03 **Order #:** 698906 **Sample Matrix:** WATER
Date Received: 12/24/03 **Submission #:** R2319657 **Analytical Run** 99165

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 12/26/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS	RESULT	UNITS
4-BROMOFLUOROBENZENE	(83 - 118 %)	98	%
TOLUENE-D8	(88 - 124 %)	99	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	111	%

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLK

Lab Name: cas/roch Contract: SEARB

Lab Code: 10145 Case No.: R3-19657 SAS No.: ______ SDG No.: 698895

Matrix: (soil/water) WATER Lab Sample ID: 698906 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3311.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. ______ Date Analyzed: 12/26/03

GC Column: db-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

FORM I VOA-TIC 8260b

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GP-5 9-9.5

Lab Name: CAS\ROCH   Contract: SEARB

Lab Code: 10145   Case No.: R4-19774   SAS No.: ______   SDG No.: 700222

Matrix: (soil/water) SOIL   Lab Sample ID: 700222 2500

Sample wt/vol: 4.0 (g/ml) G   Lab File ID: R3362.D

Level: (low/med) MED   Date Received: 01/02/04

% Moisture: not dec. 11.4   Date Analyzed: 01/09/04

GC Column: ZB-624 ID: 0.25 (mm)   Dilution Factor: ~~1.0~~ 2500

Soil Extract Volume 10000 (uL)   Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	28000	U
75-01-4	Vinyl chloride	28000	U
74-83-9	Bromomethane	28000	U
75-00-3	Chloroethane	28000	U
75-35-4	1,1-Dichloroethene	28000	U
67-64-1	Acetone	28000	U
75-15-0	Carbon disulfide	28000	U
75-09-2	Methylene chloride	28000	U
156-60-5	trans-1,2-Dichloroethene	28000	U
75-34-3	1,1-Dichloroethane	28000	U
156-59-2	cis-1,2-Dichloroethene	28000	U
78-93-3	2-Butanone	28000	U
67-66-3	Chloroform	28000	U
107-06-2	1,2-Dichloroethane	28000	U
71-55-6	1,1,1-Trichloroethane	3800	J
56-23-5	Carbon tetrachloride	28000	U
71-43-2	Benzene	28000	U
79-01-6	Trichloroethene	350000	
78-87-5	1,2-Dichloropropane	28000	U
75-27-4	Bromodichloromethane	28000	U
10061-01-5	cis-1,3-Dichloropropene	28000	U
10061-02-6	trans-1,3-Dichloropropene	28000	U
79-00-5	1,1,2-Trichloroethane	28000	U
124-48-1	Dibromochloromethane	28000	U
75-25-2	Bromoform	28000	U
108-10-1	4-Methyl-2-pentanone	28000	U
108-88-3	Toluene	28000	U
127-18-4	Tetrachloroethene	28000	U
591-78-6	2-Hexanone	28000	U
108-90-7	Chlorobenzene	28000	U
100-41-4	Ethylbenzene	28000	U
108-38-3/106-42-3	(m+p) Xylene	28000	U
95-47-6	o-Xylene	28000	U
100-42-5	Styrene	28000	U
79-34-5	1,1,2,2-Tetrachloroethane	28000	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP-5 9-9.5

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R4-19774 SAS No.: ____ SDG No.: 700222

Matrix: (soil/water) SOIL Lab Sample ID: 700222 2500

Sample wt/vol: 4.0 (g/ml) G Lab File ID: R3362.D

Level: (low/med) MED Date Received: 01/02/04

% Moisture: not dec. 11.4 Date Analyzed: 01/09/04

GC Column: ZB-624 ID: 0.25 (mm) Dilution Factor: ~~1.0~~ 2500

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 001120-21-4	Undecane	12.90	25000	JN
2. 000112-40-3	Dodecane	13.57	24000	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GP-5 12-12.6

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19977 SAS No.: ______ SDG No.: 700222

Matrix: (soil/water) SOIL Lab Sample ID: 700225 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3419.D

Level: (low/med) LOW Date Received: 01/02/04

% Moisture: not dec. 18.3 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	6	J
75-09-2	Methylene chloride	1	J
75-15-0	Carbon disulfide	12	U
78-93-3	2-Butanone	12	U
156-59-2	cis-1,2-Dichloroethene	9	J
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	32	
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
108-38-3/106-42-3	(m+p)Xylene	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
95-47-6	o-Xylene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
78-87-5	1,2-Dichloropropane	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP-5 12-12.6

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19977 SAS No.: ______ SDG No.: 700222

Matrix: (soil/water) SOIL Lab Sample ID: 700225 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3419.D

Level: (low/med) LOW Date Received: 01/02/04

% Moisture: not dec. 18.3 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown alkane	26.16	9	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GP-6 10-10.5

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19977 SAS No.: ______ SDG No.: 700222

Matrix: (soil/water) SOIL Lab Sample ID: 700226 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3420.D

Level: (low/med) LOW Date Received: 01/02/04

% Moisture: not dec. 18.7 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
74-83-9	Bromomethane	12	U
67-64-1	Acetone	5	J
75-09-2	Methylene chloride	2	J
75-15-0	Carbon disulfide	12	U
78-93-3	2-Butanone	12	U
156-59-2	cis-1,2-Dichloroethene	7	J
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	12	J
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
124-48-1	Dibromochloromethane	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
108-88-3	Toluene	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
108-38-3/106-42-3	(m+p)Xylene	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
95-47-6	o-Xylene	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
78-87-5	1,2-Dichloropropane	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP-6 10-10.5

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19977 SAS No.: ______ SDG No.: 700222

Matrix: (soil/water) SOIL Lab Sample ID: 700226 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3420.D

Level: (low/med) LOW Date Received: 01/02/04

% Moisture: not dec. 18.7 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GP-8 7.5-8S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19774 SAS No.: ______ SDG No.: 700222

Matrix: (soil/water) SOIL Lab Sample ID: 700227 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3459.D

Level: (low/med) MED Date Received: 01/02/04

% Moisture: not dec. 18.8 Date Analyzed: 01/08/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1500	U
75-01-4	Vinyl chloride	1500	U
75-00-3	Chloroethane	1500	U
74-83-9	Bromomethane	1500	U
67-64-1	Acetone	1500	U
75-09-2	Methylene chloride	1500	U
75-15-0	Carbon disulfide	1500	U
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	1600	
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	4100	
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	320,000 ~~260000~~	~~E~~
75-27-4	Bromodichloromethane	1500	U
10061-01-5	cis-1,3-Dichloropropene	1500	U
10061-02-6	trans-1,3-Dichloropropene	1500	U
79-00-5	1,1,2-Trichloroethane	1500	U
124-48-1	Dibromochloromethane	1500	U
75-25-2	Bromoform	1500	U
108-10-1	4-Methyl-2-pentanone	1500	U
108-88-3	Toluene	270	J
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	2000	
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U
108-38-3/106-42-3	(m+p)Xylene	160	J
100-42-5	Styrene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
95-47-6	o-Xylene	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-35-4	1,1-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	1500	U
56-23-5	Carbon tetrachloride	1500	U
78-87-5	1,2-Dichloropropane	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP-8 7.5-8S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19774 SAS No.: ______ SDG No.: 700222

Matrix: (soil/water) SOIL Lab Sample ID: 700227 125.0

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3459.D

Level: (low/med) MED Date Received: 01/02/04

% Moisture: not dec. 18.8 Date Analyzed: 01/08/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 125.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000124-18-5	Decane	19.95	9400	JN
2. 002847-72-5	Decane, 4-methyl-	20.55	2200	JN
3. 006975-98-0	Decane, 2-methyl-	21.55	1800	JN
4. 013151-34-3	Decane, 3-methyl-	21.74	1900	JN
5. 001120-21-4	Undecane	22.39	15000	JN
6.	unknown hydrocarbon	22.59	3100	J
7.	unknown hydrocarbon	22.83	3500	J
8.	unknown hydrocarbon	23.45	2100	J
9.	unknown hydrocarbon	23.63	2900	J
10. 004292-92-6	Cyclohexane, pentyl-	23.69	1900	JN
11.	unknown hydrocarbon	24.05	3000	J
12. 000112-40-3	Dodecane	24.63	5300	JN
13. 002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	24.81	2500	JN
14.	unknown hydrocarbon	26.16	1900	J
15. 000629-50-5	Tridecane	26.61	2200	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GP-10 19.8-20

Lab Name: CAS/ROCH   Contract: SEARB

Lab Code: 10145   Case No.: R3-19977   SAS No.: ______   SDG No.: 700222

Matrix: (soil/water) SOIL   Lab Sample ID: 700230 1.0

Sample wt/vol: 5.0 (g/ml) G   Lab File ID: B3421.D

Level: (low/med) LOW   Date Received: 01/02/04

% Moisture: not dec. 12.2   Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm)   Dilution Factor: 1.0

Soil Extract Volume ______ (uL)   Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	CONCENTRATION (UG/KG)	Q
74-87-3	Chloromethane	11	U
75-01-4	Vinyl chloride	11	U
75-00-3	Chloroethane	11	U
74-83-9	Bromomethane	11	U
67-64-1	Acetone	12	
75-09-2	Methylene chloride	2	J
75-15-0	Carbon disulfide	11	U
78-93-3	2-Butanone	11	U
156-59-2	cis-1,2-Dichloroethene	19	
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
71-55-6	1,1,1-Trichloroethane	11	U
71-43-2	Benzene	11	U
79-01-6	Trichloroethene	20	
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
124-48-1	Dibromochloromethane	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-pentanone	11	U
108-88-3	Toluene	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
108-38-3/106-42-3	(m+p)Xylene	11	U
100-42-5	Styrene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
95-47-6	o-Xylene	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
56-23-5	Carbon tetrachloride	11	U
78-87-5	1,2-Dichloropropane	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GP-10 19.8-20

Lab Name: CAS/ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19977 SAS No.: ______ SDG No.: 700222

Matrix: (soil/water) SOIL Lab Sample ID: 700230 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3421.D

Level: (low/med) LOW Date Received: 01/02/04

% Moisture: not dec. 12.2 Date Analyzed: 01/06/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 1 (uL) Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-1-W

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19875 SAS No.: ______ SDG No.: 702133

Matrix: (soil/water) WATER Lab Sample ID: 702133 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3569.D

Level: (low/med) LOW Date Received: 01/14/04

% Moisture: not dec. ______ Date Analyzed: 01/19/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	14	
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	14	
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	7	J
156-59-2	cis-1,2-Dichloroethene	33	
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	33	J
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	8	J
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	1	J
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	8	J
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RW-1-W

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19875 SAS No.: ______ SDG No.: 702133

Matrix: (soil/water) WATER Lab Sample ID: 702133 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3569.D

Level: (low/med) LOW Date Received: 01/14/04

% Moisture: not dec. ______ Date Analyzed: 01/19/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RW-2-W

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19875 SAS No.: SDG No.: 702133

Matrix: (soil/water) WATER Lab Sample ID: 702134 100.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3568.D

