Work Plan for Remedial Excavation
Former Loading Dock Area
Buell Automatics Site
BCP Site No. C828114
381 Buell Road
Rochester, Monroe County, New York

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 14624-3123

Prepared by:

Stantec Consulting Services Inc.
61 Commercial Street
Rochester, New York 14614

Stantec

July 2013

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road, Avon, New York 14414-9519
Phone: (585) 226-5353 • **Fax:** (585) 226-8139
Website: www.dec.ny.gov

Joe Martens
Commissioner

July 24, 2013

Mr. Gary Lawton
President
Buell Automatics, Inc.
381 Buell Road
Rochester, NY 14624

Dear Mr. Lawton:

Re: Buell Automatics Site #C828114
Brownfield Cleanup Program (BCP)
Work Plan for Remedial Excavation
Former Loading Dock Area; July 2013
Town of Gates, Monroe County

The New York State Department of Environmental Conservation (NYSDEC) has completed its review of the document entitled *"Work Plan for Remedial Excavation Former Loading Dock Area"* (the Work Plan) dated July 2013 and prepared by Stantec Consulting Services Inc. for the Buell Automatics Site in the Town of Gates, Monroe County. Based on the information and representations given in the Work Plan, NYSDEC has determined that the Work Plan substantially addresses the requirements of the Brownfield Cleanup Agreement. The Work Plan is hereby approved.

By **August 24, 2013**, and prior to the start of field activities**,** please distribute copies of the approved Work Plan as follows:

- Gates Public Library (1 hardcopy);
- Frank Sowers – NYSDEC, Avon (2 hardcopies);
- Mark Sergott – NYSDOH, Albany (1 hardcopy); and
- John Frazer- MCHD (1 electronic copy).

According to the schedule in the approved Work Plan, field activities are scheduled to start by October 24, 2013. Please notify me at least seven days in advance of the start of field work.

Thank you for your cooperation in this matter and please contact me at (585) 226-5357 if you have any questions.

Sincerely,

Frank Sowers

Frank Sowers, P.E.
Environmental Engineer 2

ec:
B. Putzig
J. Frazer
M. Storonsky
M. Sergott
P. Lytle
J. Picciotti

Stantec

Stantec Consulting Services Inc.
61 Commercial Street
Rochester NY 14614
Tel: (585) 475-1440

July 22, 2013
File: 190500033

Frank Sowers, P.E.
Environmental Engineer II
New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, NY 14414

RE: Work Plan for Remedial Excavation
Brownfield Cleanup Program Site # C828114
Buell Automatics Site
381 Buell Road
Gates, New York

Dear Frank:

On behalf of Buell Automatics, Inc., Stantec Consulting Services Inc. has prepared the enclosed Work Plan for Remedial Excavation in the Former Loading Dock Area of the Buell Automatics, Inc. facility located at 381 Buell Road in the Town of Gates, Monroe County, New York.

Should you have any questions or require additional information, please do not hesitate to call.

Sincerely,

STANTEC CONSULTING SERVICES INC.

Michael P. Storonsky
Managing Principal
Tel: (585) 413-5266
Fax: (585) 272-1814
Mike.Storonsky@stantec.com

Peter Nielsen, P.E.
Senior Associate
Tel: (585) 413-5280
Fax: (585) 272-1814
Peter.Nielsen@stantec.com

Thomas D. Wells
Senior Geologist
Tel: (585) 413-5271
Fax: (585) 272-1814
Tom.Wells@stantec.com

ec w/ enclosure: B. Putzig (NYSDEC)
M. Sergott (NYSDOH)
G. Lawton (Buell Automatics, Inc.)
P. Lytle (E&L Solutions, Inc.)

Stantec

WORK PLAN FOR REMEDIAL EXCAVATION
FORMER LOADING DOCK AREA
BUELL AUTOMATICS SITE
July 2013

CERTIFICATION

I, Peter Nielsen, certify that I am currently a New York State-registered professional engineer and that this Work Plan was prepared in accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Signature

July 22, 2013
Date

Executive Summary

Stantec Consulting Services Inc. (Stantec) has prepared this Work Plan for Remedial Excavation for the Former Loading Dock Area (FLDA) of the Buell Automatics Brownfield Cleanup Program (BCP) Site located at 381 Buell Road in the Town of Gates, Monroe County, New York (the "Site"). The Site is designated as BCP Site No. C828114.

The work plan was prepared on behalf of and at the request of Buell Automatics, Inc. (Buell). Buell is implementing an environmental remediation program (a remedy) for the Site pursuant to the terms of a Brownfield Cleanup Agreement (BCA) executed by Buell and the New York State Department of Environmental Conservation (NYSDEC) and pursuant to applicable regulations and guidance. The remedy is being implemented to address the presence of volatile organic compounds (VOCs) and petroleum impacts in soil and groundwater at levels exceeding applicable standards.

A proposed remedy for the Site was described in the conceptual Remedial Work Plan (RWP, Stantec, February 2010) that was approved by the NYSDEC in March 2010. As implementation of the remedy has proceeded, design documents presenting specific plans for the various phases and components of the remedy have been submitted for the NYSDEC's approval. The remedial excavation and removal of contaminated FLDA soil will be the next component of the overall remedy to be implemented.

The purpose of the remedial excavation will be to address contamination of soil in the FLDA by trichloroethene (TCE) and related chlorinated volatile organic compounds (VOCs). The goal will be to meet remedial action objectives established by the NYSDEC. The plans for the excavation described herein take into account the feasibility of the recommended actions in the context of past, current and likely future use of the Site, uses in proximity to the Site, and the financial resources of Buell Automatics.

The area to be addressed by the excavation spans the portion of the Site between the west wall of the southern half of the Buell manufacturing building and the western boundary of the Site. Existing concrete and asphalt pavement will be removed from an approximate 45-foot wide by 65-foot long rectangular area to permit access to the underlying soil. Accessible contaminated soil will then be removed to a depth of at least 5 feet, and excavation to at least 8 feet will be performed in the apparent source area (the portion of the remedial area where previous borings identified the highest levels of contamination). Deeper excavation (deeper than 5 or 8 feet) may

be performed if it would be feasible and also prudent in the context of the plan to implement a program of enhanced in-situ bioremediation (EISB) after the FLDA excavation activities are completed. Deeper excavation, if performed, could address conditions such as the following:

- indications of the apparent presence of grossly contaminated material beyond the planned excavation depths;
- indications that all or most of any remaining soil with impacts exceeding NYSDEC 's cleanup objectives for protection of groundwater is of relatively limited extent and quantity and is easily accessible.

Contaminated material will be disposed of off-site in accordance with applicable regulations, and the remedial excavation will be backfilled to restore the existing grade and pavements. Finally, two existing monitoring wells, which will be decommissioned during the excavation activities, will be replaced.

WORK PLAN FOR REMEDIAL EXCAVATION
FORMER LOADING DOCK AREA
BUELL AUTOMATICS SITE
July 2013

EXECUTIVE SUMMARY E.1

1.0 INTRODUCTION 1.1
1.1 PURPOSE 1.1
1.2 SITE DESCRIPTION 1.2
1.3 IDENTIFICATION OF SCGS 1.2

2.0 SITE CONDITIONS 2.3
2.1 GEOLOGIC AND HYDROGEOLOGIC CONDITIONS 2.3
2.2 NATURE AND EXTENT OF CONTAMINATION 2.3

3.0 REMEDIAL ACTION FOR THE FLDA 3.5
3.1 TEMPORARY CONSTRUCTION FACILITIES 3.8
3.1.1 Decontamination Facilities 3.8
3.1.2 Impacted Soil Staging Area 3.8
3.1.3 Dewatering Area 3.9
3.1.4 Temporary Fence Installation - Excavation and Soil Staging Areas 3.9
3.2 CONFIRMATORY SOIL SAMPLES 3.10
3.3 WASTE CHARACTERIZATION AND DISPOSAL 3.10
3.4 SITE MANAGEMENT PLAN 3.11
3.5 SITE RESTORATION 3.11
3.6 WATER MANAGEMENT AND MONITORING 3.12
3.7 SURVEY CONTROL 3.12
3.8 QUALITY ASSURANCE 3.12
3.9 HEALTH AND SAFETY PLAN AND COMMUNITY AIR MONITORING PLAN 3.13
3.10 PROJECT MANAGEMENT 3.13
3.11 PERMITS 3.13
3.12 IMPLEMENTATION SCHEDULE AND REPORTING 3.14

Figures

Figure 1 Site Location Map
Figure 2 Remediation Site Plan and Existing Monitoring Well Location Plan
Figure 3 Excavation and Restoration Sections

Appendices

Appendix A Site Plan Showing Soil Impacts in the FLDA
Appendix B Manufacturer's Information for the Biosolve™ Odor and Vapor Control Product
Appendix C Manufacturer's Information for the Resolve II™ Organic Acid Product
Appendix D Contained-In Demonstration Work Plan dated July 2, 2013, and NYSDEC approval letter dated July 5, 2013

1.0 Introduction

1.1 PURPOSE

Stantec Consulting Services Inc. (Stantec) has prepared this Work Plan for Remedial Excavation of contaminated soil from the Former Loading Dock Area (FLDA) of the Buell Automatics Brownfield Cleanup Program (BCP) Site located at 381 Buell Road in the Town of Gates, Monroe County, New York (the "Site"). The Site is designated as BCP Site No. C828114.

The work plan was prepared on behalf of and at the request of Buell Automatics, Inc. (Buell). Buell is implementing an environmental remediation program (a remedy) for the Site pursuant to the terms of a Brownfield Cleanup Agreement (BCA) executed by Buell and the New York State Department of Environmental Conservation (NYSDEC) and pursuant to applicable New York State regulations and NYSDEC guidance. The remedy is being implemented to address the presence of volatile organic compounds (VOCs) and petroleum impacts in soil and groundwater at levels exceeding applicable standards.

A proposed remedy for the Site was described in the conceptual Remedial Work Plan (Stantec, February 2010) that was approved by the Department in March 2010. As implementation of the remedy has proceeded, design documents presenting specific plans for the various phases and components of the remedy have been submitted for the Department's approval. The remedial excavation and removal of contaminated FLDA soil will be the next component of the overall remedy to be implemented.

The purpose of the remedial excavation will be to address contamination of soil in the FLDA by trichloroethene (TCE) and related chlorinated volatile organic compounds (VOCs). The goal will be to meet remedial action objectives established by the NYSDEC. The plans for the excavation described herein take into account the feasibility of the recommended actions in the context of past, current and likely future use of the Site, uses in proximity to the Site, and the financial resources of Buell Automatics.

This Work Plan includes the following items:

- a description of the nature and extent of contamination in the FLDA;
- a description of the proposed remedial action and associated sampling and monitoring;
- a description of temporary construction facilities and the various pre- and post-excavation site preparation and restoration activities that will be required;

- references to Health & Safety and Community Air Monitoring Plans that describe monitoring procedures and vapor, odor and dust control to be implemented during remedial activities;
- a schedule for implementation and reporting; and
- a Professional Engineer's certification.

1.2 SITE DESCRIPTION

The Site is located in an area of industrial and commercial uses. Buell operates a manufacturing facility at the Site to produce machined parts for automotive components and other applications.

The Site property occupies approximately 1.67 acres and is improved by a manufacturing building with a footprint of approximately 25,000 square feet. (The 12,000 square-foot northern portion of the building is excluded from the area encompassed by the BCA.) Buildings occupy roughly 29% of the Site property, while the majority of the remaining surface area is covered by asphalt parking lots and access roads. A Site Plan is presented as Figure 2.

The FLDA spans the paved outdoor area between the western end of the southern portion of the Buell building and the western boundary of the Site.

1.3 IDENTIFICATION OF SCGS

Regulatory Standards, Criteria and Guidelines (SCGs) have been established by NYSDEC for environmental media at BCP sites. Soil results at the Buell site have been evaluated by comparison to New York Codes, Rules and Regulations (NYCRR) Part 375 Restricted Use Soil Cleanup Objectives (SCOs) for both the Protection of Groundwater (POGW) and for protection of human health at Industrial Use sites.

2.0 Site Conditions

2.1 GEOLOGIC AND HYDROGEOLOGIC CONDITIONS

Granular fill material is the uppermost overburden unit at the site. Fill thickness measured at RI test borings ranged from 0.0 to 3.0 ft. and averaged 1.6 ft. across the Site. Typical fill material is asphalt road base, and consists of dry to moist, gray coarse to fine sand and gravel, with some silt.

Site fill is underlain by a sequence of lacustrine sediments. The uppermost unit is brown silty fine sand ranging in thickness from 0.4 to 19.2 ft. and averaging 6.4 ft. across the Site. Lacustrine sand deposits are underlain by a few to several feet of lacustrine silty clay or clayey silt beds.

The lacustrine units are underlain by dense gray glacial till. Where it was encountered, the depth to the top of the till ranged from 11 to 29 feet below ground surface (bgs). Bedrock was encountered in one (the deepest) Site boring at a depth of 37.3 ft. bgs.

The Site's surficial geology provides for a low permeability hydrogeologic setting characterized by a shallow water table. Unconfined water table conditions exist within the shallow lacustrine sand unit, and generally speaking, the water table at the Site was found to be within 5 feet of ground surface. Groundwater elevation monitoring results indicate that the direction of groundwater flow in the surficial deposits is generally to the south-southwest.

2.2 NATURE AND EXTENT OF CONTAMINATION

In the Former Loading Dock Area, contaminant impacts are predominantly from trichloroethene ("TCE") and related chlorinated volatile organic compounds (collectively "VOCs"). TCE and other chlorinated VOCs are present in soil at concentrations above the Department's soil cleanup objectives (SCOs) for protection of groundwater (POGW). In one soil sample interval in the Former Loading Dock area (test boring B-23, sample depth of 1 to 2 ft. bgs), TCE was detected at a concentration that exceeded the Department's SCOs for protection of public health at sites restricted to industrial uses, but otherwise VOCs detected were below SCOs for industrial use sites. Groundwater in the FLDA and downgradient groundwater in adjacent areas to the west and southwest have also been impacted by chlorinated VOCs.

Previous FLDA soil sample analysis results are shown on the site plan presented in Appendix A, which is a copy of Figure 12B from the November 2007 RI Report for the Site. The Site data indicate that the area in which soil contamination is present in the FLDA above applicable standards extends approximately 45 ft. east-west and approximately 65 ft. north-south. The highest concentration of contamination was found in the top 2 feet of soil at test borings B-23 and MW-16, which were located in the center of the northern end of the FLDA. In this northern

part of the FLDA surrounding the B-23 and MW-16 locations, contamination above applicable SCGs was found to extend to a depth of approximately 8 feet.

In the eastern and southern part of the FLDA, the area of chlorinated VOC impacts is overlapped by an adjacent area of impacts from petroleum. An oily product has been observed at the water table in monitoring well MW-10, which is located in the area of overlap. These impacts, from petroleum solvent compounds and cutting oil, extend into the FLDA from the Petroleum Impacts Area located to the east beneath the Buell building.

3.0 Remedial Action for the FLDA

Excavation and offsite disposal of the impacted FLDA soil is proposed. The basis for the proposed excavation activities is presented in Section 4.2 of the February 2010 Remedial Work Plan (Selected Alternatives, Alternative 7). Excavation and off-site disposal of VOC-contaminated soil will be implemented to address unsaturated soils exceeding the protection of groundwater SCOs and saturated soils in the primary source area.

The plans put forth herein are based on the assumption that the excavated volume will be approximately 470 cu. yards and that the excavation will cover an area of approximately 1,966 square feet. It is assumed that contaminated soils will be removed to a depth of 5 feet in all areas and to a depth of about 8 feet in the primary source area located in the center of the northern portion of the FLDA. These assumptions concerning area, volume and depth will be adjusted as warranted during the excavation process, on the basis of both field observations and confirmatory sample analysis results, to respond to actual site conditions in a way that allows for removal of apparently-contaminated material that is likely to exceed applicable SCOs while avoiding to the extent possible the following potential issues:

- over-excavation of apparently-uncontaminated material;
- the need for managing an excessively large volume of groundwater;
- damage to the foundation of the adjacent Buell building or other adjacent structures; and
- undermining of or damage to underground utility lines, including a 2-inch water line located along the western property boundary on the west side of the planned excavation area.

The work proposed will include:

- Obtaining an access agreement with the neighboring aScribe Laser facility to allow for a temporary parking buffer and work area exclusion zone, access for excavation equipment, and possible excavation and subsequent restoration, on the offsite property to the west.
- Stakeout of underground utilities.
- Temporary relocation of the waste dumpster and enclosure located at the northwest corner of the planned excavation area.
- Preparation of a roll-off loading and staging area, staging of covered roll-offs (equipped with liners if necessary) for segregation and temporary on-site storage of excavated materials, staging of drums or a water tank for collection and management of excavation water, and designation of the route and procedures for eventual egress from the site of waste container transport vehicles.

- Performance of health & safety and community air monitoring in accordance with approved project plans. Refer to Section 3.9 for additional details.
- Demolition of the concrete and asphalt pavements in the rectangular area measuring approximately 45 ft. by 65 ft. that encompasses the area of impacted FLDA soils. The pavement removal area is shown on Figure 2. Demolished pavement materials will be staged in covered roll-offs and sampled and characterized as necessary prior to transportation for disposal or recycling offsite.
- Excavation of impacted soil to a bottom depth of approximately 5 ft. below ground surface (bgs) in general and to approximately 8 ft. bgs within the area in the center of the north part of the FLDA where VOC concentrations were found to exceed Industrial Use SCOs in shallow soil. A schematic cross section of the anticipated soils excavation is shown on Figure 3. It is anticipated that the overall excavation area will cover approximately 2,000 sq. ft., and the area of deeper excavation in the source area will cover approximately 912 sq. ft.

  Soil screening both by visual means and with the use of photoionization detector (PID) equipment will be performed to assess the extent of material that may be contaminated. For the PID screening, grab samples will be collected as needed for headspace screening with a PID equipped with an 11.7 eV lamp. To the extent feasible, the goals of the activity will be to identify and remove the following:

  - soil that appears to be contaminated at levels that could exceed POGW SCOs and is positioned in the horizon above the anticipated level of the water table during seasonal low or drought periods, which for the purposes of this plan is estimated as being 5 ft. bgs;
  - in the apparent source area located in the center of the FLDA, the soil between a depth of 5 and 8 ft. bgs that appears to be contaminated at levels that could exceed POGW SCOs; and
  - any other accessible soil that appears to be grossly contaminated or contaminated at levels that could exceed the Industrial Use SCOs.

  If conditions allow for excavation below a depth of 5 ft. bgs in a broad area without excessive groundwater infiltration, and it is apparent that excavation of a few feet in additional depth in some areas would enable removal of all or most remaining soil with impacts exceeding POGW SCOs, and the Buell Automatics management considers this to be a prudent additional step in light of other factors apparent at the time (factors such as weather conditions, impact on facility operations or neighboring properties, impact on overall cost, etc.), then such additional removal may be implemented. The decision to undertake the additional removal will be considered in consultation with NYSDEC at the time of the excavation activities. This additional step may be warranted if, for example, it is apparent that taking this additional step could reduce the need for, or scope of, follow-up activities

that are planned under the Enhanced In-Situ Bioremediation (EISB) component of the approved site remedy.

- Collection and appropriate management of excavation water and other waste liquids. Refer to Section 3.6 for water management details.
- Excavated soils will be loaded using a backhoe or skid steer bucket into roll-offs where it will be staged, sampled, and characterized as necessary prior to transportation for disposal offsite. Separate roll-off containers will be used to segregate excavated material based on the apparent level and type of contamination. For example, grossly-contaminated material will be staged separately from lightly-contaminated material, and apparently uncontaminated material that needs to be removed to access contaminated material will also be segregated.
- If necessary, nuisance odor and vapor emissions will be controlled with the use of Biosolve™. Additional information on the Biosolve™ product is provided in Appendix B.
- Collection and laboratory analysis of confirmatory sidewall and bottom samples. Refer to Section 3.2 for further details.
- Application of organic acid material (degraded guar gum) in the bottom and along the sidewalls of the completed excavation to promote EISB activity. Approximately 160 lbs. of the product Revert II™ will be utilized for this purpose. Revert II™ was selected as it is essentially the same as the organic acid product (Revert™) used in Stantec's bench scale treatability test performed for the project and described in the February 2010 RWP. The Material Safety Data Sheet (MSDS) for Revert II™ is presented in Appendix C. The actual quantity of product used will be documented in the Construction Completion Report.
- Installation of a demarcation layer at excavation limits. Refer to Section 3.5 for further details.
- Backfilling to grade with clean granular fill. Refer to Section 3.5 for site restoration details.
- Restoration of the existing asphalt and concrete slab to pre-excavation conditions, elevation and finish. Refer to Figure 3 for a cross-section view of existing features to be restored.
- Replacement of existing monitoring wells MW-10 and MW-16, which will be decommissioned during the excavation activities.
- Prior to off-site disposal, waste characterization of material in each roll-off will be performed to determine the appropriate method of disposal.
- Off-site disposal of contaminated soil, excavation water, and other wastes. Refer to Section 3.3 for further details on off-site disposal.
- Offsite recycling or disposal of the demolished concrete and asphalt. It is currently presumed that concrete will qualify as non-hazardous waste; this presumption is subject to confirmation by sampling and analysis. Refer to Section 3.3 for further details on off-site disposal.

3.1 TEMPORARY CONSTRUCTION FACILITIES

3.1.1 Decontamination Facilities

A temporary decontamination pad will be used to decontaminate earthwork-related equipment. If necessary, trucks and equipment leaving the site will have their tires cleaned to remove excavated soil prior to leaving the project area.

The decontamination pad will be constructed of polyethylene sheeting with a sump for the purposes of collecting wash water, if needed. The decontamination pad will be covered when not in use to limit collection of rainwater. Wash water will be stored in 55-gallon drums or a storage tank and properly disposed of off-Site at the end of the project. Accumulated sediments will be disposed of with the impacted Site soil. The decontamination pad construction materials will be disposed of off-Site at the completion of the project.

3.1.2 Impacted Soil Staging Area

The Contractor will construct and maintain a staging area comprised of a layer of polyethylene (poly) sheeting for staging tarped roll-offs containing the excavated impacted soil. The Contractor will secure the tarps on the staged roll-offs during non-working hours. If soil excavated from below the water table contains sufficient free liquid that it drains from the soil, measures will be taken to collect free liquid and transfer it to the project wastewater storage tank.

Covered roll-offs, lined as necessary and meeting all applicable requirements for managing hazardous wastes, will be staged to segregate excavated soil into the appropriate category/class of predicted method of disposal.

