

Former Brown Manufacturing Site

NYSDEC Brownfields Project No. B-00024-7

101 Chester Street Syracuse, New York

January 2003

Prepared For:

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1.0 INTRODUCTION

1.1 Site Location and Description

The Former Brown Manufacturing Site is presently a vacant lot (<1 acre) located at 101 Chester Street in the City of Syracuse situated at the southeast corner of the intersection of Chester Street and Bellevue Avenue (see Figure 1-1). The site is bordered to the north by Bellevue Avenue, to the south by residential properties along Chester Street, to the east by residential properties along Huron Street, and to the west by Chester Street (see Figure 1-2). The site is a generally flat parcel of land partially covered with grass, concrete, stone, and asphalt. The northeast portion of the site is surfaced with a combination of concrete, stone, and asphalt. A row of trees and a chain-link fence are located along the east property boundary.

1.2 Site Background and History

Following a fire which occurred at the site on August 21, 1981, approximately 100 drums of waste oil, a waste oil disposal pit, a quenching trough (open-ended, underground storage tank), and a ruptured electrical transformer were identified at the site. Testing performed at the site in August and September of 1981 identified the presence of polychlorinated biphenyl (PCB) waste oils and PCB-contaminated concrete and soil. In October 1981, CECOS International, an environmental remediation contractor, apparently removed and disposed of the drums of PCB waste oil, the PCB waste oil/sludge in the disposal pit, the quenching trough and its contents, the PCB-contaminated concrete and soil, and the ruptured electrical transformer. Beardsley Design Associates' (BDA) review of newspaper articles and correspondence, as well as interviews with persons knowledgeable with the events that occurred at the site in 1981, indicated that no post-remediation PCB soil testing was performed at the site to assess the effectiveness of the remediation activities that were conducted.

Furthermore, based on BDA's review/interviews, a waste oil disposal pit may have been located in the "backyard" of the 110 Huron Street property (east of and adjacent to the site). A surface depression was observed in the backyard of the 110 Huron Street property containing settled backfill that could have been the former location of the 12' x 12' waste oil disposal pit which was described in the correspondence and newspaper articles reviewed by BDA.

In addition, real estate information reviewed by BDA indicated that the site included the 110 Huron Street property until 1988, at which time the 110 Huron Street property was obtained by the City of Syracuse by tax deed and then sold as a separate parcel. BDA reviewed newspaper articles obtained from the City of Syracuse Office of the Corporation Counsel. Relevant information contained in the newspaper articles is summarized below.

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<u>Date</u> 8/22/81	<u>Source</u> Herald-Journal	Summary of Relevant Information Fire occurred at abandoned Brown Corporation factory located at 213 Bellevue Avenue, which previously manufactured automobile parts.
9/15/81	Post-Standard	One of 80 barrels found at the site exhibited 5,000 ppm of PCBs.
10/6/81	Post-Standard	Henry Brown owned the factory until 1968; Truck axles, gears, and other parts were manufactured at the factory that occupied the site; Liquids sampled from a shallow waste oil disposal pit were found to contain 4,800 ppm PCB; Officials found an industrial capacitor at the site that was contaminated with PCBs.
10/6/81	Post-Standard	Samples of cinderblock fragments and oil from a quenching trough showed PCB concentrations between 100 ppm and 200 ppm; A 12' x 12' pit at the site was apparently used for disposal of waste oil; A soil sample from the yard at 114 Huron Street showed no PCBs.
10/23/81	Post-Standard	Scheduled for removal and disposal are several yards of soil in a disposal pit, a large quenching trough, several contaminated cinderblocks, and about 100 barrels of oil.
10/24/81	Post-Standard	The contract for removal and disposal of the PCB contamination will be carried out by CECOS International and is scheduled to begin 10/26/81.
10/27/81	Herald-Journal	About 100 barrels of waste will be solidified for transport to a secure landfill in Niagara Falls; Soil will be excavated from the waste oil disposal pit at the rear of the building that nearly borders a residence, but has been fenced off.
10/29/81	Herald-Journal	Excavation and testing will continue until non-contaminated soil is identified or until groundwater is encountered; The PCB waste oil would only seep slowly through the earth and is not water soluble; The possibility exists that oil contamination may have entered the water table.
10/29/81	Post-Standard	The walls of the waste oil disposal pit may have cracked and some of the contaminated waste could have leaked into the soil.
10/30/81	Post-Standard	Workers removed ±20 cubic yards of contaminated soil from
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the waste oil disposal pit; DEC will have to test the waste oil
disposal pit after it is cleaned to see if any of the waste oils
leached into the soil.

11/3/81 Post-Standard

Re-testing of the area is contingent on whether there is money left once CECOS completes the removal and disposal of the hazardous material; If the money runs out, the pit won't get tested and neither will the soil where the barrels were located

until additional money is made available.

Post-Standard Unknown

Following the cleanup activities, four soil samples collected from the former waste oil disposal pit area yielded PCB concentrations below 50 ppm, and two soil samples collected from the ground where 80 barrels of waste oil had been stored yielded PCB concentrations of 93,000 ppm and 160 ppm; The DEC indicated that additional soil samples should be collected to determine how deep the PCBs have penetrated into the property subsurface soils.

BDA reviewed reports obtained from the City of Syracuse Office of the Corporation Counsel. Relevant information contained in the reports is summarized below.

<u>Date</u> 8/21/81	Report Fire Investigation Report	Summary of Relevant Information Fire occurred at the structure that is reportedly owned by Morris Goldfeld; Site has been vacant for approximately 10 years; Fire appears to have been set intentionally using a flammable liquid; Entire structure was damaged.
9/11/81	Galson Report	Report to John Fietze at the NYSDOT showing PCB results for 49 samples collected from the site on 8/24/81; Samples included sludge, sediment, and oil samples; Results ranged from <5 ppm to 4,800 ppm PCB.
10/14/81	Galson Report	Report to John Fietze at the NYSDOT showing PCB results for a soil sample collected from 114 Huron Street, and an oil sample and a sludge sample collected from the site; The soil sample collected from 114 Huron Street contained <0.1 ppm PCB, the oil sample contained 224 ppm PCB, and the sludge sample 117 ppm PCB.
11/5/81	O'Brien & Gere Report	Report to John Fietze at the NYSDOT showing PCB results for 45 samples of waste oil collected from drums at the site on 9/17/81; PCBs were only detected in one drum (Drum 43), 7 ppm of PCB Aroclor 1254.

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Based on BDA's review of the newspaper articles and reports as summarized above, the following persons were interviewed to obtain new information or to confirm existing information about the about the events which occurred at the site:

Person Interviewed Results of Interview

John Corbett, Mr. Corbett recalled 1981 fire and confirmed the Former Fire Investigator location of the former building and the location of

> drums/barrels; He could not recall the exact location of waste oil disposal pit, but indicated that it was located somewhere

> > behind the building, on the east side of the site.

Richard Brickwedde, Esq.,

Mr. Brickwedde recalled that the drums/barrels Former DEC Attorney and area of contamination were located behind (east) the former building; to the best of his

recollection the waste oil disposal pit was located on the rear (west side) of an adjacent

property located on Huron Street.

Thomas Suozzo, DEC Engineer

Mr. Suozzo could not recall what became of the site after the initial clean-up work was completed; In addition, he was not aware of any post-remedial soil sampling or testing

conducted at the site, and stated that residual PCB contamination could still remain in subsurface soils.

Topography and Drainage

A United States Geologic Survey (USGS) map including the site (Syracuse West, NY, Photo revised 1978) indicated that the site is at an elevation of ±400 feet. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps indicate that the site is not located within or immediately adjacent to a 100-year or 500-year flood plain. BDA's review of USGS maps, as well as our observation of the site and surrounding areas, suggest that groundwater flows in a south/southeasterly direction towards Onondaga Creek which is ±600 feet from the site.

1.4 Geology and Hydrogeology

1.4.1 Regional Geologic Setting

Review of surficial geologic mapping indicates that the unconsolidated soils in the vicinity of the site consist of a thin layer of lacustrine silt and clay, underlain by glacial till. The thickness of these types of unconsolidated deposits is typically variable in the immediate vicinity of the City. The site is located near the border of two (2) physiogeographic provinces within New York State - the Ontario Lowlands to the north and the Appalachian Uplands to the south. The Ontario Lowlands slope toward the north and represent the southern extension of the Lake Ontario drainage basin, while the northern margin of the Appalachian Uplands includes the Finger Lakes troughs. The geology of the area in which the site is located consists of bedrock and overburden deposits. Bedrock in Central New

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York is dominated by flat-lying Sulurian-age and Devonian-age sedimentary rocks which exhibit a slight southerly dip of approximately 100 feet per mile. The Onondaga Lake Valley is underlain by the Vermon Formation which is a soft shale. The Vernon Formation is overlain by the Syracuse and Camillus Formations. The Syracuse Formation consists of shale, dolostones, gypsum, and rock salt. The Camillus Formation consists of soft, dolomitic shale and thin, gypsiferous shale. The bedrock in the vicinity of the site consists of the Camillus Formation.

The pre-glacial bedrock beneath the site was modified by overriding Pleistocene glaciers. Deepening of the Onondaga Valley by glacial ice, in manner similar to that which formed the Finger Lakes and surrounding valleys, produced a bedrock basin extending below sea level. Glacial sculpting of the area has produced a pronounced north-northwest to south-southeast orientation of hills and valleys.

This orientation is partly the result of erosion of the underlying bedrock by glacial ice and till deposits into elliptical hills known as drumlins, which are predominantly composed of till. Till is typically a compact, unsorted, and poorly stratified mixture of sands, silt, clay, gravel, and boulders deposited by glacial ice. A layer of till 10 to 15 feet thick overlies bedrock in the area of the site.

During glacial retreat in the Onondaga Valley, pre-glacial drainage to the north was blocked by an ice front producing a proglacial lake in which significant quantities of glaciolacustrine sediments were deposited. Drainage in adjacent north-south valleys, to the east and west of the Onondaga Valley, was also blocked by the ice front producing a series of lakes standing against the ice. As the level of the lakes rose, they utilized the lowest available drainage pathway which was predominantly to the south, over relatively high spillways or to the east or west over inter-valley divides. The large volumes of meltwater from the ice, spilling from one basin to another, cut numerous east-west trending channels into the valley divides. With the decay of the ice, lower spillways opened resulting in drainage of the proglacial lakes and the establishment of the existing system of lakes and surface drainage in the area. During the time the proglacial lakes existed, they accumulated large volumes of sediment washed out from the ice and from the channels crossing the valley divides. These sediments consist primarily of fine sand and silt. Gravel, sand, and clay, however, are also present in some locations. Surficial soil deposits near the site have been mapped as lacustrine silt and clay, likely deposited as a result of the proglacial lakes.

1.4.2 Regional Hydrogeologic Setting

The site is located within the Onondaga Lake drainage basin, which covers approximately 230 square miles and is part of the larger Eastern Oswego River drainage basin, which covers approximately 2,500 square miles. Surface water drains north from the Onondaga Lake drainage basin into the Seneca River, into the Oswego River, and then into Lake Ontario. Surface water in the area of the site is influenced by Onondaga Lake and its tributaries. The tributary nearest to the site is Onondaga Creek, which is located ±600 feet south/southeast from the site. Onondaga Creek, which flows from south to north through

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the Onondaga Valley and the City of Syracuse into Onondaga Lake, drains a watershed of approximately 100 square miles and has an average annual flow rate of approximately 190 cubic feet per second (cfs), before it discharges into the south end of Onondaga Lake. Onondaga Creek has been relocated from its former discharge point which was once located at the southeast corner of Onondaga Lake.

The geology of the Onondaga Valley has a significant impact on the movement of groundwater in the valley and its tributaries. Groundwater flow in Onondaga Valley and its tributaries is primarily driven by topography. Water flowing from the valley divides into the surface and groundwater systems within each tributary valley. Surface and groundwater then flow towards Onondaga Lake. The flow patterns, velocities, and the groundwater/surface water ratio in each tributary valley are dependent on the local geologic conditions within each valley. The site does not appear to directly overlie any aquifers and does not appear to be located near any primary or principal water supply aquifers as classified by the NYSDEC. A surficial aquifer is located approximately five miles south of the site.

Regional bedrock geologic mapping indicates that bedrock underlying the site consists of the Syracuse Formation, of Upper Silurian Age, which includes dolostone, shale, gypsum, and salt stratigraphic units. Consistent with the topographic setting of the site, shallow groundwater flow in the area of the site would be perceived to flow across the site from the south to the north, in a direction toward Onondaga Creek. Groundwater within the deeper bedrock generally occurs within fractures, joint sets, and bedding planes which are commonly enlarged due to dissolution of carbonates and evaporites. There is reportedly no private or municipal groundwater wells used to supply potable water within a four-mile radius of the site. The residents within a four-mile radius of the site receive their domestic water from municipal service connections supplied by the City of Syracuse Water System, the Onondaga County Water Authority, or the Metropolitan Water Board. These agencies receive their water from surface water intakes on Lakes Otisco, Skaneateles, and/or Ontario.

1.5 Review of Existing Data

1.5.1 Soil Sampling Conducted Following 1981 Fire

BDA reviewed a Post-Standard newspaper article (date unknown) which indicated that, following the cleanup activities (circa November 1981), six soil samples were collected from the site. Four soil samples collected from the former waste oil disposal pit area exhibited PCB concentrations below 50 ppm, and two soil samples collected from the area where 80 barrels of waste oil had been stored yielded PCB concentrations of 93,000 ppm and 160 ppm. From the available information reviewed by BDA, there was no indication of other "post-remediation" soil sampling or testing conducted at the site.

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1.5.2 Soil Sampling Conducted by Beardsley Design

Under separate contract with the City of Syracuse, BDA collected composite soil samples from the site on October 25, 1995 (see Figure 1-3). The composite soil samples were submitted for PCB, polychlorinated dibenzo-dioxin (PCDDs), and polychlorinated dibenzofuran (PCDFs) analysis. The soil sampling was based on EPA Document 560/5-85-026 ("Verification of PCB Spill Cleanup by Sampling & Analysis"), which is a statistically-based method developed for determining if PCB spills have been properly remediated. This method typically requires samples to be collected from a known PCB spill area, including adjacent areas around the PCB spill area. The soil sampling methodology recommended by EPA Document 560/5-85-026 was slightly modified, however, to include sampling of soil from the subject property only. Thus, no soil sampling was conducted at adjacent properties. As a result, the modified soil sampling conducted by BDA in October 1995 was performed only for the purpose of "screening" surficial soils at the site for PCBs, PCDDs, and PCDFs. The soil sampling performed by BDA included the collection of soil samples from 19 locations at the site. Each soil sample was collected from a depth of approximately six inches below using a hand auger. Five composite samples were formed from the soil samples collected and each composite sample was analyzed as follows:

Composite	<u>Samples</u>	<u>Analysis</u>
1	1, 2, 15, 16, 17	PCBs
2	3, 4, 8, 9, 14	PCBs
3	10, 11, 12, 13	PCBs
4	5, 6, 7, 18, 19	PCBs
5	1, 2, 15, 16, 17	PCDDs, PCDFs

Upstate Laboratories, Inc. analyzed Composite Samples 1, 2, 3, and 4 for PCBs (Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260) using EPA Method 8080. The PCB laboratory analysis results for Composite Samples 1, 2, 3, and 4 are summarized below.

Summary of PCB Aroclor Analyses

Composite	Samples	<u>1016</u>	<u>1221</u>	1232	1242	1248	1254	1260
1	1, 2, 15, 16, 17	ND	ND	ND	ND	ND	ND	ND
2	3, 4, 8, 9, 14	ND	ND	ND	ND	3 ppm	ND	ND
3	10, 11, 12, 13	ND	ND	ND	ND	ND	ND	ND
4	5, 6, 7, 18, 19	ND	ND	ND	ND	ND	ND	ND

Note: ND = Not Detected

As indicated, PCBs were detected in composite soil sample #2 that was formed from five individual soil samples collected from the south portion of the site in an area which appears to have been occupied by the south portion of the former Brown Manufacturing Building (west of residential lots located at 112 Huron Street and 114 Huron Street). Triangle Laboratories, Inc. analyzed composite soil sample #5 for PCDDs and PCDFs using EPA Method 8280. The PCDD and PCDF

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laboratory analysis results for composite soil sample #5 are summarized below.

Summary of PCDD/PCDF Analyses

Composite	Samples	TCDD	PeCDD	<u>HxCDD</u>	<u>HpCDD</u>	\underline{TCDF}	<u>PeCDF</u>	\underline{HxCDF}	<u>HPCDF</u>
5	1, 2, 15, 16,	17 ND	ND	ND	ND	ND	ND	ND	ND
MDLs	. ,	< 0.168	<1.17	< 0.252	< 0.337	< 0.144	< 0.685	< 0.192	< 0.0361

Note: MDLs = Method Detection Limits

As indicated, no PCDDs or PCDFs were detected in the composite soil sample #5 above the MDLs shown.

Following the 1981 fire at the site, the waste oil disposal pit, was apparently excavated and backfilled. However, no post-remediation soil sampling/testing was conducted to determine if residual PCBs were present in the subsurface soils at the site and/or at adjacent properties. Based on previous use of the site for the manufacture of automobile parts, the existence of PCB wastes/contamination following the 1981 fire at the site, and the presence of PCBs identified in the composite soil sample #2, it was interpreted that soil and/or groundwater at the site may be contaminated with PCBs, metals, and/or petroleum compounds.

Section 2.0 discusses Site Investigation activities that were performed at the site, including the collection and analysis of soil and groundwater samples, to assess the nature and extent of contamination that exists at the site. The soil and groundwater samples collected were analyzed for PCBs, Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), and Target Analyte List (TAL) metals.

1.6 SI/RA Approach

Site Investigations

Initial Site Investigation (SI) efforts included the completion of site reconnaissance efforts to identify obvious areas of environmental concern at the site. Initial (Phase 1) site investigation efforts included the completion of a series of shallow hand borings (HB) within the area identified as NYSDOH Hotspot. A series of equally spaced Geoprobe borings (GP) were then completed to characterize subsurface conditions at the site property. A series of Phase-1 subsurface test trenches (T) were then completed within specific site areas where subsurface contamination was anticipated or encountered during the completion of initial site reconnaissance and Geoprobe boring efforts. Groundwater monitoring wells (MW) were installed at five locations near the site perimeter and former building foundation to assess potential impacts to the shallow groundwaters proximate to the site that may have occurred as a result of previous site operations.