Level: (low/med) LOW Date Received: 01/14/04

% Moisture: not dec. Date Analyzed: 01/19/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 100.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	1000	U
75-01-4	Vinyl chloride	440	J
75-00-3	Chloroethane	1000	U
74-83-9	Bromomethane	1000	U
67-64-1	Acetone	1000	U
75-09-2	Methylene chloride	1000	U
75-15-0	Carbon disulfide	1000	U
78-93-3	2-Butanone	1000	U
156-59-2	cis-1,2-Dichloroethene	15000	
67-66-3	Chloroform	1000	U
107-06-2	1,2-Dichloroethane	1000	U
71-55-6	1,1,1-Trichloroethane	200	J
71-43-2	Benzene	1000	U
79-01-6	Trichloroethene	8100	
75-27-4	Bromodichloromethane	1000	U
10061-01-5	cis-1,3-Dichloropropene	1000	U
10061-02-6	trans-1,3-Dichloropropene	1000	U
79-00-5	1,1,2-Trichloroethane	1000	U
124-48-1	Dibromochloromethane	1000	U
75-25-2	Bromoform	1000	U
108-10-1	4-Methyl-2-pentanone	1000	U
108-88-3	Toluene	1000	U
591-78-6	2-Hexanone	1000	U
127-18-4	Tetrachloroethene	1000	U
108-90-7	Chlorobenzene	1000	U
100-41-4	Ethylbenzene	1000	U
108-38-3/106-42-3	(m+p)Xylene	1000	U
100-42-5	Styrene	1000	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	U
95-47-6	o-Xylene	1000	U
156-60-5	trans-1,2-Dichloroethene	1000	U
75-35-4	1,1-Dichloroethene	1000	U
75-34-3	1,1-Dichloroethane	120	J
56-23-5	Carbon tetrachloride	1000	U
78-87-5	1,2-Dichloropropane	1000	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RW-2-W

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19875 SAS No.: ______ SDG No.: 702133

Matrix: (soil/water) WATER Lab Sample ID: 702134 100.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3568.D

Level: (low/med) LOW Date Received: 01/14/04

% Moisture: not dec. ______ Date Analyzed: 01/19/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLK

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19875 SAS No.: SDG No.: 702133

Matrix: (soil/water) WATER Lab Sample ID: 702135 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3579.D

Level: (low/med) LOW Date Received: 01/14/04

% Moisture: not dec. Date Analyzed: 01/20/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
108-38-3/106-42-3	(m+p)Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
95-47-6	o-Xylene	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
78-87-5	1,2-Dichloropropane	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLK

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R3-19875 SAS No.: ______ SDG No.: 702133

Matrix: (soil/water) WATER Lab Sample ID: 702135 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B3579.D

Level: (low/med) LOW Date Received: 01/14/04

% Moisture: not dec. ______ Date Analyzed: 01/20/04

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

Data Validation Services

120 Cobble Creek Road   P. O. Box 208
North Creek, NY   12853
Phone (518) 251-4429
Facsimile (518) 251-4428

LETTER OF TRANSMITTAL

TO:	Peter Smith
COMPANY:	Stantec
FROM:	Judy Harry
DATE:	06-~~26~~ 27-06
ENCLOSED:	DUSR for the Buell Rd. site CAS Sub. No. R2631499
	Qualified report forms
	Associated invoice

Ship via: US Express____   UPS ____   US Priority__X__Fed Ex____Other ___

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, N. Y. 12853
Phone 518-251-4429
Facsimile 518-251-4428

June 26, 2006

Peter Smith
Stantec
2250 Brighton Henrietta Town Line Rd.
Rochester, NY 14623

PS Buell Automatics

RE: Validation Review of the ~~Kennedy Valve~~ site
CAS Sub. No. R2631499

Dear Mr. Smith:

Review has been completed for the data package generated by Columbia Analytical Services that pertains to samples collected5/01/06 and 5/0206 at the Buell Rd. site. Twelve aqueous samples and a field duplicate were processed for TCL volatiles. Two of the samples and a field duplicate were also processed by TCL semivolatiles. Trip and cooler blanks were also analyzed. Methodologies utilized are those of the USEPA CLP OLM04.2.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Case Narratives
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Instrumental Tunes
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for this level of review.

In summary, samples were primarily processed in compliance with protocol, and results are usable as reported, or usable with minor qualification due to sample matrix or to typical processing outliers.

A copy of the laboratory case narrative is attached to this text, and should be reviewed in conjunction with this report. Included with this report are red-ink qualified sample results forms.

The following text discusses quality issues of concern.

General

Blind field duplicate correlations for BU-MW10-GW were acceptable.

The laboratory reported abbreviated client IDs for some of the samples, which should have been suffixed with "-GW".

TCL Volatiles by USEPA CLP

Results for sample analytes initially reported with the "E" flag, indicating a response above the established linear range of the instrument, are to be derived from the dilution ("-DL") analyses of the samples. All other target analyte results can be derived from the initial analyses.

Holding times were met. Surrogate and internal standard responses were within guidelines. Calibrations standard responses were within laboratory and validation guidelines. Blanks show no contamination.

Matrix spikes of BU-MW16-GW show acceptable accuracy and precision. Blind field duplicate correlations for BU-MW10-GW were acceptable.

Although preserved with HCl, the pH of BU-MW3-GW was above 2 when checked at sample receipt. The sample was processed one day beyond the allowable holding time for unpreserved samples. The results for that sample are therefore qualified as estimated in value.

Some of the samples were processed initially at dilution due to high target analyte concentrations, and reporting limits for analytes reporting non-detection are therefore elevated in those samples.

Samples containing high concentrations are target analytes are processed at initial dilution, resulting in elevated reporting limits for non-detected compounds. This is in compliance with protocol requirements.

Semivolatile Analyses by USEPA CLP

The low level detection of n-nitrosodi-n-propylamine in BU-DUP-GW is edited to non-detection at the CRDL due to poor spectral quality. The response reported as that compound is an artifact of a hydrocarbon.

Calibrations standard responses were within laboratory and validation guidelines, with the exception of those for 2,4-dinitrophenol and atrazine (39%D and 52%D). Results for those two compounds in the samples are qualified as estimated.

Holding times were met. Surrogate and internal standard responses were within guidelines, although one of the samples and the field duplicate were diluted beyond that evaluation. Calibrations standard responses were within laboratory and validation guidelines. Blanks show no contamination.

Matrix spikes of BU-MW16-GW produced acceptable accuracy and precision (or elevated recoveries for analytes not detected in the sample.

The duplicate control samples show low recoveries for n-nitrosodi-n-propylamine (15% and 30%, below 41%). Results for this analyte in the samples are therefore qualified as estimated ("UJ").

Blind field duplicate correlations for BU-MW10-GW were acceptable.

Tentatively Identified Compounds (TICs) flagged as "B" or "A" by the laboratory are considered external contamination (indicated by presence in associated blanks), and results should be rejected as sample components.

Some of the samples were processed initially at dilution due to high target analyte concentrations, and reporting limits for analytes reporting non-detection are therefore elevated in those samples.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

Att

VALIDATION QUALIFIER DEFINITIONS

DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the national qualifiers assigned to results in the data review process. If the Regions choose to use additional qualifiers, a complete explanation of those qualifiers should accompany the data review.

U - **The analyte was analyzed for, but was not detected above the reported sample quantitation limit.**

J - **The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.**

N - **The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification."**

NJ - **The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.**

UJ - **The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.**

R - **The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.**

LABORATORY SAMPLE IDs AND CASE NARRATIVES

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG 901536
SUBMISSION R2631499
CLIENT: Stantec
CLIENT REP: Karen Bunker
PROJECT: Buell Automatics #190500033

BATCH COMPLETE: yes
DISKETTE REQUESTED: Y_x__ N____
DATE: 05/3/06
CUSTODY SEAL: PRESENT/ABSENT:
CHAIN OF CUSTODY: PRESENT/ABSENT:

DATE REVISED:
DATE DUE: 05/27/06
PROTOCOL:ASPB
SHIPPING No.:
SUMMARY PKG: Y__x__ N

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS SAMPLE CONDITION
901536	BU-MW2-GW	water	OLM4.3, LS	5/1/06	5/2/06			
901537	BU-MW3-GW	water	OLM4.3, LS	5/2/06	5/2/06			
901538	BU-MW6-GW	water	OLM4.3, LS	5/1/06	5/2/06			
901539	BU-MW7-GW	water	OLM4.3, LS	5/1/06	5/2/06			
901540	BU-MW8-GW	water	OLM4.3, LS	5/1/06	5/2/06			
901541	BU-MW9-GW	water	OLM4.3, LS	5/1/06	5/2/06			
901542	BU-MW10-GW	water	OLM4.3,OLM4.2 LS	5/1/06	5/2/06			
901543	BU-MW11-GW	water	OLM4.3, LS	5/1/06	5/2/06			
901544	BU-MW16-GW	water	OLM4.3,OLM4.2 LS QC	5/1/06	5/2/06			
901545	BU-MW17-GW	water	OLM4.3, LS	5/1/06	5/2/06			
901546	BU-RW1-GW	water	OLM4.3, LS	5/1/06	5/2/06			
901547	BU-RW2-GW	water	OLM4.3, LS	5/2/06	5/2/06			
901548	BU-DUP-GW	water	OLM4.3,OLM4.2 LS	5/1/06	5/2/06			
901549	Trip Blank	water	OLM4.3, LS	5/1/06	5/2/06			
901550	Cooler Blank	water	OLM4.3, LS					
			VOC					
			SVOC					

4

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Stantec Consulting	**Service Request No.:**	R2631499
Project:	Buell Automatics	**Date Sampled:**	5/1-2/06
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier V. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Fourteen (14) water samples were received for analysis at Columbia Analytical Services on 5/2/06. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were received at a cooler temperature of 4°C, within guidelines.

Volatile Organics

Fourteen (14) water samples were analyzed using Method OLM4.3 for Volatile Organic compounds. Library Searches were run for each sample. One cooler blank was also analyzed with the batch and included in the report.

All BFB tuning criteria were met. The initial and continuing calibration were within limits.

All surrogate standard recoveries were acceptable.

All samples were run within the proper holding time for the method.

Site specific QC is provided for location BU-MW-16-GW (CAS Order #901544). All Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries were within QC limits. All Relative Percent Difference (RPD) calculations were acceptable.

Hits between the MDL and CRQL have been flagged as "J", estimated.

Hits above the calibration range of the standards are flagged as "E", estimated. The sample is then repeated at the appropriate dilution for the hit. All hits on the subsequent dilution are flagged as "D". Both sets of data are included in the report. The suffix "DL" is added to the location ID for the dilution.

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for VOC analysis. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

The Laboratory Method Blanks, Trip Blank and Cooler Blank associated with these samples were free of contamination.

Location BU-MW3-GW (CAS Order # 901537) was found to be unpreserved at a pH of >2. All vials are checked after analysis in order to maintain the integrity of the sample. This has also been noted on the Cooler Receipt and Preservation Check Form included in the report. The sample was analyzed on the 8th day from sample collection and receipt. All other vials were found to be preserved to a pH of <2.

No other problems were encountered during the analysis of these samples.

Approved by Karen Bunker Date 6/7/06

Page 2 R2631499 Continued

SemiVolatile Organics

Three (3) water samples were analyzed for using method OLM4.3 for Semivolatile Organic compounds.

All DFTPP tuning criteria were met. The initial and continuing calibration criteria were within limits.

All Surrogate recoveries were acceptable except for BU-MW16-GW and BU-MW16-GWMS (CAS Order # 901544) which were outside limits for Terphenol-d14. The sample was not repeated since the sample and QC confirmed each other. The recoveries have been flagged as "*". BU-DUP-GW and BU-MW10-GW surrogates were diluted out. The recoveries have been flagged as "D".

All samples were extracted and analyzed within proper method holding times.

Site QC is included in the report package for location BU-MW16-GW (CAS Order # 901544). All Matrix Spike (MS) and Blank Spike (BS) and Matrix Spike Duplicate (MSD) and Blank Spike Duplicate (BSD) recoveries were within QC limits except the following:

N-Nitroso-Di-n-propylamine: BS/BSD out low
4-Nitrophenol: MS/MSD, BS/BSD out high
Pentachlorophenol: MSD & BSD out high

The Relative Percent Difference (RPD) calculation for N-Nitroso-Di-n-propylamine was also outside QC limits. All exceedences have been flagged as "*".

Library Searches against the NBS/EPA library were conducted on all samples, reanalysis, and blanks for SVOC analysis. The 30 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

Hits between the MDL and CRQL have been flagged as "J", estimated.

All Laboratory Method Blank was free from contamination of target compounds.