Based on the results of the remedial investigation (RI) for the Site, it is (shall be) assumed that all excavated soil roll-offs will contain soil that contains chlorinated VOCs, and that therefore soils in all roll-offs would be listed hazardous waste unless and until either:

a) there is sufficient analytical data to demonstrate that the soil does not contain chlorinated compounds , or

b) NYSDEC issues a contained-in determination allowing the soils to be managed as non-hazardous waste.

A Contained-in Demonstration Work Plan (CID WP) was submitted to and approved by NYSDEC. The CID WP and NYSDEC approval letter are presented in Appendix D. Soils staged in the roll-offs shall be analyzed as specified in the CID WP to demonstrate the classification of the soils and determine the method in which the soil may be disposed.

Segregation determinations will be based on field monitoring as described below. Roll-offs will be used to sort the following classes of material: concrete demolition material, material to be sent to a non-hazardous waste facility if possible, material to be sent to a hazardous waste facility, and soils that may need to be incinerated or treated prior to landfilling. Segregation of soil will be based on the following criteria:

- Soils exhibiting PID readings of greater than 1,000 ppm will be managed with the expectation that they may be classified as hazardous waste requiring treatment or incineration.
- Soils exhibiting PID readings of 50 to 1,000 ppm will be managed with the expectation that they may be classified as hazardous waste requiring disposal at a hazardous waste landfill.
- Soils exhibiting PID readings of 0 to 50 ppm will be managed with the expectation that they may be classified as non-hazardous waste allowing disposal at a non-hazardous waste landfill.
- Concrete and asphalt debris is expected to be classified as non-hazardous requiring disposal at non-hazardous waste disposal or recycling facility.

These guidelines are consistent with the guidelines developed for the same purpose for the remedial excavation activities completed in 2003-2004 in the Former Trench Drain Area of the Buell Site. Actual disposal methods and facilities for the segregated materials will be determined by the results of waste characterization sampling and analysis. Refer to Section 3.3 for information on waste characterization and disposal.

3.1.3 Dewatering Area

If field conditions are such that groundwater is encountered during earthwork activities, measures will be taken to pump and temporarily containerize groundwater in a water storage tank or 55-gallon drums. Containerized groundwater will be sampled and characterized as necessary prior to transportation and disposal offsite.

3.1.4 Temporary Fence Installation - Excavation and Soil Staging Areas

Temporary construction fence will be erected around the perimeter of proposed Site-related work, including the excavation and staging areas described above. The purpose of the fencing will be to prevent unauthorized entry into the remediation work areas. Construction fencing around the excavation will be 6-foot high portable chain link fence. Orange plastic construction fencing will be utilized for all other staging areas. Backfilling will be performed as soon as is reasonably practicable following completion of the excavation; however fencing shall be in place at all times should any excavation be left temporarily open to await confirmatory soil sample

results. The fencing shall remain in place until final backfilling of the area is completed. Warning and signal signage will be incorporated on the temporary fencing.

3.2 CONFIRMATORY SOIL SAMPLES

Confirmation soil samples will be obtained in the excavation to demonstrate sufficient removal of impacted soils. Documentation soil samples will be collected, if necessary, to document the level of contamination remaining in areas where the excavation is terminated before SCGs can be achieved and further excavation is not feasible (e.g., in areas where further excavation is not possible because it may result in structural damage to a building).

Samples will be obtained at the frequencies required by the DER-10 document section 5.4(b). Samples will be obtained at the frequency of one sidewall sample for every 30 linear ft. of sidewall and one bottom sample for every 900 sq. ft. of excavation bottom.

DER-10 section 5.4(b)5.v requires that each excavation within a larger excavation be considered a separate excavation from the standpoint of confirmation and documentation sampling. Accordingly, for the planned primary excavation area, which is currently estimated as likely to cover 1,996 sq. ft. and extend to a depth of 5 ft., 6 to 8 sidewall samples and up to 4 bottom samples are anticipated. For the area of deeper secondary excavation to 8 ft. within the primary excavation, an additional 4 sidewall samples and 1 or 2 bottom samples are anticipated. The actual number samples will be determined by the configuration of each section of the completed excavation and the required sampling frequency specified by DER-10.

All confirmatory soil samples plus the required quality assurance/quality control (QA/QC samples, including MS/MSD and blind field duplicates) will be submitted to a New York State Department of Health (NYSDOH) ELAP-certified laboratory for analysis of TCL VOCs plus TICs using USEPA Method 8260B. In those sections of the excavation where petroleum contamination is evident, confirmatory sample analysis will also be performed for TCL SVOCs plus TICs using USEPA Method 8270C. On the basis of the results of the RI, at a minimum, sidewall and bottom samples collected from the eastern and southern portions of the primary excavation will be analyzed for SVOCs plus TICs.

Analytical results for confirmatory samples will be reported using Category B deliverables, and a data usability report will be prepared.

3.3 WASTE CHARACTERIZATION AND DISPOSAL

Wastes anticipated include the following:

- excavated soil (segregated as appropriate on the basis of apparent degree and type of contamination to allow for separate characterization and, if necessary, separate disposal as hazardous and non-hazardous waste),

- containerized groundwater resulting from excavation dewatering;
- decontamination fluids,
- polyethylene sheeting and sampling materials and PPE, and
- construction and demolition debris generated during demolition of the existing pavement.

Disposal of wastes will be conducted in accordance with applicable regulations. Analyses performed on each of the waste streams will be dictated by requirements of the disposal facility(s). Excavated concrete and soils will be stockpiled in covered roll-off units to facilitate discrete sampling for characterization analyses. Wastes will be transported only by permitted haulers.

- Contaminated Waste Disposal:
    - Staged, excavated soil will be disposed offsite in accordance with applicable regulations at a permitted disposal facility.
    - Containerized water (groundwater and stormwater collected from the excavation, decontamination rinse water, and free liquids collected from soil staging roll-offs) will be disposed offsite at a permitted treatment/storage/disposal facility. Appropriate testing will be performed on the water before disposal.
    - Non-hazardous solid waste generated during remedial activities will be disposed offsite at a NYSDEC-Part 360 permitted disposal landfill.

3.4 SITE MANAGEMENT PLAN

In order to minimize the potential for future intrusive site activities to cause the spread of contamination or create potential exposure to impacted media, an Interim Site Management Plan (ISMP, dated February 2011) was developed for the Site and approved by NYSDEC in June, 2011. The ISMP provides guidance for planning and executing future site activities (such as excavation, grading, drilling, etc.) that could encounter impacted soil or groundwater. The ISMP provides guidance on monitoring and screening soils for potential handling, characterizing, and disposal.

3.5 SITE RESTORATION

The Site restoration activities include:

- Installation of a demarcation layer at the soil excavation limits. The demarcation layer will consist of orange plastic snow fence to allow groundwater movement.

- Excavation Backfill: The excavation will be backfilled to the pavement subgrade with backfill material obtained from offsite. This material will be demonstrated to be sufficiently free of contamination through prior analytical data or additional sampling and analysis if required. Grain size analysis will also be conducted. Approval of the specific material to be used for backfill shall be obtained from the NYSDEC project manager prior to bringing the material on site. The backfill material will meet the allowable constituent levels for Commercial or Industrial use provided in DER-10, Appendix 5, unless it is determined to be exempt from sampling per DER-10, Section 5.4(e).5. It is anticipated that there may be the need for approximately 470 cubic yards (cy) of imported backfill material.

- Following backfilling of the excavation, the top 6-inches of remedial excavation will be completed with replacement of a structural concrete pavement to the original grade. Approximately 54 cy of reinforced concrete will be installed. In the event that asphalt is removed, it will be replaced in kind.

3.6 WATER MANAGEMENT AND MONITORING

Any accumulated groundwater or precipitation water that requires removal from the excavation, decontamination rinse water, and free-liquids that collect in soil staging roll-offs will be temporarily containerized on site. Steel or poly storage tanks of sufficient capacity will be kept on site during the excavation activities in order to manage the water. Containerized fluids will be tested with appropriate waste characterization analyses and disposed of offsite in accordance with applicable regulations.

Excavated soils will be staged on site during the remedial activity in lined and covered roll-offs approved for use with hazardous waste. Measures will be taken both to collect any stormwater that comes in contact with excavated material in the staging area and to minimize collection of uncontaminated precipitation water. Stormwater that does collect in the staging area will be transferred and containerized with water from the excavation.

3.7 SURVEY CONTROL

The actual limits of excavation will be established in the field at completion using a handheld GPS unit, such as the GeoXT, with sub-meter accuracy.

3.8 QUALITY ASSURANCE

Quality Assurance will be performed in accordance with the Quality Assurance Project Plan (QAPP) approved for the Site by NYSDEC (Quality Assurance Project Plan, Remedy Implementation, Buell Automatics Site, BCP Site #C828114, 381 Buell Road, Rochester, New York dated February 10, 2011, revised July 2011).

3.9 HEALTH AND SAFETY PLAN AND COMMUNITY AIR MONITORING PLAN

The project Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP), which are included as appendices in the ISMP referenced above in Section 3.4, will be implemented during the FLDA remedial work.

3.10 PROJECT MANAGEMENT

The Stantec Project Manager will have primary responsibility for the development and implementation of the Work Plan, including coordination among the task leaders. The Project Manager will identify staff requirements, direct and monitor site progress, and be responsible for project performance within the established budget and schedule. He will also coordinate the activities of the task leaders, support staff, acquisition of engineering or specialized technical support, and other aspects of the day-to-day activities associated with the project.

The Project Manager, with assistance from the Project Engineer will be responsible for overseeing implementation of remedial activities, in addition to overall project quality. The Project Geologist or Environmental Technician will also be responsible for on-site oversight and documentation of remedial activities. The Project Engineer will report directly to the Project Manager and will perform periodic review of technical information and provide recommendations for modifications, if appropriate. The Project Engineer's responsibility will be consistent with the requirements of DER-10, Chapter 1 Section 1.5(b) 3, and the Engineer will provide the required certification in the Construction Completion Report.

One or more ELAP-accredited analytical laboratories will provide analytical services during the remedial excavation program. The data usability report for confirmatory samples will be prepared by a third-party data validator.

A specialty environmental contractor knowledgeable about soil excavation and handling soils contaminated with chlorinated VOCs and petroleum will perform the work. The remedial contractor will be responsible for execution of the work plan under full-time observation by an Owner's representative. The contractor will be required to perform the work in accordance with the applicable provisions of the Excavation Work Plan presented in Appendix A of the February 2011 Interim SMP for the Buell Site.

3.11 PERMITS

The required permits, if any, will be obtained from the appropriate agencies or municipalities by the Contractor or Stantec prior to commencement of work. These may include (but may not be limited to) an excavation permit and a water discharge permit. In addition, wastes removed from the site, whether hazardous or non-hazardous, will be transported by a permitted waste hauler(s).

3.12 IMPLEMENTATION SCHEDULE AND REPORTING

In accordance with the RWP, FLDA remedial activities will be initiated within 90 days of the Department's approval of this work plan. It is anticipated that once the work plan is approved, approximately two months will be needed to prepare bid documents, obtain contractor bids, and negotiate terms with the selected contractor. It is anticipated that on-site remedial activities could be performed in the August and September 2013. This time period could be advantageous as being likely to have relatively dry weather and relatively low water-table conditions.

The remedial activities will be documented in a Construction Completion Report (CCR). A draft CCR will be submitted to NYSDEC within 90 days of the completion of remedial activities.

FIGURES

This map may contain data from a variety of sources. This map is not intended to replace a survey by a Licensed Surveyor.
Stantec does not certify the accuracy of the data. This map is for reference only and should not be used for construction.

Geographic Information Systems Cartographic Design By: Andy Less Document Path: U:\16059\civil\Remedial Action Work Plan - 2013\Fig1-Buell_RAWP-Site_Location_Map.mxd

Stantec Consulting
61 Commercial Street
Rochester, NY 14614
Phone 585.475.1440 Fax 585.272.1814
www.stantec.com

Figure 1 - Site Location Map

Work Plan for Remedial Excavation
Buell Automatics
Rochester, NY

N

Legend

Name

- Approx. Limits of Covered Roll - Off Staging Area
- Approx. Limits of Decontamination Pad
- Former Loading Dock Area (FLDA) Excavation Limits

Buell Investigation Points

Investigation Point Type

- Borehole and Temporary MW
- Geoprobe
- MW
- Pre-existing MW
- 4in SS Remediation Well
- BCA Boundary

B-38 B-37 B-42 B-18 B-15 B-44 B-39 B-23 B-16 B-34 B-19 B-17 B-43 B-35 B-36 B-41 B-20 B-40 B-21 B-31 B-28 B-22 B-30 B-27 B-29 B-33 B-32 B-25 B-10 B-24 B-14 B-13 B-11 B-12 MW-16 MW-19 MW-14 MW-10 MW-9 MW-20 MW-2 MW-2 (Deep) MW-22 GP-1 GP-2 GP-3 MW-8 MW-21

A SCRIBE LASER FACILITY

Buell Automatics

Former All-Around Travel (Demolished)

Geographic Information Systems Cartographic Design By: Andy Less Document Path: U:\16059\civil\Remedial Action Work Plan - 2013\Fig2-REMEDIATEION SITE PLAN AND EXISTING MONITORING WELL LCOATION PLAN.mxd

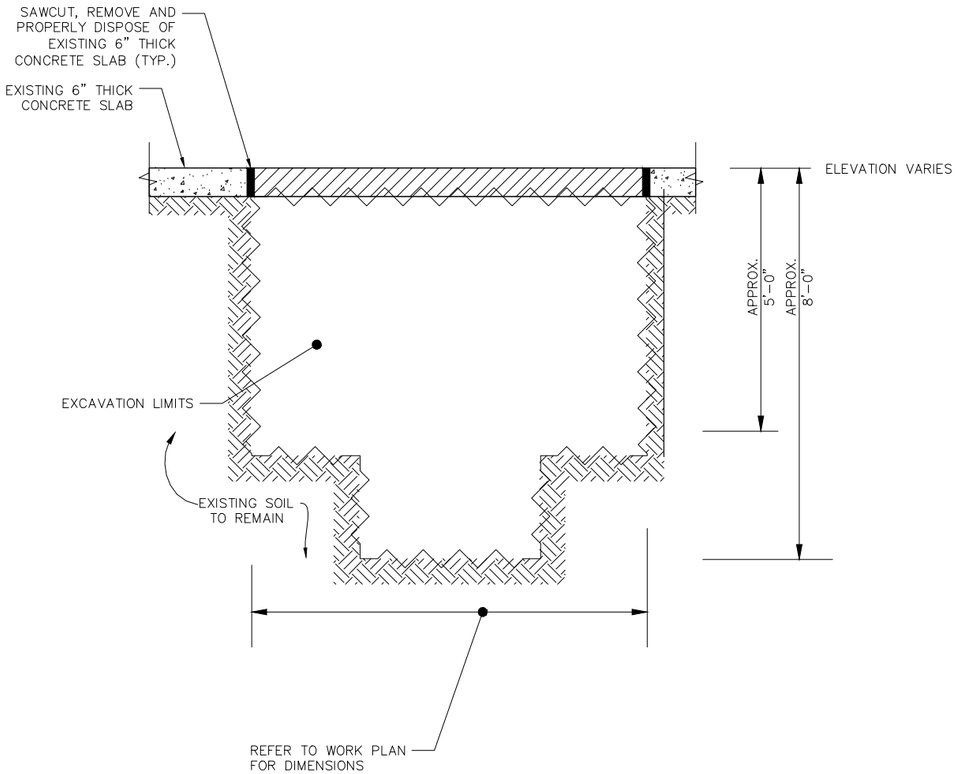
Stantec Consulting
61 Commercial Street
Rochester, NY 14614
Phone 585.475.1440 Fax 585.272.1814
www.stantec.com

0 2.5 5 10 15 20 Feet

1 inch = 20 feet

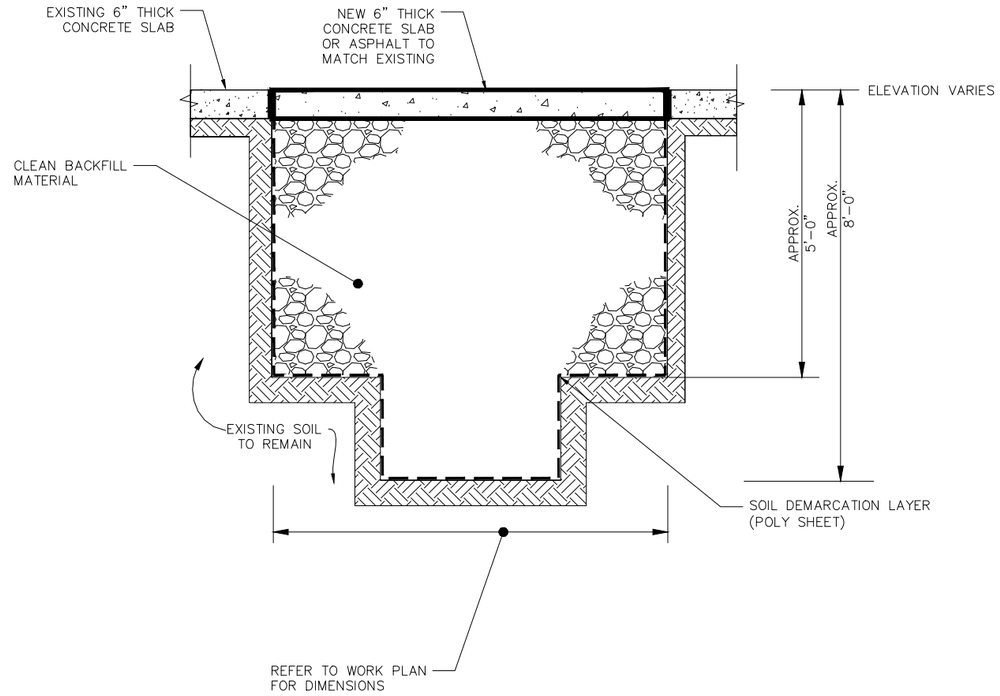
Figure 2 - REMEDIATION SITE PLAN AND EXISTING MONITORING WELL LCOATION PLAN

Work Plan for Remedial Excavation
Buell Automatics, Rochester NY



1/3 EXCAVATION SECTION

N.T.S.



2/3 FINAL RESTORATION SECTION

N.T.S.

Stantec Consulting Services
61 Commercial Street
Rochester, NY
14614
Tel. 585-475-1440
Fax. 585-272-2814
www.stantec.com

Consultants

Legend

Notes

Revision	By	Appd.	YY.MM

Issued	By	Appd.	YY.MM

File Name: FIGURE 3.DWG	AL	PN/MPS	AF	13.
	Dwn.	Chkd.	Dsgn.	YY.MM

Permit-Seal

Client/Project
BUELL AUTOMATICS

Work Plan for Remedial Excavation

ROCHESTER, NY

Title
EXCAVATION AND RESTORATION SECTIONS

Project No.	Scale	
190500014	N.T.S.	
Drawing No.	Sheet	Revision
FIG 3	of	

APPENDIX A

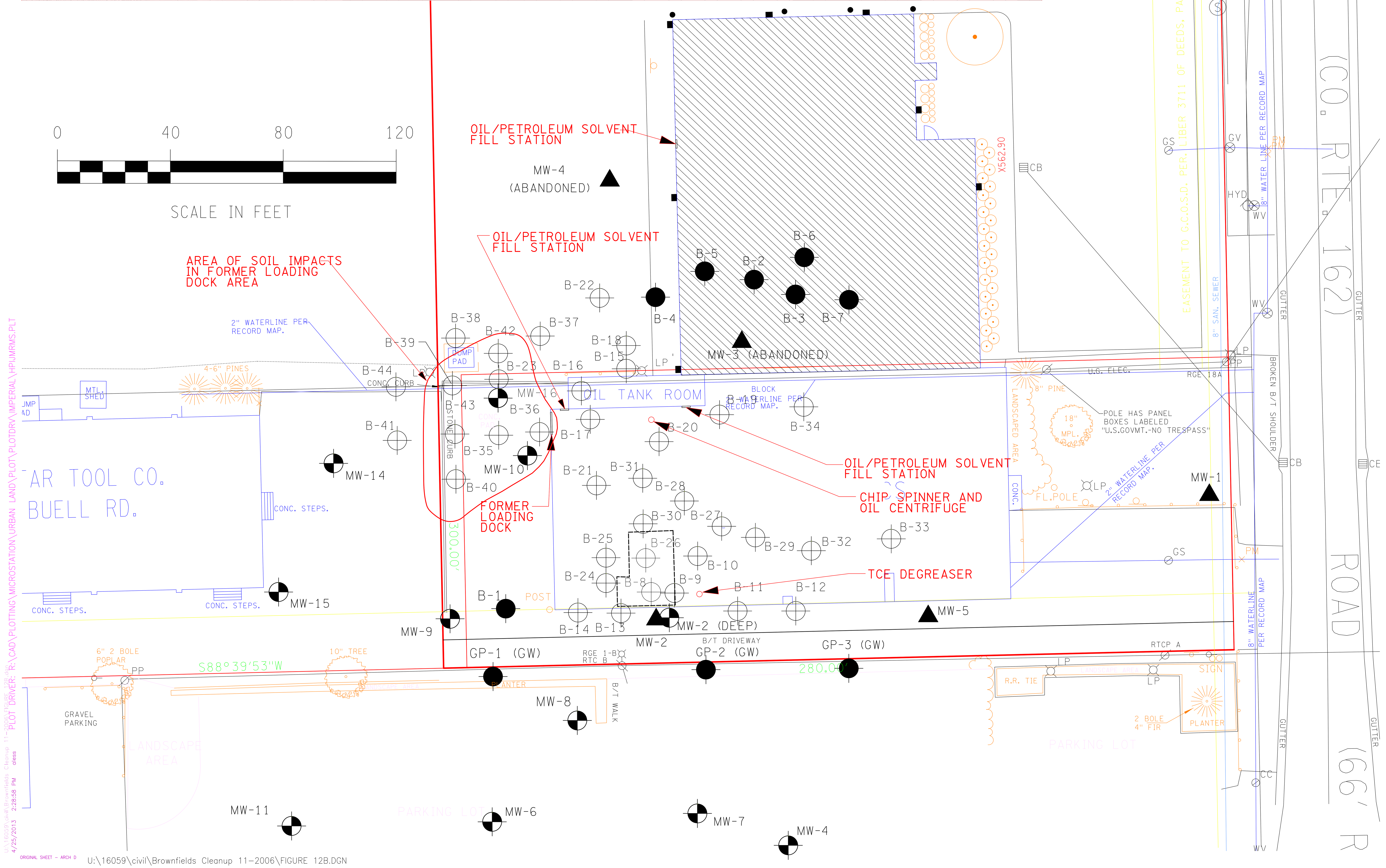
Summary of Exceedances of SCOs and Field Observations of Contaminant Impacts in Soil - Former Loading Dock Area

Boring No. / Sample Date	Part 375 SCOs[1] Industrial	Part 375 SCOs[1] GW Prot.	MW-10 08/05/02 8.0 - 10.0 ft.	MW-16 11/22/06 0.5-2.0 ft.	MW-16 11/22/06 0.5-2.0 ft Dup	MW-16 11/22/06 9.0 - 10.0 ft.	B16 08/09/02 6.0 - 6.5 ft.	B17 08/09/02 4.5 - 5.0 ft.	B21 05/03/03 4.5 - 5.0 ft.	B23 05/05/03 1.0 - 2.0 ft.
Laboratory analysis results										
VOCs (ppb)										
Acetone	1,000,000	50	11 U	**82**	1,500 U	6.0 J	12 J	**64**	**59**	1,500 U
1,1-Dichloroethane	480,000	270	45	59 U	**580** J	11 U	13 U	47 J	8 J	**2,400**
1,1-Dichloroethene	1,000,000	330	5 J	59 U	**650** J	11 U	13 U	61 U	25 U	1,500 U
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
cis-1,2-Dichloroethene	1,000,000	250	**890** D	**960**	**42,000** D	26	13 U	61 U	230	**84,000** D
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
Trichloroethene	400,000	470	**440** D	**530**	**290,000** D	29	13 U	61 U	25 U	**820,000** D
Vinyl Chloride	27,000	20	**28**	59 U	1,500 U	11 U	13 U	61 U	25 U	1,500 U
Total VOC TICs	--	--	71	1,831	39,900	65.5	5,530	12,150	6,000	12,500
SVOCs (ppb)				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.
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.
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.