After review and interpretation of initial (Phase 1) Site Investigation field and analytical data, a series of supplemental Phase-2A (on-site) test trenches were completed within the site property to identify or confirm the extent of potential contamination previously identified. In an effort to identify potential adjacent off-site contamination impacts, a series of Phase 2B (off-site) test

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trench excavations were completed at adjacent residential properties. As part of the SI, media samples were collected from the hand borings, Geoprobe borings, subsurface test trenches, and groundwater monitoring wells for laboratory analysis.

After receipt of laboratory data reports, a final data usability review was performed to confirm the validity of the data. The laboratory data results were compared to applicable NYSDEC standards and recommended soil cleanup objectives and were also utilized to prepare a site-specific qualitative human health risk assessment. The results of site reconnaissance, field investigations, media sampling, laboratory analysis, data usability review, and qualitative human health risk assessment were compiled and interpreted within this Site Investigation Report.

Development of Remedial Alternatives

As SI laboratory data reports were received, and areas of environmental concern for the site were identified, remedial alternative development efforts were concurrently initiated. As the first effort for this task, remedial action objectives, which specify remediation goals in terms of contaminants identified, media of concern, and potential exposure pathways, were identified, after which potential general remedial response actions, such as treatment, containment, excavation, extraction, disposal, and institutional actions, were identified. After listing applicable general response actions, suitable response action technologies for the remediation of contaminated media were identified.

The respective response action technologies were then assembled into remedial alternatives that were evaluated and screened based upon criteria including effectiveness (long term and short term), reliability, implementability, and cost. Upon completion of remedial alternative screening task, a detailed remedial alternative evaluation was conducted. In general, the alternatives were evaluated in accordance with specific criteria to determine a cost-effective and protective remedy.

The NYSDEC will subsequently evaluate the remedial alternatives based on community acceptance. The results of the remedial alternative development and evaluation previously mentioned have been compiled within the Remedial Alternative Report section of this SI/RAR.

2.0 SITE INVESTIGATION ACTIVITIES AND METHODOLOGIES

The primary task of the Site Investigation involved site characterization. Site characterization included activities to determine the nature and extent of contamination at the site. For this project, Site Characterization included: 1) the collection and assessment of existing data; 2) subcontractor procurement; 3) the completion of field investigations; 4) the completion of a qualitative human health risk assessment, and 5) SI Report Preparation.

2.1 Field Investigations

The following field investigations were completed as part of the Site Investigation to determine the nature and extent of contamination at the site.

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2.1.1 Preliminary Site Reconnaissance

A preliminary site reconnaissance was completed in an effort to identify obvious areas of environmental concern at the site. During the completion of preliminary site reconnaissance efforts, the foundation-slab remnants of former buildings were identified at the site. In general, the site was observed to be covered with mixture of grass, concrete, stone and asphalt. The northeast portion of the site is surfaced with a combination of concrete, stone and asphalt.

2.1.2 Phase 1 Subsurface Soil Investigations

In an effort to identify the general location of existing USTs, pipelines, and/or general evidence of contaminant releases at the site, a series of phased subsurface investigations were completed at the site. On July 20, 1998, C & H personnel completed 10 preliminary hand borings (HB-1 through HB-10) within the "NYSDOH Hot Spot area" in an effort to characterize shallow subsurface soil contamination at the site. During the completion of the hand borings, soil samples were routinely collected for total organic vapor screening utilizing a photoionization detector (PID) and PCB Immunoassay testing. A separate soil sample was also collected from hand boring HB-9 for PCBs (EPA Method 8080), volatile organic compounds (EPA Method 8240), semi-volatile organic compounds (EPA Method 8270), and TAL metals (CLP Method 200.7) analyses.

On July 21 and 22, 1998, personnel from BDA and Lyon Drilling mobilized to the site to complete 27 Geoprobe soil borings. During the completion of subsurface soil borings, continuous sampling was completed as a means to characterize subsurface soils at the site.

Soil samples retrieved as part of this effort were field screened for the presence of volatile organic compounds, using a Thermo-Environmental (PID). Separate subsurface soil samples were collected from boring locations GP-2, GP-5, GP-8, GP-13, GP-16. GP-17, and GP-25 for PCB (EPA Method 8080), volatile organic compound (EPA Method 8240), semi-volatile organic compound (EPA Method 8270), and TAL metals (CLP Method 200.7) analyses.

On July 30, and 31, 1998, a total of six (Phase-1) subsurface test trench excavations were completed at the property utilizing a rubber wheeled backhoe. During the completion of the test trench excavations, soil samples were routinely collected for total organic vapor screening, utilizing a PID. Separate subsurface soil samples were collected from test trench excavations T-1, T-2, T-4, T-5, and T-6 for PCB (EPA Method 8080), volatile organic compound (EPA Method 8240), semi-volatile organic compound (EPA Method 8270), and TAL metals (CLP Method 200.7) analyses. The locations of the ten hand borings, 27 Geoprobe borings, and six subsurface test trench excavations completed as part of the Phase 1 SI are shown in Figure 2.

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2.1.3 Groundwater Investigations

During the week of July 27, 1998, personnel from BDA and CME Associates mobilized to the site to complete five shallow groundwater monitoring well installations (MW-1, MW-2, MW-3, MW-4, and MW-5) within the subject property in order to assess the presence of potential shallow groundwater quality impacts at the site. The locations of monitoring wells MW-1 through MW-5 are shown in Figure 2. Each of the subsurface monitoring well borings was completed using continuous split spoon sampling at each monitoring well location, consistent with ASTM D-1586-84, and advanced using a six-inch O.D. hollow stem auger without the use of air or drilling fluids. Continuous sampling was completed as a means to define the unconsolidated geology prior to boring advancement.

During the completion of shallow monitoring well borings, retrieved soil samples were field screened for the presence of volatile organic compounds, using a Thermo-Environmental (PID). Each of the monitoring well installations was constructed of two-inch diameter PVC tri-lock jointed screen and riser, with locking caps. Consistent with the gravel, sand, and silt conditions identified at the site, each monitoring well was constructed using 10-slot (0.01-inch) well screens and "0-grade" sandpack. Screens, risers and fittings were steam cleaned prior to installation. Split spoons and downhole apparatus/tools were decontaminated (steam cleaned) between samples. Details regarding the location and well screen interval of each monitoring well installed at the site are listed in the following report table.

Monitoring Well Installation Location Details

<u>Well</u>	Location	Well Screen Interval
MW-1	Northeast Corner of Site	6 to 16 feet below grade
MW-2	Northwest Corner of Site	5 to 15 feet below grade
MW-3	Southwest Corner of Site	4 to 14 feet below grade
MW-4	Southeast Corner of Site	4 to 14 feet below grade
MW-5	South of Building Foundation	5.5 to 15.5 feet below grade

A bentonite seal, at least two feet in thickness, was placed following the installation of the sand pack to minimize the potential downward communication (or short-circuiting) of infiltrating surface waters to the local shallow groundwater regime. The balance of the hole was backfilled with a cement/bentonite grout. The placement of annular material was coordinated with the withdrawal of augers or casing to minimize caving around the well screen and riser pipe. Annular material was placed with a tremie to avoid bridging between riser and borehole. For each of the shallow wells, the screen was installed so as to "straddle" the perceived groundwater surface. A vented flush-mount casing with a locking steel cap, was installed to surround each PVC well location to maintain well integrity. Each of the monitoring wells was finished by installing a concrete cap, sloped away from the respective well casing, to prevent runoff water infiltration. The void between each steel casing and PVC riser was filled with heavy grade sand to prevent invasion by rodents and insects. A weep hole was drilled into each steel casing, just above the

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concrete cap. During the completion of subsurface drilling tasks, drill cuttings were visually inspected and screened with a PID. Drill cuttings that exhibited obvious evidence (staining, odors, elevated PID readings) were placed in drums and staged on-site.

Each of the monitoring wells was developed and purged using electric submersible pumps on August 1, 1998. During well development efforts, turbidity readings were found to improve to values between 40 to 90 NTUs over the duration of well development. On August 6, 1998, groundwater samples were collected from each monitoring well for TCL parameters. The top of each monitoring well PVC riser was subsequently surveyed to establish the horizontal location and elevation of the measuring point, so that depth to water measurements could be utilized to calculate site specific groundwater elevations, groundwater contours, and groundwater flow directions. All elevations were referenced to the top of a fire hydrant located along Chester Street.

2.1.4 Phase 2 Subsurface Soil Investigations

In an effort to confirm the extent of soil contamination identified as part of the Phase 1 Subsurface Soil Investigation, a series of Phase-2 subsurface test trench excavations were completed within the site (Phase-2A) and at residential properties located immediately east of the subject property (Phase-2B). During the week of November 15, 1999, test trench excavations TT-7 through TT-15 were completed within the subject property utilizing a rubber wheeled backhoe. As part of this effort, soil samples were routinely collected for total organic vapor screening utilizing a PID, and PCB field screening using immunoassay screening. Separate subsurface soil samples were collected from test trench excavations T-7 through T-15 for PCB (EPA Method 8080), semi-volatile organic compound (EPA Method 8270), and total petroleum hydrocarbon (NYSDOH Method 310-13) analyses. In addition, an oil sample was collected from test trench T-8 for PCB (EPA Method 8080), volatile organic compound (EPA Method 8260), semi-volatile organic compound (EPA Method 8270), and total petroleum hydrocarbon (NYSDOH Method 310-13) analyses.

During the week of May 15, 2001, test trench excavations TT-16 through TT-22 were completed within the neighboring residential properties immediately east of the subject property utilizing a rubber wheeled backhoe. As part of this effort, soil samples were routinely collected for PID volatile organic vapor screening and PCB immunoassay screening. Separate subsurface soil samples were collected from each of the 12 test trenches for PCB (EPA Method 8080), volatile organic compound (EPA Method 8260), and semi-volatile organic compound (EPA Method 8270) analyses. The locations of the 9 onsite and 7 off-site (residential property) test trench excavations completed as part of the Phase 2 Site Investigation are shown in Figure 2.

2.1.5 Qualitative Human Health Risk Assessment

In an effort to assess potential site impacts on human health and the environment, a general qualitative human health risk assessment was completed, including a contaminant exposure and toxicity assessment. The results of this focused qualitative risk assessment were used to develop an overall characterization of risk to humans and the environment.

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The focused risk assessment included an evaluation of the following aspects, based on current and historic site specific analytical data: 1) contaminant identification and selection of indicator compounds and chemicals of concern; 2) exposure assessment to identify actual or potential exposure pathways and the extent or amount of exposure; 3) toxicity assessment and dose response information, and 4) risk characterization of the potential risks or adverse health or environment effects for each of the exposure scenarios.

2.1.6 Data Usability Review

In an effort to provide adequate, compliant, and defensible data, consistent with NYSDEC Guidance, a portion of the analytical data generated as part of the Site Investigations was reviewed by DATAVAL, Inc., of Endwell, New York. A general evaluation of field records and analytical data was performed to assess whether the data are accurate, usable, and defensible. The data usability review effort was completed for analytical data generated as part of the Site Investigation, consistent with NYSDEC-DUSR Guidance.

3.0 SITE INVESTIGATION RESULTS

3.1 Subsurface Investigations

In order to identify the subsurface presence of existing USTs, pipelines, debris, and/or general evidence of contaminant releases at the site, a series of ten hand borings, 27 Geoprobe borings, and six test trench excavations were completed as part of the Phase 1 Site Investigation. In an effort to confirm the extent of contamination at the site, a series of nine on-site (Phase 2A) and seven off-site (Phase 2B) supplemental test trenches were completed as part of Phase 2 Site Investigations. During the week of July 27, 1998, five shallow groundwater monitoring well installations (MW-1, MW-2, MW-3, MW-4, and MW-5) were completed within the subject property in order to assess the existence of potential shallow groundwater quality impacts at the site. A listing of the subsurface conditions encountered within each of the completed test pit excavations is included within the Screening and Immunoassay Logs shown in Appendix A of this report.

3.1.1 Hand Boring Investigations

During the completion of the ten hand borings, the soils encountered within the "NYSDOH Hot Spot" area generally included native organic material or loose urban fill material to a depth of six-inches below grade. As shown in the Screening and Immunoassay Logs (Appendix A), although the majority of soil samples collected from the hand borings did not exhibit the presence of volatile organic vapors (above 2 ppm) or PCBs (above 10 ppm) during field PID and PCB immunoassay screening, the soil sample collected from boring HB-9 exhibited a PCB concentration in the range of 10 to 50 ppm. Accordingly, a separate soil sample was collected from boring HB-9 for PCB (EPA Method 8080), volatile organic compound (EPA Method 8240), semi-volatile organic compound (EPA Method 8270), and TAL metals (CLP Method 200.7) analyses. As shown in Tables 1-1 through 1-3, and as summarized in the following table, concentrations of organic compounds were identified within the boring HB-9 soil sample above TAGM 4046 recommended soil cleanup objectives (RSCOs).

Summary of Soil Sample HB-9 Organic Compound Analytical Results As Compared to TAGM 4046 RSCOs

<u>Parameter</u>	<u>Units</u>	TAGM 4046 RSCO	Concentration
PCB Aroclor 1254	mg/kg	1 (surface); 10 (subsurface) 72
Benzo (a) anthracene	mg/kg	0.224 or MDL	19
Benzo (a) pyrene	mg/kg	0.061 or MDL	6.5
Benzo (b) flouranthene	mg/kg	1.1	9.9
Benzo (k) flouranthene	mg/kg	1.1	4.9
Chrysene	mg/kg	0.4	12
Dibenzo (a.h) anthracene	mg/kg	0.014 or MDL	1.2
Indeno (1,2,3-cd) pyrene	mg/kg	3.2	2.5

In addition to the elevated presence of native non-metals and metals (barium, calcium, iron, magnesium, and zinc), the soil sample collected from HB-9 exhibited elevated concentrations of arsenic (21.5 mg/kg), cadmium (2.0 mg/kg), chromium (25.7 mg/kg), nickel (29.3 mg/kg) and selenium (5.4 mg/kg) which slightly exceeded respective TAGM 4046 recommended soil cleanup objectives (RSCOs) or accepted Eastern US background concentrations (see Table 1-4).

3.1.2 Geoprobe Boring Investigations

During the completion of the 27 Geoprobe soil borings, the soil conditions encountered were variable, but generally included 1 to 4 feet of urban fill (including sand and/or silt mixed within crushed stone, gravel, brick, ash, cinders, and/or wood debris) overlying dense silt with little to some clay and/or sand to a depth ranging from 10 to 12 feet below grade. Evidence of perched shallow groundwater conditions was identified at 3.7 to 11 feet below grade during the completion of borings GP-5, GP-10, GP-11, GP-16, GP-18, GP-23, GP-24, GP-25, and GP-27.

As shown in the Screening and Immunoassay Logs (Appendix A), the results of field observations (odor and/or sheen), field PID screening, and/or PCB Immunoassay screening revealed the presence petroleum and/or PCB contamination within the majority of borings soil samples. In an effort to quantify the most significant contamination field identified during completion of these borings, separate soil samples were collected from borings GP-2 (4.0-5.7 feet), GP-5 (2.0-4.0 feet), GP-8 (0.5-2.0 feet), GP-13 (0-0.5 feet), GP-16 (0-0.5 feet), GP-17 (8-10 feet), and GP-25 (0-0.5 feet) for PCB (EPA Method 8080), volatile organic compound (EPA Method 8240), semi-volatile organic compound (EPA Method 8270), and TAL metals (CLP Method 200.7) analyses.

Although the presence of PCBs was not detected within the soil samples collected from borings GP-2, GP-5, GP-8, GP-16, GP-17, and GP-25, PCB Aroclor 1254 was detected within the soil sample collected from boring GP-13 at a concentration of 22 mg/kg. The following volatile and semi-volatile organic compounds were identified within the soil

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samples collected from borings GP-2, GP-5, GP-8, GP-13, GP-16, and GP-25 above TAGM 4046 RSCOs (see also Tables 1-1 through 1-3).

Geoprobe Boring Soil Sample Analytical Data Summary of Organic Compounds Detected

Boring Type	Parameter	RSCO mg/kg)	Concentration (mg/kg)
GP-2 (4-5.7 feet)	Benzo (a) anthracene Benzo (a) pyrene Benzo (b) flouranthane Benzo (k) flouranthane Chrysene Dibenzofuran Fluoranthene Indeno (1,2,3-cd) pyene Phenanthrene Pyrene	0.224 or MDL 0.061 or MDL 1.1 1.1 0.4 6.2 50.0 3.2 50.0 50.0	34.0 24.0 43.0 7.60 28.0 6.90 72.0 12.0 92.0
GP-5 (2-4 feet)	Acetone	0.2	1.70
	2-Butanone	0.3	0.36
GP-8 (0.5-2.0 feet)	Benzo (a) anthracene	0.224 or MDL	6.50
	Benzo (a) pyrene	0.061 or MDL	3.10
	Benzo (b) flouranthane	1.1	5.30
	Benzo (k) flouranthane	1.1	1.60
	Chrysene	0.4	4.80
GP-13 (0-0.5 feet)	Benzo (a) anthracene	0.224 or MDL	2.60
	Benzo (a) pyrene	0.061 or MDL	1.60
	Benzo (b) flouranthane	1.1	2.70
	Chrysene	0.4	1.9
	Dibenzo (a,h) anthracene	0.014 or MDL	0.33
GP-16 (0-0.5 feet)	Benzo (a) anthracene	0.224 or MDL	11.0
	Benzo (a) pyrene	0.061 or MDL	7.50
	Benzo (b) flouranthane	1.1	12.0
	Benzo (k) flouranthane	1.1	4.40
	Chrysene	0.4	9.20
	Dibenzo (a,h) anthracene	0.014 or MDL	1.50
	Indeno (1,2,3-cd) pyene	3.2	4.70
GP-25 (0-0.5 feet)	Chrysene	0.4	2.50

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In addition to the elevated presence of native non-metals and metals (barium, calcium, iron, magnesium, and zinc), the soil samples collected from borings GP-2, GP-5, GP-8, GP-13, GP-16, GP-17, and GP-25 exhibited elevated concentrations of arsenic (12.6 to 22.4 mg/kg), cadmium (1.7 to 2.7 mg/kg), chromium (16.6 to 33.2 mg/kg), nickel (13.9 to 426 mg/kg), and selenium (5.0 to 8.1 mg/kg), which exceeded respective TAGM 4046 RSCOs or accepted Eastern US background concentrations (see Table 1-4).