No other problems were encountered during the analysis of these samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Karen Bunker

Approved by Karen Bunker **Date** 6/7/06

QUALIFIED REPORT FORMS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW2

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ____ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901536 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7285.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ____ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 Kas 5/30/06

Soil Extract Volume ____ (uL) Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	200	U
74-87-3	Chloromethane	200	U
75-01-4	Vinyl chloride	560	
74-83-9	Bromomethane	200	U
75-00-3	Chloroethane	200	U
75-69-4	Trichlorofluoromethane	200	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	200	U
67-64-1	Acetone	200	U
75-35-4	1,1-Dichloroethene	200	U
79-20-9	Methyl Acetate	200	U
75-09-2	Methylene chloride	200	U
75-15-0	Carbon disulfide	200	U
1634-04-4	Methyl tert-Butyl Ether	200	U
156-60-5	trans-1,2-Dichloroethene	26	J
75-34-3	1,1-Dichloroethane	200	U
78-93-3	2-Butanone	200	U
156-59-2	cis-1,2-Dichloroethene	3800	
67-66-3	Chloroform	200	U
110-82-7	Cyclohexane	200	U
107-06-2	1,2-Dichloroethane	200	U
71-55-6	1,1,1-Trichloroethane	200	U
56-23-5	Carbon tetrachloride	200	U
71-43-2	Benzene	200	U
79-01-6	Trichloroethene	240	
108-87-2	Methylcyclohexane	200	U
78-87-5	1,2-Dichloropropane	200	U
75-27-4	Bromodichloromethane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
79-00-5	1,1,2-Trichloroethane	200	U
124-48-1	Dibromochloromethane	200	U
75-25-2	Bromoform	200	U
108-10-1	4-Methyl-2-pentanone	200	U
108-88-3	Toluene	200	U
591-78-6	2-Hexanone	200	U
127-18-4	Tetrachloroethene	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
100-41-4	Ethylbenzene	200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW2

Lab Name: CAS-ROCH   Contract: STANTEC

Lab Code: 10145   Case No.: R6-31499   SAS No.: ______   SDG No.: 901536

Matrix: (soil/water) WATER   Lab Sample ID: 901536 20.0

Sample wt/vol: 5.0 (g/ml) ML   Lab File ID: B7285.D

Level: (low/med) LOW   Date Received: 05/02/06

% Moisture: not dec. ______   Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm)   Dilution Factor: ~~1.0~~ 20.0 KA 5/30/06

Soil Extract Volume ______ (uL)   Soil Aliquot Volume: ______ (uL)

CAS NO. COMPOUND   CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L   Q

CAS NO.	COMPOUND	UG/L	Q
1330-20-7	(m+p)Xylene	200	U
95-47-6	o-Xylene	200	U
100-42-5	Styrene	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW2

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901536 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7285.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW3

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901537 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7280.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
75-71-8	Dichlorodifluoromethane	10	U J
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
1634-04-4	Methyl tert-Butyl Ether	6	J
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
110-82-7	Cyclohexane	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW3

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901537 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7280.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
1330-20-7	(m+p)Xylene	10	U J
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW3

Lab Name: CAS-ROCH   Contract: STANTEC

Lab Code: 10145   Case No.: R6-31499   SAS No.: ______   SDG No.: 901536

Matrix: (soil/water) WATER   Lab Sample ID: 901537 1.0

Sample wt/vol: 5.0 (g/ml) ML   Lab File ID: B7280.D

Level: (low/med) LOW   Date Received: 05/02/06

% Moisture: not dec. ______   Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm)   Dilution Factor: 1.0

Soil Extract Volume ______ (uL)   Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW6

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901538 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7286.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	200	U
74-87-3	Chloromethane	200	U
75-01-4	Vinyl chloride	50	J
74-83-9	Bromomethane	200	U
75-00-3	Chloroethane	200	U
75-69-4	Trichlorofluoromethane	200	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	200	U
67-64-1	Acetone	200	U
75-35-4	1,1-Dichloroethene	200	U
79-20-9	Methyl Acetate	200	U
75-09-2	Methylene chloride	200	U
75-15-0	Carbon disulfide	200	U
1634-04-4	Methyl tert-Butyl Ether	200	U
156-60-5	trans-1,2-Dichloroethene	200	U
75-34-3	1,1-Dichloroethane	200	U
78-93-3	2-Butanone	200	U
156-59-2	cis-1,2-Dichloroethene	720	
67-66-3	Chloroform	200	U
110-82-7	Cyclohexane	200	U
107-06-2	1,2-Dichloroethane	200	U
71-55-6	1,1,1-Trichloroethane	25	J
56-23-5	Carbon tetrachloride	200	U
71-43-2	Benzene	200	U
79-01-6	Trichloroethene	2400	
108-87-2	Methylcyclohexane	200	U
78-87-5	1,2-Dichloropropane	200	U
75-27-4	Bromodichloromethane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
79-00-5	1,1,2-Trichloroethane	200	U
124-48-1	Dibromochloromethane	200	U
75-25-2	Bromoform	200	U
108-10-1	4-Methyl-2-pentanone	200	U
108-88-3	Toluene	200	U
591-78-6	2-Hexanone	200	U
127-18-4	Tetrachloroethene	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
100-41-4	Ethylbenzene	200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW6

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901538 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7286.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
1330-20-7	(m+p)Xylene	200	U
95-47-6	o-Xylene	200	U
100-42-5	Styrene	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW6

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901538 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7286.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW7

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901539 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7281.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	2	J
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
1634-04-4	Methyl tert-Butyl Ether	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	20	
67-66-3	Chloroform	10	U
110-82-7	Cyclohexane	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	2	J
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW7

Lab Name: CAS-ROCH　Contract: STANTEC

Lab Code: 10145　Case No.: R6-31499　SAS No.: ____　SDG No.: 901536

Matrix: (soil/water) WATER　Lab Sample ID: 901539 1.0

Sample wt/vol: 5.0 (g/ml) ML　Lab File ID: B7281.D

Level: (low/med) LOW　Date Received: 05/02/06

% Moisture: not dec. ____　Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm)　Dilution Factor: 1.0

Soil Extract Volume ____ (uL)　Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
1330-20-7	(m+p)Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW7

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901539 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7281.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ________ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ________ (uL) Soil Aliquot Volume: ________ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW8

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901540 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7287.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	200	U
74-87-3	Chloromethane	200	U
75-01-4	Vinyl chloride	150	J
74-83-9	Bromomethane	200	U
75-00-3	Chloroethane	200	U
75-69-4	Trichlorofluoromethane	200	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	200	U
67-64-1	Acetone	200	U
75-35-4	1,1-Dichloroethene	200	U
79-20-9	Methyl Acetate	200	U
75-09-2	Methylene chloride	200	U
75-15-0	Carbon disulfide	200	U
1634-04-4	Methyl tert-Butyl Ether	200	U
156-60-5	trans-1,2-Dichloroethene	200	U
75-34-3	1,1-Dichloroethane	14	J
78-93-3	2-Butanone	200	U
156-59-2	cis-1,2-Dichloroethene	3300	
67-66-3	Chloroform	200	U
110-82-7	Cyclohexane	200	U
107-06-2	1,2-Dichloroethane	200	U
71-55-6	1,1,1-Trichloroethane	200	U
56-23-5	Carbon tetrachloride	200	U
71-43-2	Benzene	200	U
79-01-6	Trichloroethene	1700	
108-87-2	Methylcyclohexane	200	U
78-87-5	1,2-Dichloropropane	200	U
75-27-4	Bromodichloromethane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
79-00-5	1,1,2-Trichloroethane	200	U
124-48-1	Dibromochloromethane	200	U
75-25-2	Bromoform	200	U
108-10-1	4-Methyl-2-pentanone	200	U
108-88-3	Toluene	200	U
591-78-6	2-Hexanone	200	U
127-18-4	Tetrachloroethene	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
100-41-4	Ethylbenzene	200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW8

Lab Name: CAS-ROCH   Contract: STANTEC

Lab Code: 10145   Case No.: R6-31499   SAS No.: ______   SDG No.: 901536

Matrix: (soil/water) WATER   Lab Sample ID: 901540 20.0

Sample wt/vol: 5.0 (g/ml) ML   Lab File ID: B7287.D

Level: (low/med) LOW   Date Received: 05/02/06

% Moisture: not dec. ______   Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm)   Dilution Factor: ~~1.0~~ 20.0 Yas 5/30/06

Soil Extract Volume ______ (uL)   Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
1330-20-7	(m+p)Xylene	200	U
95-47-6	o-Xylene	200	U
100-42-5	Styrene	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW8

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901540 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7287.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 rας 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW9

Lab Name: CAS-ROCH   Contract: STANTEC

Lab Code: 10145   Case No.: R6-31499   SAS No.: ____   SDG No.: 901536

Matrix: (soil/water) WATER   Lab Sample ID: 901541 2.0

Sample wt/vol: 5.0 (g/ml) ML   Lab File ID: B7283.D

Level: (low/med) LOW   Date Received: 05/02/06

% Moisture: not dec. ____   Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm)   Dilution Factor: ~~1.0~~ 2.0 Kas/30/06

Soil Extract Volume ____ (uL)   Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	53	
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	5	J
75-69-4	Trichlorofluoromethane	20	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	20	U
67-64-1	Acetone	9	J
75-35-4	1,1-Dichloroethene	20	U
79-20-9	Methyl Acetate	20	U
75-09-2	Methylene chloride	20	U
75-15-0	Carbon disulfide	20	U
1634-04-4	Methyl tert-Butyl Ether	20	U
156-60-5	trans-1,2-Dichloroethene	2	J
75-34-3	1,1-Dichloroethane	170	
78-93-3	2-Butanone	20	U
156-59-2	cis-1,2-Dichloroethene	250	
67-66-3	Chloroform	20	U
110-82-7	Cyclohexane	20	U
107-06-2	1,2-Dichloroethane	20	U
71-55-6	1,1,1-Trichloroethane	9	J
56-23-5	Carbon tetrachloride	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	21	
108-87-2	Methylcyclohexane	20	U
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
124-48-1	Dibromochloromethane	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW9

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901541 2.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7283.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0 Ka 5/30/06

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
1330-20-7	(m+p)Xylene	20	U
95-47-6	o-Xylene	20	U
100-42-5	Styrene	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW9

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901541 2.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7283.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 2.0 KAS/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
BU-MW10

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901542 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7289.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KA 5/30/06

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	200	U
74-87-3	Chloromethane	200	U
75-01-4	Vinyl chloride	910	
74-83-9	Bromomethane	200	U
75-00-3	Chloroethane	200	U
75-69-4	Trichlorofluoromethane	200	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	200	U
67-64-1	Acetone	200	U
75-35-4	1,1-Dichloroethene	200	U
79-20-9	Methyl Acetate	200	U
75-09-2	Methylene chloride	200	U
75-15-0	Carbon disulfide	200	U
1634-04-4	Methyl tert-Butyl Ether	200	U
156-60-5	trans-1,2-Dichloroethene	27	J
75-34-3	1,1-Dichloroethane	330	
78-93-3	2-Butanone	200	U
156-59-2	cis-1,2-Dichloroethene	3000	
67-66-3	Chloroform	200	U
110-82-7	Cyclohexane	200	U
107-06-2	1,2-Dichloroethane	200	U
71-55-6	1,1,1-Trichloroethane	200	U
56-23-5	Carbon tetrachloride	200	U
71-43-2	Benzene	200	U
79-01-6	Trichloroethene	160	J
108-87-2	Methylcyclohexane	200	U
78-87-5	1,2-Dichloropropane	200	U
75-27-4	Bromodichloromethane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
79-00-5	1,1,2-Trichloroethane	200	U
124-48-1	Dibromochloromethane	200	U
75-25-2	Bromoform	200	U
108-10-1	4-Methyl-2-pentanone	200	U
108-88-3	Toluene	200	U
591-78-6	2-Hexanone	200	U
127-18-4	Tetrachloroethene	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
100-41-4	Ethylbenzene	200	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW10