Boring No. / Sample Date	B35 09/20/05 2.0-3.0 ft.	B35 09/20/05 2.0-3.0 ft. Dup	B35 09/20/05 7.0-8.0 ft.	B36 09/20/05 7.0-8.0 ft.	B36 09/20/05 9.0-10.0 ft.	B39 09/20/05 2.5-3.0 ft.	B39 09/20/05 2.5-3.0 ft. DL	B39 09/20/05 6.0-7.0 ft.
VOCs (ppb)								
Acetone	1,500 U	1,500 U	13	1,500 U	1,500 U	**62**	1,500 U	18
1,1-Dichloroethane	1,500 U	**930** J	17	1,500 U	1,500 U	48 J	1,500 U	11 U
1,1-Dichloroethene	**480** J	82 J	0.5 J	1,500 U	1,500 U	5 J	1,500 U	11 U
trans-1,2-Dichloroethene	81 J	160 J	11 U	1,500 U	1,500 U	14 J	1,500 U	11 U
cis-1,2-Dichloroethene	**10,000**	**17,000**	170	**1,700**	**1,900**	**3,100** E	**3,300** D	22
1,1,1-Trichloroethane	**16,000**	**19,000**	12	**16,000**	1,500 U	200	1,500 U	11 U
Trichloroethene	1,400 U	1,400 U	51	**1,800**	**3,400**	61 U	1,500 U	11 U
Vinyl Chloride	1,500 U	1,500 U	11 U	1,500 U	1,500 U	61 U	1,500 U	11 U
Total VOC TICs	170,600	148,500	0	0	0	0	0	0
SVOCs (ppb)	NA	NA	NA			NA	NA	NA
Total SVOC Target Compounds				400 U	490			
Total SVOC TICs				NA	NA			
Field observations								
PID readings greater than 100 ppm	405 @ 2.5 ft. 115 @ 3.5 ft.			125 @ 7.5 ft.		None		
Oil or product sheen noted	None			None		None		
Odors noted	None			None		None		

Boring No. / Sample Date	B40 09/20/05 6.5-7.0 ft.	B40 09/20/05 6.5-7.0 ft. DL	B40 09/20/05 7.5-8.0 ft.	B42 09/20/05 3.5-4.0 ft.	B42 09/20/05 3.5-4.0 ft. DL	B42 09/20/05 7.0-8.0 ft.	B43 09/20/05 3.0-4.0 ft.	B43 09/20/05 3.0-4.0 ft. DL	B43 09/20/05 7.0-8.0 ft.
VOCs (ppb)									
Acetone	25 J	1,600 U	60 U	19	23 JD	1,500 U	8 J	16 JD	1,500 U
1,1-Dichloroethane	240	190 JD	8 J	32	37 JD	170 J	28	25 JD	1,500 U
1,1-Dichloroethene	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	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	**7,500** E	**8,300** D	**580**	**820** E	**980** D	1,500 U	**800** E	**790** D	**2,200**
1,1,1-Trichloroethane	220	1,600 U	60 U	12 U	62 U	170 J	12 U	61 U	1,500 U
Trichloroethene	**900**	**590** JD	81	3 J	4 JD	**3,400**	2 J	61 U	230 J
Vinyl Chloride	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
SVOCs (ppb)	NA	NA	NA	NA	NA	NA		NA	
Total SVOC Target Compounds							72		46
Total SVOC TICs							NA		NA
Field observations									
PID readings greater than 100 ppm	None			None			None		
Oil or product sheen noted	None			None			None		
Odors noted	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.



Stantec Consulting Services Inc.
61 Commercial Street
Rochester NY U.S.A.
14614
Tel. 585.475.1440
Fax. 585.272.1814
www.stantec.com

Stantec

Consultants

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

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. | Sheet | Revision

FIGURE 12B | of

U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 12B.DGN

APPENDIX B

781-482-7900

Contact Us

SEARCH

Select Language Powered by Translate

HOME APPLICATIONS PRODUCT & TECHNOLOGY HOW TO BUY OUR COMPANY NEWS

A Trusted Solution for Hydrocarbon Cleanup for Over 30 Years

SOIL REMEDIATION

BioSolve works in three ways on soil remediation projects

BioSolve®, a water-based, biodegradable surfactant formulation, functions in three ways to remediate contaminated soil:

- **Solubilizes** hydrocarbon, effectively "washing" hydrocarbons from the soil;
- **Mobilizes** hydrocarbons (by reducing interfacial tension) for more efficient extraction via recovery wells; and
- **Micro-encapsulates** hydrocarbons remaining in the soil matrix, increasing bioavailability and stimulating bioremediation.

Freeing NAPL

Removing Non Aqueous Phase Liquid (NAPL) contamination trapped within subsurface formations is the core challenge in many remediation efforts. NAPLs have low solubility in water and therefore are not subject to efficient removal by many technologies. Injection of BioSolve® solution into the vadose and/or smear zones can enhance remediation by:

- Stripping and desorbing NAPL from the soil matrix, removing 75-99% of the contaminant mass,
- Increasing matrix transmissivity, thereby boosting and extraction capabilities at recovery wells.

Stimulating bioremediation

Imagine a sandwich that is three feet thick. This meal is almost inedible because it is out of proportion with the size of the mouth. All one can do is nibble around the edges. In similar manner, trapped hydrocarbon masses are slow to biodegrade because their massive globular structure is out of proportion to the microscopic bacteria that naturally seek to ingest/process the oil.

How does BioSolve Work?
BioSolve® microencapsulates the hydrocarbons (through the formation of micelles), resulting in a multiple order of magnitude decrease in droplet size and a corresponding increase in the surface area accessible to bacteria. This transformation makes the hydrocarbon readily digestible by the bacteria, thereby speeding up the natural biodegradation process.

For more information, call to request the BioSolve InfoSheet on Soil Remediation.

329 Massachusetts Avenue | Lexington, MA 02420 USA
Phone: +1 (781) 482-7900 | Toll Free: +1 (800) 225-3909
Fax: +1 (781) 482-7909 | Email: info@biosolve.com

development by bartlett

Warehouse and Logistics Provider

UniGroup Logistics

Original text

Contribute a better translation

MATERIAL SAFETY DATA SHEET

THE BIOSOLVE® COMPANY
329 Massachusetts Avenue
Lexington, Massachusetts 02420 USA

Ref. No.: 2001
Date: 7/26/2010

Phone: +1 (781) 482-7900 Fax: +1 (781) 482-7909
Emergency Phone-24 Hours: +1 (800) 225-3909
E-Mail: info@biosolve.com
Web Site: www.biosolve.com

SECTION I - IDENTITY

Name:	**BioSolve®**
CAS #:	138757-63-8
Formula:	Proprietary
Chemical Family:	Water Based, Biodegradable, Wetting Agents & Surfactants
HMIS Code:	Health 1, Fire 0, Reactivity 0
HMIS Key:	4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Insignificant

SECTION II - HAZARDOUS INGREDIENTS

Massachusetts Right to Know Law or 29 C.F.R. (Code of Federal Regulations) 1910.1000 require listing of hazardous ingredients.

This product does not contain any hazardous ingredients as defined by CERCLA, Massachusetts Right to Know Law and California's Prop. 65.

DOT Class: Not Regulated/Non Hazardous

SECTION III - PHYSICAL - CHEMICAL CHARACTERISTICS

Boiling Point	: 265°F	Specific Gravity	: 1.00 +/-.01
Melting Point	: 32°F	Vapor Pressure mm/Hg	: Not Applicable
Surface Tension- 6% Solution	: 29.1 Dyne/cm at 25°C	Vapor Density Air = 1	: Not Applicable
Reactivity with Water	: No	Viscosity - Concentrate	: 490 Centipoise
Evaporation Rate	: >1 as compared to Water	Viscosity - 6% Solution	: 15 Centipoise
Appearance	: Clear Liquid unless Dyed	Solubility in Water	: Complete
Odor	: Pleasant Fragrance	pH	: 9.1+/-.3
Pounds per Gallon	: 8.38		

SECTION IV - FIRE AND EXPLOSION DATA

Special Fire Fighting Procedures	: None	Flammable Limit	: None
Unusual Fire and Explosion Hazards	: None	Auto Ignite Temperature	: None
Solvent for Clean-Up	: Water	Fire Extinguisher Media	: Not Applicable
Flash Point	: None		

SECTION V - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be taken in Handling and Storage: Use good normal hygiene.
Precautions to be taken in case of Spill or Leak -

Small spills, in an undiluted form, contain. Soak up with absorbent materials.
Large spills, in an undiluted form, dike and contain. Remove with vacuum truck or pump to storage/salvage vessel. Soak up residue with absorbent materials.

Waste Disposal Procedures -

Dispose in an approved disposal area or in a manner which complies with all local, provincial, and federal regulations.

SECTION VI - HEALTH HAZARDS

Threshold Limit Values: Not applicable
Signs and Symptoms of Over Exposure-

Acute : Moderate eye irritation. Skin: Causes redness, edema, drying of skin.
Chronic: Pre-existing skin and eye disorders may be aggravated by contact with this product.

Medical Conditions Generally Aggravated by Exposure: Unknown
Carcinogen: No
Emergency First Aid Procedures -

Eyes: Flush thoroughly with water for 15 minutes. Get medical attention.
Skin: Remove contaminated clothing. Wash exposed areas with soap and water. Wash clothing before reuse. Get medical attention if irritation develops.
Ingestion: Get medical attention.
Inhalation: None considered necessary.

SECTION VII - SPECIAL PROTECTION INFORMATION

Respiratory Protection	: Not necessary	Local Exhaust Required	: No, except in confined space as required.
Ventilation Required	: Normal	Protective Clothing	: Neoprene or other chemical resistant gloves, safety goggles or chemical face shield. Wash clothing before reuse.

WHEN UTILIZED IN CONFINED SPACE OPERATIONS, ADDITIONAL PPE MAY BE REQUIRED AS PER OSHA GUIDELINES.

SECTION VIII - PHYSICAL HAZARDS

Stability	: Stable	Incompatible Substances	: None Known
Polymerization	: No	Hazardous Decomposition Products	: None Known

---

SECTION IX - TRANSPORT & STORAGE

DOT Class	: Not Regulated/Non Hazardous		
Freeze Temperature	: 28°F	Storage	: 35°F-120°F
Freeze Harm	: None (thaw & stir)	Shelf Life	: Unlimited Unopened

---

SECTION X - REGULATORY INFORMATION

The Information on this Material Safety Data Sheet reflects the latest information and data that we have on hazards, properties, and handling of this product under the recommended conditions of use. Any use of this product or method of application, which is not described on the Product label or in this Material Safety Data Sheet, is the sole responsibility of the user. This Material Safety Data Sheet was prepared to comply with the OSHA Hazardous Communication Regulation and Massachusetts Right to Know Law.

APPENDIX C

Material Safety Data Sheet

REVERT II

1. Product and Company Identification

Material name	**REVERT II**
Patent Number	Not available
Revision date	August-31-2009
Version No.	7
CAS #	Mixture
Product use	Water Gelling Agent
Manufacturer information	Johnson Screens 1950 Old Highway 8, NW New Brighton, MN 5511 Contact No. 651-636-6900 Chemtrec 1-800-424-9300/+1-703-527-3887
Emergency	Chemtrec 1-800-424-9300/+1-703-527-3887
Supplier information	Johnson Screens 1950 Old Highway 8 NW New Brighton, MN 55112 US

2. Hazards Identification

Emergency overview	WARNING AVOID CREATING DUST. Exposure to powder or dusts may be irritating to eyes, nose and throat. Avoid breathing dust. Avoid contact with skin, eyes and clothing. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA regulatory status	This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Eyes	Do not get this material in contact with eyes. Contact with eyes may cause irritation. Dust or powder may irritate eye tissue. Dust of this product may be irritating and can cause tearing, reddening and swelling.
Skin	Do not get this material in contact with skin.
Inhalation	Do not breathe dust/fume/gas/mist/vapors/spray. May be irritating to mucous membrantes and lung tissue. Inhalation of dusts may cause respiratory irritation. In some individuals may cause respiratory allergic response.
Ingestion	Do not ingest. May be irritating to mouth, throat, and stomach. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Potential environmental effects	Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
Skin contact	Immediately flush skin with plenty of water. Get medical attention if irritation develops or persists.
Inhalation	If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air. Move to fresh air.
Ingestion	If swallowed, seek medical advice immediately and show this container or label. Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
General advice	If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties	Not a fire hazard. The product is not flammable.
Extinguishing media	
Suitable extinguishing media	Water. Water fog. Dry chemical, CO2, water spray or regular foam.
Protection of firefighters	
Protective equipment and precautions for firefighters	Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental Release Measures

Personal precautions	Local authorities should be advised if significant spillages cannot be contained. Keep unnecessary personnel away. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Methods for containment	If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product.
Methods for cleaning up	Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation. After removal flush contaminated area thoroughly with water. Collect dust or particulates using a vacuum cleaner with a HEPA filter.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Do not breathe dust from this material. In case of insufficient ventilation, wear suitable respiratory equipment. Handle and open container with care. Wash thoroughly after handling. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed.

Storage	Keep container tightly closed. Keep in a cool place. Keep in a well-ventilated place. Use care in handling/storage. Guard against dust accumulation of this material.

8. Exposure Controls / Personal Protection

Engineering controls	Ensure adequate ventilation, especially in confined areas. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn.
Personal protective equipment	
Eye / face protection	Avoid contact with eyes. Wear dust goggles.
Respiratory protection	Wear respirator with dust filter. Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.
General hygeine considerations	Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Off white powder.
Color	Off-white - Yellowish
Odor	Bean like.
Odor threshold	Not available
Physical state	Solid.
Form	Solid
pH	Not applicable
Melting point	Not applicable
Freezing point	Not applicable
Boiling point	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available
Flammability limits in air, lower, % by volume	Not available
Vapor pressure	Not applicable
Vapor density	Not applicable
Specific gravity	Not applicable
Relative density	Not applicable
Solubility (water)	Forms gel
Partition coefficient (n-octanol/water)	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable

VOC	Not applicable
Softening point	Not applicable
Pour point	Not applicable
Viscosity	Not applicable
Bulk density	Not applicable
Percent volatile	Not applicable
Molecular weight	Not applicable
Molecular formula	Not applicable

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Incompatible materials	None known.
Hazardous decomposition products	Oxides of carbon.

11. Toxicological Information

Acute effects	Acute LD50: 6770 mg/kg estimated, Rat, Oral
Sensitization	Not expected to be hazardous by OSHA criteria.
Chronic effects	Occupational exposure to respirable dust should be monitored and controlled.
Carcinogenicity	Not expected to be hazardous by OSHA criteria.
Neurological effects	Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity	This product has no known eco-toxicological effects.

13. Disposal Considerations

Disposal instructions	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Not regulated as hazardous goods.

Department of Transportation (DOT) Requirements

Bulk

Not regulated as hazardous goods.

Department of Transportation (DOT) Requirements

Not regulated as dangerous goods.

Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as hazardous goods.

Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as dangerous goods.

IMDG

Not regulated as hazardous goods.

IMDG

Not regulated as dangerous goods.

IATA

Not regulated as hazardous goods.

IATA

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical No

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

HMIS® ratings

Health: 1
Flammability: 0
Physical hazard: 0

NFPA ratings	Health: 1 Flammability: 0 Instability: 0
Prepared by	Emilia Ugwu 4426 South Flores Rd Elmendorf TX, 78112 +1 210 626 0832
Disclaimer	THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US, AND IS BELIEVED TO BE ACCURATE, ALTHOUGH NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY THE COMPANY IN THIS RESPECT. SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. SUCH CONDITIONS MUST COMPLY WITH ALL GOVERNMENTAL REGULATIONS.
Issue date	August-31-2009
MSDS sections updated	This document has undergone significant changes and should be reviewed in its entirety.

APPENDIX D, Part 1

Contained-In Demonstration Work Plan
Remedial Excavation
Former Loading Dock Area
Buell Automatics Site
BCP Site No. C828114
381 Buell Road
Rochester, Monroe County, New York

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 14624-3123

Prepared by:

Stantec Consulting Services Inc.
61 Commercial Street
Rochester, New York 14614

Stantec

July 2013

Stantec Consulting Services Inc.
61 Commercial Street
Rochester NY 14614
Tel: (585) 475-1440

July 2, 2013
File: 190500033

Henry Wilkie
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-7015

RE: Contained-In Demonstration Work Plan for Remedial Excavation
Brownfield Cleanup Program Site # C828114
Buell Automatics Site
381 Buell Road, Gates, New York

Dear Mr. Wilkie:

On behalf of Buell Automatics, Inc., and as a supplement to our Remedial Action Work Plan, Stantec Consulting Services Inc. has prepared the enclosed Contained-In Demonstration Work Plan for soil containing trichloroethene and related chlorinated volatile organic compounds to be excavated at the Former Loading Dock Area of the Buell Automatics, Inc. facility located at 381 Buell Road in the Town of Gates, Monroe County, New York. The implementation of these activities is proposed to take place during August-September 2013 as part of the ongoing implementation of the Brownfield Cleanup Program at the Buell Automatics site.

We look forward to the Department's review and approval of the enclosed Work Plan. Should you have any questions or require additional information, please do not hesitate to call.

Sincerely,

STANTEC CONSULTING SERVICES INC.

Michael P. Storonsky
Managing Principal
Tel: (585) 413-5266
Fax: (585) 272-1814
Mike.Storonsky@stantec.com

Peter Nielsen, P.E.
Senior Associate
Tel: (585) 413-5280
Fax: (585) 272-1814
Peter.Nielsen@stantec.com

Thomas D. Wells
Senior Geologist
Tel: (585) 413-5271
Fax: (585) 272-1814
Tom.Wells@stantec.com

ec w/ enclosure: F. Sowers (NYSDEC)
B. Putzig (NYSDEC)
P. Lytle (E&L Solutions, Inc.)
M. Sergott (NYSDOH)
G. Lawton (Buell Automatics, Inc.)

Stantec

WORK PLAN FOR REMEDIAL EXCAVATION
FORMER LOADING DOCK AREA
BUELL AUTOMATICS SITE
July 2013

CERTIFICATION

I, Peter Nielsen, certify that I am currently a New York State-registered professional engineer and that this Work Plan was prepared in accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Signature

7/2/2013
Date

Table of Contents

1.0 INTRODUCTION 1.1
1.1 PURPOSE 1.1

2.0 BACKGROUND INFORMATION 2.2
2.1 SOIL ANALYTICAL RESULTS 2.2

3.0 CONTAINED-IN DEMONSTRATION WORK PLAN 2.4
3.1 CONTAMINATION SOURCE AND LISTING 2.4
3.2 SOIL SAMPLING 2.4
3.3 LAND DISPOSAL REQUIREMENTS 2.5

Figures

Figure 1 Site Location Map
Figure 2 Remediation Site Plan and Existing Monitoring Well Location Plan

Appendices

Appendix A Figure 12B from the November 2007 RI Report, Titled: *Soil Impacts Former Loading Dock Area*
Appendix B Remedial Investigation Report (Stantec 2007) Laboratory Analysis Reports for Soils Samples from Former Loading Dock Area

1.0 Introduction

1.1 PURPOSE

Stantec Consulting Services Inc. (Stantec) has prepared this Contained-In Demonstration Work Plan for soil containing trichloroethene (TCE) and related chlorinated volatile organic compounds (CVOCs) which is to be excavated and removed from the Former Loading Dock Area (FLDA) of the Buell Automatics Brownfield Cleanup Program (BCP) Site located at 381 Buell Road in the Town of Gates, Monroe County, New York (the "Site"). A Site Location Map is presented as Figure 1. The work plan was prepared on behalf of and at the request of Buell Automatics, Inc. (Buell). The Site is designated as BCP Site No. C828114.

Buell is implementing an environmental remediation program (a remedy) for the Site pursuant to the terms of a Brownfield Cleanup Agreement (BCA) executed by Buell and the New York State Department of Environmental Conservation (NYSDEC) and pursuant to applicable New York State regulations and NYSDEC guidance. The remedy for the FLDA is described in the draft Remedial Action Work Plan (RAWP) which was submitted to the NYSDEC on April 30, 2013. Comments on the RAWP were received from the NYSDEC on June 17, 2013, and have been addressed in a revised RAWP is being resubmitted concurrent with this Work Plan.

This Contained-In Demonstration Work Plan describes currently-known conditions relative to soil contamination and requests approval for disposal of the analysis of TCE and other contaminants contained in the soil to be removed from the FLDA to determine if it can be disposed of as non-hazardous waste.

2.0 BACKGROUND INFORMATION

The Site is located in an area of industrial and commercial uses. Buell operates a manufacturing facility at the Site to produce machined parts for automotive components and other applications.

The Site property occupies approximately 1.67 acres and is improved by a manufacturing building with a footprint of approximately 25,000 square feet. (The 12,000 square-foot northern portion of the building is excluded from the area encompassed by the BCA.)