3.1.3 Phase I Test Trench Investigations

During the completion of the six Phase-1 test trench excavations (T-1 through T-6), the soil conditions encountered were variable, but generally included 1 to 4 feet of concrete and/or urban fill (including sand and/or silt mixed within concrete debris, crushed stone, gravel, brick, ash, cinders, and/or wood debris) overlying dense sandy silt with trace to little clay to a depth ranging from 10 to 12 feet below grade. During the completion of test trenches T-1, T-2, and T-4, oil saturated soils and a limited volume of oil product were encountered at depths ranging from 5 to 13 feet below grade. Evidence of perched shallow groundwater conditions was also identified at 5 feet below grade during the completion of test trench T-1.

As shown in the Screening and Immunoassay Logs (Appendix A), the results of field observations (odor, sheen, or oil product), field PID screening and/or PCB Immunoassay screening revealed the presence of petroleum and/or PCB contamination within test trenches T-1, T-2, T-4, and T-5. In an effort to quantify the most significant contamination field identified during completion of these test trenches, separate soil samples were collected from test trenches T-1 (5 feet), T-2 (11 feet), T-4 (13 feet), T-5 (13 feet), and T-6 (13 feet) for PCB (EPA Method 8080), volatile organic compound (EPA Method 8240), semi-volatile organic compound (EPA Method 8270), and TAL metals (CLP Method 200.7) analyses.

Although the presence of PCBs was not detected within the soil samples collected from test trenches T-1, T-2, T-5, T-6, PCB Aroclor 1248 was detected within the soil sample collected from test trench T-4 (13 feet below grade) at a concentration of 5 mg/kg. Although low-level concentrations of volatile organic compounds were detected within the soil samples collected from test trenches T-1, T-2, T-4, T-5, and T-6, these concentrations did not exceed TAGM 4046 recommended soil cleanup objectives (RSCOs). Furthermore, although low-level concentrations of semi-volatile organic compounds were detected within the soil samples collected from test trenches T-1, T-2, T-4, T-5, and T-6, these concentrations did not exceed TAGM 4046 recommended soil cleanup objectives (RSCOs), except for benzo (a) pyrene, which was identified within the soil sample collected from test trench T-6 at a concentration of 0.340 mg/kg.

In addition to the elevated presence of native non-metals and metals (barium, calcium, iron, magnesium, and zinc), the soil samples collected from test trenches T-1, T-2, T-4, T-5, and T-6 exhibited elevated concentrations of arsenic (9.7 to 29.3 mg/kg), cadmium (1.5 to 14.7 mg/kg), chromium (156 mg/kg), mercury (3.9 mg/kg), nickel (15.5 to 342 mg/kg),

and selenium (3.0 to 13.5 mg/kg) which exceeded respective TAGM 4046 RSCOs or accepted Eastern US background metal concentrations. (See Table 1-4)

3.1.4 Phase IIA (On-Site) Test Trench Investigations

During the completion of the nine Phase-2A (on-site) test trench excavations (T-7 through T-15), the soil conditions encountered were variable. A significant volume of urban fill and demolition debris was identified within test trench locations T-7 and T-15, while urban fill overlying apparent native sand and silt (with some gravel and clay) was identified at test trench locations T-8 through T-14. During the completion of test trenches T-8, T-11, T-12, and T-13, the presence of oil was encountered on groundwaters that infiltrated to the subject excavations. In addition, as shown in the Screening and Immunoassay Logs (Appendix A), the results of field observations (odor, sheen) and field PID screening revealed evidence of residual petroleum contamination within the soils of test trenches T-7, T-9, T-10, and T-15.

In an effort to quantify the most significant contamination identified during the field investigation, separate soil samples were collected from test trenches T-7 through T-15 for PCB (EPA Method 8080), semi-volatile organic compound (EPA Method 8270), and total petroleum hydrocarbon (NYSDOH Method 310-13) analyses. An oil product sample was also collected from test trench T-8 for PCB (EPA Method 8080), volatile organic compound (EPA Method 8240), semi-volatile organic compound (EPA Method 8270), and total petroleum hydrocarbon (NYSDOH Method 310-13) analyses.

As shown in Tables 2-1 and 2-2, analysis of the oil sample collected from test trench T-8 revealed the presence of naphthalene (200 mg/l), 2-methylnaphthalene (81 mg/l), and methylene chloride (9.7 mg/l) above TAGM 4046 RSCOs.

The elevated presence of semi-volatile organic compounds was not identified within the soil samples collected from test trenches T-8, T-9, T-11, T-12, T-13, and T-14. The following semi-volatile organic compounds were identified within the soil samples collected from test trenches T-7, T-10, and T-15 above TAGM 4046 RSCOs (see also Tables 2-1 and 2-2).

Phase 2A (On-Site) Test Trench Soil Sample Analytical Data Summary of Organic Compounds Detected

		RSCO	Concentration
Location		(mg/kg)	(mg/kg)
T-7 (2)	Benzo (a) anthracene	0.224 or MDL	19
3 ft.	Chrysene	0.4	17
	Benzo (b) flouranthene	1.1	17
	Benzo (k) flouranthene	1.1	7.9
	Benzo (a) pyrene	0.061 or MDL	18
	Indeno (1,2,3-cd) pyrene	3.2	7.6

			
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T-10 (1)	Benzo (a) pyrene	0.061 or MDL	1.412 ft.
T-15 (1)	Chrysene	0.4	13
5 ft.	Benzo (b) flouranthene	1.1	14
	Benzo (k) flouranthene	1.1	4.2
	Benzo (a) pyrene	0.061 or MDL	9.9

Although the presence of PCBs was not detected within the soil samples collected from test trenches T-8, T-9, T-10, T-11, T-12, T-13, and T-14, trace concentrations (below the applicable TAGM 4046 RSCOs for subsurface soils) of PCB Aroclor 1248 or 1254 were detected within the soil samples collected from test trenches T-7 and T-15 (see Table 2-3).

The following table summarizes the results of total petroleum hydrocarbon analyses of soil collected from trenches T-7 through T-15.

Phase 2A (On-Site) Test Trench Soil Sample Analytical Data Summary of Total Petroleum Hydrocarbon Detected

<u>Location</u>	Fuel Oil #2	Lubricating Oil	<u>Unidentified</u>	<u>TPH</u>
Т-7	Not Detected	Detected	Not Detected	Detected
T-8	Detected	Detected	Not Detected	Detected
T-9	Not Detected	Detected	Not Detected	Detected
T-10	Not Detected	Detected	Not Detected	Detected
T-11	Detected	Detected	Not Detected	Detected
T-12	Not Detected	Detected	Detected	Detected
T-13	Detected	Detected	Not Detected	Detected
T-14	Not Detected	Not Detected	Not Detected	Not Detected
T-15	Not Detected	Detected	Detected	Detected

3.1.5 Phase IIB (Off-Site) Test Trench Investigations

During the completion of the thirteen Phase-2B (off-site) test trench excavations, the soil conditions encountered to a depth of 9 to 12 feet below grade generally included moist to wet dark gray sand and silt. As shown in the Screening and Immunoassay Logs (Appendix A), the results of field observations (odor, sheen) and field PID screening revealed evidence of residual petroleum contamination within the soils of test trenches T-16(1), T-16(2), T-17(1), and T-18(1).

In order to quantify the most significant contamination identified during this field investigation task, separate soil samples were collected from each of the thirteen test trenches for PCB (EPA Method 8080), volatile organic compound (EPA Method 8240), and semi-volatile organic compound (EPA Method 8270) analyses.

As shown in Tables 3-1 and 3-2 and summarized in the following table, trace to low-level concentrations of the specific volatile and semi-volatile organic compounds were identified

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within the soil samples collected from the following test trenches above TAGM 4046 recommended soil cleanup objectives (RSCOs).

Phase 2B (Off-Site) Test Trench Soil Sample Analytical Data Summary of Organic Compounds Detected

		RSCO	Concentration
Trench	<u>Parameter</u>	(mg/kg)	<u>(mg/kg)</u>
T-16-1	Acetone	0.2	2.000
	Chloroform	0.3	1.200
	Chrysene	0.4	2.000
T-16-2	Acetone	0.2	0.910
	Chloroform	0.3	0.440
T-17-1	Acetone	0.2	0.680
T-18-1	Acetone	0.2	0.670
	Chloroform	0.3	0.540
T-19-1	Acetone	0.2	0.780
	Chloroform	0.3	0.690
T-20-1	Acetone	0.2	0.500
	Chloroform	0.3	0.510
T-20-2	Chrysene	0.4	1.200

As shown in Table 3-3, the presence of PCBs was not detected within any of the soil samples collected from the thirteen Phase 2B (Off-Site) test trenches.

3.2 **Groundwater Investigations**

3.2.1 Field Observations

During the week of July 27, 1998, five shallow groundwater monitoring wells (MW-1, MW-2. MW-3. MW-4, and MW-5) were installed at site perimeter locations as part of the Site Investigation. In general, the geologic conditions encountered during the completion of each monitoring well boring included a layer of brown soil and urban fill (generally 2 to 6 feet thick) overlying intermixed silt and fine sand to a depth of approximately 12 feet below grade. Consistently wet soils were generally encountered at a depth of 9 to 11 feet below grade.

On August 1, 1998, each of the five monitoring wells was developed for a period of one hour by overpumping using a submersible pump. Although the monitoring wells exhibited only minimal groundwater yield during developments, turbidity readings generally improved to values between 100 to 150 NTUs over the duration of the development effort. On the morning of August 6, 1998, each of the monitoring wells was purged using disposable polyethylene bailers and allowed to recharge. On August 6, 1998, groundwater samples were collected from each of the monitoring wells, packed in ice filled coolers, and delivered to Upstate Laboratories for TCL parameter analysis.

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3.2.2 Results of Groundwater Quality Sampling and Analysis

The groundwater samples collected as part of the Site Investigation were analyzed for TCL parameters, including EPA 8260 volatile organic compounds, EPA 8270 semi-volatile organic compounds, EPA 8080 PCBs/pesticides, and TAL metals. The groundwater sample analytical results are included within Appendix B and are summarized in Tables 4-1 through 4-4. The presence of PCBs and semi-volatile organic compounds was not detected within the groundwater samples collected from wells MW-1, MW-2, MW-3, MW-4, and MW-5. As shown in Tables 4-2 through 4-4 and summarized in the following table, only trace to low-level concentrations of the following specific volatile organic compounds and heavy metals were detected within the groundwaters collected from the five wells.

Summary of Groundwater Quality Analytical Data Parameters Detected at Elevated Concentrations

<u>Parameter</u>	<u>Units</u>	Class GA Standard	<u>MW-1</u>	<u>MW-2</u>	<u>MW-3</u>	<u>MW-4</u>	<u>MW-5</u>
<u>VOCs</u> Chloroform	ug/l	7	<10	20	<10	2	2
<u>Heavy Metals</u> aluminum cadmium	ug/l ug/l	100 5	222 45.4	143 R	<u>139</u> R	<u>169</u> R	<u>147</u> R

Note: Class GA Groundwater Quality Exceedences <u>Bold and Underlined</u> R = rejected data as per the Data Usability Summary Report

In addition to the aluminum and cadmium, elevated sodium concentrations (exceeding the Class GA Standard of 20,000 ug/l) were identified within the groundwater samples collected from wells MW-1, MW-3, MW-4, and MW-5. Although native parameters including barium, calcium, magnesium, manganese, and potassium were detected within the majority of the well groundwater samples, the resultant concentrations did not exceed applicable NYSDEC Class GA groundwater quality standards or guidance values. In addition, the presence of chromium, iron, nickel, antimony, beryllium, cobalt, copper, selenium, silver, thallium, and vanadium was not detected within any of the monitoring well groundwater samples collected as part of the Site Investigation.

3.2.3 Groundwater Flow Directions

On August 6, 1998, depths to groundwater were measured within each of the five site monitoring wells and each of the monitoring well top of PVC riser elevations was surveyed to establish the horizontal location and elevation of the measuring point, so that depth to water measurements could be utilized to calculate site specific groundwater elevations, groundwater contours, and groundwater flow directions. All elevations were referenced to the top of an existing fire hydrant located along the east side of Chester Street (adjacent to

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the 121 Chester Street residence). The depth to groundwater and calculated groundwater elevations for each of the site monitoring wells is presented in Table 4-5 and summarized in the following table.

Summary of Groundwater Depth and Elevation Measurements August 6, 1998

Monitoring	Screen	PVC	Depth	Groundwater
Well	Interval	<u>Elevation</u>	<u>to Water</u>	<u>Elevation</u>
MW-1	6-16 ft.	96.86 ft.	9.37 ft.	87.49 ft.
MW-2	5-15 ft.	97.29 ft.	9.65 ft.	87.64 ft.
MW-3	4-14 ft.	97.26 ft.	10.17 ft.	87.09 ft.
MW-4	4-14 ft.	97.00 ft.	9.95 ft.	87.05 ft.
MW-5	5.5-15.5 ft.	97.40 ft.	10.19 ft.	87.21 ft.

As shown on Figure 3, shallow groundwater flow at the site was calculated to trend slightly from north to south over the majority of the site. As previously noted (from the results of test pit excavation and subsurface boring efforts), it appears that perched groundwater conditions exist within the western portion of the site. Furthermore, during the completion of well development purging efforts, the monitoring wells exhibited only minimal groundwater yield. Consistent with the results of well specific groundwater elevations calculations, it is estimated that the hydraulic gradient across the site is a minimal 0.27 percent. Based on the soil conditions and geology identified at the site and the rates of groundwater recovery observed at wells MW-1, MW-2, MW-3, MW-4, and MW-5, it is estimated that the permeability of the shallow silt and sand soils at these wells ranges between 1 x 10-7 to 1 x 10-4 cm/sec.

3.3 Qualitative Human Health Risk Evaluation

A qualitative human health risk evaluation was completed as part of the Site Investigation. The procedure for performing the risk assessment was consistent with USEPA methodologies, and the scope was developed in accordance with NYSDOH guidance. The sequencing of steps was modified to streamline the process consistent with the goals of Brownfield site investigations. This qualitative risk assessment was completed using a two-step process, including 1) contaminant identification and selection of contaminants of concern and 2) exposure assessment to identify actual or potential exposure pathways.

3.3.1 Contaminant Identification and Exposure Assessment

Data from the site investigation phase was used as the basis for the risk assessment. Sampling was conducted for subsurface soil, groundwater, and materials within subsurface structures and drains. There was no surface water or air sampling performed as part of the Site Investigation. The qualitative exposure assessment consisted of two steps:

1. Exposure Setting Characterization - Description of the physical characteristics of the

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site and populations near the site. This includes information such as soil types, geologic setting, and groundwater flow.

- 2. Exposure Pathway Identification Identification of potentially exposed populations and the associated exposure pathway. The exposure pathway consists of four elements:
 - The contaminant source (e.g., previous release)
 - The transport medium (e.g., groundwater)
 - The exposure point (e.g., [potable water supply well)
 - The exposure route (e.g., ingestion)

3.3.2 Site Specific Qualitative Assessment

Contaminant Identification

Tables 1-1 through 1-4, 2-1 through 2-4, 3-1 through 3-3, and 4-1 through 4-4 present the results of the Site Investigation sampling and analysis program that was conducted at the site. As shown in the following summary table, a number of organic and heavy metals were identified at elevated concentrations within the media collected as part of the Brownfields Site Investigation.

PCBs	Media	of	Detection

Aroclor 1248 surface and subsurface soils Aroclor 1254 surface and subsurface soils

VOCs Media of Detection

Acetone surface and subsurface soils 2-Butanone surface and subsurface soils

Chloroform subsurface soils, shallow groundwater

Methylene Chloride surface and subsurface soils, oil on groundwater

Semi-VOCs Media of Detection

Benzo(a)anthracene surface and subsurface soils
Benzo(a) pyrene surface and subsurface soils
Benzo(b)fluoranthene surface and subsurface soils
Benzo(k)fluoranthene surface and subsurface soils
Chrysene surface and subsurface soils

Dibenzo(a,h)anthracene surface soils
Dibenzofuran subsurface soils
Fluoranthene subsurface soils

Indeno(1,2,3-cd)pyrene surface and subsurface soils

2-Methylnaphthalene oil on groundwater

Naphthalene oil on groundwater Phenanthrene subsurface soils

Pyrene subsurface soils

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Metals Media of Detection shallow groundwater Aluminum surface and subsurface soils Arsenic Barium surface and subsurface soils surface and subsurface soils Beryllium Cadmium surface and subsurface soils Chromium surface and subsurface soils surface and subsurface soils Copper surface and subsurface soils Iron Lead surface and subsurface soils surface and subsurface soils Magnesium subsurface soils Mercury Nickel surface and subsurface soils surface and subsurface soils Selenium Sodium shallow groundwater Zinc surface and subsurface soils

3.3.3 Exposure Assessment

Exposure Setting Characterization

The former Brown Manufacturing site is located in a residential area of the City of Syracuse. Groundwater flow at the site trends in the north to south direction. Hydraulically downgradient from the site, the land usage is commercial and industrial. Access to the property is unrestricted. Given the location within the City, and the fact that drinking water in the area is provided by a public water supply, groundwater use for potable water is unlikely. Current populations that could potentially be impacted by contaminants at the site are limited. Since the site is vacant, there are no onsite workers. Public roads border the site to the north and west.

Contamination leaving the site via the municipal sewer system, if any, would enter the Onondaga County sewer system. If there were workers in the sewer system at the time that precipitation or runoff from the site was entering the sewers, exposure would be possible, although unlikely. Based on this information, populations potentially affected would include the following:

- Trespassers unauthorized visitors to the site
- County sewer workers exposed to contaminated runoff entering the sewers
- General public pedestrians or vehicle passengers on the adjacent streets
- Future on-site construction workers workers involved in excavation of contaminated soils at the site (note that this assessment excludes workers performing remedial activities as part of the project)

Exposure Pathway Identification

As described above, the exposure pathway identification consists of the following four steps:

BEARDSLEY DESIGN ASSOCIATES

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- 1. Contaminant source Data from the sampling and analysis program identified levels of contamination in the surface soils, subsurface soil, and to a lesser extent shallow groundwaters.
- 2. Transport medium The transport media for each contaminant source is identified in the table below. Given the general condition of the facility, it was assumed that water in the subsurface drains could enter groundwater from leaking pipes or along building foundation walls.
- 3. Exposure points The exposure point is the point of potential human contact with the contaminated medium under reasonable current and future land uses. The exposure points for the site are shown in the table below.