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901542 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7289.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
1330-20-7	(m+p)Xylene	200	U
95-47-6	o-Xylene	200	U
100-42-5	Styrene	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW10

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901542 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7289.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 Las 130 100

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW11

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901543 4.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7284.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 4.0 ka 5/30/06

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	40	U
74-87-3	Chloromethane	40	U
75-01-4	Vinyl chloride	45	
74-83-9	Bromomethane	40	U
75-00-3	Chloroethane	40	U
75-69-4	Trichlorofluoromethane	40	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	40	U
67-64-1	Acetone	40	U
75-35-4	1,1-Dichloroethene	6	J
79-20-9	Methyl Acetate	40	U
75-09-2	Methylene chloride	40	U
75-15-0	Carbon disulfide	40	U
1634-04-4	Methyl tert-Butyl Ether	40	U
156-60-5	trans-1,2-Dichloroethene	4	J
75-34-3	1,1-Dichloroethane	87	
78-93-3	2-Butanone	40	U
156-59-2	cis-1,2-Dichloroethene	740	
67-66-3	Chloroform	40	U
110-82-7	Cyclohexane	40	U
107-06-2	1,2-Dichloroethane	40	U
71-55-6	1,1,1-Trichloroethane	21	J
56-23-5	Carbon tetrachloride	40	U
71-43-2	Benzene	40	U
79-01-6	Trichloroethene	110	
108-87-2	Methylcyclohexane	40	U
78-87-5	1,2-Dichloropropane	40	U
75-27-4	Bromodichloromethane	40	U
10061-01-5	cis-1,3-Dichloropropene	40	U
10061-02-6	trans-1,3-Dichloropropene	40	U
79-00-5	1,1,2-Trichloroethane	2	J
124-48-1	Dibromochloromethane	40	U
75-25-2	Bromoform	40	U
108-10-1	4-Methyl-2-pentanone	40	U
108-88-3	Toluene	40	U
591-78-6	2-Hexanone	40	U
127-18-4	Tetrachloroethene	40	U
106-93-4	1,2-Dibromoethane	40	U
108-90-7	Chlorobenzene	40	U
100-41-4	Ethylbenzene	40	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW11

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901543 4.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7284.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 4.0 KA 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
1330-20-7	(m+p)Xylene	40	U
95-47-6	o-Xylene	40	U
100-42-5	Styrene	40	U
98-82-8	Isopropylbenzene	40	U
79-34-5	1,1,2,2-Tetrachloroethane	40	U
541-73-1	1,3-Dichlorobenzene	40	U
106-46-7	1,4-Dichlorobenzene	40	U
95-50-1	1,2-Dichlorobenzene	40	U
96-12-8	1,2-Dibromo-3-chloropropane	40	U
120-82-1	1,2,4-Trichlorobenzene	40	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW11

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901543 4.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7284.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 4.0 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW16

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901544 400

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7279.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 400 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	4000	U
74-87-3	Chloromethane	4000	U
75-01-4	Vinyl chloride	640	J
74-83-9	Bromomethane	4000	U
75-00-3	Chloroethane	4000	U
75-69-4	Trichlorofluoromethane	4000	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	4000	U
67-64-1	Acetone	4000	U
75-35-4	1,1-Dichloroethene	780	J
79-20-9	Methyl Acetate	4000	U
75-09-2	Methylene chloride	4000	U
75-15-0	Carbon disulfide	4000	U
1634-04-4	Methyl tert-Butyl Ether	4000	U
156-60-5	trans-1,2-Dichloroethene	4000	U
75-34-3	1,1-Dichloroethane	2800	J
78-93-3	2-Butanone	4000	U
156-59-2	cis-1,2-Dichloroethene 120,000	~~130000~~	~~E~~
67-66-3	Chloroform	4000	U
110-82-7	Cyclohexane	4000	U
107-06-2	1,2-Dichloroethane	4000	U
71-55-6	1,1,1-Trichloroethane	4000	
56-23-5	Carbon tetrachloride	4000	U
71-43-2	Benzene	4000	U
79-01-6	Trichloroethene	8200	
108-87-2	Methylcyclohexane	4000	U
78-87-5	1,2-Dichloropropane	4000	U
75-27-4	Bromodichloromethane	4000	U
10061-01-5	cis-1,3-Dichloropropene	4000	U
10061-02-6	trans-1,3-Dichloropropene	4000	U
79-00-5	1,1,2-Trichloroethane	4000	U
124-48-1	Dibromochloromethane	4000	U
75-25-2	Bromoform	4000	U
108-10-1	4-Methyl-2-pentanone	4000	U
108-88-3	Toluene	4000	U
591-78-6	2-Hexanone	4000	U
127-18-4	Tetrachloroethene	4000	U
106-93-4	1,2-Dibromoethane	4000	U
108-90-7	Chlorobenzene	4000	U
100-41-4	Ethylbenzene	4000	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW16

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901544 400

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7279.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 400 Kas/30/ic

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
1330-20-7	(m+p)Xylene	4000	U
95-47-6	o-Xylene	4000	U
100-42-5	Styrene	4000	U
98-82-8	Isopropylbenzene	4000	U
79-34-5	1,1,2,2-Tetrachloroethane	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
96-12-8	1,2-Dibromo-3-chloropropane	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW16

Lab Name: CAS-ROCH   Contract: STANTEC

Lab Code: 10145   Case No.: R6-31499   SAS No.: ______   SDG No.: 901536

Matrix: (soil/water) WATER   Lab Sample ID: 901544 400

Sample wt/vol: 5.0 (g/ml) ML   Lab File ID: B7279.D

Level: (low/med) LOW   Date Received: 05/02/06

% Moisture: not dec. ______   Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm)   Dilution Factor: ~~1.0~~ 400 KA 5/30/06

Soil Extract Volume ______ (uL)   Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW17

Lab Name: CAS-ROCH   Contract: STANTEC

Lab Code: 10145   Case No.: R6-31499   SAS No.: ______   SDG No.: 901536

Matrix: (soil/water) WATER   Lab Sample ID: 901545 1.0

Sample wt/vol: 5.0 (g/ml) ML   Lab File ID: B7282.D

Level: (low/med) LOW   Date Received: 05/02/06

% Moisture: not dec. ______   Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm)   Dilution Factor: 1.0

Soil Extract Volume ______ (uL)   Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
1634-04-4	Methyl tert-Butyl Ether	2	J
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
110-82-7	Cyclohexane	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW17

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901545 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7282.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION (UG/L)	Q
1330-20-7	(m+p)Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW17

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901545 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7282.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-RW1

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ____ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901546 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7288.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ____ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume ____ (uL) Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	200	U
74-87-3	Chloromethane	200	U
75-01-4	Vinyl chloride	1200	
74-83-9	Bromomethane	200	U
75-00-3	Chloroethane	200	U
75-69-4	Trichlorofluoromethane	200	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	200	U
67-64-1	Acetone	200	U
75-35-4	1,1-Dichloroethene	200	U
79-20-9	Methyl Acetate	200	U
75-09-2	Methylene chloride	200	U
75-15-0	Carbon disulfide	200	U
1634-04-4	Methyl tert-Butyl Ether	200	U
156-60-5	trans-1,2-Dichloroethene	27	J
75-34-3	1,1-Dichloroethane	250	
78-93-3	2-Butanone	200	U
156-59-2	cis-1,2-Dichloroethene	4600 ~~5100~~	~~E~~
67-66-3	Chloroform	200	U
110-82-7	Cyclohexane	200	U
107-06-2	1,2-Dichloroethane	200	U
71-55-6	1,1,1-Trichloroethane	200	U
56-23-5	Carbon tetrachloride	200	U
71-43-2	Benzene	200	U
79-01-6	Trichloroethene	400	
108-87-2	Methylcyclohexane	200	U
78-87-5	1,2-Dichloropropane	200	U
75-27-4	Bromodichloromethane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
79-00-5	1,1,2-Trichloroethane	200	U
124-48-1	Dibromochloromethane	200	U
75-25-2	Bromoform	200	U
108-10-1	4-Methyl-2-pentanone	200	U
108-88-3	Toluene	200	U
591-78-6	2-Hexanone	200	U
127-18-4	Tetrachloroethene	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
100-41-4	Ethylbenzene	200	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-RW1

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901546 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7288.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

1330-20-7	(m+p)Xylene	200	U
95-47-6	o-Xylene	200	U
100-42-5	Styrene	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-RW1

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901546 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7288.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-RW2

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901547 200.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7290.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 200.0 Kas 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	2000	U
74-87-3	Chloromethane	2000	U
75-01-4	Vinyl chloride	2000	U
74-83-9	Bromomethane	2000	U
75-00-3	Chloroethane	2000	U
75-69-4	Trichlorofluoromethane	2000	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	2000	U
67-64-1	Acetone	2000	U
75-35-4	1,1-Dichloroethene	2000	U
79-20-9	Methyl Acetate	2000	U
75-09-2	Methylene chloride	2000	U
75-15-0	Carbon disulfide	2000	U
1634-04-4	Methyl tert-Butyl Ether	2000	U
156-60-5	trans-1,2-Dichloroethene	2000	U
75-34-3	1,1-Dichloroethane	160	J
78-93-3	2-Butanone	2000	U
156-59-2	cis-1,2-Dichloroethene	27000	
67-66-3	Chloroform	2000	U
110-82-7	Cyclohexane	2000	U
107-06-2	1,2-Dichloroethane	2000	U
71-55-6	1,1,1-Trichloroethane	230	J
56-23-5	Carbon tetrachloride	2000	U
71-43-2	Benzene	2000	U
79-01-6	Trichloroethene	13000	
108-87-2	Methylcyclohexane	2000	U
78-87-5	1,2-Dichloropropane	2000	U
75-27-4	Bromodichloromethane	2000	U
10061-01-5	cis-1,3-Dichloropropene	2000	U
10061-02-6	trans-1,3-Dichloropropene	2000	U
79-00-5	1,1,2-Trichloroethane	2000	U
124-48-1	Dibromochloromethane	2000	U
75-25-2	Bromoform	2000	U
108-10-1	4-Methyl-2-pentanone	2000	U
108-88-3	Toluene	2000	U
591-78-6	2-Hexanone	2000	U
127-18-4	Tetrachloroethene	2000	U
106-93-4	1,2-Dibromoethane	2000	U
108-90-7	Chlorobenzene	2000	U
100-41-4	Ethylbenzene	2000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-RW2

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901547 200.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7290.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 200.0 KAS/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
1330-20-7	(m+p)Xylene	2000	U
95-47-6	o-Xylene	2000	U
100-42-5	Styrene	2000	U
98-82-8	Isopropylbenzene	2000	U
79-34-5	1,1,2,2-Tetrachloroethane	2000	U
541-73-1	1,3-Dichlorobenzene	2000	U
106-46-7	1,4-Dichlorobenzene	2000	U
95-50-1	1,2-Dichlorobenzene	2000	U
96-12-8	1,2-Dibromo-3-chloropropane	2000	U
120-82-1	1,2,4-Trichlorobenzene	2000	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-RW2

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901547 200.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7290.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/10/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 200.0 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-DUP