A Remediation Site Plan is presented as Figure 2. The FLDA spans the paved outdoor area between the western end of the southern portion of the Buell building and the western boundary of the Site.

The FLDA RAWP (Stantec, April 2013) and design documents present specific plans for the components of the remedy needed to address contamination of soil in the FLDA. The goal will be to meet remedial action objectives established by the NYSDEC.

The plans for the excavation take into account the feasibility of the recommended actions in the context of past, current and likely future use of the Site, uses in proximity to the Site, and the financial resources of Buell Automatics.

2.1 SOIL ANALYTICAL RESULTS

Previous FLDA soil sample analysis results are shown on the site plan presented in Appendix A, which is a copy of Figure 12B from the November 2007 Remedial Investigation (RI) Report for the Site. TCE and other CVOCs are present in soil at concentrations above the Department's soil cleanup objectives (SCOs) for protection of groundwater (POGW). Laboratory analytical reports for soil samples from the FLDA are also presented in Appendix A. The Site data indicate that the area in which soil contamination is present in the FLDA above applicable standards extends approximately 45 ft. east-west and approximately 65 ft. north-south. The highest concentration of contamination was found in the top 2 feet of soil at test borings B-23 and MW-16, which were located in the center of the northern end of the FLDA. In this northern part of the FLDA surrounding the B-23 and MW-16 locations, contamination above applicable SCGs was found to extend to a depth of approximately 8 feet.

In one soil sample interval in the Former Loading Dock area (test boring B-23, sample depth of 1 to 2 ft. bgs), TCE was detected at a concentration that exceeded the Department's SCOs for protection of public health at sites restricted to industrial uses, but otherwise VOCs detected were below SCOs for industrial use sites.

Groundwater in the FLDA and downgradient groundwater in adjacent areas to the west and southwest have been impacted by CVOCs.

In the eastern and southern part of the FLDA, the area of chlorinated VOC impacts is overlapped by an adjacent area of impacts from petroleum. An oily product has been observed at the water table in monitoring well MW-10, which is located in the area of overlap. These impacts, from petroleum solvent compounds and cutting oil, extend into the FLDA from the Petroleum Impacts Area located to the east beneath the Buell building.

3.0 Contained-In Demonstration Work Plan

The NYSDEC's Technical Administrative Guidance Memorandum (TAGM) 3028, "*Contained-In" Criteria for Environmental Media*, (November 30, 1992; Contained-In Action Levels Tables dated August 4, 1997) sets minimum criteria which environmental media contaminated by listed hazardous waste must meet in order to preclude the necessity of it being managed as a hazardous waste.

This Contained-In Demonstration Work Plan has been prepared to seek NYSDEC approval for offsite disposal of TCE- or CVOC-impacted soils which will be excavated as part of the FLDA RAWP (Stantec, July 2013).

3.1 CONTAMINATION SOURCE AND LISTING

This source area is estimated to cover an area as described previously with highly contaminated soils found in the top 2 feet of soil in the center of the area. SCO exceedances were found to depths of up to 8 feet. The area of CVOC impacts is overlapped by an adjacent impact from release of petroleum.

The highest concentrations of CVOCs in groundwater were detected at monitoring wells MW-10 and MW-16 located within the FLDA. The primary CVOCs present in groundwater include TCE and its breakdown products cis-1,2-DCE, 1,1-dichloroethane and vinyl chloride. 1,1,1-TCA was also detected at elevated concentrations at MW-16. Naphthalene was reported to be present in MW-16 at 27 ug/l, which exceeds the Class GA groundwater standard of 10 ug/l.

3.2 SOIL SAMPLING

In accordance with TAGM 3028:

- Soils shall be analyzed directly for total concentrations of each hazardous constituent expected to be contained in the medium. These results are to be compared to the Contained-In Action Levels for soil/sediment, which are 58 mg/kg for TCE and applicable August 4, 1997 NYSDEC Contained-In Action Levels (CIALs) for other compounds that may be detected.

- The leachate from soils must also be analyzed for each hazardous constituent expected to be contained in the medium. For soils that will be excavated and relocated off the facility property, this is accomplished with Toxicity Characteristic Leachate Procedure (TCLP) analysis. The results will be compared to the Contained-In Groundwater Action Levels of 5 micrograms per liter (µg/L, or parts per billion) for TCE and applicable CIALs for other compounds that may be detected.

NYSDEC's *DER-10: Technical Guidance for Site Investigation and Remediation* (May 2010) specifies a recommended number of soil samples to be analyzed for soil exported from a site based on the volume of soil to be removed.

It is anticipated that up to approximately 470 cy of soil will be excavated from the FLDA. Figure 2 shows the exterior areas to be excavated. It is anticipated that the overall excavation area will cover approximately 2,000 sq. ft., and the area of deeper excavation in the source area will cover approximately 912 sq. ft.

Covered roll-offs suitable for managing hazardous wastes, will be staged to segregate the excavated material to determine method of disposal. Roll-offs will sort concrete demolition material, material to be sent to a non-hazardous waste facility, hazardous waste facility, and soils that may need to be treated prior to landfilling or incinerated. Segregation of soil will be based on the following criteria:

- Soils exhibiting PID readings of greater than 1,000 ppm will be managed with the expectation that they may be classified as hazardous waste requiring treatment or incineration.

- Soils exhibiting PID readings of 50 to 500 ppm and 501 to 1,000 ppm will be segregated as separate categories and both categories will be managed with the expectation that they may be classified as hazardous waste requiring disposal at a hazardous waste landfill.

- Soils exhibiting PID readings of 0 to 50 ppm will be managed with the expectation that they are likely to be classified as non-hazardous waste allowing disposal at a non-hazardous waste landfill.

It is proposed to collect soil samples of each individual roll-off for total TCL VOCs and total TCL SVOCs at the frequencies described in Table 5.4(e)10 of DER-10. In addition, other analyses may be performed to satisfy landfill requirements.

Samples will be submitted to an ELAP-certified laboratory. Quality assurance/quality control (QA/QC) procedures will be in accordance with the NYSDEC approved Quality Assurance Project Plan (QAPP) for the Buell site (Stantec, February 2011).

Total TCL VOC and SVOC soil results will be compared with the CIALs for Soil/Sediment. The proposed TCLP sample results will be compared to the August 4, 1997 CIALs.

If either class of CIAL is exceeded, the material will be managed as a listed hazardous waste and will be subjected to the land-disposal analytical requirements discussed below in Section 3.3. Disposal methods will be dictated by the results of the land-disposal analyses.

If neither the Total nor TCLP CIALs are exceeded, the material will be disposed of as non-hazardous waste unless determined to be characteristic hazardous waste by TCLP analyses.

3.3 LAND DISPOSAL REQUIREMENTS

Land disposal requirements (LDRs) identify hazardous wastes that are restricted from land disposal and define those limited circumstances under which an otherwise prohibited hazardous

waste may be land disposed. A prohibited waste identified in the table "Treatment Standards for Hazardous Wastes" (6 NYCRR Part 376.4) may be land disposed only if it meets the requirements found in the table, as identified by analysis of representative waste sample(s). The land disposal requirements will be applicable and will be analyzed if the soil is determined to contain a listed hazardous waste (either F002 or U228) per the demonstration outlined in this work plan. In that case, the soil will be eligible for land disposal only if: 1) the CVOC or TCE concentration is less than 6 mg/kg (in representative waste samples) and other contaminates are also below applicable LDR thresholds; or 2) the soil is treated prior to disposal to reduce the concentration to less than applicable LDR thresholds (e.g. 6 mg/kg for TCE).

In addition, if TCLP testing indicates that the soil is a characteristic hazardous waste, the soil may be land disposed only if the TCE and CVOC concentrations in the TCLP extract are less than 6 mg/L.

FIGURES

This map may contain data from a variety of sources. This map is not intended to replace a survey by a Licensed Surveyor.
Stantec does not certify the accuracy of the data. This map is for reference only and should not be used for construction.

Geographic Information Systems Cartographic Design By: Andy Less Document Path: U:\16059\civil\Remedial Action Work Plan - 2013\Fig1-Buell_RAWP-Site_Location_Map.mxd

Stantec Consulting
61 Commercial Street
Rochester, NY 14614
Phone 585.475.1440 Fax 585.272.1814
www.stantec.com

Figure 1 - Site Location Map

Work Plan for Remedial Excavation
Buell Automatics
Rochester, NY

N

Legend

Name

- Approx. Limits of Covered Roll - Off Staging Area
- Approx. Limits of Decontamination Pad
- Former Loading Dock Area (FLDA) Excavation Limits

Buell Investigation Points

Investigation Point Type

- Borehole and Temporary MW
- Geoprobe
- MW
- Pre-existing MW
- 4in SS Remediation Well
- BCA Boundary

B-38 B-37 B-42 B-18 B-15 B-44 B-39 B-23 B-16 B-34 B-19 B-17 B-43 B-35 B-36 B-41 B-20 B-40 B-21 B-31 B-28 B-22 B-30 B-27 B-29 B-33 B-32 B-25 B-10 B-24 B-14 B-13 B-11 B-12 MW-16 MW-19 MW-14 MW-10 MW-9 MW-20 MW-2 MW-2 (Deep) MW-22 GP-1 GP-2 GP-3 MW-8 MW-21

A SCRIBE LASER FACILITY

Buell Automatics

Former All-Around Travel (Demolished)

Geographic Information Systems Cartographic Design By: Andy Less Document Path: U:\16059\civil\Remedial Action Work Plan - 2013\Fig2-REMEDIATEION SITE PLAN AND EXISTING MONITORING WELL LCOATION PLAN.mxd

Stantec Consulting
61 Commercial Street
Rochester, NY 14614
Phone 585.475.1440 Fax 585.272.1814
www.stantec.com

0 2.5 5 10 15 20 Feet

1 inch = 20 feet

Figure 2 - REMEDIATION SITE PLAN AND EXISTING MONITORING WELL LCOATION PLAN

Work Plan for Remedial Excavation
Buell Automatics, Rochester NY

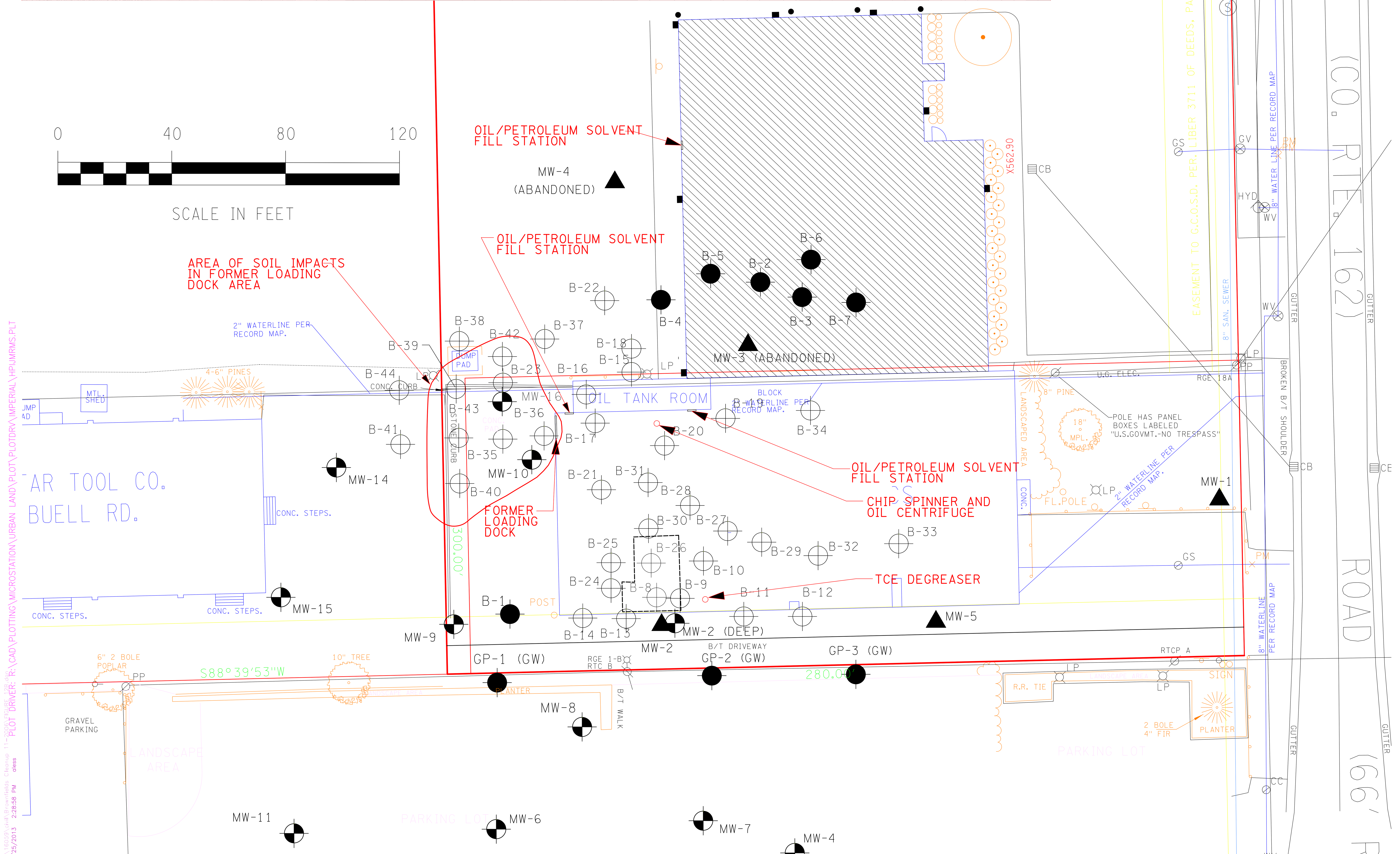
APPENDIX A

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

Boring No. / Sample Date	Part 375 SCOs [1] Industrial	Part 375 SCOs [1] GW Prot.	MW-10 08/05/02 8.0 - 10.0 ft.	MW-16 11/22/06 0.5-2.0 ft.	MW-16 11/22/06 0.5-2.0 ft Dup	MW-16 11/22/06 9.0 - 10.0 ft.	B16 08/09/02 6.0 - 6.5 ft.	B17 08/09/02 4.5 - 5.0 ft.	B21 05/03/03 4.5 - 5.0 ft.	B23 05/05/03 1.0 - 2.0 ft.	B35 09/20/05 2.0-3.0 ft.	B35 09/20/05 2.0-3.0 ft. Dup	B35 09/20/05 7.0-8.0 ft.
Laboratory analysis results													
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. / Sample Date	B36 09/20/05 7.0-8.0 ft.	B36 09/20/05 9.0-10.0 ft.	B39 09/20/05 2.5-3.0 ft.	B39 09/20/05 2.5-3.0 ft. DL	B39 09/20/05 6.0-7.0 ft.	B40 09/20/05 6.5-7.0 ft.	B40 09/20/05 6.5-7.0 ft. DL	B40 09/20/05 7.5-8.0 ft.	B42 09/20/05 3.5-4.0 ft.	B42 09/20/05 3.5-4.0 ft. DL	B42 09/20/05 7.0-8.0 ft.	B43 09/20/05 3.0-4.0 ft.	B43 09/20/05 3.0-4.0 ft. DL	B43 09/20/05 7.0-8.0 ft.
Laboratory analysis results														
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.



U:\16059\civil\Brownfields Cleanup 11-2006\FIGURE 12B.DGN

Stantec
Stantec Consulting Services Inc.
61 Commercial Street
Rochester NY U.S.A.
14614
Tel. 585.475.1440
Fax. 585.272.1814
www.stantec.com

Consultants

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

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

APPENDIX B

Columbia Analytical Services INC.
An Employee - Owned Company

ACCREDITED IN ACCORDANCE WITH nelac

QUALITY ETHICS SERVICE
ACL Environmental Sciences

Effective 6/18/2002

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.

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
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

Columbia Analytical Services INC.
An Employee - Owned Company

ACCREDITED IN ACCORDANCE WITH nelac

QUALITY ETHICS SERVICE
ACL Environmental Sciences

Effective 6/28/2002

INORGANIC QUALIFIERS

C (Concentration) qualifier –

- B - if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL).
- U - if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- E - The reported value is estimated because of the presence of interference.
- J - Estimated Value
- M - Duplicate injection precision not met.
- N - Spiked sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- W - Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- * - Duplicate analysis not within control limits.
- + - Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed.

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
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R2-13195 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 574626 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A2815.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: not dec. 12.3 Date Analyzed: 08/08/02

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	11	U
75-01-4	Vinyl chloride	28	
75-00-3	Chloroethane	11	U
74-83-9	Bromomethane	11	U
67-64-1	Acetone	11	U
75-09-2	Methylene chloride	11	U
75-15-0	Carbon disulfide	11	U
78-93-3	2-Butanone	11	U
156-59-2	cis-1,2-Dichloroethene	1500	E
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
71-55-6	1,1,1-Trichloroethane	4	J
71-43-2	Benzene	11	U
79-01-6	Trichloroethene	890	E
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	19	
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	5	J
75-34-3	1,1-Dichloroethane	45	
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.

MW10-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R2-13195 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 574626 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A2815.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: not dec. 12.3 Date Analyzed: 08/08/02

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

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-10SDL

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R2-13195 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575626 5.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A2832.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: not dec. 12.3 Date Analyzed: 08/09/02

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 5.0

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	57	U
75-01-4	Vinyl chloride	8	JD
75-00-3	Chloroethane	57	U
74-83-9	Bromomethane	57	U
67-64-1	Acetone	57	U
75-09-2	Methylene chloride	57	U
75-15-0	Carbon disulfide	57	U
78-93-3	2-Butanone	57	U
156-59-2	cis-1,2-Dichloroethene	890	D
67-66-3	Chloroform	57	U
107-06-2	1,2-Dichloroethane	57	U
71-55-6	1,1,1-Trichloroethane	57	U
71-43-2	Benzene	57	U
79-01-6	Trichloroethene	440	D
75-27-4	Bromodichloromethane	57	U
10061-01-5	cis-1,3-Dichloropropene	57	U
10061-02-6	trans-1,3-Dichloropropene	57	U
79-00-5	1,1,2-Trichloroethane	17	JD
124-48-1	Dibromochloromethane	57	U
75-25-2	Bromoform	57	U
108-10-1	4-Methyl-2-pentanone	57	U
108-88-3	Toluene	57	U
591-78-6	2-Hexanone	57	U
127-18-4	Tetrachloroethene	57	U
108-90-7	Chlorobenzene	57	U
100-41-4	Ethylbenzene	57	U
108-38-3/106-42-3	(m+p)Xylene	57	U
100-42-5	Styrene	57	U
79-34-5	1,1,2,2-Tetrachloroethane	57	U
95-47-6	o-Xylene	57	U
156-60-5	trans-1,2-Dichloroethene	57	U
75-35-4	1,1-Dichloroethene	57	U
75-34-3	1,1-Dichloroethane	21	JD
56-23-5	Carbon tetrachloride	57	U
78-87-5	1,2-Dichloropropane	57	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-10SDL

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R2-13195 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575626 5.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A2832.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: not dec. 12.3 Date Analyzed: 08/09/02

GC Column: DB-624 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: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000071-23-8	1-Propanol	8.23	71	JND

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10-S

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 574626 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT409.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: 12.3 decanted:(Y/N) N Date Extracted: 08/16/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/02

Injection Volume: 2.0 (uL) Dilution Factor: ~~1.0~~ 1C (1) 10/8/02

GPC Cleanup: (Y/N) Y pH: 7.51

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3800	U
111-44-4	bis(-2-Chloroethyl)Ether	3800	U
95-57-8	2-Chlorophenol	3800	U
541-73-1	1,3-Dichlorobenzene	3800	U
106-46-7	1,4-Dichlorobenzene	3800	U
95-50-1	1,2-Dichlorobenzene	3800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3800	U
95-48-7	2-Methylphenol	3800	U
621-24-7	N-Nitroso-Di-n-propylamine	3800	U
67-72-1	Hexachloroethane	3800	U
106-44-5	4-Methylphenol	3800	U
98-95-3	Nitrobenzene	3800	U
78-59-1	Isophorone	3800	U
88-75-5	2-Nitrophenol	3800	U
105-67-9	2,4-Dimethylphenol	3800	U
111-91-1	bis(-2-Chloroethoxy)Methane	3800	U
120-83-2	2,4-Dichlorophenol	3800	U
120-82-1	1,2,4-Trichlorobenzene	3800	U
91-20-3	Naphthalene	3800	U
106-47-8	4-Chloroaniline	3800	U
87-68-3	Hexachlorobutadiene	3800	U
59-50-7	4-Chloro-3-methylphenol	3800	U
91-57-6	2-Methylnaphthalene	3800	U
77-47-4	Hexachlorocyclopentadiene	3800	U
88-06-2	2,4,6-Trichlorophenol	3800	U
95-95-4	2,4,5-Trichlorophenol	9500	U
91-58-7	2-Chloronaphthalene	3800	U
88-74-4	2-Nitroaniline	9500	U
208-96-8	Acenaphthylene	3800	U
131-11-3	Dimethyl Phthalate	3800	U
606-20-2	2,6-Dinitrotoluene	3800	U
83-32-9	Acenaphthene	3800	U
99-09-2	3-Nitroaniline	9500	U
51-28-5	2,4-Dinitrophenol	9500	U
132-64-9	Dibenzofuran	3800	U
121-14-2	2,4-Dinitrotoluene	3800	U
100-02-7	4-Nitrophenol	9500	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10-S

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 574626 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT409.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: 12.3 decanted:(Y/N) N Date Extracted: 08/16/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/02

Injection Volume: 2.0 (uL) Dilution Factor: ~~1.0~~ 10 R 10/...