Contaminant Source	Transport Medium	Exposure Point
Groundwater	Groundwater	on-site construction worker
Surface Soil	Runoff	on-site construction worker
	Soil Dispersion	off-site neighboring residents or trespassers
Subsurface soil	Soil	on-site construction worker
	Ground water	on-site construction worker

- 4. Exposure route The routes of exposure for each potential exposure point identified above are discussed below:
 - Exposure of off-site workers to site contaminants This would be limited to the unlikely circumstance of workers involved with nearby municipal sewers working at the same time that contaminants from the site were entering the sewer system. Typically, this would only occur during periods of precipitation and/or runoff. Exposure could occur via ingestion, inhalation, and/or dermal contact.
 - Exposure of local residents, trespassers, and/or on-site workers to subsurface soil contamination This is a scenario for local residents or future construction workers if no remediation of subsurface contamination takes place. Excavation of contaminated soils could result in exposure via ingestion, dermal contact, or inhalation of dust particles.
 - Exposure of on-site workers to groundwater contamination This is a scenario for future construction workers if no remediation of subsurface contamination takes place. Excavation into contaminated soil that is below the water table could result in exposure via ingestion, dermal contact, or inhalation.

3.4 Data Usability Review

As part of the Site Investigation, media samples were collected from Geoprobe borings, subsurface test pit excavations, and groundwater monitoring wells. The collected groundwater, surface soil,

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and subsurface soil samples were analyzed for TCL parameters, in accordance with EPA approved methodologies. For the samples collected for TCL parameter analysis, the project-specific analytical laboratory, Upstate Laboratories, Inc., provided analytical data reports in the form of NYSDEC ASP Category B reportables/deliverables packages.

As part of services of the project-specific analytical laboratory, Upstate Laboratories completed a review of the generated analytical data for compliance with Quality Control (QC) acceptance limits as specified in the applicable ASP method for each analysis. The following QC operations and items are considered in the validation of reported results: holding times; surrogate recovery; spiked sample recovery; duplicates/spike duplicate precision; tuning criteria; internal standard variation; continuing calibration variation; reference (check) sample recovery, and instrument, method, trip, and field blanks. The appropriate frequency for each operation is also considered.

As referenced by the laboratory in the Data Usability Summary Reports, every effort has been made to report data that is compliant with the EPA methodology cited for each analysis. In cases where the laboratory was unable to meet all method requirements prior to sample expiry, either due to the nature of the sample or other technical difficulty, results are reported with qualification with the understanding that qualified results may not be suitable for compliance purposes. The internal technical review is based on the USEPA Contract Laboratory Program (CLP), National Functional Guidelines for Organic Review (EPA 540/R-94/012, February 1994) and National Functional Guidelines for Inorganic Review (EPA 540/R-94/013, February 1994).

The results of the internal laboratory review, validation, and usability assessment are included within each of the three delivery groups of analytical data: Appendix B (Phase I Analytical Data), Appendix C (Phase IIA Analytical Data), and Appendix D (Phase IIB Analytical Data). The project Data Usability Summary Reports will be submitted to the Department under separate cover. Additional copies of the project Analytical Data Reports and Data Usability Summary Reports are available upon request.

4.0 SITE INVESTIGATION INTERPRETATIONS AND CONCLUSIONS

4.1 Surface and Subsurface Soil Investigation Results

In general, the results of surface and subsurface soil investigations completed at the site and adjacent residential properties as part of the Site Investigation revealed the following areas and media of environmental impact.

- 1. PCB Contaminated Soils NYSDOH Hot Spot Area: The results of field PCB Immunoassay testing completed on the soil samples collected from the majority of hand borings (HB) and laboratory analysis of soils collected from boring HB-9 confirmed the presence of elevated PCB concentrations (greater than 1 ppm) within the surface soils (0 to 0.5 feet below grade) of the NYSDOH Hot-Spot area.
- 2. Oil Product and Petroleum-Related PAH-Contaminated Shallow Soils Western Site Area: During the completion of test trench T-1, oil product was encountered along a perched water table at two locations in the vicinity of the NYSDOH Hot Spot area.

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During the completion field soil sample screening efforts of Geoprobe borings GP-2, GP-3, GP-4, GP-5, GP-6, GP-11, GP-12, and GP-13, evidence of low-level petroleum and/or PCB contamination was identified. Similarly, analysis of soil samples collected from borings GP-2 (4-5.5 feet) and GP-13 (0-0.5 feet) and test trenches T-7 (3 feet) and T-15 (5 feet) revealed PAH concentrations that exceed NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives. Although the horizontal extent of PAH contamination within the western site area is large, the vertical extent of contamination in this area of the site appears to be limited to the shallow soils above 4 to 5 feet below grade.

3. Oil Product and Petroleum-Related PAH-Contaminated Deep Soils Along Building Foundation Walls: During the completion of test trenches T-2, T-4, T-8, T-12, and T-13, the presence of oil product was encountered at various depths extending to the local water table (12-13 feet below grade). The presence of oil product at these locations appeared to coincide with the presence of non-native porous backfill materials located along the perimeter of the former building foundation.

4.2 Groundwater Investigation Findings

Although the results of subsurface soil investigations revealed the presence of residual petroleum contamination (elevated PAH concentrations) within a number of subsurface soil samples, and the presence of floating oil product at numerous test trench locations completed near former building foundation walls, the results of groundwater sampling and analysis at installed monitoring wells revealed only limited impacts to groundwater at the site. Specifically, analysis of these groundwater samples did not reveal the presence of petroleum related volatile organic compounds, semi-volatile organic compounds, PCBs, or elevated heavy metal concentrations. Although chloroform, aluminum, and sodium were identified within the groundwater samples collected from the monitoring wells, these parameters were generally identified at concentrations only slightly above the applicable NYSDEC Class GA Groundwater Quality Standards.

Although oil product was encountered at locations adjacent to former building foundation walls and buried pipes during the completion test trench excavations, the physical nature of the dense/viscous oil and the confining native soils appears to limit the migration potential of the oil product. Since the oil product encountered appears to exhibit an affinity for soil adsorption and was not identified within the groundwater samples collected from adjacent site monitoring wells, it does not appear that significant or extensive impacts to shallow groundwaters at the site have occurred as a result of historic activities at the site.

TABLES

Summary of Phase 1 SI Soil Sample Analytical Data (Polychlorinated Biphenyls- PCBs) Former Brown Manufacturing Site, Syracuse, New York IABLE - 1-1

Parameter	Surface RSCO	Subsurface	HB-9	GP-2D	GP-5C	GP-8B	GP-13A	GP-16A	GP-25A	T-1Q	T-26	L	T-5E	1-66	3
In-Situ PID		1	0.0	5.0	1.0	0.0	0.0	0.0	1.0	(L=84;D=5)	(L=92*,D=111) 15.0	(L=8',D=13')	(L=5, D=13)	=13)	Oil on Water
Headspace PID	,	-	0:0	6.8	5.2	1.2	2.0	0.0	00	88	0 80	2 12		3 6	-
immunoassay	,	,	10-50	10-50	10-50	>50	1-10	1.40	10.50	40.50	0.00	0.62	0.5	0.0	20.0
DCD Amalan 1046		Į.								200	21-7	01-1	Ž.	V	10-50
rea Alocio iu ia	ο:	O.	V	<0.09	<0.1	<0.1	<0.09	<0.0>	<0.09	<15	<0.1	<0.1	1.0	0.1	\$
PCB Arodor 1221	1.0	10	<2	<0.18	<0.2	<0.2	<0.18	<0.18	<0.18	065	<0.2	<0.2	<0.2	<0.2	<10
PCB Arodor 1232	1.0	10	₽	<0.0>	<0.1	<0.1	<0.09	<0.0>	<0.0>	<15	<0.1	<0.1	40.1	0.0	\$
PCB Arodor 1242	0.1	10	Ÿ	60.0>	<0.1	<0.1	<0.0>	<0.09	<0.0>	<15	<0.1	<0.1	50.7	50	, <5
PCB Araclor 1248	1.0	10	⊽	<0.0>	40.1	<0.1	<0.09	<0.0>	<0.09	<15	100	4	100		, 4
PCB Aroclor 1254	0.7	10	72	<0.09	<0.1	<0.1	2	<0.0>	60.0>	<15	\$ 0.1	, es	- 6		7 4
PCB Aroclor 1260	1.0	10	7	<0.0>	40.1	<0.1	60:0>	<0.0>	<0.09	<15	<0.1	<0.1	0.1	0.1	7 \
		PCB Total:	7.2	<0.18	<0.2	<0.2	22	<0.18	<0.18	<30	<0.2	S = 5	<0.2	<0.2	<10

Notes: 7. Reg. 3. Re 4. SH

Results expressed in milligrams per kilogram (mg/kg) = parts per million (ppm).
RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.
Results in BOLD type indicate detected concentrations of parameter analyzed.
SHADING indicates results above the RSCO.

TABLE - 1-2 Summary of Phase 1 SI Soil Sample Analytical Data TCL-VOCs Analyses

Former Brown Manufacturing Site, Syracuse, New York

Parameter	RSCO	HB-9 (0.0'-0.5')	GP-2D (4.0'-5,7')	GP-5C (2.0'-4.0')	GP-88 (0.5'-2.0')	GP-13A (0.0'-0.5')	GP-16A (0.0′-0.5')	GP-17F (8.0'-10.0')	GP-25A (0.0'-0.5')	T-1Q (L=84',D=5')	1-2G (L=92',D=11')	[-4] (L=8',D=13')	1-5E (L=5'.D=13')	1-6G (L=35',D=13')
			THE PARTY OF THE P	Marine Ma	MANAGEMENT CONTRACTOR OF THE PARTY OF THE PA	www.www.www.www.www.www.	THE PERSON NAMED AND POST OF THE PERSON NAMED AND PARTY.				ELONG TO THE TAX TO TH	&	Janes and the second second	electrical de la constantina de la cons
In-Situ PIO Screening	-	0.0	5,0	1.0	0,0	0.0	0.0	100.0	1.0	1.0	15.0	10.0	3,0	0.0
Headspace PID Screening	***************************************	0.0	6.8	5.2	1.2	2.0	0.0	140.0	0.0	6.6	28.0	25.0	11.0	0,0
Acetone	0.2	< 0.062	< 0.150	1.700	< 0.012	< 0.011	< 0.011	< 0.250	< 0.071	R	< 0.100	< 0.066	< 0.032	< 0.068
Benzene	0.06	0.002	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.084	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
Bromodichloromethane	N/L	< 9.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.016
Bromoform	N/L	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
Bromomethane	N/L	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0,011	R	< 0.060	< 0.088	< 0.032	< 0.015
2-Butanone	0,3	< 0.014	< 0.028	0.360	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.080	< 0.066	< 0.032	< 0.015
Carbon Disulfide	2.7	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	0.013	< 0.065	< 0.032	< 0.015
Carbon Tetrachlonde	0.6	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.054	< 0.011	R	< 0.060	< 0.066	< 0,032	< 0.015
Chlorobenzene	1.7	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0,060	< 0.066	< 0.932	< 0.015
Chloroethane	1,9	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0,066	< 0.032	< 0.015
Chloreform	0.3	0.005	0.009	0.013	800,0	0.004	0.004	< 0.064	0.002	R	< 0.060	< 0.058	< 0.032	< 0.015
Chloromethane	N/L	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	0.016	< 0.066	< 0.032	< 0.015
Dibromochloromethane	N/S	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
1,1-Dichloroethane	0.2	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
1,2-Dichloroethane	0.1	< 0.014	< 0.028	< 0.012	< 0.912	< 0.011	< 0.011	< 0,064	< 0.011	R	< 0.060	< 0.086	< 0.032	< 0.015
1,1-Dicirloroethene	0,4	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
cis-1,2-Dichloroethene	N/L	< 0.014	< 0,028	< 0.012	< 0.012	< 0.911	< 0.011	< 0.964	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
trans-1,2-Dichloroethene	0,3	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
1,2-Dichloropropane	N/L	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.080	< 0.066	< 0.032	< 0.015
cis-1,3-Dichloropropene	N/L	< 0.014	< 0.028	< 0,012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0,060	< 0.086	< 0.032	< 0.015
trans-1,3-Dichloropropene	N/L	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0,032	< 0.015
Ethylbenzene	N/L	< 0.014	< 0.028	0.014	< 0.012	< 0.011	< 0.011	< 0.084	< 0.011	R	< 0.080	< 0.066	< 0.032	< 0.015
2-Hexanone	N/L	< 0.014	< 0.028	0.086	< 0.012	< 0.011	< 0,011	< 0,064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
Methylene Chloride	Q.1	< 0.017	< 0.160	< 0.089	< 0.039	0.028	< 0.036	< 9.110	< 0,054	R	< 0.086	< 0.088	< 0.036	< 0.024
4-Methyl-2-Pentanone	1.9	< 0.014	< 0.028	0.200	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
Styrene	N/L	< 0.014	< 0.028	< 0.012	< 0,012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
1.1.2.2-Tetrachiorcethane	0,6	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0,068	< 0.032	< 0.015
Tetrachloroethene	1.4	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.068	< 0.032	< 0.015
Toluene	1.5	0.002	0.009	0,015	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0,066	< 0.032	< 0.015
1,1,1-Trichloroethane	0.8	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
1.1.2-Trichkoroethane	N/L	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
Trichloroethene	0.7	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 0.015
Vinyl Chloride	0.2	< 0.014	< 0.028	< 0.012	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	< 0.060	< 0.066	< 0.032	< 9.015
m-Xvlene, p-Xvlene	1.2	0.004	0.013	0.022	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	R	0.330	0.140	< 0.032	< 0.015
o-Xylene	1.2	< 0.014	0.011	0.021	< 0.012	< 0.011	< 0.011	< 0.064	< 0.011	Ř	< 0.030	< 0.066	< 0.032	< 0.015

- Notes:

 1. Results expressed in milligrams per kilogram (mg/kg) = parts per million (ppm).

 2. RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.

 3. N/L = Parameter Not Listed in NYSDEC TAGM HWR-94-4046.

 4. N/S = Parameter Listed in NYSDEC TAGM HWR-94-4046, but RSCO Not Specified.

 5. Results in BOLD type indicate detected concentrations of parameter analyzed.

 6. SHADING indicates results above the RSCO.

 7. A value of R denotes unusable data as per the Data Usability Summary Report

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TABLE - 1-3

Summary of Phase 1 SI Soil Sample Analytical Data

TCL - Semi-VOC Analyses

Former Brown Manufacturing Site, Syracuse, New York

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Parameter	RSCO	HB-9 (0,0'-0,5')	GP-2D (4,0'-5,7')	GP-5C (2,0'-4,0')	GP-8B (0.5'-2.0')	GP-13A (0.0'-0.5')	GP-16A (0.0'-0.5')	GP-17F (8,0'-10.0')	GP-25A (0.0'-0.5')	T-1Q (L=84',D=5')	T-2G (L=92',D=11')	T-4) (L=8',D=13')	T-5E (L=5',D=13')	T-6G (L=35',D=13')
In-Situ PID Screening	***************************************	0.0	5.0	1.0	0.0	0.0	0.0	100.0	1.0	1.0	15.0	10.0	3.0	0.0
Headspace PID Screening		0.0	6.8	5.2	1.2	2.0	0.0	140.0	0.0	6.6	28,0	25.0	11.0	0.0
Acenaphthene	50.0	2.200	5.800	< 3.900	0.930	0.290	1.400	< 0.430	0.250	< 5.800	< 0.800	< 0,390	< 0.530	< 0.490
Acenaphthylene	41.0	0.720	2.600	< 3.900	0.330	0.520	0.880	< 0.430	0.220	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Anthracene	50.0	5.800	13,000	< 3.500	2.500 6.500	0.980	3,900 11,000	0.239 < 0.430	0.880 < 1.900	< 5,800 < 5,800	< 0.800 < 0.800	< 0.390 < 0.390	< 0.530 < 0.530	< 0.490 < 0.490
Benzo (a) anthracene	0.224 or MDL 0.061 or MDL	19,000 6,500	34.000 24.000	< 3,900 < 3,900	3,100	1,500	7.500	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	0.340
Benzo (a) pyrene Benzo (b) fluoranthene	1.1	9,900	43,000	< 3.900	5,300	2.700	12.000	< 0.430	< 1,900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Benzo (g,h,i) perylene	50.0	2,400	15.000	< 3.900	1.600	0.910	3.900	< 0.430	< 1.900	< 5.800	< 0.800	< 0,390	< 0.530	< 0.490
Benzo (k) fluoranthene	1.1	4.900	7,600	< 3.900	1.600	1,100	4.400	< 0.430	< 1.900	< 5,800	< 0.800	< 0.390	< 0.530	< 0.490
bis (2-Chloroethoxy) methane	N/L	< 2.400	< 1.900	< 3.900	< 1,900	< 0,360	< 1,800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
bis (2-Chioroethyl) ether	N/L	< 2.400	< 1.900	< 3.900	< 1,900	< 0.360	< 1.800	< 0.430	< 1,900	< 5,800	< 0.800	< 0.390	< 0.530	< 0.490
bis (2-Ethythexyl) phthalate	50.0	< 2,400	< 1,900	< 3,900	< 1.900	< 0.360	< 1.800	< 0.059 < 0.430	< 1.900 < 1.900	< 5.800 < 5.800	< 0.800 < 0.800	< 0.390 < 0.390	< 0.530 < 0.530	< 0.097 < 0.490
4-Bromophenylphenylether	N/L 50,0	< 2.400 < 2400	< 1.900 < 1.900	< 3.900 < 3.900	< 1,900 < 1,900	< 0.360 < 0.360	< 1.800 < 1.800	< 0.430	< 1,900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Sutylbenzylphthalate Carbazole	N/L	2.600	5.100	< 3.900	0.920	0.450	1.800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
4-Chloro-3-methylphenol	0.240 or MDL	< 2.400	< 1.900	< 3.900	< 1.900	< 0.360	< 1.800	< 0.430	< 1.900	< 5,800	< 0.800	< 0.390	< 0.530	< 0.490
4-Chloroaniline	0,220 or MDL	< 2,400	< 1.900	< 3,900	< 1.900	< 0.360	< 1.800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
2-Chloronaphthalene	N/L	< 2,400	< 1,900	< 3.900	< 1.900	< 0.360	< 1.800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0,490
2-Chlorophenol	0.8	< 2.400	< 1.990	< 3.900	< 1.900	< 0.360	< 1,800	< 0.430	< 1,900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
4-Chlorophenylphenylether	N/L	< 2.400	< 1.900	< 3.900	1 < 1,900	< 0.360	< 1.800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Chrysene	0,4	12,000	28.000	< 3.900	4.800	1,900	9,200 < 1,800	< 0.430 < 0.430	2.500 < 1.900	< 5.800 < 5.800	< 0.800 < 0.800	< 0,390 < 0.550	< 0.530 < 0.620	< 0.490 < 1.200
Di-n-butylphthalate	3.1 50.0	< 2.400 < 2.400	< 1.900 < 1.900	< 3.900 < 3.900	0.270	< 0.360	< 1,800	< 0.430	< 1,900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Di-n-octylphthalate Dibenzo (a.h) anthracene	0.014 or MDL	1.200	< 1,900	< 3.900	< 1.900	0.330	1.500	< 0.430	< 1,900	< 5.800	< 0.800	< 0.390	< 0.530	< 0,490
Dibenzofuran	6,2	2,100	6,900	< 3.900	0.740	0.240	1.100	< 0.430	0.300	< 5,300	< 0.800	< 0.390	< 0.530	< 0.490
1,2-Dichlorobenzene	N/L	< 2,400	< 1.900	< 3,900	< 1.900	< 0.360	< 1,800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
1.3-Dichlorobenzene	N/L	< 2.400	< 1.900	< 3.990	< 1,900	< 0.360	< 1.800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
1,4-Dichlorobenzene	N/L	< 2.400	< 1,900	< 3.900	< 1,900	< 0.360	< 1,800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
3,3'-Dichlorobenzidine	N/S	< 2400	< 1,900	< 3,900	< 1,900	< 0.360	< 1.800	< 0.430 < 0.430	< 1.900 < 1.900	< 5.800 < 5.800	< 0.800 < 0.800	< 0.390 < 0.390	< 0.530 < 0.630	< 0.490 < 0.490
2,4-Dichlorophenol	0.4 7.1	< 12.000 < 2.400	< 1.900 < 1.900	< 3.900 < 3.900	< 1,900 < 1,900	< 0.360 < 0.360	< 1.800 < 1.800	< 0.430	< 1,900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Diethylphthalate 2,4-Dimethylphenol	7.1 N/L	< 2.400	< 1.900	< 3.900	< 1,900	< 0.360	< 1,800	< 0.430	< 1,900	< 5.800	< 0.800	< 0,390	< 0.530	< 0.490
Dimethylphthalate	2.0	< 2.400	< 1,900	< 3.900	< 1,900	< 0.360	< 1,800	< 0.430	< 1.900	< 5,800	< 0.800	< 0.390	< 0.530	< 0.490
2.4-Dinitrophenol	0.200 or MDL	< 2.400	< 9,400	< 19,000	< 9.700	< 1.800	< 8,900	< 2.100	< 9.500	< 29.000	< 4.000	< 1.900	< 2.690	< 2.500
2,4-Dinitrotoluene	N/L	< 2.400	< 1.900	< 3.900	< 1.900	< 0.360	< 1.800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
2,6-Dinitrotoluene	1.0	< 2.400	< 1.900	< 3.900	< 1.900	< 0.360	< 1.800	< 0.430	< 1.900	< 5,800	< 0.800	< 0.390	< 0.530	< 0.490
Fluoranthene	50.0	20.000	72.000	< 3.900	7.400	6.600	13,000	0.130	2,400	7.800	< 0.800	< 0.390	< 0.530	< 0.490
Fluorene	50.0	2.900	9.200	< 3,900 < 3,900	1.200	0,430	1,700 < 1,800	< 0.430 < 0.430	0.310	< 5.800 < 5.800	< 0.800 < 0.800	< 0.390 < 0.390	< 0.530 < 0.530	< 0.490 < 0.490
Hexachlorobenzene	0.41 N/L	< 2.400 < 2.400	< 1,900 < 1,900	< 3,900	< 1,900	< 0.360	< 1.800	< 0.430	< 1,900	< 5,800	< 0.800	< 0.390	< 0.530	< 0.490
Hexachlorobutadiene Prexachlorocyclopentadiene	N/L	< 2.400	< 1.900	< 3,900	< 1.900	< 0.360	< 1.800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Hexachloroethane	N/L	< 2.400	< 1,900	< 3,900	< 1.900	< 0.360	< 1.800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Indeno (1,2,3-cd) pyrene	3,2	2.500	12.000	< 3.900	1.600	0.870	4.700	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Isophorone	4,40	< 2.400	< 1.900	< 3,900	< 1.900	< 0.360	< 1.800	< 0.430	< 1.960	< 5.800	< 0.800	< 0.390	< 0,530	< 0.490
2-Methyl-4,6-dinitrophenol	N/L	< 12.000	< 9,400	< 19.600	< 9.700	< 1.800	< 8.900	< 2.100	< 9.500	< 29,000	< 4.000	< 1.900	< 2.600	< 2.500
2-Mothylnaphthalene	36.4	1.000	5,100 < 1,900	0.470 < 3.900	0,460 < 1,900	0,130	0.580 < 1.800	3.300 < 0.430	0.450 < 1.900	2,300 < 5,300	4.900 < 0.800	1.400 < 0.390	0,110 < 0.530	< 0,490 < 0,490
2-Methylphenol 4-Methylphenol	0.100 or MDL 0.9	< 2,400 < 2,400	< 1,900	< 3.900	< 1.960	< 0.360	< 1,800	< 0.430	< 1.900	< 5,800	< 0.800	< 0.390	< 0.530	< 0.490
Nachthalene	13,0	1,500	11.000	< 3.900	0.850	0.200	< 1,800	< 0.430	< 1,900	8,700	< 0.800	< 0.390	< 0.530	< 0.490
2-Nitroaniline	0.430 or MDL	< 12.000	< 9,400	< 19.000	< 9.700	< 1.800	< 8.900	< 2.100	< 9,500	< 29.000	< 4.000	< 1.900	< 2.600	< 2.500
3-Nitroaniline	0.500 or MDL	< 12.000	< 9.400	< 19.000	< 9.700	< 1,800	< 8,900	< 2.100	< 9.500	< 29,000	< 4,000	< 1.900	< 2.690	< 2.500
4-Nitroaniline	N/L	< 12.000	< 9,400	< 19,000	< 9.700	< 1,800	< 8.900	< 2.100	< 9.500	< 29.000	< 4.000	< 1.900	< 2.600	< 2.500
Nitrobenzene	0.200 or MDL	< 2.400	< 1,900	< 3.900	< 1.900	< 0.360	< 1,800	< 0.430	< 1.909	< 5.500	< 0.800	< 0.390	< 0.530	< 0.490
2-Nitrophenoi	0.330 or MDL	< 2.400	< 1.900	< 3.909	< 1,900	< 0.380 < 1.800	< 1.800 < 8.900	< 0.430 < 2.100	< 1,900 < 9,500	< 5.800 < 29.000	< 0,800 < 4,000	< 0.390 < 1.900	< 0.530 < 2.600	< 0.490
4-Nitrophenol	0.100 or MDL N/L	< 12.000 < 2.400	< 9,400 < 1,900	< 19.000 < 3.900	< 9,700 < 1,900	< 0.360	< 1.800	< 0.430	< 1.900	< 5.800	< 4.000	< 0.390	< 0.530	< 2.500 < 0.490
n-Nitrosodi-n-propytamine n-Nitrosodiphenylamine	N/L N/L	< 2.400	< 1.900	< 3.900	< 1,900	< 0.360	< 1.800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
2,2'-Oxybis (1-Chloropropane)	NA.	< 2.400	< 1,900	< 3.900	< 1,900	< 0.360	< 1,800	< 0.430	< 1.900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Pentachlorophenol	1.0 or MDL	< 12,000	< 9.400	< 19.000	< 9.700	< 1,800	< 8.900	< 2.100	< 9,500	< 29.000	< 4.000	< 1.900	< 2.600	< 2.500
Phenanthrene	50.0	26,000	92.000	1.700	8.000	4.800	13,000	1,300	4,600	< 5.800	3,500	< 0.390	0,390	0.490
Phenol	0.03 or MDL	< 2.400	< 1,900	< 3.900	< 1900	< 0.360	< 1,800	< 0.430	< 1,900	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
Pyrene	50.0	35.000	97,000	< 3,900	12.000	9,400	28.000	< 0.430	9.500	< 5.800	< 0.800	< 0.390	< 0.530	< 0.490
1,2,4-Trichlorobenzene	N/L.	< 2.400	< 1.900	< 3,900	< 1.900	< 0.360 < 1.800	< 1,890 < 8,900	< 0.430 < 2.100	< 1.900 < 9.500	< 5.800 < 29.000	< 0.800 < 4.000	< 0.390 < 1.900	< 0.530 < 2.600	< 0.490
2,4,5-Trichlorophenol	0,1 NR	< 12.000 < 2.400	< 9.400 < 1.900	< 19.000 < 3.900	< 9,700 < 1,900	< 0.360	< 1,800	< 9.430	< 1,900	< 29.000	< 0.800	< 0.390	< 2.530 < 0.530	< 2,500 < 0,490
2,4,6-Trichlorophenol	N/L	~ C.4VV	1.800	~ 0.5GV	1.350	market and the second s	La reconstruction of the second	WARRIOTO WARRANTON	Januare and Company of the Company o	Parameter Commence of the Comm	Same and the same a	entranse en	portion was a series of the se	karana and a same and a same and a same a

- Notes:

 1. Results expressed in milligrams per kilogram (mg/kg) = parts per million (ppm).

 2. RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.

 3. MDL = Method Detection Limit.

 4. N/L = Parameter Not Listed in NYSDEC TAGM HWR-94-4046.

 5. N/S = Parameter Listed in NYSDEC TAGM HWR-94-4048, but RSCO Not Specified.

 6. Results in BOLD type indicate detected concentrations of parameter analyzed.

 7. SHADING indicates results above the RSCO.

TABLE - 1-4

Summary of Phase 1 SI Soil Sample Analytical Data

TAL Metals Analyses

Former Brown Manufacturing Site, Syracuse, New York

Perturbation designation of the second secon	Eastern USA		THB-9	GP-20	GP-5C	1 GP-8B	GP-13A	GP-16A	GP-17F	GP-25A	1-1Q	T-2G	7-41	7-5E	7-6G
Parameter	Background (ppm)	RSCO	(0.0'-0.5')	(4.0'-5.7')	(2.0'-4.0')	(0.5'-2.0')	(0.0'-0.5')	(0.0'-0.5')	(8.0'-10.0')	(0.0'-0.5')	(L=84',D=5')	(L=92',D=11')	(L=8',D=13')	(L=5',D=13')	(L=35',D=13')
Aluminum	33000	\$8	6760	6310	4540	8640	7650	7810	10500	7230	5940	2460	5730	4740	4560
Antimony	N/A	\$8	< 4.3	< 3.4	< 3.5	< 3.5	< 3.2	< 3.2	< 3.3	< 3.4	< 5.3	< 1.8	< 2.0	< 4.8	< 4,4
Arsenic	3 - 12 '	7.5 or SB	21.5	7.2	6,9	22.4	19.0	20.3	12.6	R	29.3	R	R	R	9.7
Barium	15 - 600	300 or SB	456	170	68	201	258	343	120	2150	10300	34,5	95.3	40.9	56.4
Beryllium -	0 - 1.75	0.16 or SB	< 0.86	< 0.67	< 0.7	0.98	0.74	0.88			0.93	< 0.36	< 0.39	< 0.95	< 0,88
Cadmium	0.1 - 1	1 or SB	2;2,2,2,2,2,2,2,2	1.70	< 1.2	2,30	Z-100-100	2:50	22	2.7	14.7	1.50	2.4	3	2
Calcium	130 - 35000	\$8	124000	159000	66800	42300	107000	104000	13400	34200	44400	80700	70700	139000	54500
Chrosnium	1.5 - 40 *	10 or S8	25.7	22.6	9.2	16.6	17.8	22.1	17.9	33.2	156	2.7	6.1	8.9	8.6
Cobalt	2.5 ~ 60 *	30 or S8	< 5.7	5.1	5.7	7.4	6.8	7.20	10.3	6.2	6.1	< 2.40	2.9	< 6.3	< 0.59
Соррег	1 - 50	25 or SB	46.6	35.8	43.3	66.7	54.5	87.8	19.9	99.5	536	5	11.6	19.3	11.7
lron	2000 - 550000	2000 or SB	15600	11300	12700	17500	15900	22400	19900	27300	27700	3540	7650	12800	9210
Lead	200 - 500 **	\$8	107	243	115	243	230	320	48.1	2460	641	31.2	56.4	Ŕ	R
Magnesium	100 - 5000	S8	17100	25700	19400	6550	13800	16600	6240	7310	8550	9630	11700	17300	9090
Manganese	50 - 5000	S8	309	253	232	294	380	359	450	285	545	82.4	197	302	163
Mercury	9.001 - 0.2	0.1	<u>R</u>	R	R	R	R	R	< 1.3	R	< 1.8	3.9	< 1.3	< 1,6	< 1.5
Nickel	0.5 - 25	13 or S8	29.3	21.7	13.9	21	22.3	22.3	23.2	426	342	3.7	8.2	15.5	12.1
Potassium	8500 - 43000 *	\$8	920	1160	792	1060	1150	1330	1210	1320	922	407	642	890	562
Selenium	0.1 - 3.9	2 or S8	5.4	7.1	5.8	7.5	5	8.1	5.2	5.2	13.5	3	5.4	< 1.6	4.7
Silver	∮ N/A	SB SB	< 2.9	< 2.2	< 2.3	< 2.3	< 2.2	< 2.1	< 2.6	< 2.3	R	R	R	R	R
Sodium	6000 - 6000	\$8	422	< 225	233	249	215	238	< 25ô	< 227	1220	< 241	< 263	< 317	< 294
Thallium	N/A	SB	< 5.4	< 2.2	< 2.3	4.5	2.2	< 2.1	< 2.6	< 2.3	< 3.5	< 2.4	< 2.6	< 3.2	< 2.9
Vanadium	1 - 300	150 or SB	22,6	17.7	17.2	24.0	19.2	21.7	19.3	15.1	14.2	4.5	7.7	14.5	14.2
Zinc	9 - 50	20 or SB	205	246	112	229	184	323	58.4	234	686	29.3	74	37.7	52.9

- Notes:
 1. Results expressed in milligrams per kilogram (mg/kg) = parts per million (ppm).
 2. RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.
- (*) = New York State Background Level.
 (*) = New York State Background Level.
 (*) = Background levels for lead vary widely, Average background levels in metropolitan areas or near highways typically range from 200-500 ppm.
 N/S = Parameter Listed in NYSDEC TAGM HWR-94-4046, but RSCO Not Specified.
 Results in BOLD type indicate detected concentrations of parameter analyzed.
 SHADING indicates results above the RSCO, Eastern USA Background Level, or New York State Background Level.

- 8. A value of R denotes unusable data as per the Data Usability Summary Report

TABLE - 2-1

Summary of Phase 2A SI Soil Sample Analytical Data TCL - VOC Analyses

Former Brown Manufacturing Site - Syracuse, New York

Parameter	RSCO	T8 Oll on GW		
In-Sila PID Screening	,	3.0		
Headspace PID Screening	0.2	130		
Acetone	0.2	< 34.0		
Benzene	0.06	< 34.0		
Bromodichloromethane	N/L	< 34.0		
Bromoform	N/L	< 34.0		
Bromomethane	N/L	1 × 27.0		
2-Butanone	0.3	< 34.0		
Carbon Disulfide	2.7	< 34.0		
Carbon Tetrachloride	0.6	< 34.0		
Chlorobenzene	1.7	< 34.0		
Chloroethane	1.9	< 34.0		
Chloroform	0.3	< 34.0		
Chloromethane	N/L	< 34.0		
Dibromochloromethane	N/S	< 34.0		
1.1-Dichloroethene	0.2	< 34.0		
1,2-Dichloroethane	0.1	< 34.0		
1,1-Dichloroethene	0.4	< 34.0		
cis-1,2-Dichloroethene	N/L	< 34.0		
Irans-1,2-Dichlorgethene	0.3	< 34.0		
1,2-Dichloropropane	N/L	< 34.0		
cis-1,3-Dichloropropene	N/L	< 34.0		
trans-1,3-Dichloropropene	N/L	< 34.0		
Ethylbenzene	N/L	< 34.0		
2-Hexanone	N/L	< 34.0		
Methylene Chloride	0.1	9.7		
4-Methyl-2-Pentanbne	1.0	< 34.0		
Styrene	N/L	< 34.0		
1.1.2.2-Tetrachloroethane	0.6	< 34.0		
Tetrachloroethene	1.4	< 34.0		
Toluene	1.5	< 34.0		
1,1,1-Trichloroethane	0.8	< 34.0		
1,1,2-Trichloroethane	N/L	< 34.0		
Trichloroethene	0.7	< 34.0		
Vinvi Chloride	0.2	< 34.0		
m-Xylene, p-Xylene	1.2	< 34.0		
o-Xylene	1.2	< 34.0		

- Notes:
 1. All values expressed in parts per million (ppm).
 2. RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.
- 3. N/L = Parameter Not Listed in NYSDEC TAGM HWR-94-4046.
 4. N/S = Parameter Listed in NYSDEC TAGM HWR-94-4046, but RSCO Not Specified.
 5. Results in BOLD type indicate detected concentrations of parameter analyzed.
- SHADING indicates results above the RSCO.