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901548 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7313.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. Date Analyzed: 05/11/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	200	U
74-87-3	Chloromethane	200	U
75-01-4	Vinyl chloride	890	
74-83-9	Bromomethane	200	U
75-00-3	Chloroethane	200	U
75-69-4	Trichlorofluoromethane	200	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	200	U
67-64-1	Acetone	200	U
75-35-4	1,1-Dichloroethene	200	U
79-20-9	Methyl Acetate	200	U
75-09-2	Methylene chloride	200	U
75-15-0	Carbon disulfide	200	U
1634-04-4	Methyl tert-Butyl Ether	200	U
156-60-5	trans-1,2-Dichloroethene	31	J
75-34-3	1,1-Dichloroethane	340	
78-93-3	2-Butanone	200	U
156-59-2	cis-1,2-Dichloroethene	2800	
67-66-3	Chloroform	200	U
110-82-7	Cyclohexane	200	U
107-06-2	1,2-Dichloroethane	200	U
71-55-6	1,1,1-Trichloroethane	200	U
56-23-5	Carbon tetrachloride	200	U
71-43-2	Benzene	200	U
79-01-6	Trichloroethene	170	J
108-87-2	Methylcyclohexane	200	U
78-87-5	1,2-Dichloropropane	200	U
75-27-4	Bromodichloromethane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
79-00-5	1,1,2-Trichloroethane	200	U
124-48-1	Dibromochloromethane	200	U
75-25-2	Bromoform	200	U
108-10-1	4-Methyl-2-pentanone	200	U
108-88-3	Toluene	200	U
591-78-6	2-Hexanone	200	U
127-18-4	Tetrachloroethene	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
100-41-4	Ethylbenzene	200	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-DUP

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901548 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7313.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/11/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KG 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

1330-20-7	(m+p)Xylene	200	U
95-47-6	o-Xylene	200	U
100-42-5	Styrene	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-DUP

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901548 20.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7313.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/11/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 20.0 KAS 5/30/06

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: CAS-ROCH   Contract: STANTEC

Lab Code: 10145   Case No.: R6-31499   SAS No.: ______   SDG No.: 901536

Matrix: (soil/water) WATER   Lab Sample ID: 901549 1.0

Sample wt/vol: 5.0 (g/ml) ML   Lab File ID: B7312.D

Level: (low/med) LOW   Date Received: 05/02/06

% Moisture: not dec. ______   Date Analyzed: 05/11/06

GC Column: DB624 ID: 0.32 (mm)   Dilution Factor: 1.0

Soil Extract Volume ______ (uL)   Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
1634-04-4	Methyl tert-Butyl Ether	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
110-82-7	Cyclohexane	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901549 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7312.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/11/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	(m+p)Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901549 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7312.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/11/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COOLER BLK

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901550 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7315.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/11/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
1634-04-4	Methyl tert-Butyl Ether	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
110-82-7	Cyclohexane	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COOLER BLK

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901550 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7315.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/11/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
1330-20-7	(m+p)Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

COOLER BLK

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R6-31499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901550 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: B7315.D

Level: (low/med) LOW Date Received: 05/02/06

% Moisture: not dec. ______ Date Analyzed: 05/11/06

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume ______ (uL) Soil Aliquot Volume: ______ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW10-GW

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R631499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901542 50

Sample wt/vol: 1000 (g/ml) ML Lab File ID: CK800.D

Level: (low/med) LOW Date Received: 5/2/06

% Moisture: ______ decanted:(Y/N) N Date Extracted: 5/4/06

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 5/17/06

Injection Volume: 2.0 (uL) Dilution Factor: ~~1.0~~ 10.0 JW 5/26/06

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
108-95-2	Phenol	500	U
111-44-4	bis(-2-Chloroethyl)Ether	500	U
95-57-8	2-Chlorophenol	500	U
108-60-1	2,2'-oxybis(1-Chloropropane)	500	U
95-48-7	2-Methylphenol	500	U
621-24-7	N-Nitroso-Di-n-propylamine	500	U J
67-72-1	Hexachloroethane	500	U
106-44-5	4-Methylphenol	500	U
98-95-3	Nitrobenzene	500	U
78-59-1	Isophorone	500	U
88-75-5	2-Nitrophenol	500	U
105-67-9	2,4-Dimethylphenol	500	U
111-91-1	bis(-2-Chloroethoxy)Methane	500	U
120-83-2	2,4-Dichlorophenol	500	U
91-20-3	Naphthalene	500	U
106-47-8	4-Chloroaniline	500	U
87-68-3	Hexachlorobutadiene	500	U
59-50-7	4-Chloro-3-methylphenol	500	U
91-57-6	2-Methylnaphthalene	500	U
77-47-4	Hexachlorocyclopentadiene	500	U
88-06-2	2,4,6-Trichlorophenol	500	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	500	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	500	U
131-11-3	Dimethyl Phthalate	500	U
606-20-2	2,6-Dinitrotoluene	500	U
83-32-9	Acenaphthene	500	U
99-09-2	3-Nitroaniline	1200	U
51-28-5	2,4-Dinitrophenol	1200	U J
132-64-9	Dibenzofuran	500	U
121-14-2	2,4-Dinitrotoluene	500	U
100-02-7	4-Nitrophenol	1200	U
86-73-7	Fluorene	500	U
7005-72-3	4-Chlorophenyl-phenylether	500	U
84-66-2	Diethylphthalate	500	U
100-01-6	4-Nitroaniline	1200	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW10-GW

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R631499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER

Lab Sample ID: 901542 50

Sample wt/vol: 1000 (g/ml) ML

Lab File ID: CK800.D

Level: (low/med) LOW

Date Received: 5/2/06

% Moisture: ________ decanted:(Y/N) N

Date Extracted: 5/4/06

Concentrated Extract Volume: 5000 (uL)

Date Analyzed: 5/17/06

Injection Volume: 2.0 (uL)

Dilution Factor: ~~1.0~~ 10.0 [illegible] 5/26/06

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine	500	U
101-55-3	4-Bromophenyl-phenylether	500	U
118-74-1	Hexachlorobenzene	500	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	500	U
120-12-7	Anthracene	500	U
86-74-8	Carbazole	500	U
84-74-2	Di-n-Butylphthalate	500	U
206-44-0	Fluoranthene	500	U
129-00-0	Pyrene	500	U
85-68-7	Butyl benzyl phthalate	500	U
91-94-1	3,3'-Dichlorobenzidine	500	U
56-55-3	Benzo(a)Anthracene	500	U
218-01-9	Chrysene	500	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	500	U
117-84-0	Di-n-octyl phthalate	500	U
205-99-2	Benzo(b)fluoranthene	500	U
207-08-9	Benzo(k)Fluoranthene	500	U
50-32-8	Benzo(a)Pyrene	500	U
193-39-5	Indeno(1,2,3-cd)Pyrene	500	U
53-70-3	Dibenz(a,h)anthracene	500	U
191-24-2	Benzo(g,h,i)Perylene	500	U
1912-24-9	Atrazine	500	U J
100-52-7	Benzaldehyde	500	U
98-86-2	Acetophenone	500	U
105-60-2	Caprolactam	1200	U
92-52-4	Biphenyl	500	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: **BU-MW10-GW**

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R631499 SAS No.: ____ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901542 50

Sample wt/vol: 1000 (g/ml) ML Lab File ID: CK800.D

Level: (low/med) LOW Date Received: 5/2/06

% Moisture: ____ decanted: (Y/N) N Date Extracted: 5/4/06

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 5/17/06

Injection Volume: 2.0 (uL) Dilution Factor: ~~1.0~~ 10.0 JW 5/16/06

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 24

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.84	590	J
2.	unknown hydrocarbon	7.11	310	J
3.	unknown	7.73	240	J
4.	unknown	7.81	420	J
5.	unknown hydrocarbon	8.09	250	J
6.	unknown	8.89	320	J
7.	unknown	9.76	390	J
8.	unknown	10.15	270	J
9.	unknown	11.66	490	J
10.	unknown hydrocarbon	12.23	510	J
11.	unknown hydrocarbon	13.23	570	J
12.	unknown	14.00	310	J
13.	unknown	14.80	370	J
14.	unknown	15.60	520	J
15.	unknown	15.70	280	J
16.	unknown	15.81	490	J
17.	unknown	16.07	470	J
18.	unknown	16.46	230	J
19.	unknown	16.55	290	J
20.	unknown hydrocarbon	16.90	350	J
21.	unknown hydrocarbon	18.85	360	J
22.	unknown	19.25	240	J
23.	unknown	19.59	270	J
24.	unknown hydrocarbon	19.96	440	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW16-GW

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R631499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901544 0.93

Sample wt/vol: 1070 (g/ml) ML Lab File ID: CK801.D

Level: (low/med) LOW Date Received: 5/2/06

% Moisture: decanted:(Y/N) N Date Extracted: 5/4/06

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/17/06

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	9	U
111-44-4	bis(-2-Chloroethyl)Ether	9	U
95-57-8	2-Chlorophenol	9	U
108-60-1	2,2'-oxybis(1-Chloropropane)	9	U
95-48-7	2-Methylphenol	2	J
621-24-7	N-Nitroso-Di-n-propylamine	9	U J
67-72-1	Hexachloroethane	9	U
106-44-5	4-Methylphenol	3	J
98-95-3	Nitrobenzene	9	U
78-59-1	Isophorone	9	U
88-75-5	2-Nitrophenol	9	U
105-67-9	2,4-Dimethylphenol	9	U
111-91-1	bis(-2-Chloroethoxy)Methane	9	U
120-83-2	2,4-Dichlorophenol	9	U
91-20-3	Naphthalene	27	
106-47-8	4-Chloroaniline	9	U
87-68-3	Hexachlorobutadiene	9	U
59-50-7	4-Chloro-3-methylphenol	9	U
91-57-6	2-Methylnaphthalene	9	U
77-47-4	Hexachlorocyclopentadiene	9	U
88-06-2	2,4,6-Trichlorophenol	9	U
95-95-4	2,4,5-Trichlorophenol	23	U
91-58-7	2-Chloronaphthalene	9	U
88-74-4	2-Nitroaniline	23	U
208-96-8	Acenaphthylene	9	U
131-11-3	Dimethyl Phthalate	9	U
606-20-2	2,6-Dinitrotoluene	9	U
83-32-9	Acenaphthene	1.0	J
99-09-2	3-Nitroaniline	23	U
51-28-5	2,4-Dinitrophenol	23	U J
132-64-9	Dibenzofuran	9	U
121-14-2	2,4-Dinitrotoluene	9	U
100-02-7	4-Nitrophenol	23	U
86-73-7	Fluorene	9	U
7005-72-3	4-Chlorophenyl-phenylether	9	U
84-66-2	Diethylphthalate	9	U
100-01-6	4-Nitroaniline	23	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-MW16-GW

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R631499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901544 0.93

Sample wt/vol: 1070 (g/ml) ML Lab File ID: CK801.D

Level: (low/med) LOW Date Received: 5/2/06

% Moisture: decanted:(Y/N) N Date Extracted: 5/4/06

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/17/06

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	23	U
86-30-6	N-Nitrosodiphenylamine	9	U
101-55-3	4-Bromophenyl-phenylether	9	U
118-74-1	Hexachlorobenzene	9	U
87-86-5	Pentachlorophenol	23	U
85-01-8	Phenanthrene	9	U
120-12-7	Anthracene	9	U
86-74-8	Carbazole	2	J
84-74-2	Di-n-Butylphthalate	9	U
206-44-0	Fluoranthene	1	J
129-00-0	Pyrene	9	U
85-68-7	Butyl benzyl phthalate	9	U
91-94-1	3,3'-Dichlorobenzidine	9	U
56-55-3	Benzo(a)Anthracene	9	U
218-01-9	Chrysene	9	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	1	J
117-84-0	Di-n-octyl phthalate	9	U
205-99-2	Benzo(b)fluoranthene	9	U
207-08-9	Benzo(k)Fluoranthene	9	U
50-32-8	Benzo(a)Pyrene	9	U
193-39-5	Indeno(1,2,3-cd)Pyrene	9	U
53-70-3	Dibenz(a,h)anthracene	9	U
191-24-2	Benzo(g,h,i)Perylene	9	U
1912-24-9	Atrazine	9	UJ
100-52-7	Benzaldehyde	9	U
98-86-2	Acetophenone	1	J
105-60-2	Caprolactam	23	U
92-52-4	Biphenyl	9	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-MW16-GW

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R631499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901544 0.93