GPC Cleanup: (Y/N) Y pH: 7.51

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
86-73-7	Fluorene	3800	U
7005-72-3	4-Chlorophenyl-phenylether	3800	U
84-66-2	Diethylphthalate	3800	U
100-01-6	4-Nitroaniline	9500	U
534-52-1	4,6-Dinitro-2-methylphenol	9500	U
86-30-6	N-Nitrosodiphenylamine	3800	U
101-55-3	4-Bromophenyl-phenylether	3800	U
118-74-1	Hexachlorobenzene	3800	U
87-86-5	Pentachlorophenol	9500	U
85-01-8	Phenanthrene	3800	U
120-12-7	Anthracene	3800	U
86-74-8	Carbazole	3800	U
84-74-2	Di-n-Butylphthalate	3800	U
206-44-0	Fluoranthene	3800	U
129-00-0	Pyrene	3800	U
85-68-7	Butyl benzyl phthalate	3800	U
91-94-1	3,3'-Dichlorobenzidine	3800	U
56-55-3	Benzo(a)Anthracene	3800	U
218-01-9	Chrysene	3800	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	3800	U
117-84-0	Di-n-octyl phthalate	3800	U
205-99-2	Benzo(b)fluoranthene	3800	U
207-08-9	Benzo(k)Fluoranthene	3800	U
50-32-8	Benzo(a)Pyrene	3800	U
193-39-5	Indeno(1,2,3-cd)Pyrene	3800	U
53-70-3	Dibenz(a,h)anthracene	3800	U
191-24-2	Benzo(g,h,i)Perylene	3800	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

TENTATIVELY IDENTIFIED COMPOUNDS

MW10-S

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 574626 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT409.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: 12.3 decanted: (Y/N) N Date Analyzed: 09/10/02

Concentrated Extract Volume: 500 (uL) Dilution Factor: 1.0 it (E) 10/8/02

Injection Volume: 2.0 (uL) Soil Aliquot Volume: 2 (uL)

GPC Cleanup: (Y/N) Y pH: 7.51

CONCENTRATION UNITS:

Number TICs found: 20 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown hydrocarbon	10.54	5500	J
2.	unknown	11.03	5100	J
3.	unknown hydrocarbon	12.45	4200	J
4.	unknown hydrocarbon	13.02	12000	J
5.	unknown hydrocarbon	13.39	4500	J
6.	unknown hydrocarbon	14.03	14000	J
7.	unknown hydrocarbon	14.79	5400	J
8.	unknown hydrocarbon	16.33	7400	J
9.	unknown hydrocarbon	16.39	11000	J
10.	unknown	16.80	9500	J
11.	unknown hydrocarbon	16.86	6200	J
12.	unknown hydrocarbon	17.39	5100	J
13.	unknown hydrocarbon	17.71	8200	J
14.	unknown	18.33	6400	J
15.	unknown	19.72	6700	J
16.	unknown	26.22	5700	J
17.	unknown	27.44	8800	J
18.	unknown hydrocarbon	8.55	4500	J
19.	unknown hydrocarbon	8.83	5000	J
20.	unknown hydrocarbon	9.65	4300	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10-S RE

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 574626 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT432.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: 12.3 decanted:(Y/N) N Date Extracted: 09/04/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/11/02

Injection Volume: 2.0 (uL) Dilution Factor: 1.0 10 (11) 10/9/02

GPC Cleanup: (Y/N) Y pH: 7.51

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3800	U
111-44-4	bis(-2-Chloroethyl)Ether	3800	U
95-57-8	2-Chlorophenol	3800	U
541-73-1	1,3-Dichlorobenzene	3800	U
106-46-7	1,4-Dichlorobenzene	3800	U
95-50-1	1,2-Dichlorobenzene	3800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3800	U
95-48-7	2-Methylphenol	3800	U
621-24-7	N-Nitroso-Di-n-propylamine	3800	U
67-72-1	Hexachloroethane	3800	U
106-44-5	4-Methylphenol	3800	U
98-95-3	Nitrobenzene	3800	U
78-59-1	Isophorone	3800	U
88-75-5	2-Nitrophenol	3800	U
105-67-9	2,4-Dimethylphenol	3800	U
111-91-1	bis(-2-Chloroethoxy)Methane	3800	U
120-83-2	2,4-Dichlorophenol	3800	U
120-82-1	1,2,4-Trichlorobenzene	3800	U
91-20-3	Naphthalene	3800	U
106-47-8	4-Chloroaniline	3800	U
87-68-3	Hexachlorobutadiene	3800	U
59-50-7	4-Chloro-3-methylphenol	3800	U
91-57-6	2-Methylnaphthalene	3800	U
77-47-4	Hexachlorocyclopentadiene	3800	U
88-06-2	2,4,6-Trichlorophenol	3800	U
95-95-4	2,4,5-Trichlorophenol	9500	U
91-58-7	2-Chloronaphthalene	3800	U
88-74-4	2-Nitroaniline	9500	U
208-96-8	Acenaphthylene	3800	U
131-11-3	Dimethyl Phthalate	3800	U
606-20-2	2,6-Dinitrotoluene	3800	U
83-32-9	Acenaphthene	3800	U
99-09-2	3-Nitroaniline	9500	U
51-28-5	2,4-Dinitrophenol	9500	U
132-64-9	Dibenzofuran	3800	U
121-14-2	2,4-Dinitrotoluene	3800	U
100-02-7	4-Nitrophenol	9500	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10-S RE

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-1319E SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 574626 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT432.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: 12.3 decanted:(Y/N) N Date Extracted: 09/04/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/11/02

Injection Volume: 2.0 (uL) Dilution Factor: 10 (R) 10/8/02

GPC Cleanup: (Y/N) Y pH: 7.51

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
86-73-7	Fluorene	3800	U
7005-72-3	4-Chlorophenyl-phenylether	3800	U
84-66-2	Diethylphthalate	3800	U
100-01-6	4-Nitroaniline	9500	U
534-52-1	4,6-Dinitro-2-methylphenol	9500	U
86-30-6	N-Nitrosodiphenylamine	3800	U
101-55-3	4-Bromophenyl-phenylether	3800	U
118-74-1	Hexachlorobenzene	3800	U
87-86-5	Pentachlorophenol	9500	U
85-01-8	Phenanthrene	3800	U
120-12-7	Anthracene	3800	U
86-74-8	Carbazole	3800	U
84-74-2	Di-n-Butylphthalate	3800	U
206-44-0	Fluoranthene	3800	U
129-00-0	Pyrene	3800	U
85-68-7	Butyl benzyl phthalate	3800	U
91-94-1	3,3'-Dichlorobenzidine	3800	U
56-55-3	Benzo(a)Anthracene	3800	U
218-01-9	Chrysene	3800	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	3800	U
117-84-0	Di-n-octyl phthalate	3800	U
205-99-2	Benzo(b)fluoranthene	3800	U
207-08-9	Benzo(k)Fluoranthene	3800	U
50-32-8	Benzo(a)Pyrene	3800	U
193-39-5	Indeno(1,2,3-cd)Pyrene	3800	U
53-70-3	Dibenz(a,h)anthracene	3800	U
191-24-2	Benzo(g,h,i)Perylene	3800	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

TENTATIVELY IDENTIFIED COMPOUNDS

MW10-S RE

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-1319.5 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 574626 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT432.D

Level: (low/med) LOW Date Received: 08/06/02

% Moisture: 12.3 decanted: (Y/N) N Date Analyzed: 09/11/02

Concentrated Extract Volume: 500 (uL) Dilution Factor: ~~1.0~~ 10 09/11/02

Injection Volume: 2.0 (uL) Soil Aliquot Volume: 2 (uL)

GPC Cleanup: (Y/N) Y pH: 7.51

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown hydrocarbon	7.80	12000	J
2.	unknown hydrocarbon	7.94	8200	J
3.	unknown hydrocarbon	8.55	13000	J
4. 000629-50-5	Tridecane	8.83	14000	JN
5.	unknown hydrocarbon	9.45	8100	J
6. 074645-98-0	Dodecane, 2,7,10-trimethyl-	9.65	9800	JN
7. 001921-70-6	Pentadecane, 2,6,10,14-tetramet	13.02	23000	JN
8.	unknown hydrocarbon	13.91	15000	J
9. 000638-36-8	Hexadecane, 2,6,10,14-tetrameth	14.03	25000	JN
10.	unknown hydrocarbon	15.00	11000	J
11.	unknown hydrocarbon	16.40	24000	J
12.	unknown hydrocarbon	16.55	15000	J
13.	unknown hydrocarbon	16.81	15000	J
14.	unknown hydrocarbon	16.87	15000	J
15.	unknown hydrocarbon	17.41	11000	J
16.	unknown hydrocarbon	17.72	9300	J
17.	unknown hydrocarbon	19.66	7800	J
18.	unknown hydrocarbon	19.73	8300	J
19.	unknown	23.92	7600	J
20.	unknown	24.19	11000	J
21.	unknown hydrocarbon	26.26	12000	J
22.	unknown hydrocarbon	27.48	18000	J

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW16 0.5-2

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: _____ SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862406 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B4761.D

Level: (low/med) LOW Date Received: 11/22/05

% Moisture: not dec. 15.1 Date Analyzed: 12/02/05

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/KG	Q
75-71-8	Dichlorodifluoromethane	59	U
74-87-3	Chloromethane	59	U
75-01-4	Vinyl chloride	59	U
74-83-9	Bromomethane	59	U
75-00-3	Chloroethane	59	U
75-69-4	Trichlorofluoromethane	59	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	59	U
67-64-1	Acetone	82	
75-35-4	1,1-Dichloroethene	59	U
79-20-9	Methyl Acetate	59	U
75-09-2	Methylene chloride	7	JB
75-15-0	Carbon disulfide	4	J
1634-04-4	Methyl tert-Butyl Ether	59	U
156-60-5	trans-1,2-Dichloroethene	3	J
75-34-3	1,1-Dichloroethane	59	U
78-93-3	2-Butanone	59	U
156-59-2	cis-1,2-Dichloroethene	960	
67-66-3	Chloroform	59	U
110-82-7	Cyclohexane	59	U
107-06-2	1,2-Dichloroethane	59	U
71-55-6	1,1,1-Trichloroethane	350	
56-23-5	Carbon tetrachloride	59	U
71-43-2	Benzene	59	U
79-01-6	Trichloroethene	530	
108-87-2	Methylcyclohexane	9	J
78-87-5	1,2-Dichloropropane	59	U
75-27-4	Bromodichloromethane	59	U
10061-01-5	cis-1,3-Dichloropropene	59	U
10061-02-6	trans-1,3-Dichloropropene	59	U
79-00-5	1,1,2-Trichloroethane	15	J
124-48-1	Dibromochloromethane	59	U
75-25-2	Bromoform	59	U
108-10-1	4-Methyl-2-pentanone	59	U
108-88-3	Toluene	3	J
591-78-6	2-Hexanone	59	U
127-18-4	Tetrachloroethene	59	U
106-93-4	1,2-Dibromoethane	59	U
108-90-7	Chlorobenzene	59	U
100-41-4	Ethylbenzene	59	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW16 0.5-2

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: _____ SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862406 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B4761.D

Level: (low/med) LOW Date Received: 11/22/05

% Moisture: not dec. 15.1 Date Analyzed: 12/02/05

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/KG	Q
1330-20-7	(m+p)Xylene	59	U
95-47-6	o-Xylene	6	J
100-42-5	Styrene	59	U
98-82-8	Isopropylbenzene	59	U
79-34-5	1,1,2,2-Tetrachloroethane	59	U
541-73-1	1,3-Dichlorobenzene	59	U
106-46-7	1,4-Dichlorobenzene	59	U
95-50-1	1,2-Dichlorobenzene	59	U
96-12-8	1,2-Dibromo-3-chloropropane	59	U
120-82-1	1,2,4-Trichlorobenzene	59	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
MW16 0.5-2

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: _____ SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862406 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B4761.D

Level: (low/med) LOW Date Received: 11/22/05

% Moisture: not dec. 15.1 Date Analyzed: 12/02/05

GC Column: DB624 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: 20

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown aliphatic hydrocarbon	19.82	52	J
2.	unknown aliphatic hydrocarbon	22.25	52	J
3.	unknown hydrocarbon	22.69	80	J
4.	unknown aromatic hydrocarbon	23.11	63	J
5.	unknown hydrocarbon	23.30	62	J
6.	unknown aliphatic hydrocarbon	23.51	110	J
7.	unknown aromatic hydrocarbon	23.79	57	J
8.	unknown aliphatic hydrocarbon	23.91	98	J
9.	unknown hydrocarbon	24.51	56	J
10.	unknown aromatic hydrocarbon	24.66	140	J
11.	unknown aliphatic hydrocarbon	24.82	170	J
12.	unknown aliphatic hydrocarbon	25.01	65	J
13.	unknown aliphatic hydrocarbon	25.62	50	J
14.	unknown cyclic hydrocarbon	25.77	78	J
15.	unknown aliphatic hydrocarbon	26.02	260	J
16.	unknown aromatic hydrocarbon	26.33	98	J
17.	unknown hydrocarbon	26.70	63	J
18.	unknown aliphatic hydrocarbon	26.84	110	J
19.	unknown aliphatic hydrocarbon	27.82	110	J
20.	unknown hydrocarbon	28.41	57	J

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MWDUP

Lab Name: CAS/ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862405 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: T4589.D

Level: (low/med) MED Date Received: 11/22/05

% Moisture: not dec. 16.5 Date Analyzed: 12/02/05

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (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
74-83-9	Bromomethane	1500	U
75-00-3	Chloroethane	1500	U
75-35-4	1,1-Dichloroethene	650	J
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	470	J
75-34-3	1,1-Dichloroethane	580	J
156-59-2	cis-1,2-Dichloroethene	44000	E
78-93-3	2-Butanone (MEK)	1500	U
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	51000	E
56-23-5	Carbontetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	240000	E
78-87-5	1,2-Dichloropropane	1500	U
75-27-4	Bromodichloromethane	1500	U
10061-01-5	cis-1,3-Dichloropropene	1500	U
108-10-1	4-Methyl-2-pentanone	1500	U
108-88-3	Toluene	1500	U
10061-02-6	trans-1,3-Dichloropropene	1500	U
79-00-5	1,1,2-Trichloroethane	1500	U
75-25-2	Bromoform	1500	U
127-18-4	Tetrachloroethene	1500	U
591-78-6	2-Hexanone	1500	U
124-48-1	Dibromochloromethane	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	78	J
1330-20-7	(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
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
96-12-8	1,2-Dibromo-3-Chloropropane	1500	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWDUP

Lab Name: CAS/ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: _____ SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862405 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: T4589.D

Level: (low/med) MED Date Received: 11/22/05

% Moisture: not dec. 16.5 Date Analyzed: 12/02/05

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	1500	U
106-93-4	1,2-Dibromoethane	1500	U
108-87-2	Methylcyclohexane	320	J
110-82-7	Cyclohexane	1500	U
1634-04-4	Methyl-tert-butyl Ether	1500	U
79-20-9	Methyl Acetate	1500	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	1500	U
75-69-4	Trichlorofluoromethane	1500	U
75-71-8	Dichlorodifluoromethane	1500	U
98-82-8	Isopropylbenzene	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

TENTATIVELY IDENTIFIED COMPOUNDS

MWDUP

Lab Name: CAS/ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: _____ SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862405 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: T4589.D

Level: (low/med) MED Date Received: 11/22/05

% Moisture: not dec. 16.5 Date Analyzed: 12/02/05

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (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	10.87	3800	JN
2. 000493-02-7	Naphthalene, decahydro-, trans-	11.55	2300	JN
3. 001120-21-4	Undecane	11.62	3200	JN
4.	Unknown	11.66	1900	J
5. 000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	11.74	2600	JN
6. 002958-76-1	Naphthalene, decahydro-2-methy	11.96	1900	JN
7. 004292-92-6	Cyclohexane, pentyl-	12.00	1900	JN
8.	Unknown Aromatic Hydrocarbon	12.33	3200	J
9.	Unknown Hydrocarbon	12.43	3500	J
10.	Unknown Aromatic Hydrocarbon	12.56	1900	J
11.	Unknown Hydrocarbon	12.74	2300	J
12.	Unknown Cyclic Hydrocarbon	12.84	3400	J
13.	Unknown Hydrocarbon	13.06	3600	J
14.	Unknown Hydrocarbon	13.28	2500	J
15. 013065-07-1	Naphthalene, 1,2,3,4-tetrahydro-	13.38	1900	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWDUP DL

Lab Name: CAS/ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: _____ SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862405 1250

Sample wt/vol: 4.0 (g/ml) G Lab File ID: T4593.D

Level: (low/med) MED Date Received: 11/22/05

% Moisture: not dec. 16.5 Date Analyzed: 12/02/05

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 10.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	15000	U
75-01-4	Vinyl Chloride	15000	U
74-83-9	Bromomethane	15000	U
75-00-3	Chloroethane	15000	U
75-35-4	1,1-Dichloroethene	15000	U
67-64-1	Acetone	15000	U
75-15-0	Carbon Disulfide	15000	U
75-09-2	Methylene Chloride	15000	U
156-60-5	trans-1,2-Dichloroethene	15000	U
75-34-3	1,1-Dichloroethane	15000	U
156-59-2	cis-1,2-Dichloroethene	42000	D
78-93-3	2-Butanone (MEK)	15000	U
67-66-3	Chloroform	15000	U
107-06-2	1,2-Dichloroethane	15000	U
71-55-6	1,1,1-Trichloroethane	48000	D
56-23-5	Carbontetrachloride	15000	U
71-43-2	Benzene	15000	U
79-01-6	Trichloroethene	290000	D
78-87-5	1,2-Dichloropropane	15000	U
75-27-4	Bromodichloromethane	15000	U
10061-01-5	cis-1,3-Dichloropropene	15000	U
108-10-1	4-Methyl-2-pentanone	15000	U
108-88-3	Toluene	15000	U
10061-02-6	trans-1,3-Dichloropropene	15000	U
79-00-5	1,1,2-Trichloroethane	15000	U
75-25-2	Bromoform	15000	U
127-18-4	Tetrachloroethene	15000	U
591-78-6	2-Hexanone	15000	U
124-48-1	Dibromochloromethane	15000	U
108-90-7	Chlorobenzene	15000	U
100-41-4	Ethylbenzene	15000	U
1330-20-7	(m+p) Xylene	15000	U
95-47-6	o-Xylene	15000	U
100-42-5	Styrene	15000	U
79-34-5	1,1,2,2-Tetrachloroethane	15000	U
541-73-1	1,3-Dichlorobenzene	15000	U
106-46-7	1,4-Dichlorobenzene	15000	U
95-50-1	1,2-Dichlorobenzene	15000	U
96-12-8	1,2-Dibromo-3-Chloropropane	15000	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MWDUP DL

Lab Name: CAS/ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862405 1250

Sample wt/vol: 4.0 (g/ml) G Lab File ID: T4593.D

Level: (low/med) MED Date Received: 11/22/05

% Moisture: not dec. 16.5 Date Analyzed: 12/02/05

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 10.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
120-82-1	1,2,4-Trichlorobenzene	15000	U
106-93-4	1,2-Dibromoethane	15000	U
108-87-2	Methylcyclohexane	15000	U
110-82-7	Cyclohexane	15000	U
1634-04-4	Methyl-tert-butyl Ether	15000	U
79-20-9	Methyl Acetate	15000	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroeth	15000	U
75-69-4	Trichlorofluoromethane	15000	U
75-71-8	Dichlorodifluoromethane	15000	U
98-82-8	Isopropylbenzene	15000	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWDUP DL

Lab Name: CAS/ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: _____ SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862405 1250

Sample wt/vol: 4.0 (g/ml) G Lab File ID: T4593.D

Level: (low/med) MED Date Received: 11/22/05

% Moisture: not dec. 16.5 Date Analyzed: 12/02/05

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 10.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 100 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW16 9-10

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: _____ SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862407 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B4765.D

Level: (low/med) LOW Date Received: 11/22/05

% Moisture: not dec. 11.3 Date Analyzed: 12/02/05

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/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	11	U
67-64-1	Acetone	6	J
75-35-4	1,1-Dichloroethene	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene chloride	11	U
75-15-0	Carbon disulfide	11	U
1634-04-4	Methyl tert-Butyl Ether	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
156-59-2	cis-1,2-Dichloroethene	26	
67-66-3	Chloroform	11	U
110-82-7	Cyclohexane	11	U
107-06-2	1,2-Dichloroethane	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon tetrachloride	11	U
71-43-2	Benzene	11	U
79-01-6	Trichloroethene	30	
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
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	5	J
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
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW16 9-10

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862407 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B4765.D

Level: (low/med) LOW Date Received: 11/22/05

% Moisture: not dec. 11.3 Date Analyzed: 12/02/05

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/KG	Q
1330-20-7	(m+p)Xylene	11	U
95-47-6	o-Xylene	11	U
100-42-5	Styrene	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW16 9-10

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-28921 SAS No.: _____ SDG No.: 862403

Matrix: (soil/water) SOIL Lab Sample ID: 862407 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B4765.D

Level: (low/med) LOW Date Received: 11/22/05

% Moisture: not dec. 11.3 Date Analyzed: 12/02/05

GC Column: DB624 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

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B16-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R2-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575817 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A2918.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. 25.1 Date Analyzed: 08/16/02

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	13	U
75-01-4	Vinyl chloride	13	U
75-00-3	Chloroethane	13	U
74-83-9	Bromomethane	13	U
67-64-1	Acetone	12	J
75-09-2	Methylene chloride	13	U
75-15-0	Carbon disulfide	13	U
78-93-3	2-Butanone	13	U
156-59-2	cis-1,2-Dichloroethene	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
71-55-6	1,1,1-Trichloroethane	13	U
71-43-2	Benzene	13	U
79-01-6	Trichloroethene	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
124-48-1	Dibromochloromethane	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	6	J
108-38-3/106-42-3	(m+p)Xylene	13	U
100-42-5	Styrene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
95-47-6	o-Xylene	5	J
156-60-5	trans-1,2-Dichloroethene	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	5	J
56-23-5	Carbon tetrachloride	13	U
78-87-5	1,2-Dichloropropane	13	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B16-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R2-13195 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575817 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: A2918.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. 25.1 Date Analyzed: 08/16/02

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	19.77	630	J
2.	unknown hydrocarbon	20.10	830	J
3.	unknown hydrocarbon	20.71	360	J
4.	unknown hydrocarbon	21.40	340	J
5.	unknown hydrocarbon	21.70	230	J
6.	unknown hydrocarbon	22.46	220	J
7.	unknown hydrocarbon	22.54	580	J
8.	unknown hydrocarbon	22.76	200	J
9.	unknown hydrocarbon	22.98	370	J
10.	unknown hydrocarbon	23.60	230	J
11.	unknown hydrocarbon	23.79	420	J
12.	unknown hydrocarbon	24.22	370	J
13.	unknown hydrocarbon	24.79	220	J
14.	unknown hydrocarbon	25.11	270	J
15.	unknown hydrocarbon	26.29	260	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B16-S

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13196 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575817 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: BT416.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 25.1 decanted:(Y/N) N Date Extracted: 08/16/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/02