Summary of Phase 2A SI Soil Sample Analytical Data TCL - Semi-VOC Analyses

Former Brown Manufacturing Site - Syracuse, New York

Parameter	RSCO	177-2 (1	77-4 (L=60',D=14')	T8 Oil on GW	T8-2 (L=100',D=13')	T8-2 Dup. (L=100',D=13')	T9-1 (L=5',D=13')	T10-1 (L=9',D=12')	T11-1 (L=11',D=12')	T12-1 (L=5',D=11')	T13-1 (L=5',D=10')	T14-1 (L=5',D=10')	T15-1 (L=5',D=5')
In-Situ PID Screening		(L=23',D=3')	(L=60,D=14)	3.0	10	10	0.0	3.0	2.5	1.0	5.0	0.0	1.0
Headspace PID Screening	ļ	6.0	0.0	130	40	46	1.8	2.0	4,4	2.0	10.3	1.0	3.7
Phenol	0.03 or MDL	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
bis (2-Chloroethyl) ether	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40 < 40
2-Chlorophenol	8,0	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4,1	< 42	< 35	< 0.53	< 40
1,3-Dichlorobenzene	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35 < 35	< 0.53 < 0.53	< 40
1.4-Dichlorobenzene	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42 < 42	< 35	< 0.53	< 40
1,2-Dichlorobenzene	N/L	< 4	< 0.39	< 100	< 0.39	< 0,42	< 0.42	< 0.48 < 0.48	< 4.1 < 4.1	< 42	< 35	< 0.53	< 40
2-Methylphenol	0.100 or MDL	<u> </u>	< 0.39	< 100	< 0.39 < 0.39	< 0.42 < 0.42	< 0.42 < 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
2,2'-Oxybis (1-Chloropropane) 4-Methylphenol	N/L 0.9	< 4	< 0.39 < 0.39	< 100 < 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
n-Nitrosodi-n-propylamine	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Hexachloroethane	N/L	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4,1	< 42	< 35	< 0.53	< 40
Nitrobenzene	0.200 or MDL	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Isophorone	4.40	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0,48	< 4,1	< 42	< 35	< 0.53	< 40
2-Nitrophenol	0.330 or MDL	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
2,4-Dimethylphenol	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0,42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40 < 40
bis (2-Chloroethoxy) methane	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35 < 35	< 0.53 < 0.53	< 40
2,4-Dichlorophenol	0.4	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42 < 42	< 35 < 35	< 0.53	< 40
1.2.4-Trichlorobenzene	N/L.	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42 < 0.42	< 0.48 0.50	< 4.1 < 4.1	< 42	< 35	< 0.53	< 40
Naphthalene 4-Chloroaniline	13.0	< 4.6	< 0.39 < 0.39	200	< 0.39 < 0.39	< 0.42 < 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Hexachlorobutadiene	0.220 or MDL N/L	< 4	< 0.39 < 0.39	< 100 < 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
4-Chloro-3-methylphenol	0.240 or MDL	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
2-Methylnaphthalene	36.4	2.2	< 0.39	81	1.20	1,20	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Hexachlorocyclopentadiene	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	0.29	< 4.1	< 42	< 35	< 0.53	< 40 .
2.4.6-Trichlorophenol	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
2,4,5-Trichlorophenol	0.1	< 40	< 0.39	< 1,000	< 3.90	< 4.20	< 4.20	< 4.80	< 41	< 420	< 350	< 5.30	< 400 < 40
2-Chloronaphthalene	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53 < 5.30	< 400
2-Nitroaniline	0.430 or MDL	< 40	< 0.39	< 1,000	< 3.90	< 4.20	< 4.20	< 4.80	< 41	< 420 < 42	< 350 < 35	< 0.53	< 40
Dimethylphthalate	2.0	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48 0.66	< 4.1 < 4.1	< 42	< 35	< 0.53	< 40
Acenaphthylene	41.0	1.2	< 0.39	< 100	< 0.39	< 0.42 < 0.42	< 0.42 < 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
2.6-Dinitrotoluene 3-Nitroaniline	1.0 0.500 or MDL	< 4 < 40	< 0.39 < 3.90	< 100 < 1,000	< 0.39 < 3.90	< 4.20	< 4.20	< 4.80	< 41	< 420	< 350	< 5.30	< 400
Acenaphthene	50.0	4.6	< 0.39	< 100	< 0.39	< 0.42	< 0.42	0.50	< 4,1	< 42	< 35	< 0.53	< 40
2,4-Dinitrophenol	0.200 or MDL	< 40	< 3.90	< 1,000	< 3.90	< 4.20	< 4.20	< 4.80	< 41	< 420	< 350	< 5.30	< 400
4-Nitrophenol	0.100 or MDL	< 40	< 3.90	< 1.000	< 3.90	< 4.20	< 4.20	< 4.80	< 41	< 420	< 350	< 5.30	< 400
Dibenzofuran	6.2	3,6	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.39	< 4.1	< 42	< 35	< 0.53	< 40
2.4-Dinitrotoluene	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Diethylphthalate	7.1	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53 < 0.53	< 40 < 40
4-Chlorophenviphenylether	N/L	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35 < 35	< 0.53	< 40
Fluorene	50.0	6.3	< 0.39	< 100	0.17	< 0.42	< 0.42	0.70	< 4.1	< 42 < 420	< 350	< 5.30	< 400
4-Nitroaniline	NA.	< 40	< 3.90	< 1,000	< 3.90	< 4.20	< 4.20 < 2.10	< 4.80 < 2.40	< 41 < 20	< 210	< 170	< 2.70	< 200
2-Methyl-4,6-dinitrophenol n-Nitrosodiphenylamine	N/L	< 20 < 4	< 2.00 < 0.39	< 500 < 100	< 2.00 < 0,39	< 2.10 < 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
4-Bromophenviphenviether	N/L N/L	< 4	< 0.39 < 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Hexachlorobenzene	0.41	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Pentachlorophenol	1.0 or MDL	< 7.9	< 0.78	< 200	< 0.78	< 0.83	< 0.83	R	R	< 83	< 70	< 1.10	< 79
Phenanthrene	50.0	32	< 0.39	18	0.670	< 0.42	< 0.42	5.3	< 4.1	< 42	< 35	< 0.53	22
Anthracene	50.0	12	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	4.8
Carbazole	N/L	3.4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53 < 0.53	< 46 < 40
Di-n-butylohthalate	8.1	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	27
Fluoranthene	50.0	25	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42 < 42	< 35 < 35	< 0.53	29
Pyrene	50.0	42	< 0.39	< 100	< 0.39	< 0.42	< 0.42 < 0.42	< 0.48 < 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Butylbenzylghthalate 3,3'-Dichlorobenzidine	50.0	< 4	< 0.39 < 0.39	< 100 < 100	< 0.39 < 0.39	< 0.42 < 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Benzo (a) anthracene	N/S 0 224 or MDL	19	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Chrysene	0.4	17	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	43
bis (2-Ethylhexyl) phthalate	50.0	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Di-n-octviphthalate	50.0	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	< 40
Benzo (b) fluoranthene	1,1	17	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	14
Benzo (k) fluoranthene	1,1	7.9	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42	< 35	< 0.53	4.2
Berizo (a) pyrene	0.061 or MDL.	18	< 0.39	< 100	< 0.39	< 0.42	< 0.42	1,4	< 4.1	< 42	< 35	< 0.53	9,9
Indeno (1,2,3-cd) pyrene	3.2	7.6	< 0.39	< 100	< 0.39	< 0.42	< 0.42	0.47	< 4.1	< 42	< 35	< 0.53 < 0.53	< 40
Dibenzo (a.h) anthracene	0.014 or MDL	< 4	< 0.39	< 100	< 0.39	< 0.42	< 0.42	< 0.48	< 4.1	< 42 < 42	< 35 < 35	< 0.53	< 40
Benzo (g,h,i) pervlene	50.0	7.6	< 0.39	< 100	< 0.39	< 0.42	< 0.42	0.41	< 4.1	1 - 5 4%	1,	1	

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- Notes:
 All values expressed in parts per million (ppm).
 RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.
 MDL = Method Detection Limit.
 N/L = Parameter Not Listed in NYSDEC TAGM HWR-94-4046.
 N/S = Parameter Listed in NYSDEC TAGM HWR-94-4046. but RSCO Not Specified.I
 Results in BOLD type indicate detected concentrations of parameter analyzed.
 SHADING indicates results above the RSCO.
 A value of R denotes unusable data as per the Data Usability Summary Report.

Page 1 of 1

PCBs - Polychlorinated Biphenyls Analyses Soil Sample Analytical Data Summary of Phase 2A SI

	Surface	Subsurface	T7-1	(L=23',D=3')	77-3 (L=52',D=3')	77.4	T8-1 (L=35',D=13')	18-2 (L=100',D=13')	(L=100',D=13')	(L=5',D=13')
Parameter In Car. OID	KSCC ,	X YOU	1.5	1.0	2.5	0.0	3.0	10	0,	0.0
or and a			140	6.0	13.0	0.0	130	40	46	£.9
Headspace PID	-		THE PERSON NAMED OF THE PE	***************************************	Carried Communication of the C	000 0	0.1.0	0.080 ×	< 0.100	< 0.100
PCB Arador 1016	0	Ç	< 0.100	× 0.100	> 0.080	020.0				
000 Amoint 4004	C	10	< 0.100	< 0.100	060'0 >	0:000 >	× 0.110	060:0 >	< 0.100	< 0.100
PUB ABOSIGI 124 :	2				000	0000	< 0.550 ×	060'0 >	< 0.100	< 0.100
PCB Arodor 1232	č,	6	< 0.100	001.0 >	0.080 V.080	2000				
		Ç	< 0.100	< 0.150	060'0 >	060'0 >	< 0.110	060'0 >	< 0.100	< 0.100
PCB Arocior 1242	2	2						000	00,0	< 0.100
PCR Arcelor 1248	r. C	Ç	< 0.100	< 0.100	4.453	060'0 >	< 0.110	060,0 >	201.0	
			0,00	2 400	1.585	060'0 >	< 0.110	080'0 >	< 0.100	× 0.100
PCB Arodor 1254	,	27.	2.4.13	222-7						0000
0907 201000 000	C.	10	< 0.100	< 0.100	060:0 >	0.090 >	< 0.110	060'0 >	0 I I I I	, c. c.c.
POB ACCOUNTS	* Physical Company of the Company of	TO CONTRACT	*****************		0000	0000	A 0.110	060'0 >	< 0.100	< 0.100
		Tato DODA	2250	2.400	0000	0805				-

Notes:
1. All values expressed in parts per million (ppm).
2. RSCO = Recommended Soil Cleanup Objective: Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.
3. Results in BOLD type indicate detected concentrations of parameter analyzed.
4. SHADING indicates results above the RSCO.

PCBs - Polychlorinated Biphenyls Analyses Soil Sample Analytical Data Summary of Phase 2A SI

			Former -	Brown Manufa	Former - Brown Manufacturing, Site - Syracuse, New York	vracuse. New Y	- 1		***************************************	
Parameter	Surface	Subsurface RSCO	T9-2 (L=60',D=11')	T10-1 (L=9',D=12')	T10-2 (L=29',D=12')	T10-3 (L=45',D=12')	711-1 (L=11',D=12')	T11-2 (L=37',D=13')	[L=45,D=10]	(L=60',D=10')
needigeneeringenseeri	,	í	1.0	3.0	ť.	0.,	2.5	15	90	90
Headspace PID	,	1	3.5	2.0	1,6	2.2	4,4	32	555	රිව
PCB Anodor 1016	1.000	10,000	< 0.100	< 0.120	< 0.100	< 0.090	060'0 >	< 0.109	< 0.100	< 0.100
PCB Aradior 1221	1,000	10,690	< 0.100	< 0.120	< 0.100	< 0.090	360'0 >	< 0,100	< 0.100	< 0.100
PCB Arodor 1232		10,000	< 0,100	< 0.120	< 0.100	< 0.090	< 0.090	< 0.100	< 0.100	< 0.100
PCB Arador 1242	1,000	10.000	< 0.100	< 0.120	< 0.100	< 0.090	< 0.090	< 0.100	< 0.100	< 0.100
PCB Arodor 1248	1,500	15,000	< 0.100	< 0.120	< 0.100	< 0.080	< 0.090	< 0.100	< 0.100	< 0.100
PCB Arodor 1254	1.000	10.000	< 0.100	< 0.120	< 0.100	< 0.090	060.0 >	< 0.100	< 0.100	< 0.100
PCB Arodor 1260	1.000	10.000		< 0.120	< 0.100	060.0 >	0.030 >	< 0.100	< 0.100	< 0,100
AND		Total PCBs =	< 0.100	< 0.120	< 0.100	0:030	< 0.000	< 0.100	< 0.100	< 0.100
		•								

Notes:
1. All values expressed in parts per million (ppm).
2. RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.
3. Results in BOLD type indicate detected concentrations of parameter analyzed.
4. SHADING indicates results above the RSCO.

Soil Sample Analytical Data PCBs - Polychlorinated Biphenyls Analyses Summary of Phase 2A SI

			ıĩ	ormer - Brown &	fanufacturing .	Sife - Syracuse	New York				
Parameter	Surface RSCO	Subsurface RSCO	T12-1 (L=5',D=11')	(L=35',D=11') (L=65',D=11') (L=5',D=10') (L=35',D=1	T12-3 (L=65',D=11')	T13-1 (L=5',D=10')	T13-2 (L=35',D=10')	(L=5',D=10')	T14-2 (L=15',D=10')	T15-1 (L=5',D=5')	T15-2 (L=35',D=4')
Old mis-ul	edociacióni	1	1.0	63	25	5.0	0.0	0.0	0.0	1.0	1,0
Heedspace PID	,	,	2.0	58	40	10.3	0.0	1.0	4.1	3.7	2.8
PC8 Arador 1016	1.000	10.030	< 0.100	0.050.	060'0 >	060'0 >	< 0.100	< 0.130	< 0.110	< 0.100	< 0.100
PCB Arador 1221	1.000	10.000	< 0.100	060'0 >	060.0 >	060'0 >	< 0.100	< 0.130	< 0.110	< 0.700	< 0.100
PCB Aradior 1232	1.000	10.000	< 0.100	060'0 >	060'0 >	060'0 >	< 0.100	< 0.130	< 0.110	< 0.100	< 0.100
PCB Arodor 1242	1.000	10.000	< 0.100	060'0 >	< 0.050	060'0 >	< 0.100	< 0.136	< 0.110	< 0.100	< 0,100
PCB Araclor 1248	1,000	10,000	< 0.100	060'0 >	< 0.090	< 0.090	< 0.100	< 0.130	< 0.110	< 0.100	< 0.100
PC8 Arocior 1254	1,000	10.000	< 0.100	060'0 >	060.0 >	< 0.090	< 0.100	< 0.130	< 0.110	1.480	1.120
PCB Araclar 1260	1.000	10.000	< 0.100	080'0 >	< 0.090	080'0 >	< 0.100	< 0.130	< 0.110	< 0.190	< 0.100
		Total PCBs =	< 0.100	060.0 >	< 0.090	> 0.090	< 0.100	< 0.130	< 0.110	1.480	1.120

Notes:

All values expressed in parts per million (ppm).
 RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-84-4046.
 Results in BOLD type indicate detected concentrations of parameter analyzed.
 SHADING indicates results above the RSCO.

12/17/2002

Summary of Phase 2A SI Soil Sample Analytical Data TPH - Gas Chromatography Product ID Analyses

Former Brown Manufacturing Site - Syracuse, New York

Parameter	T7-1 (L=11',D=4')	T7-2 (L=23',D=3')	T7-3 (L=52',D=3')	77-4 (L=60',D=14')	T8-1 (L=35',D=13')	78 Oil on GW	T8-2 T8-2 Dup. (L=100',D=13') (L=100',D=13')	T8-2 Dup. (L=100',D=13')	T9-1 (L=5',D=13')
Old uhS-nl	rů.	0.1	ړ. تن	0.0	3.0	4	10	10	0.0
Headspace PID	14.0	0'9	13.0	0.0	130	i.	40	46	65
Gasoline Range	N N	QN	QN	QN	ON	GN	QV	Q	Q
Fuel Oil #1/Kerosene Ranga	A 4.0	5.8	83.8	9.5 >	97 >	< 1000	< 3.8	< 4.3	< 4.1
Fuel Oil #2/Diesel Range	0.4.0	> 3.9	8.5	> 3.9	Detected	Detected	Detected	Detected	< 4.1
Lubricating/Insulating/Hydraulic Range	Detected	Detected	Detected	g	Detected	Defected	Defected	Detected	Detected
Unidentified Hydrocarbons	9	QN	Ð	Ş	GN	QN	ND	QV	S
Total Petroleum Hydrocarbons	Detected	Detected	Detected	ğ	Detected	Detected	Detected	Detected	Detected

Notes:
1. All values expressed in parts per million (ppm).
2. BOLD type indicates detected parameters.

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Summary of Phase 2A Si Soil Sample Analytical Data TPH - Gas Chromatography Product ID Analyses

Former Brown Manufacturing Site - Syracuse, New York

Parameter	T9-2 (L=60',D=11')	T10-1 (L=9',D=12')	T10-2 (L=29',D=12')	T10-3 (L=45',D=12')	T11 Oil in Pipe	T11-1 (L=11',D=12')	T11-2 (L=37',D=13')	T11-3 (L=45',D=10')	TH1-4 (L=60',D=10')
in-Situ PiD	Ç.	3.0	£,5	1.0	•	2.5	15	99	50
Headspace PID	3.5	2.0	ν <u>.</u>	2.2	ı	4,4	32	**	88
Gasoline Range	9	QN	GN	9	QN	QN	Q	S	QN.
Fuel Oii #1/Kerosene Range	03 (r) V	< 4.8	< 4.3	< 3.8	< 1000	< 4.0	< 4.0	< 4.2	^ 4,4
Fuel Oil #2/Diesel Range	රා ල් V	< 4.8	< 4.3	< 3.8	< 1000	< 4.0	Detected	Detected	Detected
Lubricating/Insulating/Hydraulic Range	Detected	Detected	Detected	Detected	Detected	Defected	Detected	Defected	Detected
Unidentified Hydrocarbons	2	QN	ON.	2	S	S	2	Q	8
Total Petroleum Hydrocarbons	Detected	Detected	Detected	Detected	Detected	Defected	Detected	Detected	Detected
				***************************************	,				

Notes:
1. All values expressed in parts per million (ppm),
2. BQLD type indicates detected parameters.