Sample wt/vol: 1070 (g/ml) ML Lab File ID: CK801.D

Level: (low/med) LOW Date Received: 5/2/06

% Moisture: decanted: (Y/N) N Date Extracted: 5/4/06

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/17/06

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

Number TICs found: 24 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	4.03	4	J
2.	unknown	5.45	12	J
3.	unknown	6.33	4	J
4.	unknown	6.65	5	J
5.	unknown	6.86	6	J
6.	unknown	7.35	10	J
7.	unknown	7.57	18	J
8.	unknown	7.82	5	J
9.	unknown	7.90	6	J
10.	unknown	8.12	33	J
11.	unknown	8.29	10	J
12.	unknown	8.52	4	J
13.	unknown	8.57	5	J
14.	unknown	8.86	6	J
15.	unknown	8.93	13	J
16.	unknown	9.22	6	J
17.	unknown	9.84	55	J
18.	unknown	9.94	6	J
19.	unknown	10.53	8	J
20.	unknown	11.70	29	J
21.	unknown	12.51	4	J
22.	unknown	12.76	6	J
23.	unknown	14.32	6	J
24.	unknown	20.60	5	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-DUP-GW

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R631499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901548 20.8

Sample wt/vol: 960 (g/ml) ML Lab File ID: CK799.D

Level: (low/med) LOW Date Received: 5/2/06

% Moisture: decanted:(Y/N) N Date Extracted: 5/4/06

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/17/06

Injection Volume: 2.0 (uL) Dilution Factor: ~~1.0~~ 20.0 JJ 5/16/06

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
108-95-2	Phenol	210	U
111-44-4	bis(-2-Chloroethyl)Ether	210	U
95-57-8	2-Chlorophenol	210	U
108-60-1	2,2'-oxybis(1-Chloropropane)	210	U
95-48-7	2-Methylphenol	210	U
621-24-7	N-Nitroso-Di-n-propylamine	210 ~~59~~	~~J~~ UJ
67-72-1	Hexachloroethane	210	U
106-44-5	4-Methylphenol	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
105-67-9	2,4-Dimethylphenol	210	U
111-91-1	bis(-2-Chloroethoxy)Methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	210	U
87-68-3	Hexachlorobutadiene	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	520	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	520	U
208-96-8	Acenaphthylene	210	U
131-11-3	Dimethyl Phthalate	210	U
606-20-2	2,6-Dinitrotoluene	210	U
83-32-9	Acenaphthene	210	U
99-09-2	3-Nitroaniline	520	U
51-28-5	2,4-Dinitrophenol	520	UJ
132-64-9	Dibenzofuran	210	U
121-14-2	2,4-Dinitrotoluene	210	U
100-02-7	4-Nitrophenol	520	U
86-73-7	Fluorene	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
84-66-2	Diethylphthalate	210	U
100-01-6	4-Nitroaniline	520	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BU-DUP-GW

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R631499 SAS No.: SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901548 20.8

Sample wt/vol: 960 (g/ml) ML Lab File ID: CK799.D

Level: (low/med) LOW Date Received: 5/2/06

% Moisture: decanted:(Y/N) N Date Extracted: 5/4/06

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/17/06

Injection Volume: 2.0 (uL) Dilution Factor: ~~1.0~~ 20.0 JJ 5/16/06

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	520	U
86-30-6	N-Nitrosodiphenylamine	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	210	U
87-86-5	Pentachlorophenol	520	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-Butylphthalate	210	U
206-44-0	Fluoranthene	210	U
129-00-0	Pyrene	210	U
85-68-7	Butyl benzyl phthalate	210	U
91-94-1	3,3'-Dichlorobenzidine	210	U
56-55-3	Benzo(a)Anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	210	U
117-84-0	Di-n-octyl phthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)Fluoranthene	210	U
50-32-8	Benzo(a)Pyrene	210	U
193-39-5	Indeno(1,2,3-cd)Pyrene	210	U
53-70-3	Dibenz(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)Perylene	210	U
1912-24-9	Atrazine	210	UJ
100-52-7	Benzaldehyde	210	U
98-86-2	Acetophenone	210	U
105-60-2	Caprolactam	520	U
92-52-4	Biphenyl	210	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-DUP-GW

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R631499 SAS No.: ______ SDG No.: 901536

Matrix: (soil/water) WATER Lab Sample ID: 901548 20.8

Sample wt/vol: 960 (g/ml) ML Lab File ID: CK799.D

Level: (low/med) LOW Date Received: 5/2/06

% Moisture: ______ decanted: (Y/N) N Date Extracted: 5/4/06

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/17/06

Injection Volume: 2.0 (uL) Dilution Factor: ~~1.0~~ 20.0 SJ 5/16/06

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS:

Number TICs found: 25 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	6.42	250	J
2.	unknown	6.78	240	J
3.	unknown	6.85	860	J
4.	unknown	6.93	230	J
5.	unknown hydrocarbon	7.11	440	J
6.	unknown	7.73	310	J
7.	unknown	7.82	570	J
8.	unknown	8.10	330	J
9.	unknown	8.57	310	J
10.	unknown	8.67	270	J
11.	unknown	8.89	360	J
12.	unknown	9.77	460	J
13.	unknown	10.15	300	J
14.	unknown	11.67	500	J
15.	unknown hydrocarbon	12.24	450	J
16.	unknown hydrocarbon	13.25	540	J
17.	unknown	14.01	230	J
18.	unknown	14.07	220	J
19.	unknown	14.81	320	J
20.	unknown hydrocarbon	15.61	390	J
21.	unknown	15.82	380	J
22.	unknown	16.08	240	J
23.	unknown hydrocarbon	18.86	210	J
24.	unknown	19.98	400	J
25.	unknown	20.51	340	J

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix J

Fish and Wildlife Agency Correspondence

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, Albany, New York 12233-4757
Phone: (518) 402-8935 • **FAX:** (518) 402-8925
Website: www.dec.state.ny.us

RECEIVED
JUL 16 2007
Stantec Consulting Group Inc.

Alexander B. Grannis
Commissioner

July 13, 2007

Marc Bouchard
Stantec Consulting Services
2250 Brighton Henrietta Road
Rochester, NY 14623-2706

Dear Mr. Bouchard:

In response to your recent request, we have reviewed the New York Natural Heritage Program databases with respect to an Environmental Assessment for the proposed Brownfields Program - Remedial Investigation - Buell Automatics, site as indicated on the map you provided, located at 381 Buell Road, Rochester, Monroe County.

We have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain any information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of rare or state-listed species, or of significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

Sincerely,
Tara Seoane
Tara Seoane, Information Services
New York Natural Heritage Program

Enc.
cc: Reg. 8, Wildlife Mgr.

Memo

Stantec

To:	Peter Smith	From:	Andy Smith
	Rochester Office		Rochester Office
File:	16059	Date:	July 26, 2007

Reference: Buell Automatics Remedial Investigation

In accordance with US Fish and Wildlife Service (USFWS) current policy for information on threatened and endangered species, I have reviewed the USFWS web page for federally listed threatened and endangered species in Monroe County. The federal listing identifies bog turtle (Clemmys muhlenbergii) in the Towns of Riga and Sweden as the only federally threatened or endangered species occurring in Monroe County. There were no threatened/endangered species identified in the vicinity of Buell Road in the Town of Gates. According to US FWS policy, if a subject site contains no habitat suitable for the subject species, no further investigation is required. Given that the subject site is located in an industrial area with no marsh cover/sedge wetlands that are the preferred habitat of the bog turtle, no further investigation is needed.

STANTEC CONSULTING SERVICES INC.

Andy Smith
Senior Scientist, Environmental Management
andy.smith@stantec.com

Attachment: US FWS Monroe County Listed T/E Species

Monroe County

Federally Listed Endangered and Threatened Species and Candidate Species

This list represents the best available information regarding known or likely County occurrences of Federally-listed and candidate species and is subject to change as new information becomes available.

Common Name	Scientific Name	Status
Bog turtle (Riga and Sweden Townships)	*Clemmys muhlenbergii*	T

E=Endangered T=Threatened P=Proposed C=Candidate

Information current as of: 7/26/2007

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New York Field Office
3817 Luker Road, Cortland, NY 13045
Phone: (607) 753-9334
Fax: (607) 753-9699

Long Island Field Office
3 Old Barto Rd., Brookhaven, NY 11719
Phone: (631) 776-1401
Fax: (631) 776-1405

Endangered Species Act List Request Response Cover Sheet

This cover sheet is provided in response to a search of our website* for information regarding the potential presence of species under jurisdiction of the U.S. Fish and Wildlife Service (Service) within a proposed project area.

Attached is a copy of the New York State County List of Threatened, Endangered, and Candidate Species for the appropriate county(ies). The database that we use to respond to list requests was developed primarily to assist Federal agencies that are consulting with us under Section 7(a)(2) of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Our lists include all Federally-listed, proposed, and candidate species known to occur, as well as those likely to occur, in specific counties.

The attached information is designed to assist project sponsors or applicants through the process of determining whether a Federally-listed, proposed, or candidate species and/or "critical habitat" may occur within their proposed project area and when it is appropriate to contact our offices for additional coordination or consultation. You may be aware that our offices have provided much of this information in the past in project-specific letters. However, due to increasing project review workloads and decreasing staff, we are now providing as much information as possible through our website. We encourage anyone requesting species list information to print out all materials used in any analyses of effects on listed, proposed, or candidate species.

The Service routinely updates this database as species are proposed, listed, and delisted, or as we obtain new biological information or specific presence/absence information for listed species. If project proponents coordinate with the Service to address proposed and candidate species in early stages of planning, this should not be a problem if these species are eventually listed. However, we recommend that both project proponents and reviewing agencies retrieve from our online database an *updated* list every 90 days to append to this document to ensure that listed species presence/absence information for the proposed project is *current*.

Reminder: Section 9 of the ESA prohibits unauthorized taking** of listed species and applies to Federal and non-Federal activities. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take**" any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take**," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the Service, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species.

For instance, work in certain waters of the United States, including wetlands and streams, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*), the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).*

For additional information on fish and wildlife resources or State-listed species, we suggest contacting the appropriate New York State Department of Environmental Conservation regional office(s) and the New York Natural Heritage Program Information Services.*

Since wetlands, ponds, streams, or open or sheltered coastal waters may be present in the project area, it may be helpful to utilize the National Wetlands Inventory (NWI) maps as an initial screening tool. However, they may or may not be available for the project area. Please note that while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Online information on the NWI program and digital data can be downloaded from Wetlands Mapper, http://wetlands.fws.gov/mapper_tool.htm.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. After reviewing our website and following the steps outlined, we encourage both project proponents and reviewing agencies to contact our office to determine whether an accurate determination of species impacts has been made. If there are any questions about our county lists or agency or project proponent responsibilities under the ESA, please contact the New York or Long Island Field Office Endangered Species Program at the numbers listed above.

Attachment (county list of species)

*Additional information referred to above may be found on our website at:
http://www.fws.gov/northeast/nyfo/es/section7.htm

** Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to ***take*** (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Field Office
3817 Luker Road
Cortland, NY 13045
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo

Project Number: ~~0765~~ 70765

To: Marc Bouchard Date: 7-30-07

Regarding: Buell Automatics Remedial Investigation

Town/County: Rochester / Monroe

We have received your request for information regarding occurrences of Federally-listed threatened and endangered species within the vicinity of the above-referenced project/property. Due to increasing workload and reduction of staff, we are no longer able to reply to endangered species list requests in a timely manner. In an effort to streamline project reviews, we are shifting the majority of species list requests to our website at http://www.fws.gov/northeast/nyfo/es/section7.htm. Please go to our website and print the appropriate portions of our county list of endangered, threatened, proposed, and candidate species, and the official list request response. Step-by-step instructions are found on our website.