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.14

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	450	U
111-44-4	bis(-2-Chloroethyl)Ether	450	U
95-57-8	2-Chlorophenol	450	U
541-73-1	1,3-Dichlorobenzene	450	U
106-46-7	1,4-Dichlorobenzene	450	U
95-50-1	1,2-Dichlorobenzene	450	U
108-60-1	2,2'-oxybis(1-Chloropropane)	450	U
95-48-7	2-Methylphenol	450	U
621-24-7	N-Nitroso-Di-n-propylamine	450	U
67-72-1	Hexachloroethane	450	U
106-44-5	4-Methylphenol	450	U
98-95-3	Nitrobenzene	450	U
78-59-1	Isophorone	450	U
88-75-5	2-Nitrophenol	450	U
105-67-9	2,4-Dimethylphenol	450	U
111-91-1	bis(-2-Chloroethoxy)Methane	450	U
120-83-2	2,4-Dichlorophenol	450	U
120-82-1	1,2,4-Trichlorobenzene	450	U
91-20-3	Naphthalene	450	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	450	U
59-50-7	4-Chloro-3-methylphenol	450	U
91-57-6	2-Methylnaphthalene	450	U
77-47-4	Hexachlorocyclopentadiene	450	U
88-06-2	2,4,6-Trichlorophenol	450	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	450	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	450	U
131-11-3	Dimethyl Phthalate	450	U
606-20-2	2,6-Dinitrotoluene	450	U
83-32-9	Acenaphthene	450	U
99-09-2	3-Nitroaniline	1100	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	450	U
121-14-2	2,4-Dinitrotoluene	450	U
100-02-7	4-Nitrophenol	1100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B16-S

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-1319 S SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575817 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: BT416.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 25.1 decanted:(Y/N) N Date Extracted: 08/16/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/02

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.14

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
86-73-7	Fluorene	450	U
7005-72-3	4-Chlorophenyl-phenylether	450	U
84-66-2	Diethylphthalate	450	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine	450	U
101-55-3	4-Bromophenyl-phenylether	450	U
118-74-1	Hexachlorobenzene	450	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	450	U
120-12-7	Anthracene	450	U
86-74-8	Carbazole	450	U
84-74-2	Di-n-Butylphthalate	450	U
206-44-0	Fluoranthene	450	U
129-00-0	Pyrene	450	U
85-68-7	Butyl benzyl phthalate	450	U
91-94-1	3,3'-Dichlorobenzidine	450	U
56-55-3	Benzo(a)Anthracene	450	U
218-01-9	Chrysene	450	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	77	J
117-84-0	Di-n-octyl phthalate	450	U
205-99-2	Benzo(b)fluoranthene	450	U
207-08-9	Benzo(k)Fluoranthene	450	U
50-32-8	Benzo(a)Pyrene	450	U
193-39-5	Indeno(1,2,3-cd)Pyrene	450	U
53-70-3	Dibenz(a,h)anthracene	450	U
191-24-2	Benzo(g,h,i)Perylene	450	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

TENTATIVELY IDENTIFIED COMPOUNDS

B16-S

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575817 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: BT416.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 25.1 decanted: (Y/N) N Date Analyzed: 09/10/02

Concentrated Extract Volume: 500 (uL) Dilution Factor: 1.0

Injection Volume: 2.0 (uL) Soil Aliquot Volume: 2 (uL)

GPC Cleanup: (Y/N) Y pH: 8.14

CONCENTRATION UNITS:

Number TICs found: 22 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown hydrocarbon	7.80	810	J
2.	unknown hydrocarbon	8.55	1100	J
3.	unknown hydrocarbon	9.65	940	J
4.	unknown hydrocarbon	10.54	1100	J
5.	unknown hydrocarbon	11.04	780	J
6.	unknown hydrocarbon	12.46	780	J
7.	unknown hydrocarbon	13.39	790	J
8.	unknown hydrocarbon	14.04	2800	J
9.	unknown hydrocarbon	14.71	1300	J
10.	unknown hydrocarbon	14.80	1100	J
11.	unknown	15.01	1100	J
12.	unknown hydrocarbon	15.84	1500	J
13.	unknown hydrocarbon	16.08	1900	J
14.	unknown hydrocarbon	16.41	2700	J
15.	unknown hydrocarbon	16.56	1900	J
16.	unknown hydrocarbon	16.82	2800	J
17.	unknown hydrocarbon	16.88	2000	J
18.	unknown hydrocarbon	17.41	1300	J
19.	unknown hydrocarbon	17.72	950	J
20.	unknown hydrocarbon	18.35	890	J
21.	unknown hydrocarbon	26.26	870	J
22.	unknown hydrocarbon	27.50	1400	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B16-S RE

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575817 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: BT443.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 25.1 decanted:(Y/N) N Date Extracted: 09/04/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/11/02

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.14

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	77	J
111-44-4	bis(-2-Chloroethyl)Ether	450	U
95-57-8	2-Chlorophenol	450	U
541-73-1	1,3-Dichlorobenzene	450	U
106-46-7	1,4-Dichlorobenzene	450	U
95-50-1	1,2-Dichlorobenzene	450	U
108-60-1	2,2'-oxybis(1-Chloropropane)	450	U
95-48-7	2-Methylphenol	450	U
621-24-7	N-Nitroso-Di-n-propylamine	450	U
67-72-1	Hexachloroethane	450	U
106-44-5	4-Methylphenol	450	U
98-95-3	Nitrobenzene	450	U
78-59-1	Isophorone	450	U
88-75-5	2-Nitrophenol	450	U
105-67-9	2,4-Dimethylphenol	450	U
111-91-1	bis(-2-Chloroethoxy)Methane	450	U
120-83-2	2,4-Dichlorophenol	450	U
120-82-1	1,2,4-Trichlorobenzene	450	U
91-20-3	Naphthalene	450	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	450	U
59-50-7	4-Chloro-3-methylphenol	450	U
91-57-6	2-Methylnaphthalene	450	U
77-47-4	Hexachlorocyclopentadiene	450	U
88-06-2	2,4,6-Trichlorophenol	450	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	450	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	450	U
131-11-3	Dimethyl Phthalate	450	U
606-20-2	2,6-Dinitrotoluene	450	U
83-32-9	Acenaphthene	450	U
99-09-2	3-Nitroaniline	1100	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	450	U
121-14-2	2,4-Dinitrotoluene	450	U
100-02-7	4-Nitrophenol	1100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B16-S RE

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-131915 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575817 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: BT443.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 25.1 decanted:(Y/N) N Date Extracted: 09/04/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/11/02

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.14

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
86-73-7	Fluorene	67	J
7005-72-3	4-Chlorophenyl-phenylether	450	U
84-66-2	Diethylphthalate	450	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine	450	U
101-55-3	4-Bromophenyl-phenylether	450	U
118-74-1	Hexachlorobenzene	450	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	450	U
120-12-7	Anthracene	450	U
86-74-8	Carbazole	450	U
84-74-2	Di-n-Butylphthalate	450	U
206-44-0	Fluoranthene	450	U
129-00-0	Pyrene	450	U
85-68-7	Butyl benzyl phthalate	450	U
91-94-1	3,3'-Dichlorobenzidine	450	U
56-55-3	Benzo(a)Anthracene	450	U
218-01-9	Chrysene	450	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	81	J
117-84-0	Di-n-octyl phthalate	450	U
205-99-2	Benzo(b)fluoranthene	450	U
207-08-9	Benzo(k)Fluoranthene	450	U
50-32-8	Benzo(a)Pyrene	450	U
193-39-5	Indeno(1,2,3-cd)Pyrene	450	U
53-70-3	Dibenz(a,h)anthracene	450	U
191-24-2	Benzo(g,h,i)Perylene	450	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B16-S RE

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575817 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: BT443.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 25.1 decanted: (Y/N) N Date Analyzed: 09/11/02

Concentrated Extract Volume: 500 (uL) Dilution Factor: 1.0

Injection Volume: 2.0 (uL) Soil Aliquot Volume: 2 (uL)

GPC Cleanup: (Y/N) Y pH: 8.14

Number TICs found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown hydrocarbon	7.94	770	J
2.	unknown hydrocarbon	8.55	1200	J
3.	unknown hydrocarbon	9.65	1100	J
4.	unknown hydrocarbon	10.54	1200	J
5.	unknown hydrocarbon	13.91	780	J
6.	unknown hydrocarbon	14.03	2800	J
7.	unknown hydrocarbon	14.80	810	J
8.	unknown hydrocarbon	15.65	1700	J
9.	unknown hydrocarbon	15.73	820	J
10.	unknown hydrocarbon	15.83	1000	J
11.	unknown hydrocarbon	16.40	2100	J
12.	unknown hydrocarbon	16.55	1400	J
13.	unknown hydrocarbon	16.81	1400	J
14.	unknown hydrocarbon	16.87	1500	J
15.	unknown hydrocarbon	16.94	860	J
16.	unknown hydrocarbon	17.40	890	J
17.	unknown hydrocarbon	17.71	1100	J
18.	unknown hydrocarbon	18.34	1000	J
19.	unknown hydrocarbon	19.72	780	J
20.	unknown	26.23	940	J
21.	unknown	27.47	1800	J

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B17-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R2-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575823 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: A2920.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. 17.8 Date Analyzed: 08/16/02

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	61	U
75-01-4	Vinyl chloride	61	U
75-00-3	Chloroethane	61	U
74-83-9	Bromomethane	61	U
67-64-1	Acetone	64	
75-09-2	Methylene chloride	61	U
75-15-0	Carbon disulfide	61	U
78-93-3	2-Butanone	61	U
156-59-2	cis-1,2-Dichloroethene	61	U
67-66-3	Chloroform	61	U
107-06-2	1,2-Dichloroethane	61	U
71-55-6	1,1,1-Trichloroethane	61	U
71-43-2	Benzene	61	U
79-01-6	Trichloroethene	61	U
75-27-4	Bromodichloromethane	61	U
10061-01-5	cis-1,3-Dichloropropene	61	U
10061-02-6	trans-1,3-Dichloropropene	61	U
79-00-5	1,1,2-Trichloroethane	61	U
124-48-1	Dibromochloromethane	61	U
75-25-2	Bromoform	61	U
108-10-1	4-Methyl-2-pentanone	61	U
108-88-3	Toluene	61	U
591-78-6	2-Hexanone	61	U
127-18-4	Tetrachloroethene	61	U
108-90-7	Chlorobenzene	61	U
100-41-4	Ethylbenzene	27	J
108-38-3/106-42-3	(m+p)Xylene	61	U
100-42-5	Styrene	61	U
79-34-5	1,1,2,2-Tetrachloroethane	61	U
95-47-6	o-Xylene	100	
156-60-5	trans-1,2-Dichloroethene	61	U
75-35-4	1,1-Dichloroethene	61	U
75-34-3	1,1-Dichloroethane	47	J
56-23-5	Carbon tetrachloride	61	U
78-87-5	1,2-Dichloropropane	61	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B17-S

Lab Name: CAS\ROCH Contract: SEARB

Lab Code: 10145 Case No.: R2-13195 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575823 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: A2920.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. 17.8 Date Analyzed: 08/16/02

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	20.10	1600	J
2.	unknown hydrocarbon	20.71	730	J
3. 000526-73-8	Benzene, 1,2,3-trimethyl-	20.92	710	JN
4.	unknown hydrocarbon	21.40	800	J
5.	unknown hydrocarbon	22.46	560	J
6.	unknown hydrocarbon	22.54	780	J
7.	unknown hydrocarbon	22.76	560	J
8.	unknown hydrocarbon	22.98	1000	J
9.	unknown hydrocarbon	23.14	480	J
10.	unknown hydrocarbon	23.42	550	J
11.	unknown hydrocarbon	23.60	580	J
12.	unknown hydrocarbon	23.79	1300	J
13.	unknown hydrocarbon	24.22	960	J
14.	unknown hydrocarbon	25.10	720	J
15.	unknown hydrocarbon	26.28	820	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B17-S

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575823 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT422.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 17.8 decanted:(Y/N) N Date Extracted: 08/16/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/02

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.95

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4100	U
111-44-4	bis(-2-Chloroethyl)Ether	4100	U
95-57-8	2-Chlorophenol	4100	U
541-73-1	1,3-Dichlorobenzene	4100	U
106-46-7	1,4-Dichlorobenzene	4100	U
95-50-1	1,2-Dichlorobenzene	4100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4100	U
95-48-7	2-Methylphenol	4100	U
621-24-7	N-Nitroso-Di-n-propylamine	4100	U
67-72-1	Hexachloroethane	4100	U
106-44-5	4-Methylphenol	4100	U
98-95-3	Nitrobenzene	4100	U
78-59-1	Isophorone	4100	U
88-75-5	2-Nitrophenol	4100	U
105-67-9	2,4-Dimethylphenol	4100	U
111-91-1	bis(-2-Chloroethoxy)Methane	4100	U
120-83-2	2,4-Dichlorophenol	4100	U
120-82-1	1,2,4-Trichlorobenzene	4100	U
91-20-3	Naphthalene	4100	U
106-47-8	4-Chloroaniline	4100	U
87-68-3	Hexachlorobutadiene	4100	U
59-50-7	4-Chloro-3-methylphenol	4100	U
91-57-6	2-Methylnaphthalene	4100	U
77-47-4	Hexachlorocyclopentadiene	4100	U
88-06-2	2,4,6-Trichlorophenol	4100	U
95-95-4	2,4,5-Trichlorophenol	10000	U
91-58-7	2-Chloronaphthalene	4100	U
88-74-4	2-Nitroaniline	10000	U
208-96-8	Acenaphthylene	4100	U
131-11-3	Dimethyl Phthalate	4100	U
606-20-2	2,6-Dinitrotoluene	4100	U
83-32-9	Acenaphthene	4100	U
99-09-2	3-Nitroaniline	10000	U
51-28-5	2,4-Dinitrophenol	10000	U
132-64-9	Dibenzofuran	4100	U
121-14-2	2,4-Dinitrotoluene	4100	U
100-02-7	4-Nitrophenol	10000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B17-S

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575823 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT422.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 17.8 decanted:(Y/N) N Date Extracted: 08/16/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/10/02

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.95

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
86-73-7	Fluorene	4100	U
7005-72-3	4-Chlorophenyl-phenylether	4100	U
84-66-2	Diethylphthalate	4100	U
100-01-6	4-Nitroaniline	10000	U
534-52-1	4,6-Dinitro-2-methylphenol	10000	U
86-30-6	N-Nitrosodiphenylamine	4100	U
101-55-3	4-Bromophenyl-phenylether	4100	U
118-74-1	Hexachlorobenzene	4100	U
87-86-5	Pentachlorophenol	10000	U
85-01-8	Phenanthrene	940	J
120-12-7	Anthracene	4100	U
86-74-8	Carbazole	4100	U
84-74-2	Di-n-Butylphthalate	4100	U
206-44-0	Fluoranthene	450	J
129-00-0	Pyrene	4100	U
85-68-7	Butyl benzyl phthalate	4100	U
91-94-1	3,3'-Dichlorobenzidine	4100	U
56-55-3	Benzo(a)Anthracene	4100	U
218-01-9	Chrysene	4100	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	4100	U
117-84-0	Di-n-octyl phthalate	4100	U
205-99-2	Benzo(b)fluoranthene	4100	U
207-08-9	Benzo(k)Fluoranthene	4100	U
50-32-8	Benzo(a)Pyrene	4100	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4100	U
53-70-3	Dibenz(a,h)anthracene	4100	U
191-24-2	Benzo(g,h,i)Perylene	4100	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

TENTATIVELY IDENTIFIED COMPOUNDS

B17-S

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: _____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575823 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT422.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 17.8 decanted: (Y/N) N Date Analyzed: 09/10/02

Concentrated Extract Volume: 500 (uL) Dilution Factor: 1.0

Injection Volume: 2.0 (uL) Soil Aliquot Volume: 2 (uL)

GPC Cleanup: (Y/N) Y pH: 7.95

Number TICs found: 26 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 001120-21-4	Undecane	6.81	6200	JN
2. 000112-40-3	Dodecane	7.80	4300	JN
3.	unknown hydrocarbon	7.95	8400	J
4.	unknown hydrocarbon	8.36	3400	J
5.	unknown hydrocarbon	8.55	8600	J
6. 000629-50-5	Tridecane	8.83	3600	JN
7.	unknown hydrocarbon	8.96	3200	J
8.	unknown hydrocarbon	9.03	4000	J
9.	unknown hydrocarbon	9.45	5800	J
10.	unknown hydrocarbon	9.65	5700	J
11.	unknown hydrocarbon	10.54	8100	J
12.	unknown hydrocarbon	10.63	4500	J
13.	unknown hydrocarbon	11.03	4800	J
14. 000829-26-5	Naphthalene, 2,3,6-trimethyl-	11.93	3700	JN
15. 003031-15-0	Naphthalene, 1,2,3,4-tetramethyl-	13.91	3300	JN
16.	unknown hydrocarbon	14.03	7600	J
17.	unknown hydrocarbon	14.85	3700	J
18.	unknown hydrocarbon	14.99	4500	J
19.	unknown hydrocarbon	15.58	13000	J
20.	unknown hydrocarbon	15.73	3300	J
21.	unknown hydrocarbon	16.39	4300	J
22.	unknown hydrocarbon	16.80	3400	J
23.	unknown hydrocarbon	16.86	4200	J
24.	unknown hydrocarbon	17.70	4800	J
25.	unknown hydrocarbon	18.33	4900	J
26.	unknown hydrocarbon	27.45	5000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B17-S RE

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575823 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT448.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 17.8 decanted:(Y/N) N Date Extracted: 09/04/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/12/02

Injection Volume: 2.0 (uL) Dilution Factor: 10 10 (R) 10/8/02

GPC Cleanup: (Y/N) Y pH: 7.95

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4100	U
111-44-4	bis(-2-Chloroethyl)Ether	4100	U
95-57-8	2-Chlorophenol	4100	U
541-73-1	1,3-Dichlorobenzene	4100	U
106-46-7	1,4-Dichlorobenzene	4100	U
95-50-1	1,2-Dichlorobenzene	4100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4100	U
95-48-7	2-Methylphenol	4100	U
621-24-7	N-Nitroso-Di-n-propylamine	4100	U
67-72-1	Hexachloroethane	4100	U
106-44-5	4-Methylphenol	4100	U
98-95-3	Nitrobenzene	4100	U
78-59-1	Isophorone	4100	U
88-75-5	2-Nitrophenol	4100	U
105-67-9	2,4-Dimethylphenol	4100	U
111-91-1	bis(-2-Chloroethoxy)Methane	4100	U
120-83-2	2,4-Dichlorophenol	4100	U
120-82-1	1,2,4-Trichlorobenzene	4100	U
91-20-3	Naphthalene	4100	U
106-47-8	4-Chloroaniline	4100	U
87-68-3	Hexachlorobutadiene	4100	U
59-50-7	4-Chloro-3-methylphenol	4100	U
91-57-6	2-Methylnaphthalene	4100	U
77-47-4	Hexachlorocyclopentadiene	4100	U
88-06-2	2,4,6-Trichlorophenol	4100	U
95-95-4	2,4,5-Trichlorophenol	10000	U
91-58-7	2-Chloronaphthalene	4100	U
88-74-4	2-Nitroaniline	10000	U
208-96-8	Acenaphthylene	4100	U
131-11-3	Dimethyl Phthalate	4100	U
606-20-2	2,6-Dinitrotoluene	4100	U
83-32-9	Acenaphthene	4100	U
99-09-2	3-Nitroaniline	10000	U
51-28-5	2,4-Dinitrophenol	10000	U
132-64-9	Dibenzofuran	4100	U
121-14-2	2,4-Dinitrotoluene	4100	U
100-02-7	4-Nitrophenol	10000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B17-S RE

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13196 SAS No.: SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575823 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT448.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 17.8 decanted:(Y/N) N Date Extracted: 09/04/02

Concentrated Extract Volume: 500 (uL) Date Analyzed: 09/12/02

Injection Volume: 2.0 (uL) Dilution Factor: 1.0 10 CF :10/8/02

GPC Cleanup: (Y/N) Y pH: 7.95

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
86-73-7	Fluorene	4100	U
7005-72-3	4-Chlorophenyl-phenylether	4100	U
84-66-2	Diethylphthalate	4100	U
100-01-6	4-Nitroaniline	10000	U
534-52-1	4,6-Dinitro-2-methylphenol	10000	U
86-30-6	N-Nitrosodiphenylamine	4100	U
101-55-3	4-Bromophenyl-phenylether	4100	U
118-74-1	Hexachlorobenzene	4100	U
87-86-5	Pentachlorophenol	10000	U
85-01-8	Phenanthrene	840	J
120-12-7	Anthracene	4100	U
86-74-8	Carbazole	4100	U
84-74-2	Di-n-Butylphthalate	4100	U
206-44-0	Fluoranthene	4100	U
129-00-0	Pyrene	4100	U
85-68-7	Butyl benzyl phthalate	4100	U
91-94-1	3,3'-Dichlorobenzidine	4100	U
56-55-3	Benzo(a)Anthracene	4100	U
218-01-9	Chrysene	4100	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	4100	U
117-84-0	Di-n-octyl phthalate	4100	U
205-99-2	Benzo(b)fluoranthene	4100	U
207-08-9	Benzo(k)Fluoranthene	4100	U
50-32-8	Benzo(a)Pyrene	4100	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4100	U
53-70-3	Dibenz(a,h)anthracene	4100	U
191-24-2	Benzo(g,h,i)Perylene	4100	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B17-S RE

Lab Name: CAS-ROCH Contract: Sear-Brown

Lab Code: 10145 Case No.: R22-13195 SAS No.: ____ SDG No.: 574625

Matrix: (soil/water) SOIL Lab Sample ID: 575823 10

Sample wt/vol: 30 (g/ml) G Lab File ID: BT448.D

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: 17.8 decanted: (Y/N) N Date Analyzed: 09/12/02

Concentrated Extract Volume: 500 (uL) Dilution Factor: 1.0 1.0 [handwritten initials] 10/8/02

Injection Volume: 2.0 (uL) Soil Aliquot Volume: 2 (uL)

GPC Cleanup: (Y/N) Y pH: 7.95

CONCENTRATION UNITS:

Number TICs found: 24 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 001120-21-4	Undecane	6.80	4000	JN
2.	unknown hydrocarbon	7.80	4100	J
3.	unknown hydrocarbon	7.94	8000	J
4.	unknown hydrocarbon	8.36	4400	J
5.	unknown hydrocarbon	8.55	11000	J
6.	unknown hydrocarbon	8.83	3900	J
7.	unknown hydrocarbon	8.95	3500	J
8.	unknown hydrocarbon	9.03	4200	J
9.	unknown hydrocarbon	9.44	6800	J
10.	unknown hydrocarbon	9.65	7400	J
11.	unknown hydrocarbon	10.53	6900	J
12.	unknown hydrocarbon	10.62	4000	J
13.	unknown hydrocarbon	11.02	4300	J
14.	unknown hydrocarbon	13.01	9900	J
15.	unknown hydrocarbon	13.38	3400	J
16.	unknown hydrocarbon	14.02	7700	J
17.	unknown hydrocarbon	14.85	3800	J
18.	unknown hydrocarbon	16.38	4400	J
19.	unknown hydrocarbon	16.79	3500	J
20.	unknown hydrocarbon	17.38	3700	J
21.	unknown hydrocarbon	17.69	5100	J
22.	unknown hydrocarbon	18.32	5400	J
23.	unknown hydrocarbon	19.71	3700	J
24.	unknown hydrocarbon	27.43	6200	J

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 BAG/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
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 bk 6/6

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.