Summary of Phase 2A SI Soil Sample Analytical Data TPH - Gas Chromatography Product ID Analyses

Former Brown Manufacturing Site - Syracuse, New York

T12.4 (L=5,D=11)	T12-2 (L=35',D=11')	T12-3 (L=65',D=11')	713-1 (L=5',D=10')	T13-2 (L=35',D=10')	T14-1 (L=5',D=10')	T14-2 (L=15',D=10')	T15-1 (L=5',D=5')	715-2 (L=35',D=4')
1.0	15	25	0.0	0.0	0.0	0.0	1.0	1.0
2.0	29	40	10.3	0.0	1,0	4.	3.7	2.8
Q	ΩN	QN	Ð	GN	QN	QN	CN	ΩŽ
۸ ۴. آ	< 3.7	< 3.9	< 3.5	8.5. A.3.9	< 5.3	5,4 >	8.6 >	< 3.9
A 4.1	< 3.7	< 3.9	Detected	5.9	< 5.3	A 4.5	< 3.9	3.9
Defected	Defected	Detected	Detected	Q.	QN	QV	Detected	Detected
Q	Detected	Defected	g	S.	ON	ON.	Detected	Detected
Detected	Detected	Detected	Detected	Q.	QN O	9	Defected	Detected

Notes:
1. All values expressed in parts per million (ppm).
2. BOLD type indicates detected parameters.

TABLE - 3-1

Summary of Phase 2B SI Soll Sample Analytical Data TCL - VOCs Analyses

Former Brown Manufacturing Site - Syracuse, New York

Parameter	RSCO	T16-1	T16-2	T17-1	T18-1	T19-1	T20-1
In-Situ PID Screening	-	1.1	0.0	0.0	0.0	0.0	0.0
Headspace PID Screening		145	19.3	10.6	19.5	4.1	1.7
Chloromethane	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Vinyl Chloride	0.2	R	R	R	R	R	R
Bromomethane	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Chloroethane	1.9	< 0.830	< 0.330	< 0.420	< 0,400	< 0.530	< 0.340
Acetone	0.2	2,000	0.910	0.680	0.670	0.780	0.500
1,1-Dichloroethene	0.4	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Carbon Disulfide	2.7	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Methylene Chloride	0.1	< 1.900	< 0.670	< 2.200	< 0.940	< 1.100	< 0.820
trans-1,2-Dichloroethene	0.3	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
1,1-Dichloroethane	0.2	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
2-Butanone	0.3	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
cis-1,2-Dichloroethene	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Chloroform	0.3	1.200	0.440	< 0.140	0.640	0.690	0.510
1,1,1-Trichloroethane	0.8	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Carbon Tetrachloride	0.6	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Benzene	0.06	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
1,2-Dichloroethane	0.1	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Trichloroethene	0.7	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
1,2-Dichloropropane	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Bromodichloromethane	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
4-Methyl-2-Pentanone	1.0	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
cis-1,3-Dichloropropene	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Toluene	1.5	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
trans-1,3-Dichloropropene	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
1,1,2-Trichloroethane	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
2-Hexanone	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Tetrachloroethene	1.4	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Dibromochloromethane	N/S	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Chlorobenzene	1.7	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Ethylbenzene	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
m-Xylene, p-Xylene	1.2	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
o-Xylene	1.2	< 0.830	< 0.330	< 0.420	< 0.400	< 0.100	< 0.110
Styrene	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
Bromoform	N/L	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340
1,1,2,2-Tetrachloroethane	0.6	< 0.830	< 0.330	< 0.420	< 0.400	< 0.530	< 0.340

- Notes:
 1. All values expressed in parts per million (ppm).
 2. RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum"
- N/L = Parameter Not Listed in NYSDEC TAGM HWR-94-4046.
 N/S = Parameter Listed in NYSDEC TAGM HWR-94-4046, but RSCO Not Specified.
- 5. Results in BOLD type indicate detected concentrations of parameter analyzed.
- 6. SHADING indicates results above the RSCO.
- 7. R = Rejected in data usability report
 8. A value of R denotes unusable data as per the Data Usability Summary Report

TABLE - 3-2 Summary of Phase 2B SI Soil Sample Analytical Data TCL - Semi-VOC Analyses Former Brown Manufacturing Site - Syracuse, New York

<u> </u>		7	1	1	r	1		1	T	·		T	· · · · · · · · · · · · · · · · · · ·	
Parameter	RSCO	T16-1	T16-2	T17-1	T17-2	T18-1	T18-2	T19-1	T19-2	T20-1	T20-2	T21-1	T-21-2	T22-1
In-Situ PID Screening		1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
Headspace PID Screening	-	145	19.3	10.6	0.0	19.5	0.0	4,1	0.1	1.7	1.6	0.0	0.0	0.0
bis (2-Chloroethyi) ether	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Phenol	0.03 or MDL	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
2-Chiorophenol	0.8	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
1.3-Dichlorobenzene	N/L N/L	< 0.380 < 0.380	< 0.480 < 0.480	< 0.440	< 0.530 < 0.530	< 0.440 < 0.440	< 0.430 < 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
1.4-Dichlorobenzene 1,2-Dichlorobenzene	N/L N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450 < 0.450	< 0.420	< 0.420	< 0.430
bis(2-Chloroisopropyl)ether	14/2	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420 < 0.420	< 0.420	< 0.430
2-Methylphenol	0.100 or MDL	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Hexachloroethane	N/L	< 0.380	< 0.480	< 0,440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
N-Nitrosodi-n-propvlamine	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0,430
4-Methylphenol	0.9	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0,430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Nitrobenzene	0.200 or MDL	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Isophorone 2-Nitrophenol	4.40 0.330 or MDL	< 0.380 < 0.380	< 0.480 < 0.480	< 0.440 < 0.440	< 0.530 < 0.530	< 0.440 < 0.440	< 0.430 < 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
2,4-Dimethylphenol	0.330 01 WOL	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410 < 0.410	< 0.430 < 0.430	< 0.470 < 0.470	< 0.450 < 0.450	< 0.420 < 0.420	< 0.420 < 0.420	< 0.430 < 0.430
bis (2-Chloroethoxy) methene	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
2.4-Dichlorophenol	0.4	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
1.2.4-Trichlorobenzene	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Naphthalene	13.0	< 0.380	< 0.480	< 0.440	< 0.530	0.220	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
4-Chioroaniline	0.220 or MDL	< 0.380	< 0.480	< 0,440	< 0.530	< 0.440	< 0,430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Hexachlorobutadiene	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0,410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
4-Chloro-3-methylphenol 2-Methylnaphthalene	0.240 or MDL 36.4	< 0.380 < 0.380	< 0.480 < 0.480	< 0.440 0.620	< 0.530 < 0.530	< 0.440 0.830	< 0.430 < 0.430	< 0.410 0.680	< 0.430 < 0.430	< 0.470 < 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Hexachlorocyclopentaciene	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450 < 0.450	< 0.420 < 0.420	< 0.420 < 0.420	< 0.430
2.4.6-Trichlorophenol	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
2,4,5-Trichlorophenol	0.1	< 0.950	< 1.200	< 1.100	< 1.300	< 1.100	< 1.100	< 1.000	< 1.100	< 1.200	< 1.100	< 1.100	< 1.100	< 1.100
2-Chloronaphthalene	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
2-Nitroaniline	0.430 or MDL	< 0.950	< 1.200	< 1.100	< 1.300	< 1.100	< 1.100	< 1.000	< 1.100	< 1.200	< 1.100	< 1.100	< 1.100	< 1.100
Acenaphthylene	41.0	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Dimethylphthalate 2.6-Dinitrotoluene	2.0	< 0.380	< 0.480	< 0.440 < 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Acensphthene	50.0	< 0.380 < 0.380	< 0.480 < 0.480	< 0.440	< 0,530 < 0,530	< 0.440 < 0.440	< 0.430 < 0.430	< 0.410	< 0.430 < 0.430	< 0.470 < 0.470	< 0.450 < 0.450	< 0.420	< 0.420	< 0.430
3-Nitroaniline	0,500 or MDL	< 0.950	< 1.200	< 1.100	< 1.300	< 1.100	< 1.100	< 1.000	< 1.100	< 1.200	< 1.100	< 0.420 < 1.100	< 0.420 < 1.100	< 0.430 < 1.100
2,4-Dinitrophenol	0.200 or MDL	< 0.950	< 1.200	< 1.100	< 1,300	< 1.100	< 1.100	< 1.000	< 1.100	< 1.200	< 1.100	< 1.100	< 1.100	< 1.100
Dibenzofuran	6.2	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
2.4-Dinitrotoluene	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
4-Nitrophenol	0.100 or MDL	< 0.950	< 1.200	< 1,100	< 1.300	< 1.100	< 1.100	< 1.000	< 1.100	< 1.200	< 1,100	< 1.100	< 1.100	< 1.100
Fluorene	50.0	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
4-Chlorophenvlphenvlether	N/L 7.1	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440 < 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Diethylphthalate 4-Nitroaniline	7.1 N/L	< 0.380 < 0.950	< 0.480 < 1.200	< 0.440 < 1.100	< 0.530 < 1.300	< 1,100	< 0.430 < 1.100	< 0.410 < 1.000	< 0.430 < 1.100	< 0.470 < 1.200	< 0.450	< 0.420 < 1.100	< 0.420	< 0.430
4,6-Dinitro-2-methylphenol	N/L	< 0.950	< 1.200	< 1.100	< 1.300	< 1.100	< 1.100	< 1.000	< 1.100	< 1.200	< 1.100 < 1.100	< 1.100	< 1,100 < 1,100	< 1.100 < 1.100
n-Nitrosodiphenylamine	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
4-Bromophenylphenylether	N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Hexachlorobenzene	0.41	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Pentachlorophenol	1.0 or MDL	R	R	R	R	R	R	R	R	R	R	R	R	R
Phenanthrene	50.0	0.740	< 0.480	1,600	< 0.530	1.700	< 0.430	2.500	< 0.430	0.560	< 0.450	< 0.420	< 0.420	< 0.430
Anthracene Di-n-butvishthalate	50.0 8.1	< 0.380 < 0.380	< 0.480 < 0.480	< 0.440 < 0.440	< 0.530 < 0.530	< 0.440 < 0.440	< 0.430 < 0.430	0.470 < 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Carbazola	8.1 N/L	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430 < 0.430	< 0.470 < 0.470	< 0.450 < 0.450	< 0.420	< 0.420	< 0.430
Fluoranthene	50.0	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0,420 < 0,420	< 0.420 < 0.420	< 0.430 < 0.430
Pyrene	50,0	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	0.520	0.640	< 0.420	< 0.420	< 0.430
Butvibenzyiphthalate	50.0	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
3,3'-Dichlorobenzidine	N/S	< 0.380	< 0.480	< 0.449	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Benzo (a) anthracene	0.224 or MDL	< 0.380	< 0.480	< 0.440	< 0.530	< 0,440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Chrysene	0.4	2.000	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	1,200	< 0.420	< 0.420	< 0.430
bis (2-Ethyfhexvl) phthalate Di-n-ociy/phthalate	50.0 50.0	< 0.380 < 0.380	< 0.480 < 0.480	< 0.440 < 0.440	< 0.530 < 0.530	< 0.440 < 0.440	< 1.300 < 0.430	< 0.410 < 0.410	< 1.200	< 0.470	< 0.450	< 0.420	< 0.420	< 0.460
Benzo (b) fluoranthene	1.1	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0,430 < 0,430	< 0.470 < 0.470	< 0.450 < 0.450	< 0.420	< 0.420 < 0.420	< 0.430
Benzo (k) fluoranthene	1.1	< 0.380	< 0,480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420 < 0.420	< 0.420	< 0.430 < 0.430
Benzo (a) pyrene	0.061 or MDL	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Indeno (1,2,3-cd) pyrene	3.2	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Dibenzo (a,h) anthracene	0.014 or MDL	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
Benzo (q.h.i) perviene	50.0	< 0.380	< 0.480	< 0.440	< 0.530	< 0.440	< 0.430	< 0.410	< 0.430	< 0.470	< 0.450	< 0.420	< 0.420	< 0.430
	50.0 N/L N/L	< 0.380 < 0.380 < 1.900	< 0.480 < 0.480 < 2.400	< 0.440 < 0.440 < 2.200	< 0.530 < 0.530 < 2.600	< 0.440 < 0.440 < 2.200	< 0.430 < 0.430 < 2.200	< 0.410 < 0.410 < 2.100	< 0.430 < 0.430 < 2.100	< 0,470 < 0,470 < 2,300	< 0.450 < 0.450 < 2.300	< 0.420 < 0.420 < 2.100	< 0.420 < 0.420 < 2.100	< 0.430 < 0.430 < 2.200

- Notes:

 1. All values expressed in parts per million (ppm).

 2. RSCO = Recommended Soll Cleanup Objective; Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.

 3. MDL = Method Detection Limit.

 4. N/L = Parameter Not Listed in NYSDEC TAGM HWR-94-4046.

 5. N/S = Parameter Listed in NYSDEC TAGM HWR-94-4046, but RSCO Not Specified.

 6. Results in BOLD type indicate detected concentrations of parameter analyzed.

 7. SHADING indicates results above the RSCO.

FABLe - 3-3

Summary of Phase 2B SI Soil Sample Analytical Data PCBs - Polychlorinated Biphenyls Analyses

Former Brown Manufacturing Site - Syracuse, New York

0.0 0.0	0.0						
0.0 H2 < 0.042	0.0						
5 < 0.042	0.0						
7 < 0.045	0.0						
3 < 0,047	0.0						
< 0.043	0.0						
v 0.04	0.0	< 0.041					
	0.0	< 0.043	< 0.043	< 0.043 < 0.043 < 0.043	< 0.043 < 0.043 < 0.043 < 0.043	< 0.043 < 0.043 < 0.043 < 0.043 < 0.043	 0.043 0.043 0.043 0.043 0.043 0.043
	0.0	< 0.044	< 0.044 < 0.044	< 0.044 < 0.044 < 0.044	0.0440.0440.0440.044	0.0440.0440.0440.044	 0.044 0.044 0.044 0.044 0.044 0.044
	0.0	< 0.050	< 0.050	< 0.050 < 0.050 < 0.050	0.0500.0500.0500.050	0.0500.0500.0500.0500.050	0.0500.0500.0500.0500.0500.0500.050
	0.0	< 0.044	< 0.044 < 0.044	< 0.044 < 0.044 < 0.044	0.0440.0440.0440.044	 0.044 0.044 0.044 0.044 	 0.044 0.044 0.044 0.044 0.044 0.044
	19.3	< 0.043	< 0.043 < 0.043	< 0.043 < 0.043 < 0.043	0.0430.0430.0430.043	0.0430.0430.0430.0430.043	 0.043 0.043 0.043 0.043 0.043
	1.1	< 0.038	< 0.038 < 0.038	< 0.036 < 0.038 < 0.038	0.0380.0380.038	0.0380.0380.0380.038	 0.038 0.038 0.038 0.038
	raco	10	10 10	10 10	01 01 01	01 01 01 01	01 01 01 01
	OSEX , ,	1,0	1,0	1.0	0,1 0,1 0,1	0,1 0,1 1,0 1,0 1,0	0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
	Parameter In-Situ PID Headspace PID	PCB Arodor 1221	PCB Arodor 1221 PCB Arodor 1232	PCB Arodor 1221 PCB Arodor 1232 PCB Arodor 1242	PCB Arodor 1221 PCB Arodor 1232 PCB Arodor 1242 PCB Arodor 1248	PCB Arodor 1221 PCB Arodor 1232 PCB Arodor 1242 PCB Arodor 1248 PCB Arodor 1254	PCB Arodor 1221 PCB Arodor 1232 PCB Arodor 1242 PCB Arodor 1248 PCB Arodor 1254 PCB Arodor 1250

Notes

- All values expressed in parts per million (ppm).
- 2. RSCO = Recommended Soil Cleanup Objective; Source: NYSDEC Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.
- 3. Results in BOLD type indicate detected concentrations of parameter analyzed.
- 4. SHADING indicates results above the RSCO.

Summary of Groundwater Sample Analytical Data PCBs - Polychlorinated Biphenyls Analyses (ABLE - 4-1

Former Brown Manufacturing Site, Syracuse, New York

			, , , , , , , , , , , , , , , , , , , ,			
Parameter	Groundwater Standard	MW-1	MW-2	MW-3	MW-4	MW-5
PCB Arador 1016	0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PCB Arodor 1221	0.1	< 0,10	< 0.10	< 0.10	< 0.10	< 0.10
PCB Arodor 1232	0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PCB Arodor 1242	0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PCB Aroclor 1248	0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PCB Aroclor 1254	1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PCB Arodor 1260	0,1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
	PCB Total:	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Notes:

1. Results expressed in micrograms per lifer (µg/L) = parts per billion (ppb).
2. Groundwater Standard Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.
3. Results in BOLD type indicate detected concentrations of parameter analyzed.
4. SHADING indicates results above the Groundwater Standard.