As a reminder, Section 9 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) prohibits unauthorized taking* of listed species and applies to Federal and non-Federal activities. Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the U.S. Fish and Wildlife Service (Service), to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take"* any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. If you have any questions or require further assistance regarding threatened or endangered species, please contact the Endangered Species Program at (607) 753-9334. Please refer to the above document control number in any future correspondence.

Endangered Species Biologist: Sandra Doran [signature]

*Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to *take* (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

BUELL AUTOMATICS
REMEDIAL INVESTIGATION REPORT

Appendix K

Documentation Concerning Disposal of Investigation-derived Wastes

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N Y D 0 0 2 4 6 6 2 9 0
Manifest Document No.: 6 6 1 1 8
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Buell Automatics
381 Buell Road
Rochester, NY 14624
4. Generator's Phone (716) 328-7430

A. State Manifest Document Number: MI 8666118
B. State Generator's ID: SAME

5. Transporter 1 Company Name: Freehold Cartage, Inc.
6. US EPA ID Number: N J D 0 5 4 1 2 6 1 6 4
C. State Transporter's ID: 04403 96 ME
D. Transporter's Phone: (732) 462-1001

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address:
EQ Resource Recovery, Inc..
36345 Van Born Road
Romulus, MI 48174
10. US EPA ID Number: M I D 0 6 0 9 7 5 8 4 4
G. State Facility's ID:
H. Facility's Phone: (734) 326-3100

GENERATOR

	HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, liquid, n.o.s.(F002,D040) 9, NA3082, III	11	D M	550	G	F 0 0 2
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a.Decon Water
NY=B Also D040
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information
a.K44102-OTS ERG# 171 WTS#6690
Emer. Contact: (585) 436-5660

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Date Month Day Year
Donald B Corwin III	[signature]	11 19 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year
John Russo	[signature]	1 1 19 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date Month Day Year

SPILLS [redacted] BE R[redacted]D TO [redacted]CHIGA[redacted]UTION [redacted]GENC[redacted]ING S[redacted] IN M[redacted]N AT [redacted]-4706[redacted]T OF [redacted]AT 51[redacted]60 AN[redacted]NATIO[redacted]SPON
CENTER AT 1-800-424-8802 24 HOURS PER DAY.

DEQ

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N Y D 0 0 2 4 6 6 2 9 0 — Manifest Document No.: 6 6 1 1 9
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Buell Automatics
381 Buell Road
Rochester, NY 14624
4. Generator's Phone (716) 328-7430

A. State Manifest Document Number: MI 3666119
B. State Generator's ID: SAME

5. Transporter 1 Company Name: Freehold Cartage, Inc.
6. US EPA ID Number: N J D 0 5 4 1 2 6 1 6 4
C. State Transporter's ID: 0440396 m
D. Transporter's Phone: (732) 462-1001

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address:
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111
10. US EPA ID Number: M I D 0 0 0 7 2 4 8 3 1
G. State Facility's ID:
H. Facility's Phone: (734) 697-7830

	HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F002,D040) 9, NA3077, III	16	D M	8000	P	F 0 0 2
b.		Non-regulated,Non-Haz Soils	5	D M	2500	P	0 2 9 L
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a. Soil w/Chlor Solvents
NY=L also D040
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information
a.019219WTS, ERG# 171 WTS#6690
b.019221WTS Emer. Contact: (585) 436-5660

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Date Month Day Year
Donald B Corwin III	[signature]	1 1 1 9 0 2

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year
John Russo	[signature]	1 1 1 9 0 2

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date Month Day Year

GENERATOR / TRANSPORTER / FACILITY

SPILLS MUST BE REPORTED TO MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

NYG 2849931

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

Please type or print. Do not staple

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 1/5/93)

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NYD002466290
Manifest Doc. No.: 49931
2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

GENERATOR

3. Generator's Name and Mailing Address: Buell Automatics, Inc., 381 Buell Road, Rochester NY 14624
4. Generator's Telephone Number (585) 328-7430
5. Transporter 1 (Company Name): Frank's Vacuum Truck Service
6. US EPA ID Number: NYD982792814
7. Transporter 2 (Company Name): ECOTRON
8. US EPA ID Number: OHR001000082
9. Designated Facility Name and Site Address: General Environmental Management LLC, 2655 Transport Rd., Cleveland OH 44115
10. US EPA ID Number: OHD004178612

A. NYG 2849931
B. Generator's ID: SAME
C. State Transporter's ID: [illegible]
D. Transporter's Telephone (716) 284-2132
E. State Transporter's ID:
F. Transporter's Telephone 330-478-8870
G. State Facility ID:
H. Facility Telephone (216) 621-3694

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste, Liquid, n.o.s. EPA# D043,F002 (D040,D043,F002) 9, NA3082, III	004	DM	00220	G	EPA D040 / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a. Water c/w Solvents 1.00
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. T
b.
c.
d.

15. Special Handling Instructions and Additional Information
a. Profile# 3579-H-G, ERG# 171
b. Emer. Resp.# 585-324-7430

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Ralph D'Aries — Signature: [signature] — Mo. 11 Day 18 Year 04

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Keith [illegible] — Signature: [signature] — Mo. 11 Day 18 Year 04

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: ~~Contractor~~ for ECOTRON Scott Forster — Signature: Scott Forster — Mo. 11 Day 29 Year 04

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Gregg Kechner — Signature: [signature] — Mo. 11 Day 30 Year 04

COPY 1—Disposer State—Mailed by TSD Facility

HAZARDOUS MATERIALS

000013937JJK

000013937JJK

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD002466290
2. Page 1 of 1
3. Emergency Response Phone: (585) 328-7430
4. Manifest Tracking Number: 000013937 JJK

5. Generator's Name and Mailing Address:
Buell Automatics, Inc.
381 Buell Road
Rochester NY 14624
Generator's Phone: 585 328-7430

Generator's Site Address (if different than mailing address): SAME

6. Transporter 1 Company Name: Freehold Cartage, Inc. — U.S. EPA ID Number: NJD054126164

7. Transporter 2 Company Name: Ed... — U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
Michigan Disposal Waste Treatment Plant
49350 N. I-94 Service Drive
Belleville MI 48111
Facility's Phone: (800) 592-5489
U.S. EPA ID Number: MID000724831

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ Hazardous Waste, Liquid, n.o.s. (D040,D043,F002) 9, NA3082, III (D029,D040,D043,F002)	005	DM	00275	G	F002, D029, D040, D043, F002, D040
X	2. RQ Hazardous Waste, Solid, n.o.s. (F002, D040) 9, NA3077, III (F002, D040)	001	DM	00500	P	NRNH
	3. USDOT Non-Regulated, Non-Hazardous Drill Cutting and Soil	001	DM	00500	P	NRNH
	4. USDOT Non-Regulated, Non-Hazardous Drill Cutting and Soil	002	DM	01000	P	

14. Special Handling Instructions and Additional Information
a.J061229MDI-OTS, ERG# 171 (55Gal.)
b.J061226MDI, ERG# 171 (55Gal.)
c.J061227MDI, (55Gal.) d.J061227MDI. (55Gal.)
Phase# 1638054 ME
*weights are estimated
Waste Handling Codes: 1) T 2) L

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.
Generator's/Offeror's Printed/Typed Name: Gary Lawton — Signature: [signature] — Month 10 Day 31 Year 06

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: George Haussel — Signature: [signature] — Month 10 Day 31 Year 06
Transporter 2 Printed/Typed Name: ... Edwards — Signature: [signature] — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Ryan Bushman — Signature: Ryan Bushman — Month 11 Day 16 Year 06

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY'S COPY

Appendix L

Detailed Description of VOC Analysis Results for RI Soil Samples

Appendix L

Detailed Description of VOC Analysis Results for RI Soil Samples

The following discussion of the laboratory VOC analysis results for soil samples is presented in the order in which the various soil sampling programs were conducted.

May 2002

In May 2002, soil samples from four monitoring well soil borings (MW-7, MW-8, MW-12 and MW-13) were submitted for TCL VOC analysis by ASP method 95-1. As shown in Table 10, with the exception of acetone, no VOCs were detected in the soil samples from the borings for wells MW-12 and MW-13. Acetone was detected in the method blank and, consequently, the reported results were flagged with a "B" qualifier and therefore the acetone is considered to be a laboratory-derived artifact. Sample BU-MW7-S also contained trace levels of acetone (which was flagged with a "B" qualifier) and carbon disulfide.

BU-MW8-S (collected at 16-18 ft. bgs) contained VOCs exceeding SCOs for the protection of groundwater. MW-8 is located off-Site on the adjacent 385 Buell Road property (former All-Around Travel) and downgradient from MW-2. Five TCL VOCs were detected at MW-8, including four chlorinated compounds and acetone (which was flagged with a "B" qualifier). TCE and its breakdown product cis-1,2-dichloroethene (cis-1,2-DCE) were reported in soil at MW-8 at concentrations that exceed SCOs for protection of groundwater. However, none of the compounds were reported at concentrations that exceed the SCOs for industrial use.

August 2002

Soil samples from five monitoring well soil borings (MW-2D, MW-6, MW-9, MW-10 and MW-11) and 11 Geoprobe borings (B-8, B-9, B-10, B-11, B-12, B-13, B-14, B-15, B-16, B-17 and B-18) were submitted for TCL VOC analysis by ASP method 95-1.

As shown in Table 10, only BU-MW10-S (collected at 8-10 ft. bgs) contained VOCs exceeding SCOs for the protection of groundwater in the monitoring well soil borings. MW-10 is located on-site along the exterior west building wall of the Buell facility. Seven chlorinated VOCs were detected at MW-10, including three that exceed SCOs for protection of groundwater: TCE; and its breakdown products cis-1,2-DCE; and vinyl chloride (VC). However, none of the compounds were reported at concentrations that exceed the SCOs for industrial use.

As shown in Table 11, with the exception of acetone, chlorinated hydrocarbons constitute the majority of the detected compounds in the August 2002 Geoprobe borings. Petroleum-related VOCs (i.e., ethylbenzene and xylenes) were detected in some samples, but at concentrations that were considerably lower than the levels of the chlorinated compounds, and well below SCOs.

Appendix L

Three of the Geoprobe borings (B-8, B-9 and B-11) contained four chlorinated VOCs exceeding SCOs for the protection of groundwater: TCE; cis-1,2-DCE; VC; and 1,1,1-trichloroethane (1,1,1-TCA). Geoprobe boring B-11 was located outside the Buell facility along the south building wall, east of existing monitoring well MW-2. Borings B-8 and B-9 were interior borings located in the area of the former trench drain. The area including B-8 was subsequently excavated during the IRM. The concentration of TCE in soil from B-8 also exceeded the SCO for industrial use prior to its removal.

Total concentrations of petroleum-related tentatively identified compounds (TICs) >10,000 ug/kg were reported in eight of the Geoprobe samples (B-8, B-9, B-10, B-11, B-13, B-15, B-17 and B-18). However, no SCOs have been promulgated by the Department for TICs.

February 2003

In February 2003, soil sample results from soil borings for monitoring wells MW-14 and MW-15, located on the Five Star Tool Co. property, 383 Buell Road, were submitted for TCL VOC analysis. As shown in Table 10, with the exception of trace levels of acetone, no VOCs or TICs were reported in the soil samples from MW-14 and MW-15.

May 2003

In May 2003, soil samples from Geoprobe borings B-19 through B-34 were submitted for TCL VOC analysis by ASP method 95-1. This series of Geoprobe borings included interior and exterior borings. Boring locations are shown on Figure 4.

As shown in Table 11, with the exception of acetone, chlorinated VOCs constituted the majority of the detected compounds. Petroleum-related VOCs (i.e. ethylbenzene and xylenes) were detected in some samples, but at concentrations that were considerably lower than the levels of the chlorinated compounds and well below SCOs.