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:

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	83000	E
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	67000	E
56-23-5	Carbon tetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B35S 2-3

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843510 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3495.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 16.7 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1500	U
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
75-69-4	Trichlorofluoromethane	1500	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	1500	U
75-35-4	1,1-Dichloroethene	1500	U
67-64-1	Acetone	1500	U
75-15-0	Carbon disulfide	1500	U
79-20-9	Methyl Acetate	1500	U
75-09-2	Methylene chloride	1500	U
1634-04-4	Methyl tert-Butyl Ether	1500	U
156-60-5	trans-1,2-Dichloroethene	81	J
75-34-3	1,1-Dichloroethane	480	J
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	10000	
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	16000	
110-82-7	Cyclohexane	1500	U
56-23-5	Carbon tetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	1400	J
108-87-2	Methylcyclohexane	1500	U
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
106-93-4	1,2-Dibromoethane	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B35S 2-3

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843510 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3495.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 16.7 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
108-38-3/106-42-3	(m+p)Xylene	1500	U
95-47-6	o-Xylene	240	J
100-42-5	Styrene	1500	U
98-82-8	Isopropylbenzene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
96-12-8	1,2-Dibromo-3-chloropropane	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B35S 2-3

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843510 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3495.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 16.7 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000111-84-2	Nonane	17.10	9600	JN
2. 000124-18-5	Decane	19.77	40000	JN
3. 002847-72-5	Decane, 4-methyl-	20.38	6000	JN
4.	unknown cyclic hydrocarbon	21.05	6400	J
5. 000493-02-7	Naphthalene, decahydro-, trans-	22.09	6200	JN
6. 001120-21-4	Undecane	22.21	26000	JN
7.	unknown cyclic hydrocarbon	22.64	8700	J
8.	unknown aromatic hydrocarbon	23.06	6600	J
9.	unknown aromatic hydrocarbon	23.25	6600	J
10. 002958-76-1	Naphthalene, decahydro-2-methy	23.41	11000	JN
11. 004292-92-6	Cyclohexane, pentyl-	23.50	7000	JN
12. 002958-76-1	Naphthalene, decahydro-2-methy	23.86	12000	JN
13. 000112-40-3	Dodecane	24.45	8500	JN
14.	unknown hydrocarbon	25.99	8500	J
15.	unknown aromatic hydrocarbon	26.28	7500	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

XXS DUP

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843511 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3496.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 15.7 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1500	U
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
75-69-4	Trichlorofluoromethane	1500	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	1500	U
75-35-4	1,1-Dichloroethene	82	J
67-64-1	Acetone	1500	U
75-15-0	Carbon disulfide	1500	U
79-20-9	Methyl Acetate	1500	U
75-09-2	Methylene chloride	1500	U
1634-04-4	Methyl tert-Butyl Ether	1500	U
156-60-5	trans-1,2-Dichloroethene	160	J
75-34-3	1,1-Dichloroethane	930	J
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	17000	
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	19000	
110-82-7	Cyclohexane	1500	U
56-23-5	Carbon tetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	1800	
108-87-2	Methylcyclohexane	1500	U
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
106-93-4	1,2-Dibromoethane	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

XXS DUP

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843511 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3496.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 15.7 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
108-38-3/106-42-3	(m+p)Xylene	1500	U
95-47-6	o-Xylene	200	J
100-42-5	Styrene	1500	U
98-82-8	Isopropylbenzene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
96-12-8	1,2-Dibromo-3-chloropropane	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

XXS DUP

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843511 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3496.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 15.7 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 15

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000111-84-2	Nonane	17.10	8600	JN
2. 005911-04-6	Nonane, 3-methyl-	19.06	4900	JN
3. 000124-18-5	Decane	19.77	37000	JN
4. 002847-72-5	Decane, 4-methyl-	20.37	5500	JN
5.	unknown cyclic hydrocarbon	21.05	5500	J
6. 001120-21-4	Undecane	22.20	24000	JN
7.	unknown cylclic hydrocarbon	22.63	8000	J
8.	unknown aromatic hydrocarbon	23.06	5300	J
9. 002958-76-1	Naphthalene, decahydro-2-methy	23.41	8700	JN
10. 004292-92-6	Cyclohexane, pentyl-	23.50	5800	JN
11. 002958-76-1	Naphthalene, decahydro-2-methy	23.86	9400	JN
12. 000112-40-3	Dodecane	24.45	7100	JN
13.	unknown hydrocarbon	25.98	7000	J
14.	unknown aromatic hydrocarbon	26.27	5800	J
15.	unknown aromatic hydrocarbon	26.43	5900	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B35S 7-8

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843512 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3464.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 12.4 Date Analyzed: 09/26/05

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/KG	Q	
75-71-8	Dichlorodifluoromethane	11	U	
74-87-3	Chloromethane	11	U	
75-01-4	Vinyl chloride	11	U	
74-83-9	Bromomethane	11	U	
75-00-3	Chloroethane	11	U	
75-69-4	Trichlorofluoromethane	11	U	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	11	U	
75-35-4	1,1-Dichloroethene	0.5	J	Ka 10/21/05
67-64-1	Acetone	13		
75-15-0	Carbon disulfide	11	U	
79-20-9	Methyl Acetate	11	U	
75-09-2	Methylene chloride	11	U	
1634-04-4	Methyl tert-Butyl Ether	11	U	
156-60-5	trans-1,2-Dichloroethene	11	U	
75-34-3	1,1-Dichloroethane	17		
78-93-3	2-Butanone	11	U	
156-59-2	cis-1,2-Dichloroethene	170		
67-66-3	Chloroform	11	U	
107-06-2	1,2-Dichloroethane	11	U	
71-55-6	1,1,1-Trichloroethane	12		
110-82-7	Cyclohexane	11	U	
56-23-5	Carbon tetrachloride	11	U	
71-43-2	Benzene	11	U	
79-01-6	Trichloroethene	51		
108-87-2	Methylcyclohexane	11	U	
78-87-5	1,2-Dichloropropane	11	U	
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	3	J	
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	
127-18-4	Tetrachloroethene	11	U	
591-78-6	2-Hexanone	11	U	
106-93-4	1,2-Dibromoethane	11	U	
108-90-7	Chlorobenzene	11	U	
100-41-4	Ethylbenzene	11	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B35S 7-8

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843512 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3464.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 12.4 Date Analyzed: 09/26/05

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/KG	Q
1330-20-7	(m+p)Xylene	11	U
95-47-6	o-Xylene	11	U
100-42-5	Styrene	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B35S 7-8

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843512 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3464.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 12.4 Date Analyzed: 09/26/05

GC Column: DB624 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

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B36S 7-8

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843513 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3490.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 17.1 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1500	U
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
75-69-4	Trichlorofluoromethane	1500	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	1500	U
75-35-4	1,1-Dichloroethene	1500	U
67-64-1	Acetone	1500	U
75-15-0	Carbon disulfide	1500	U
79-20-9	Methyl Acetate	1500	U
75-09-2	Methylene chloride	1500	U
1634-04-4	Methyl tert-Butyl Ether	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	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	1500	U
110-82-7	Cyclohexane	1500	U
56-23-5	Carbon tetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	1800	
108-87-2	Methylcyclohexane	1500	U
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
106-93-4	1,2-Dibromoethane	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B36S 7-8

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843513 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3490.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 17.1 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-38-3/106-42-3	(m+p)Xylene	1500	U
95-47-6	o-Xylene	1500	U
100-42-5	Styrene	1500	U
98-82-8	Isopropylbenzene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
96-12-8	1,2-Dibromo-3-chloropropane	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B36S 7-8

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843513 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3490.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 17.1 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B36S 9-10

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843514 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3487.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 17.4 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1500	U
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
75-69-4	Trichlorofluoromethane	1500	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	1500	U
75-35-4	1,1-Dichloroethene	1500	U
67-64-1	Acetone	1500	U
75-15-0	Carbon disulfide	1500	U
79-20-9	Methyl Acetate	1500	U
75-09-2	Methylene chloride	1500	U
1634-04-4	Methyl tert-Butyl Ether	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	1500	U
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	1900	
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	1500	U
110-82-7	Cyclohexane	1500	U
56-23-5	Carbon tetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	3400	
108-87-2	Methylcyclohexane	1500	U
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
106-93-4	1,2-Dibromoethane	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B36S 9-10

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843514 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3487.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 17.4 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-38-3/106-42-3	(m+p)Xylene	1500	U
95-47-6	o-Xylene	1500	U
100-42-5	Styrene	1500	U
98-82-8	Isopropylbenzene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
96-12-8	1,2-Dibromo-3-chloropropane	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B36S 9-10

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843514 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3487.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 17.4 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BU-B36-S(7-8)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843513 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG923.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 17.1 decanted:(Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/7/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	bis(-2-Chloroethyl)Ether	400	U
95-57-8	2-Chlorophenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
95-48-7	2-Methylphenol	400	U
621-24-7	N-Nitroso-Di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
106-44-5	4-Methylphenol	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(-2-Chloroethoxy)Methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
208-96-8	Acenaphthylene	400	U
131-11-3	Dimethyl Phthalate	400	U
606-20-2	2,6-Dinitrotoluene	400	U
83-32-9	Acenaphthene	400	U
99-09-2	3-Nitroaniline	1000	U
51-28-5	2,4-Dinitrophenol	1000	U
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
100-02-7	4-Nitrophenol	1000	U
86-73-7	Fluorene	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
84-66-2	Diethylphthalate	400	U
100-01-6	4-Nitroaniline	1000	U

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BU-B36-S(7-8)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843513 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG923.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 17.1 decanted:(Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/7/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
86-74-8	Carbazole	400	U
84-74-2	Di-n-Butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butyl benzyl phthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)Anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	43	J
117-84-0	Di-n-octyl phthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)Fluoranthene	400	U
50-32-8	Benzo(a)Pyrene	400	U
193-39-5	Indeno(1,2,3-cd)Pyrene	400	U
53-70-3	Dibenz(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)Perylene	400	U
1912-24-9	Atrazine	400	U
100-52-7	Benzaldehyde	400	U
98-86-2	Acetophenone	400	U
105-60-2	Caprolactam	1000	U
92-52-4	Biphenyl	400	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BU-B36-S(7-8)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843513 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG923.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 17.1 decanted: (Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/7/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

Number TICs found: 27 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	4.12	190	J B
2.	unknown	4.18	200	J B
3.	unknown	4.31	130	J B
4.	unknown	10.00	140	J
5.	unknown	10.21	120	J
6.	unknown	10.39	120	J
7.	unknown hydrocarbon	11.91	140	J
8.	unknown hydrocarbon	12.48	180	J
9.	unknown hydrocarbon	13.48	180	J
10.	unknown	14.32	100	J
11.	unknown	15.05	180	J
12.	unknown	15.18	120	J
13.	unknown	15.85	220	J
14.	unknown	16.81	130	J
15.	unknown amide	18.28	390	J B
16.	unknown	18.41	120	J
17.	unknown	19.13	130	J
18.	unknown	19.83	110	J
19.	unknown	20.25	120	J
20.	unknown	20.51	110	J
21.	unknown	21.30	210	J B
22.	unknown	21.93	3300	J B
23.	unknown hydrocarbon	22.05	190	J
24.	unknown hydrocarbon	22.96	130	J
25.	unknown hydrocarbon	24.01	130	J
26.	unknown	25.21	140	J
27.	unknown hydrocarbon	26.62	130	J

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BU-B36-S(9-10)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843514 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG924.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 17.4 decanted:(Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/7/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	bis(-2-Chloroethyl)Ether	400	U
95-57-8	2-Chlorophenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
95-48-7	2-Methylphenol	400	U
621-24-7	N-Nitroso-Di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
106-44-5	4-Methylphenol	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(-2-Chloroethoxy)Methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
208-96-8	Acenaphthylene	400	U
131-11-3	Dimethyl Phthalate	400	U
606-20-2	2,6-Dinitrotoluene	400	U
83-32-9	Acenaphthene	400	U
99-09-2	3-Nitroaniline	1000	U
51-28-5	2,4-Dinitrophenol	1000	U
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
100-02-7	4-Nitrophenol	1000	U
86-73-7	Fluorene	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
84-66-2	Diethylphthalate	400	U
100-01-6	4-Nitroaniline	1000	U

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BU-B36-S(9-10)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843514 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG924.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 17.4 decanted:(Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/7/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
86-74-8	Carbazole	400	U
84-74-2	Di-n-Butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butyl benzyl phthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)Anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	490	
117-84-0	Di-n-octyl phthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)Fluoranthene	400	U
50-32-8	Benzo(a)Pyrene	400	U
193-39-5	Indeno(1,2,3-cd)Pyrene	400	U
53-70-3	Dibenz(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)Perylene	400	U
1912-24-9	Atrazine	400	U
100-52-7	Benzaldehyde	400	U
98-86-2	Acetophenone	400	U
105-60-2	Caprolactam	1000	U
92-52-4	Biphenyl	400	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
BU-B36-S(9-10)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843514 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG924.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 17.4 decanted: (Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/7/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

Number TICs found: 29 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	4.11	180	J B
2.	unknown	4.18	200	J B
3.	unknown	4.31	120	J B
4.	unknown	8.01	110	J
5.	unknown hydrocarbon	8.29	110	J
6.	unknown hydrocarbon	9.10	140	J
7.	unknown	10.00	220	J
8.	unknown	10.39	160	J
9.	unknown hydrocarbon	11.91	220	J
10.	unknown hydrocarbon	12.48	240	J
11. 003031-15-0	Naphthalene, 1,2,3,4-tetramethyl	13.24	150	JN
12.	unknown hydrocarbon	13.48	240	J
13.	unknown	14.31	160	J
14.	unknown	14.67	120	J
15.	unknown	15.05	120	J
16.	unknown hydrocarbon	15.18	110	J
17.	unknown	15.37	140	J
18.	unknown	15.86	290	J
19.	unknown hydrocarbon	16.33	110	J
20.	unknown amide	18.28	370	J B
21.	unknown hydrocarbon	19.14	130	J
22.	unknown	19.83	130	J
23.	unknown	21.29	190	J B
24.	unknown	21.94	3200	J B
25.	unknown hydrocarbon	22.97	190	J
26.	unknown hydrocarbon	24.01	320	J
27.	unknown hydrocarbon	25.21	220	J
28.	unknown hydrocarbon	26.63	200	J
29.	unknown	28.29	200	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B39S 2.5-3

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843518 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3445.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 18.6 Date Analyzed: 09/23/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0 ka 10/21/05

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	61	U
74-87-3	Chloromethane	61	U
75-01-4	Vinyl chloride	61	U
74-83-9	Bromomethane	61	U
75-00-3	Chloroethane	61	U
75-69-4	Trichlorofluoromethane	61	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	61	U
75-35-4	1,1-Dichloroethene	5	J
67-64-1	Acetone	62	
75-15-0	Carbon disulfide	3	J
79-20-9	Methyl Acetate	61	U
75-09-2	Methylene chloride	3	J
1634-04-4	Methyl tert-Butyl Ether	61	U
156-60-5	trans-1,2-Dichloroethene	14	J
75-34-3	1,1-Dichloroethane	48	J
78-93-3	2-Butanone	61	U
156-59-2	cis-1,2-Dichloroethene	3100	E
67-66-3	Chloroform	61	U
107-06-2	1,2-Dichloroethane	61	U
71-55-6	1,1,1-Trichloroethane	200	
110-82-7	Cyclohexane	61	U
56-23-5	Carbon tetrachloride	61	U
71-43-2	Benzene	61	U
79-01-6	Trichloroethene	61	U
108-87-2	Methylcyclohexane	61	U
78-87-5	1,2-Dichloropropane	61	U
75-27-4	Bromodichloromethane	61	U
10061-01-5	cis-1,3-Dichloropropene	61	U
10061-02-6	trans-1,3-Dichloropropene	61	U
79-00-5	1,1,2-Trichloroethane	61	U
124-48-1	Dibromochloromethane	61	U
75-25-2	Bromoform	61	U
108-10-1	4-Methyl-2-pentanone	61	U
108-88-3	Toluene	61	U
127-18-4	Tetrachloroethene	61	U
591-78-6	2-Hexanone	61	U
106-93-4	1,2-Dibromoethane	61	U
108-90-7	Chlorobenzene	61	U
100-41-4	Ethylbenzene	61	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B39S 2.5-3

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843518 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3445.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 18.6 Date Analyzed: 09/23/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0 KA 10/31/05

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
1330-20-7	(m+p)Xylene	61	U
95-47-6	o-Xylene	61	U
100-42-5	Styrene	61	U
98-82-8	Isopropylbenzene	61	U
79-34-5	1,1,2,2-Tetrachloroethane	61	U
541-73-1	1,3-Dichlorobenzene	61	U
106-46-7	1,4-Dichlorobenzene	61	U
95-50-1	1,2-Dichlorobenzene	61	U
96-12-8	1,2-Dibromo-3-chloropropane	61	U
120-82-1	1,2,4-Trichlorobenzene	61	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B39S 2.5-3

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843518 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3445.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 18.6 Date Analyzed: 09/23/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0 ya 10/21/05

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.

B39S 2.5-3DL

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843518 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3491.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 18.6 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1500	U
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
75-69-4	Trichlorofluoromethane	1500	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	1500	U
75-35-4	1,1-Dichloroethene	1500	U
67-64-1	Acetone	1500	U
75-15-0	Carbon disulfide	1500	U
79-20-9	Methyl Acetate	1500	U
75-09-2	Methylene chloride	1500	U
1634-04-4	Methyl tert-Butyl Ether	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	1500	U
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	3300	D
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	1500	U
110-82-7	Cyclohexane	1500	U
56-23-5	Carbon tetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	1500	U
108-87-2	Methylcyclohexane	1500	U
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
106-93-4	1,2-Dibromoethane	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B39S 2.5-3DL

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843518 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3491.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 18.6 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-38-3/106-42-3	(m+p)Xylene	1500	U
95-47-6	o-Xylene	1500	U
100-42-5	Styrene	1500	U
98-82-8	Isopropylbenzene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
96-12-8	1,2-Dibromo-3-chloropropane	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B39S 2.5-3DL

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843518 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3491.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 18.6 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (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.

B39S 6-7

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843519 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3468.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 12.6 Date Analyzed: 09/26/05

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/KG

CAS NO.	COMPOUND		Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	11	U
75-35-4	1,1-Dichloroethene	11	U
67-64-1	Acetone	18	
75-15-0	Carbon disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene chloride	11	U
1634-04-4	Methyl tert-Butyl Ether	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	2	J
78-93-3	2-Butanone	3	J
156-59-2	cis-1,2-Dichloroethene	22	
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
71-55-6	1,1,1-Trichloroethane	2	J
110-82-7	Cyclohexane	11	U
56-23-5	Carbon tetrachloride	11	U
71-43-2	Benzene	11	U
79-01-6	Trichloroethene	20	
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
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	1	J
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
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B39S 6-7

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843519 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3468.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 12.6 Date Analyzed: 09/26/05

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/KG	Q
1330-20-7	(m+p)Xylene	11	U
95-47-6	o-Xylene	11	U
100-42-5	Styrene	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B39S 6-7

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843519 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3468.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 12.6 Date Analyzed: 09/26/05

GC Column: DB624 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.

B40S 6.5-7

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843520 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3441.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 13.1 Date Analyzed: 09/23/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0 KA 10/21/05

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

75-71-8	Dichlorodifluoromethane	58	U
74-87-3	Chloromethane	58	U
75-01-4	Vinyl chloride	11	J
74-83-9	Bromomethane	58	U
75-00-3	Chloroethane	58	U
75-69-4	Trichlorofluoromethane	58	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	58	U
75-35-4	1,1-Dichloroethene	33	J
67-64-1	Acetone	25	J
75-15-0	Carbon disulfide	58	U
79-20-9	Methyl Acetate	58	U
75-09-2	Methylene chloride	4	J
1634-04-4	Methyl tert-Butyl Ether	58	U
156-60-5	trans-1,2-Dichloroethene	13	J
75-34-3	1,1-Dichloroethane	240	
78-93-3	2-Butanone	58	U
156-59-2	cis-1,2-Dichloroethene	7500	E
67-66-3	Chloroform	58	U
107-06-2	1,2-Dichloroethane	58	U
71-55-6	1,1,1-Trichloroethane	220	
110-82-7	Cyclohexane	58	U
56-23-5	Carbon tetrachloride	58	U
71-43-2	Benzene	58	U
79-01-6	Trichloroethene	900	
108-87-2	Methylcyclohexane	58	U
78-87-5	1,2-Dichloropropane	58	U
75-27-4	Bromodichloromethane	58	U
10061-01-5	cis-1,3-Dichloropropene	58	U
10061-02-6	trans-1,3-Dichloropropene	58	U
79-00-5	1,1,2-Trichloroethane	16	J
124-48-1	Dibromochloromethane	58	U
75-25-2	Bromoform	58	U
108-10-1	4-Methyl-2-pentanone	58	U
108-88-3	Toluene	58	U
127-18-4	Tetrachloroethene	58	U
591-78-6	2-Hexanone	58	U
106-93-4	1,2-Dibromoethane	58	U
108-90-7	Chlorobenzene	58	U
100-41-4	Ethylbenzene	58	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B40S 6.5-7

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843520 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3441.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 13.1 Date Analyzed: 09/23/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0 RA 10/21/05

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
1330-20-7	(m+p)Xylene	58	U
95-47-6	o-Xylene	58	U
100-42-5	Styrene	58	U
98-82-8	Isopropylbenzene	58	U
79-34-5	1,1,2,2-Tetrachloroethane	58	U
541-73-1	1,3-Dichlorobenzene	58	U
106-46-7	1,4-Dichlorobenzene	58	U
95-50-1	1,2-Dichlorobenzene	58	U
96-12-8	1,2-Dibromo-3-chloropropane	58	U
120-82-1	1,2,4-Trichlorobenzene	58	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B40S 6.5-7

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843520 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3441.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 13.1 Date Analyzed: 09/23/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0 KA 10/21/05

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

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B40S 6.5-7DL

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843520 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3492.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 23.1 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1600	U
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
75-69-4	Trichlorofluoromethane	1600	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	1600	U
75-35-4	1,1-Dichloroethene	1600	U
67-64-1	Acetone	1600	U
75-15-0	Carbon disulfide	1600	U
79-20-9	Methyl Acetate	1600	U
75-09-2	Methylene chloride	1600	U
1634-04-4	Methyl tert-Butyl Ether	1600	U
156-60-5	trans-1,2-Dichloroethene	1600	U
75-34-3	1,1-Dichloroethane	190	J D
78-93-3	2-Butanone	1600	U
156-59-2	cis-1,2-Dichloroethene	8300	D
67-66-3	Chloroform	1600	U
107-06-2	1,2-Dichloroethane	1600	U
71-55-6	1,1,1-Trichloroethane	1600	U
110-82-7	Cyclohexane	1600	U
56-23-5	Carbon tetrachloride	1600	U
71-43-2	Benzene	1600	U
79-01-6	Trichloroethene	590	J D
108-87-2	Methylcyclohexane	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
106-93-4	1,2-Dibromoethane	1600	U
108-90-7	Chlorobenzene	1600	U
100-41-4	Ethylbenzene	1600	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B40S 6.5-7DL

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843520 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3492.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 23.1 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-38-3/106-42-3	(m+p)Xylene	1600	U
95-47-6	o-Xylene	1600	U
100-42-5	Styrene	1600	U
98-82-8	Isopropylbenzene	1600	U
79-34-5	1,1,2,2-Tetrachloroethane	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
95-50-1	1,2-Dichlorobenzene	1600	U
96-12-8	1,2-Dibromo-3-chloropropane	1600	U
120-82-1	1,2,4-Trichlorobenzene	1600	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B40S 6.5-7DL

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843520 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3492.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 23.1 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (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.