Geoprobe borings B-19, B-23, B-24 and B-26 contained between one and four chlorinated VOCs exceeding SCOs for the protection of groundwater, including TCE; cis-1,2-DCE; 1,1-dichloroethane (1,1-DCA); and 1,1,1-trichloroethane (1,1,1-TCA). Boring B-19 was located in an interior room used for the recycling of metal cuttings. Geoprobe boring B-19 was reported to contain a comparatively low TCE concentration of 1,900 ug/kg.

Borings B-24 and B-26 were interior borings located in the area of the former trench drain. The area which included B-26 was subsequently excavated during the IRM. B-24 had a relatively low concentration of 360 ug/kg cis-1,2-DCE. Geoprobe boring B-23 was on the exterior west side of the facility, located in the former drum storage source area.

Of these four borings (B-19, B-23, B-24 and B-26), only TCE in boring B-23 exceeded the SCO for industrial use at a concentration of 820,000 ug/kg. The newly identified source area at B-23 required further delineation to the north and west in September 2005.

Petroleum-related VOC TICs were reported at total concentrations >10,000 ug/kg in six of the 16 samples (B-19, B-23, B-28, B-29, B-32 and B-34). However, no SCOs have been promulgated by the Department for TICs.

December 2003 – January 2004

The following excerpts are taken from the March 2004 IRM Final Engineering Report and include discussion of the analytical results from the IRM Geoprobe soil samples and confirmatory samples. These results were compared to the TAGM 4046 RSCOs that were in effect at the time the IRM was performed. Soil analytical summary tables from the IRM Report are included in Appendix E.

IRM Soil Boring Activities

Due to the presence of the secondary concrete slab at the northern portion of the IRM excavation footprint, four Geoprobe borings (GP-1 through GP-4) were advanced through the secondary concrete slab to evaluate underlying conditions in that area prior to proceeding with the removal of the secondary concrete slab. The Geoprobe boring locations are shown on Figure 5.

The soil samples were submitted to Columbia Analytical Services for expedited analysis of TCL VOCs and TICs. Preliminary analytical results were provided and indicated that impacts from chlorinated VOCs were limited at the northern extent of the excavation footprint both horizontally and vertically. As a result, soil removal at the northern limit of the original IRM excavation footprint was slightly modified as approved by the Department.

At the completion of the IRM excavation activities, six (6) additional Geoprobe borings (GP-5 through GP-10) were advanced within the southern portion of the excavated area to evaluate the vertical extent of impacts below the excavated depth. Five (5) soil samples were submitted to Columbia for laboratory analysis from these borings. The boring locations are shown on Figure 5.

The analytical results from soil samples collected from the northern IRM Geoprobe borings GP-1 through GP-4 indicate that TCE and related solvent impacts above the RSCOs were present in the 1 – 4 ft. bgs interval at the GP-3 location. This material was removed as part of the IRM excavation program. At depths beyond the extent of soil removal in the northern portion of the excavation footprint, no individual VOC was reported above the Department's RSCOs that were in effect at that time (TAGM 4046); however, the total TIC concentration in samples from the GP-2, 5-7 ft. bgs interval and the GP-3, 8-9 ft. bgs interval were above the RSCO of 10,000 ppb for total VOCs.

Review of the TIC data from these two samples indicated the individual compounds were petroleum derived, and not chlorinated solvent derived compounds.

The analytical results from the soil samples collected from IRM Geoprobe borings GP-5 through GP-10 indicated TCE impacts above RSCOs at depths of 7.5 to 9.5 ft bgs beneath the southern portion of the remediated area. Soil boring samples from depths greater than 10 ft bgs in that area indicated that the concentrations of TCE and related chlorinated VOCs decreased significantly at these depths to levels which were below RSCOs.

Recovery Well Installations

Subsequent to backfilling, SLC installed two, six-inch stainless-steel wells within the excavation footprint. Wells RW-1 and RW-2 were placed near the northwestern and southeastern corners of the excavation areas respectively, where product was observed during soil removal activities. The wells extended to the bottom of the excavated area (~6.5-7 ft. bgs) and were finished with road boxes so they would be flush with the grade of the restored concrete floor. Well locations are shown on Figure 5.

One (1) soil sample was collected from the bottom of the RW-1 location, prior to the installation of the recovery well. The soil sample was submitted to Columbia for analysis of TCL VOCs and TICs. The soil analytical results indicate that the three detected compounds in the RW1-BOTT sample - TCE, VC and Acetone - were all at concentrations well below their respective RSCOs. The DEC sample from the same location and depth indicated comparable findings.

Confirmatory Soil Samples

Confirmatory soil samples were collected at the limits of the excavation and submitted for laboratory analysis. Six (6) soil samples (grab samples) were proposed in the Revised IRMWP to be collected from the excavation area (four sidewall samples and two bottom samples) during trenching for the proposed excavation support wall. These samples plus a matrix-spike, a matrix-spike duplicate, a duplicate, a rinse blank and a trip blank were proposed for analysis of TCL VOCs and TICs using ASP.

Given the unanticipated Site conditions encountered during initial trenching activities, the excavation support walls were not needed. As a result, trenching around the perimeter of the excavation area was not conducted, and confirmatory soil samples were subsequently collected during the course of the excavation activities. Additional sidewall and bottom samples were collected as deemed necessary to appropriately characterize shallow and deep soil conditions based on contaminant impacts observed in the field.

A total of 13 confirmatory soil samples were taken from the completed excavation area for laboratory analysis. Eight (8) sidewall samples were collected from the lateral limits of the remedial excavation area. One (1) of these eight sidewall samples was collected from the west wall of the original excavation, prior to additional soil removal that was performed in the southwesterly direction. Two (2) soil samples were taken from soil that was left in place (approximately 1 cubic yard of soil) for structural stability beneath the central pier supporting the mezzanine. In addition, three (3) bottom samples were collected to evaluate residual impacts at the vertical excavation limits. Sample locations are shown on Figure 5.

The confirmatory analytical results from the north, northwest and west sidewalls of the excavation, Samples BU-NWALL-S, BU-NWWALL-SHAL-S and BU-WWALL2-S, respectively, were all below RSCOs. An interim sidewall sample collected from the west wall of the original excavation, sample BU-WWALL-S, yielded elevated TCE concentrations, however this area was subsequently excavated and disposed off-site when the excavation was extended to the southwest.

The confirmatory analytical results from the northeast sidewall of the excavation, Sample BU-NEWALL-S, were below their individual RSCOs. However, total TICs were reported above the RSCO for total VOCs.

The confirmatory analytical results from the southeast sidewall of the excavation, BU-SEWALL-S, were above RSCOs for TCE and several related chlorinated VOCs. The concentration of TCE was two orders of magnitude less than what was previously encountered in nearby boring B-8. This sampling location is situated between the removed floor drain, that was the suspected source of the most significantly affected soil, and the room that was most recently used for TCE degreasing operations. No further excavation could be performed in the easterly direction due to the presence of an interior load-bearing building wall.

The confirmatory analytical results from the south sidewall of the excavation, Samples BU-SWWALL-S (5.3 ft) and BU-SWALL-S (6.0 ft.), were below RSCOs with the exception of a slightly elevated TCE concentration in the shallower of the two samples. However, the concentration of TCE was four orders of magnitude less than what was previously encountered in nearby boring B-8. No further excavation could be performed in this southerly direction due to the presence of the exterior load-bearing building wall.

Pier Sidewall Samples

The confirmatory analytical results from the two sidewall samples collected from the estimated one cubic yard of soil that was left in place to support the mezzanine pier, BU-PIER-NSHAL-S (2.8 ft.) and BU-PIER-NMID-S (5.0 ft.), were below RSCOs with the exception of TCE in the shallow sample and total VOC TICs for both samples. Once again, further excavation in this area could not be performed since the soil beneath the pier was supporting the mezzanine. Given the absence of elevated TCE concentrations in the deeper sample, it appears that only a small quantity of shallow TCE impacted soil remains in this location.

Appendix L

Bottom Samples

The confirmatory analytical results from the three bottom samples, BU-NWWALL-BOTT-S, BU-WBOTT-S and BU-SEBOTT-S, were below RSCOs for two of the three samples. Only the southeast bottom sample, BU-SEBOTT-S, was reported to contain concentrations of TCE and its related chlorinated VOCs above their respective RSCOs. This sampling location was situated in close proximity to the former floor drain which was the suspected source of the most significant impacts. Excavation to further depths in this area was limited by potential building subsidence considerations. However, the residual TCE concentration was two orders of magnitude below the concentration that was previously encountered in nearby boring B-8.

In summary, based on the confirmatory analytical results, the IRM excavation program achieved its intended goal of removing the most affected source area soils given the limitations imposed by the building and its related structural components.

September 2005

Ten additional Geoprobe borings (B-35 through B-44) were completed in the Former Loading Dock area in September 2005. Boring locations are shown on Figure 4.

As shown in Table 11, Geoprobe borings B-35, B-36, B-39, B-40, B-42 and B-43 contained six chlorinated VOCs exceeding SCOs for the protection of groundwater, including TCE; 1,1-DCA; 1,1-DCE; cis-1,2-DCE; 1,1,1-TCA; and VC. The boundaries of these impacts were defined by borings B-37, B-38, B-41 and B-44 completed to the north and west of the Former Loading Dock area. Samples collected at depth in B-35, B-39 and B-40 defined the extent of contamination to be approximately 6 to 8 ft. bgs.

A total VOC TIC concentration >10,000 ug/kg was reported from the shallow interval (2-3.5 ft. bgs) of B-35, only. However, no SCOs have been promulgated by the Department for TICs.

November 2005

Monitoring wells MW-16, MW-17 and MW-18 were installed in November 2005. Monitoring well locations are shown on Figure 4.

As shown in Table 10, six chlorinated VOCs were reported in the shallow duplicate soil sample collected from MW-16 (located in the Former Loading Dock area) at concentrations which exceed their respective SCOs for the protection of groundwater. TCE was reported at 290,000 ug/Kg in the 0.5 to 2.0 ft. bgs interval at MW-16. A soil sample collected from the same boring at a depth of 9-10 ft. bgs was not reported to contain VOCs above SCOs. None of the compounds in MW-16 were reported at concentrations that exceed the SCOs for industrial use. A total VOC TIC concentration

>10,000 ug/kg was reported for sample MW-DUP, collected from the 0.5 to 2.0 ft. bgs interval at MW-16.

As shown in Table 10, with the exception of a trace acetone concentration, no VOCs or TICs were reported for the samples collected from borings MW-17 and MW-18 on the 1166 Brooks Avenue parcel.

Appendix M

Fish and Wildlife Resources Impact Analysis Decision Key

(presented on the following page)

APPENDIX 3C

Fish and Wildlife Resources Impact Analysis Decision Key

		If YES Go to:	If NO Go to:
1.	Is the site or area of concern a discharge or spill event? YES	13.	2.
2.	Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13.	3
3.	Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation?	4.	9.
4.	Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5.
5.	Has the contamination gone off site?	6.	14.
6.	Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7.	14.
7.	Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8.
8.	Does contamination exist at concentrations that could exceed SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14.
9.	Does the site or any adjacent or downgradient property contain any of the following resources? a. Any endangered, threatened or special concern species or rare plants or their habitat b. Any NYSDEC designated significant habitats or rare NYS Ecological Communities c. Tidal or freshwater wetlands d. Stream, creek or river e. Pond, lake, lagoon f. Drainage ditch or channel g. Other surface water feature h. Other marine or freshwater habitat i. Forest j. Grassland or grassy field k. Parkland or woodland l. Shrubby area m. Urban wildlife habitat n. Other terrestrial habitat	11.	10.
10.	Is the lack of resources due to the contamination?	Section 3.10.1	14.
11.	Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14.	12.
12.	Does the site have widespread soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	13.
13.	Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of ~~potential~~ resources. Contact NYSDEC for information regarding endangered species.) NO	Section 3.10.1	14.
14.	No Fish and Wildlife Resources Impact Analysis needed.		