B40S 7.5-8

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843521 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3469.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 16.8 Date Analyzed: 09/26/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0 KA 10/21/05

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	60	U
74-87-3	Chloromethane	60	U
75-01-4	Vinyl chloride	60	U
74-83-9	Bromomethane	60	U
75-00-3	Chloroethane	60	U
75-69-4	Trichlorofluoromethane	60	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	60	U
75-35-4	1,1-Dichloroethene	60	U
67-64-1	Acetone	60	U
75-15-0	Carbon disulfide	60	U
79-20-9	Methyl Acetate	60	U
75-09-2	Methylene chloride	60	U
1634-04-4	Methyl tert-Butyl Ether	60	U
156-60-5	trans-1,2-Dichloroethene	60	U
75-34-3	1,1-Dichloroethane	8	J
78-93-3	2-Butanone	60	U
156-59-2	cis-1,2-Dichloroethene	580	
67-66-3	Chloroform	60	U
107-06-2	1,2-Dichloroethane	60	U
71-55-6	1,1,1-Trichloroethane	60	U
110-82-7	Cyclohexane	60	U
56-23-5	Carbon tetrachloride	60	U
71-43-2	Benzene	60	U
79-01-6	Trichloroethene	81	
108-87-2	Methylcyclohexane	60	U
78-87-5	1,2-Dichloropropane	60	U
75-27-4	Bromodichloromethane	60	U
10061-01-5	cis-1,3-Dichloropropene	60	U
10061-02-6	trans-1,3-Dichloropropene	60	U
79-00-5	1,1,2-Trichloroethane	7	J
124-48-1	Dibromochloromethane	60	U
75-25-2	Bromoform	60	U
108-10-1	4-Methyl-2-pentanone	60	U
108-88-3	Toluene	60	U
127-18-4	Tetrachloroethene	60	U
591-78-6	2-Hexanone	60	U
106-93-4	1,2-Dibromoethane	60	U
108-90-7	Chlorobenzene	60	U
100-41-4	Ethylbenzene	60	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B40S 7.5-8

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843521 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3469.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 16.8 Date Analyzed: 09/26/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0 5.0 Xa 10/21/05

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
1330-20-7	(m+p)Xylene	60	U
95-47-6	o-Xylene	60	U
100-42-5	Styrene	60	U
98-82-8	Isopropylbenzene	60	U
79-34-5	1,1,2,2-Tetrachloroethane	60	U
541-73-1	1,3-Dichlorobenzene	60	U
106-46-7	1,4-Dichlorobenzene	60	U
95-50-1	1,2-Dichlorobenzene	60	U
96-12-8	1,2-Dibromo-3-chloropropane	60	U
120-82-1	1,2,4-Trichlorobenzene	60	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B40S 7.5-8

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843521 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3469.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 16.8 Date Analyzed: 09/26/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: ~~1.0~~ 5.0 KA 10/21/05

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

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B42S 3.5-4

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843523 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3443.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 19.1 Date Analyzed: 09/23/05

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/KG	Q
75-71-8	Dichlorodifluoromethane	12	U
74-87-3	Chloromethane	12	U
75-01-4	Vinyl chloride	7	J
74-83-9	Bromomethane	12	U
75-00-3	Chloroethane	12	U
75-69-4	Trichlorofluoromethane	12	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	12	U
75-35-4	1,1-Dichloroethene	3	J
67-64-1	Acetone	19	
75-15-0	Carbon disulfide	1	J
79-20-9	Methyl Acetate	12	U
75-09-2	Methylene chloride	0.6	J
1634-04-4	Methyl tert-Butyl Ether	12	U
156-60-5	trans-1,2-Dichloroethene	3	J
75-34-3	1,1-Dichloroethane	32	
78-93-3	2-Butanone	12	U
156-59-2	cis-1,2-Dichloroethene	820	E
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
71-55-6	1,1,1-Trichloroethane	12	U
110-82-7	Cyclohexane	12	U
56-23-5	Carbon tetrachloride	12	U
71-43-2	Benzene	12	U
79-01-6	Trichloroethene	3	J
108-87-2	Methylcyclohexane	12	U
78-87-5	1,2-Dichloropropane	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	3	J
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
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B42S 3.5-4

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843523 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3443.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 19.1 Date Analyzed: 09/23/05

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/KG	Q
1330-20-7	(m+p)Xylene	12	U
95-47-6	o-Xylene	12	U
100-42-5	Styrene	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-chloropropane	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B42S 3.5-4

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843523 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3443.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 19.1 Date Analyzed: 09/23/05

GC Column: DB624 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

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B42S 3.5-4DL

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843523 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3466.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 19.1 Date Analyzed: 09/26/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 5.0

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	62	U
74-87-3	Chloromethane	62	U
75-01-4	Vinyl chloride	6	JD
74-83-9	Bromomethane	62	U
75-00-3	Chloroethane	62	U
75-69-4	Trichlorofluoromethane	62	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	62	U
75-35-4	1,1-Dichloroethene	4	JD
67-64-1	Acetone	23	JD
75-15-0	Carbon disulfide	62	U
79-20-9	Methyl Acetate	62	U
75-09-2	Methylene chloride	62	U
1634-04-4	Methyl tert-Butyl Ether	62	U
156-60-5	trans-1,2-Dichloroethene	62	U
75-34-3	1,1-Dichloroethane	37	JD
78-93-3	2-Butanone	62	U
156-59-2	cis-1,2-Dichloroethene	980	D
67-66-3	Chloroform	62	U
107-06-2	1,2-Dichloroethane	62	U
71-55-6	1,1,1-Trichloroethane	62	U
110-82-7	Cyclohexane	62	U
56-23-5	Carbon tetrachloride	62	U
71-43-2	Benzene	62	U
79-01-6	Trichloroethene	4	JD
108-87-2	Methylcyclohexane	62	U
78-87-5	1,2-Dichloropropane	62	U
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	3	JD
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
127-18-4	Tetrachloroethene	62	U
591-78-6	2-Hexanone	62	U
106-93-4	1,2-Dibromoethane	62	U
108-90-7	Chlorobenzene	62	U
100-41-4	Ethylbenzene	62	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B42S 3.5-4DL

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843523 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3466.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 19.1 Date Analyzed: 09/26/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 5.0

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
1330-20-7	(m+p)Xylene	62	U
95-47-6	o-Xylene	62	U
100-42-5	Styrene	62	U
98-82-8	Isopropylbenzene	62	U
79-34-5	1,1,2,2-Tetrachloroethane	62	U
541-73-1	1,3-Dichlorobenzene	62	U
106-46-7	1,4-Dichlorobenzene	62	U
95-50-1	1,2-Dichlorobenzene	62	U
96-12-8	1,2-Dibromo-3-chloropropane	62	U
120-82-1	1,2,4-Trichlorobenzene	62	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B42S 3.5-4DL

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843523 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3466.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 19.1 Date Analyzed: 09/26/05

GC Column: DB624 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: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B42S 7-8

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843524 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3493.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 18.5 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1500	U
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
75-69-4	Trichlorofluoromethane	1500	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	1500	U
75-35-4	1,1-Dichloroethene	1500	U
67-64-1	Acetone	1500	U
75-15-0	Carbon disulfide	1500	U
79-20-9	Methyl Acetate	1500	U
75-09-2	Methylene chloride	1500	U
1634-04-4	Methyl tert-Butyl Ether	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	170	J
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	5600	
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	170	J
110-82-7	Cyclohexane	1500	U
56-23-5	Carbon tetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	3400	
108-87-2	Methylcyclohexane	1500	U
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	49	J
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
106-93-4	1,2-Dibromoethane	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B42S 7-8

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843524 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3493.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 18.5 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
108-38-3/106-42-3	(m+p)Xylene	1500	U
95-47-6	o-Xylene	1500	U
100-42-5	Styrene	1500	U
98-82-8	Isopropylbenzene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
96-12-8	1,2-Dibromo-3-chloropropane	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B42S 7-8

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843524 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3493.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 18.5 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (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.

B43S 3-4

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843526 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3444.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 18.4 Date Analyzed: 09/23/05

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/KG	Q	
75-71-8	Dichlorodifluoromethane	12	U	
74-87-3	Chloromethane	12	U	
75-01-4	Vinyl chloride	45		
74-83-9	Bromomethane	12	U	
75-00-3	Chloroethane	12	U	
75-69-4	Trichlorofluoromethane	12	U	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	12	U	
75-35-4	1,1-Dichloroethene	2	J	
67-64-1	Acetone	8	J	
75-15-0	Carbon disulfide	12	U	
79-20-9	Methyl Acetate	12	U	
75-09-2	Methylene chloride	0.6	J	ka 10/21/05
1634-04-4	Methyl tert-Butyl Ether	12	U	
156-60-5	trans-1,2-Dichloroethene	4	J	
75-34-3	1,1-Dichloroethane	28		
78-93-3	2-Butanone	12	U	
156-59-2	cis-1,2-Dichloroethene	800	E	
67-66-3	Chloroform	12	U	
107-06-2	1,2-Dichloroethane	12	U	
71-55-6	1,1,1-Trichloroethane	12	U	
110-82-7	Cyclohexane	12	U	
56-23-5	Carbon tetrachloride	12	U	
71-43-2	Benzene	12	U	
79-01-6	Trichloroethene	2	J	
108-87-2	Methylcyclohexane	12	U	
78-87-5	1,2-Dichloropropane	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	
127-18-4	Tetrachloroethene	12	U	
591-78-6	2-Hexanone	12	U	
106-93-4	1,2-Dibromoethane	12	U	
108-90-7	Chlorobenzene	12	U	
100-41-4	Ethylbenzene	12	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B43S 3-4

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843526 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3444.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 18.4 Date Analyzed: 09/23/05

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/KG	Q
1330-20-7	(m+p)Xylene	12	U
95-47-6	o-Xylene	12	U
100-42-5	Styrene	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-chloropropane	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B43S 3-4

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843526 1.0

Sample wt/vol: 5.0 (g/ml) G Lab File ID: B3444.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 18.4 Date Analyzed: 09/23/05

GC Column: DB624 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

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B43S 3-4DL

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843526 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3467.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 18.4 Date Analyzed: 09/26/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 5.0

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	61	U
74-87-3	Chloromethane	61	U
75-01-4	Vinyl chloride	25	JD
74-83-9	Bromomethane	61	U
75-00-3	Chloroethane	61	U
75-69-4	Trichlorofluoromethane	61	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	61	U
75-35-4	1,1-Dichloroethene	61	U
67-64-1	Acetone	16	JD
75-15-0	Carbon disulfide	61	U
79-20-9	Methyl Acetate	61	U
75-09-2	Methylene chloride	61	U
1634-04-4	Methyl tert-Butyl Ether	61	U
156-60-5	trans-1,2-Dichloroethene	61	U
75-34-3	1,1-Dichloroethane	25	JD
78-93-3	2-Butanone	61	U
156-59-2	cis-1,2-Dichloroethene	790	D
67-66-3	Chloroform	61	U
107-06-2	1,2-Dichloroethane	61	U
71-55-6	1,1,1-Trichloroethane	61	U
110-82-7	Cyclohexane	61	U
56-23-5	Carbon tetrachloride	61	U
71-43-2	Benzene	61	U
79-01-6	Trichloroethene	61	U
108-87-2	Methylcyclohexane	61	U
78-87-5	1,2-Dichloropropane	61	U
75-27-4	Bromodichloromethane	61	U
10061-01-5	cis-1,3-Dichloropropene	61	U
10061-02-6	trans-1,3-Dichloropropene	61	U
79-00-5	1,1,2-Trichloroethane	61	U
124-48-1	Dibromochloromethane	61	U
75-25-2	Bromoform	61	U
108-10-1	4-Methyl-2-pentanone	61	U
108-88-3	Toluene	61	U
127-18-4	Tetrachloroethene	61	U
591-78-6	2-Hexanone	61	U
106-93-4	1,2-Dibromoethane	61	U
108-90-7	Chlorobenzene	61	U
100-41-4	Ethylbenzene	61	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B43S 3-4DL

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843526 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3467.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 18.4 Date Analyzed: 09/26/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 5.0

Soil Extract Volume _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
1330-20-7	(m+p)Xylene	61	U
95-47-6	o-Xylene	61	U
100-42-5	Styrene	61	U
98-82-8	Isopropylbenzene	61	U
79-34-5	1,1,2,2-Tetrachloroethane	61	U
541-73-1	1,3-Dichlorobenzene	61	U
106-46-7	1,4-Dichlorobenzene	61	U
95-50-1	1,2-Dichlorobenzene	61	U
96-12-8	1,2-Dibromo-3-chloropropane	61	U
120-82-1	1,2,4-Trichlorobenzene	61	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B43S 3-4DL

Lab Name: 10145 Contract: STANTEC

Lab Code: CAS-ROC Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843526 5.0

Sample wt/vol: 1.0 (g/ml) G Lab File ID: B3467.D

Level: (low/med) LOW Date Received: 09/20/05

% Moisture: not dec. 18.4 Date Analyzed: 09/26/05

GC Column: DB624 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: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B43S 7-8

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843529 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3494.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 18 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1500	U
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
75-69-4	Trichlorofluoromethane	1500	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroeth	1500	U
75-35-4	1,1-Dichloroethene	1500	U
67-64-1	Acetone	1500	U
75-15-0	Carbon disulfide	1500	U
79-20-9	Methyl Acetate	1500	U
75-09-2	Methylene chloride	1500	U
1634-04-4	Methyl tert-Butyl Ether	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
75-34-3	1,1-Dichloroethane	1500	U
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	2200	
67-66-3	Chloroform	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-55-6	1,1,1-Trichloroethane	1500	U
110-82-7	Cyclohexane	1500	U
56-23-5	Carbon tetrachloride	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	230	J
108-87-2	Methylcyclohexane	1500	U
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
106-93-4	1,2-Dibromoethane	1500	U
108-90-7	Chlorobenzene	1500	U
100-41-4	Ethylbenzene	1500	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B43S 7-8

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843529 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3494.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 18 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
108-38-3/106-42-3	(m+p)Xylene	1500	U
95-47-6	o-Xylene	1500	U
100-42-5	Styrene	1500	U
98-82-8	Isopropylbenzene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
96-12-8	1,2-Dibromo-3-chloropropane	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B43S 7-8

Lab Name: CAS-ROC Contract: STANTEC

Lab Code: 10145 Case No.: R5-27877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843529 125

Sample wt/vol: 4.0 (g/ml) G Lab File ID: B3494.D

Level: (low/med) MED Date Received: 09/20/05

% Moisture: not dec. 18 Date Analyzed: 09/27/05

GC Column: DB624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume 10000 (uL) Soil Aliquot Volume: 1000 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BU-B43-S(3-4)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843526 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG927.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 18.4 decanted:(Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/8/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410	U
111-44-4	bis(-2-Chloroethyl)Ether	410	U
95-57-8	2-Chlorophenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
95-48-7	2-Methylphenol	410	U
621-24-7	N-Nitroso-Di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
106-44-5	4-Methylphenol	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(-2-Chloroethoxy)Methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
208-96-8	Acenaphthylene	410	U
131-11-3	Dimethyl Phthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U
83-32-9	Acenaphthene	410	U
99-09-2	3-Nitroaniline	1000	U
51-28-5	2,4-Dinitrophenol	1000	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
100-02-7	4-Nitrophenol	1000	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
84-66-2	Diethylphthalate	410	U
100-01-6	4-Nitroaniline	1000	U

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BU-B43-S(3-4)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843526 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG927.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 18.4 decanted:(Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/8/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-Butylphthalate	410	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	U
85-68-7	Butyl benzyl phthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)Anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	72	J
117-84-0	Di-n-octyl phthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)Fluoranthene	410	U
50-32-8	Benzo(a)Pyrene	410	U
193-39-5	Indeno(1,2,3-cd)Pyrene	410	U
53-70-3	Dibenz(a,h)anthracene	410	U
191-24-2	Benzo(g,h,i)Perylene	410	U
1912-24-9	Atrazine	410	U
100-52-7	Benzaldehyde	410	U
98-86-2	Acetophenone	410	U
105-60-2	Caprolactam	1000	U
92-52-4	Biphenyl	410	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
BU-B43-S(3-4)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843526 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG927.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 18.4 decanted: (Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/8/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 14 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	3.96	85	J
2.	unknown	4.11	230	JB
3.	unknown	4.17	240	JB
4.	unknown	4.21	88	J
5.	unknown	4.30	160	JB
6.	unknown	10.14	170	JB
7. 1000245-63-8	2-Propenoic acid, n-tridecyl ester	12.34	130	JNB
8.	unknown hydrocarbon	19.81	82	J
9.	unknown hydrocarbon	20.49	84	J
10.	unknown	21.14	90	JB
11.	unknown	21.62	85	J
12.	unknown	21.92	4500	JB
13.	unknown	22.02	190	J
14.	unknown	23.99	210	J

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BU-B43-S(7-8)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843529 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG928.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 18 decanted:(Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/8/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410	U
111-44-4	bis(-2-Chloroethyl)Ether	410	U
95-57-8	2-Chlorophenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
95-48-7	2-Methylphenol	410	U
621-24-7	N-Nitroso-Di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
106-44-5	4-Methylphenol	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(-2-Chloroethoxy)Methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
208-96-8	Acenaphthylene	410	U
131-11-3	Dimethyl Phthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U
83-32-9	Acenaphthene	410	U
99-09-2	3-Nitroaniline	1000	U
51-28-5	2,4-Dinitrophenol	1000	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
100-02-7	4-Nitrophenol	1000	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
84-66-2	Diethylphthalate	410	U
100-01-6	4-Nitroaniline	1000	U

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BU-B43-S(7-8)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843529 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG928.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 18 decanted:(Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/8/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-Butylphthalate	410	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	U
85-68-7	Butyl benzyl phthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)Anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	46	J
117-84-0	Di-n-octyl phthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)Fluoranthene	410	U
50-32-8	Benzo(a)Pyrene	410	U
193-39-5	Indeno(1,2,3-cd)Pyrene	410	U
53-70-3	Dibenz(a,h)anthracene	410	U
191-24-2	Benzo(g,h,i)Perylene	410	U
1912-24-9	Atrazine	410	U
100-52-7	Benzaldehyde	410	U
98-86-2	Acetophenone	410	U
105-60-2	Caprolactam	1000	U
92-52-4	Biphenyl	410	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
BU-B43-S(7-8)

Lab Name: CAS-ROCH Contract: STANTEC

Lab Code: 10145 Case No.: R527877 SAS No.: _____ SDG No.: 843510

Matrix: (soil/water) SOIL Lab Sample ID: 843529 1.0

Sample wt/vol: 30 (g/ml) G Lab File ID: CG928.D

Level: (low/med) LOW Date Received: 9/20/05

% Moisture: 18 decanted: (Y/N) N Date Extracted: 9/28/05

Concentrated Extract Volume: 500 (uL) Date Analyzed: 10/8/05

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

Number TICs found: 18 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	3.96	89	J
2.	unknown	4.11	230	J B
3.	unknown	4.17	270	J B
4.	unknown	4.31	160	J B
5.	unknown	4.43	82	J
6.	unknown	10.19	120	J B
7. 1000245-63-8	2-Propenoic acid, n-tridecyl ester	12.35	130	JN B
8.	unknown hydrocarbon	17.63	96	J
9.	unknown hydrocarbon	18.38	130	J
10.	unknown hydrocarbon	19.11	130	J
11.	unknown hydrocarbon	19.81	140	J
12.	unknown hydrocarbon	20.49	130	J
13.	unknown hydrocarbon	21.23	100	J
14.	unknown hydrocarbon	21.92	4200	J B
15.	unknown	22.03	180	J
16.	unknown hydrocarbon	22.94	100	J
17.	unknown	23.98	100	J
18.	unknown	25.18	89	J

APPENDIX D, Part 2

(for the Work Plan for the FLDA Remedial Excavation)

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A, 12th Floor
625 Broadway, Albany, New York 12233-7015
Phone: (518) 402-9625 • **Fax:** (518) 402-9627
Website: www.dec.ny.gov

Joe Martens
Commissioner

JUL 05 2013

Mr. Michael P. Storonsky (mike.storonsky@stantec.com)
Managing Principal
Stantec Consulting Services, Inc.
61 Commercial Street
Rochester NY 14614

Re: Contained-In Demonstration Work Plan for Remedial Excavation
Brownfield Cleanup Program Site # C828114
Buell Automatics Site
381 Buell Road, Gates, New York, Monroe County

Dear Mr. Storonsky:

This office has reviewed the proposed "Contained-in" Request received on July 2, 2013. The "Contained-In" Demonstration Work Plan is acceptable. The "Contained-In" Determination will be performed once the soil sampling data for each segregated staged pile is submitted to this office.

Once we have reviewed the analytical data results for each individual pile, we will send you an approval "Contained-In" determination letter. Please provide this office the name and address of the permitted 360 solid waste facility that will receive it.

Should you have any questions regarding the content of this letter, please do not hesitate to contact me at (518) 402-9622 or email me at hjwilkie@gw.dec.state.ny.us.

Sincerely,

Henry Wilkie
Environmental Engineer 1
Remedial Section B

ecc: F. Sowers, DER Region 8
B. Putzig, DER Region 8
M. Sergott, NYSDOH