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TABLE - 4-2

Summary of Groundwater Sample Analytical Data TCL - VOCs Analyses

Former Brown Manufacturing Site, Syracuse, New York

Parameter	Groundwater Standard	MW-1	MW-2	MW-3	MW-4	MW-5
Acetone	50	< 12	< 10	< 10	< 10	< 11
Benzene	1	< 10	< 10	< 10	< 10	< 10
Bromodichloromethane	N/L	< 10	< 10	< 10	< 10	< 10
Bromoform	N/L	< 10	< 10	< 10	< 10	< 10
Bromomethane	N/L	< 10	< 10	< 10	< 10	< 10
2-Butanone	50	< 10	< 10	< 10	< 10	< 10
Carbon Disulfide	50	< 10	< 10	< 10	< 10	< 10
Carbon Tetrachloride	5	< 10	< 10	< 10	< 10	< 10
Chlorobenzene	5	< 10	< 10	< 10	< 10	< 10
Chloroethane	50	< 10	< 10	< 10	< 10	< 10
Chloroform	7	< 10	20	< 10	2	2
Chloromethane	N/L	< 10	< 10	< 10	< 10	< 10
Dibromochloromethane	50	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethane	5	< 10	< 10	< 10	< 10	< 10
1,2-Dichloroethane	5	< 10	< 10	< 10	< 10	< 10
1.1-Dichloroethene	5	< 10	< 10	< 10	< 10	< 10
cis-1,2-Dichloroethene	N/L	< 10	< 10	< 10	< 10	< 10
trans-1,2-Dichloroethene	5	< 10	< 10	< 10	< 10	< 10
1,2-Dichloropropane	N/L	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	N/L	< 10	< 10	< 10	< 10	< 10
trans-1,3-Dichloropropene	N/L	< 10	< 10	< 10	< 10	< 10
Ethylbenzene	N/L	< 10	< 10	< 10	< 10	< 10
2-Hexanone	N/L	< 10	< 10	< 10	< 10	< 10
Methylene Chloride	5	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-Pentanone	50	3	< 10	< 10	< 10	< 10
Styrene	N/L	< 10	< 10	< 10	< 10	< 10
1,1,2,2-Tetrachloroethane	5	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene	5	< 10	< 10	< 10	< 10	< 10
Toluene	5	< 10	< 10	< 10	< 10	< 10
1,1,1-Trichloroethane	5	< 10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane	N/L	< 10	< 10	< 10	< 10	< 10
Trichloroethene	5	< 10	< 10	< 10	< 10	< 10
Vinyl Chloride	2	< 10	< 10	< 10	< 10	< 10
m-Xylene, p-Xylene	5	< 10	< 10	< 10	< 10	< 10
o-Xylene	5	< 10	< 10	< 10	< 10	< 10

- Notes:

 1. Results expressed in micrograms per liter (μg/L) = parts per billion (ppb).

 2. Groundwater Standard Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.

 3. N/L = Parameter Not Listed in NYSDEC TAGM HWR-94-4046.
- Results in BOLD type indicate detected concentrations of parameter analyzed.
- 5. SHADING indicates results above the Groundwater Standard.

TABLE - 4-3

Summary of Groundwater Sample Analytical Data TCL Semi-VOC Analyses

Former Brown Manufacturing Site, Syracuse, New York

Accesspatifylylane	MW-5	MW-4	MW-3	MW-2	MW-1	Groundwater Standard	Parameter
Anthreacene	< 10	· · · ·					Acenaphthene
Benzo (a) pursone	< 10						Acenaphthylene
Benzo Di Juvene	< 10					<u> </u>	**************************************
Benzo (g.H.) perviene	< 10						
Berro (A) Instrumente	< 10	······································	5		<u> </u>		
Benzo (k) Suzranthene	< 10		B		B		Benzo (b) fluoranthene
Dis 2Chloroethoxy meltane	< 10			S			
Dis (2-Chloroethyl) ether	< 10		C				Burner and the second s
Dis (2 Elmylaevil) phthalate	< 10			<u> </u>	Saramanananananananananananananan		
AB-transphenylphenylother N/L	< 10						
Butylbanzylphthelate	< 9	< 16	< 44		<u> </u>		
Carbazole	< 10	< 10					
4-Chloros-3-methylphenol 5	< 10	< 8	< 28		< 30		Butyibenzylphthalate
A-Chlorophilablene	< 10	< 10	< 10	< 10	< 10	N/L	Carbazole
2-Chlorophenel N/L < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10	< 10	< 10	< 10	< 10	< 10	5	4-Chloro-3-methylphenol
2-Chlorophenol 50	< 10	< 10	< 10	< 10	< 10	5	4-Chioroaniline
A-Chlorophenylphenylether N/L	< 10	< 10	< 10	< 10	< 10	N/L	2-Chloronaphthalene
Chrysene	< 10	< 10	< 10	< 10	< 10	50	2-Chlorophenol
Dish-butylphthalate	< 10	< 10	< 10	< 10	< 10	N/L	4-Chlorophenylphenylether
Di-n-cc/lphthalate	< 10	< 10	< 10	< 10	< 10	0.002	Chrysene
Dibenzo (a,h) anthrecene	< 10	< 61	< 49	< 26	< 37	50	Di-n-butylphthalate
Dibetrocluren	< 10	< 10	< 10	< 10	< 10	50	Oi-n-octylphthalate
1,2-Dichlorobenzene	< 10	< 10	< 10	< 10	< 10	50	Dibenzo (a,h) anthracene
1.3-Dichlorobenzene	< 10	< 10	< 10	< 10	< 10	5	Dibenzofuran
1.4-Dichlorobenzelne	< 10		< 10	< 10	< 10	N/L	1,2-Dichlorobenzene
1.4-Dichlorobenzelne	< 10	< 10	< 10	< 10	< 10	N/L	1,3-Dichlorobenzene
2,4-Dichlorophenol	< 10						1,4-Dichlorobenzene
2,4-Dichlorophenol	< 10						B
Diethylphthalate	< 10						
2,4-Dimethylphenol N/L < 10	< 10			< 10	< 10	50	
Dimethylphthalate	< 10			< 10	< 10	N/L	B
2,4-Dinitrophenol 5 < 50	< 10						
2,4-Dinitrotoluene N/L < 10 < 10 < 10 < 10 < 12 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 <td>< 50</td> <td></td> <td></td> <td>< 50</td> <td></td> <td></td> <td></td>	< 50			< 50			
Fluorenthene 50	< 10	< 10	< 10	< 10	< 10	N/L	2,4-Dinitrotoluene
Fluorenthene 50	< 10		< 10	< 10	< 10		
Fluorene	< 10	< 10	< 10	< 10	< 10	50	Fluoranthena
Hexachlorobenzene	< 10	< 10	< 10	< 10	< 10	50	Fluorene
Hexachlorocyclopentadiene	< 10	< 10	< 10	< 10	< 10	0.35	Hexachlorobenzene
Hexachloroethane	< 10	< 10	< 10	< 10	< 10	N/L	Hexachlorobutadiene
Hexachloroethane	< 10	< 10	< 10	< 10	< 10	N/L	Hexachlorocyclopentadiene
Indeno (1,2,3-cd) pyrene	< 10	< 10		< 10	< 10	N/L	Hexachloroethane
Isophorone	< 10	< 10	< 10	< 10	< 10	0.002	Indeno (1,2,3-cd) pyrene
2-Methylnaphthalene 50 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 <td>< 10</td> <td>< 10</td> <td>< 10</td> <td>< 10</td> <td>< 10</td> <td>50</td> <td>Isophorone</td>	< 10	< 10	< 10	< 10	< 10	50	Isophorone
2-Methylnaphthalene 50 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 <td>< 50</td> <td>< 50</td> <td>< 50</td> <td>< 50</td> <td>< 50</td> <td>N/L</td> <td>2-Methyl-4,6-dinitrophenol</td>	< 50	< 50	< 50	< 50	< 50	N/L	2-Methyl-4,6-dinitrophenol
2-Methylphenol 5 < 10	< 10	< 10	< 10	< 10	< 10	50	
4-Methylphenol 50 < 10	< 10	< 10	< 10	< 10	< 10	5	2-Methylphenol
Naphthalene 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50	< 10	< 10	< 10	< 10	< 10	50	
3-Nitroaniline 5 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10	< 10	< 10	< 10	< 10	< 10	10	
3-Nitroaniline 5 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10 < 10	< 50	< 50	< 50	< 50	< 50	5	2-Nitroaniline
4-Nitropenzene N/L < 50 < 50 < 50 < 50 < 5 Nitropenzene 5 < 10	< 50	< 50	< 50	< 50	< 50	5	
Nitrobenzene 5 < 10 < 10 < 10 < 10 < 1 2-Nitrophenol 5 < 10	< 50	< 50	< 50	< 50	< 50	N/L	4-Nitroaniline
2-Nitrophenol 5 < 10	< 10						
4-Nitrophenol 5 < 50	< 10						2-Nitrophenol
n-Nitrosodi-n-propylamine N/L < 10 < 10 < 10 < 1 n-Nitrosodiphenylamine N/L < 10	< 50						
n-Nitrosodiphenylamine N/L < 10 < 10 < 10 < 10 < 1 2,2'-Oxybis (1-Chloropropane) N/L < 10	< 10						
2,2'-Oxybis (1-Chloropropane) N/L < 10 < 10 < 10 < 10 < 10	< 10						
	< 10						
	< 50	< 50	< 50	< 50	< 50	1	Pentachlorophenol
	< 10						
	< 10						
	< 10						
	< 10						
	< 50						
	< 10						

- Results expressed in micrograms per liter (µg/L) = parts per billion (ppb).

 Groundwater Standard Source: NYSDEC "Technical And Administrative Guidance Memorandum" (TAGM) HWR-94-4046.

 N/L = Parameter Not Listed in NYSDEC TAGM HWR-94-4046.
- N/S = Parameter Listed in NYSDEC TAGM HWR-94-4046, but RSCO Not Specified.
- Results in BOLD type indicate detected concentrations of parameter analyzed.
- SHADING indicates results above the RSCO.

Summary of Groundwater Sample Analytical Data TAL Metals Analyses IABLE - 4-4

Former Brown Manufacturing Site, Syracuse, New York

Parameter	Groundwater Standard	MW-1	MW-2	MW-3	MW-4	MW-5
Aluminum	100	722	143	139	169	147
Antimony	8	< 15	< 15	< 15	< 15	< 15
Arsenic	25	R	a	ď	œ	10.9
Barium	1000	77	< 50	201	491	279
Beryllium	11	< 3	< 3	< 3	< 3	< 3
Cadmium	5	R	ય	ጽ	ď	ĽΥ
Calcium	N/L	96000	44500	81500	147000	114000
Chromium	20	< 5	< 5	< 5	< 5	< 5
Cobalt	5	< 20	< 20	< 20	< 20	< 20
Copper	200	< 10	< 10	< 10	< 10	< 10
iron	300	09 >	09 >	09 >	09 >	2 < 60
Lead	25	< 3	< 3	< 3	< 3	< 3
Magnesium	35000	20300	10300	20500	23700	23800
Manganese	300	§ 15.5	< 10	216	< 10.0	35.3
Mercury	6.7	Ω.	æ	R	ĸ	ď
Nickel	100] < 30	× 30	< 30	< 30	< 30
Potassium	N/L	3540	1480	11400	7510	10430
Selenium	10	< 5	< 5	< 5	< 5	< 5
Silver	90	< 10	< 10	< 10	< 10	< 10
Sodium	20000	26900	8070	44700	36400	59100
Thallium	8	< 10	< 10	< 10	< 10	< 10
Vanadium	14	< 30	< 30	< 30	> 30	N/A
Zinc	S/N	æ	œ	α	α:	α

- Notes:
 1. Results expressed in micrograms per liter (µg/L) = parts per billion (ppb).
 2. Groundwater Standard Source: Table 1 of Title 6 NYCRR Part 703.5.
 3. N/L = Parameter Not Listed in Table 1 of Title 6 NYCRR Part 703.5.
 4. N/S = Parameter Listed in Table 1 of Title 6 NYCRR Part 703.5, but Groundwater Standard Not Specified.
 5. Results in BOLD type indicate detected concentrations of parameter analyzed.
 6. SHADING indicates results above the Groundwater Standard.

- N/A = Not Applicable (laboratory did not analyze for parameter) A value of R denotes unusable data as per the Data Usability Summary Report

TABLE - 4-5: GROUNDWATER MONITORING WELL DATA

Former Brown Manufacturing Site

101 Chester Street

Syracuse, New York

	MW-1	MW-2	MW-3	MW-4	MW-5
Well Riser Elevation ^{1,2}	98.96	97.29	97.26	97.00	97.40
Screened Interval ²	6.00 - 16.00	5.00 - 15.00	4.00 - 14.00	4.00 - 14.00	5.50 - 15.50
Total Well Depth ³	16.00	15.00	14.00	14.00	15.50
Depth To Water ³	9.37	9.65	10.17	9.95	10.19
Groundwater Elevation ^{1,2}	87.49	87.64	87.09	87.05	87.21

Notes:
1. Reference elevation of 100.00 feet (assumed) at top nut on fire hydrant located along east side of Chester Street in front of 121 Chester Street residence.
2. Well riser elevation measured in feet from top of 2" PVC well riser prior to bailing the wells.
3. Total well depth and depth to water measured in feet from top of 2" PVC well riser prior to bailing the wells.

FIGURES

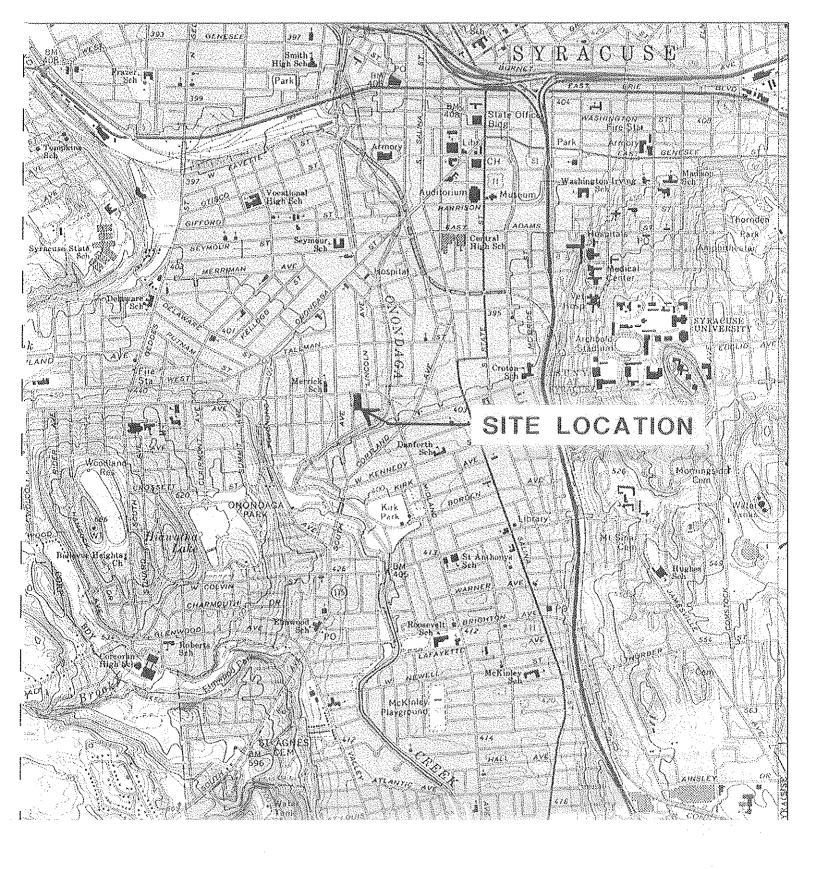
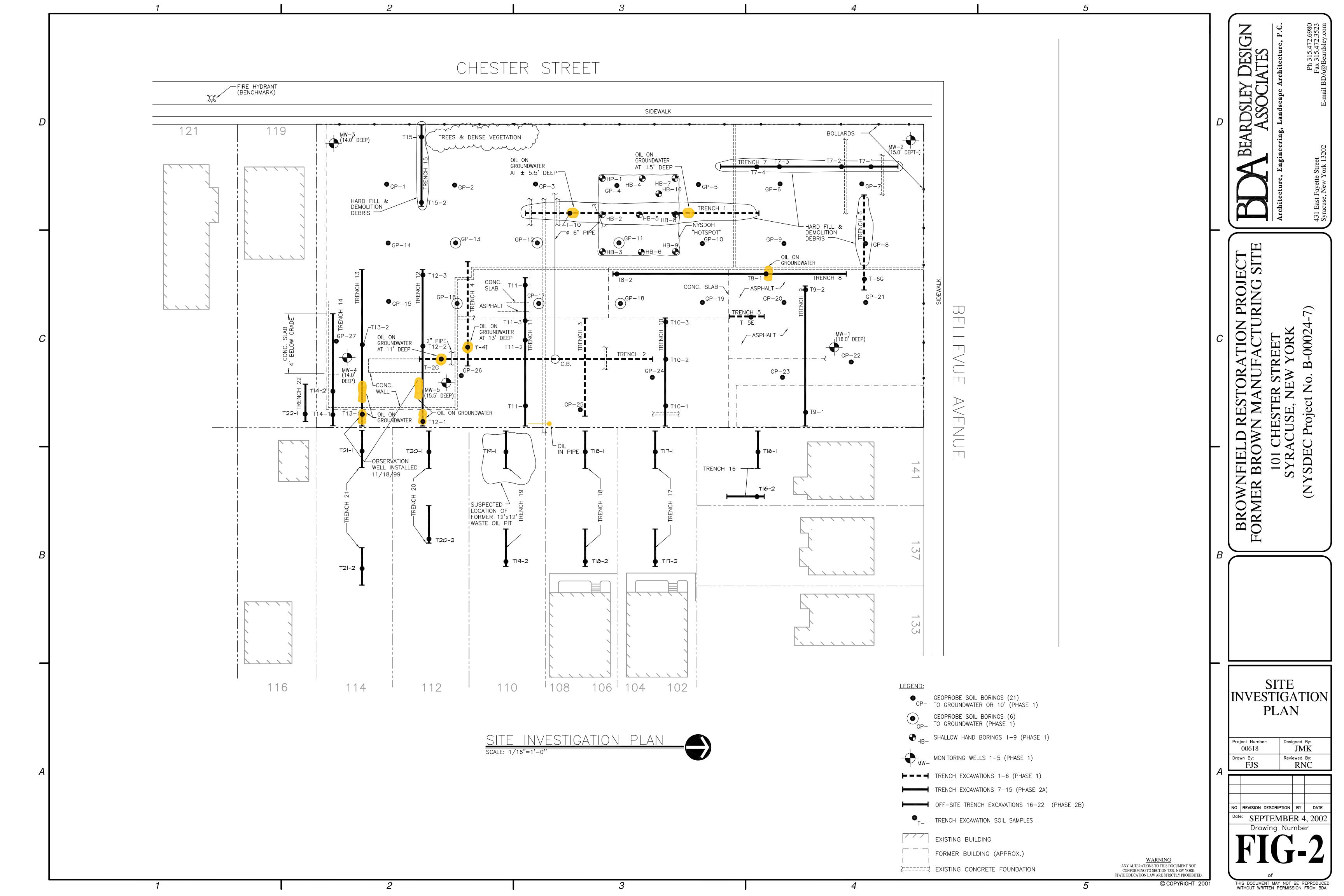
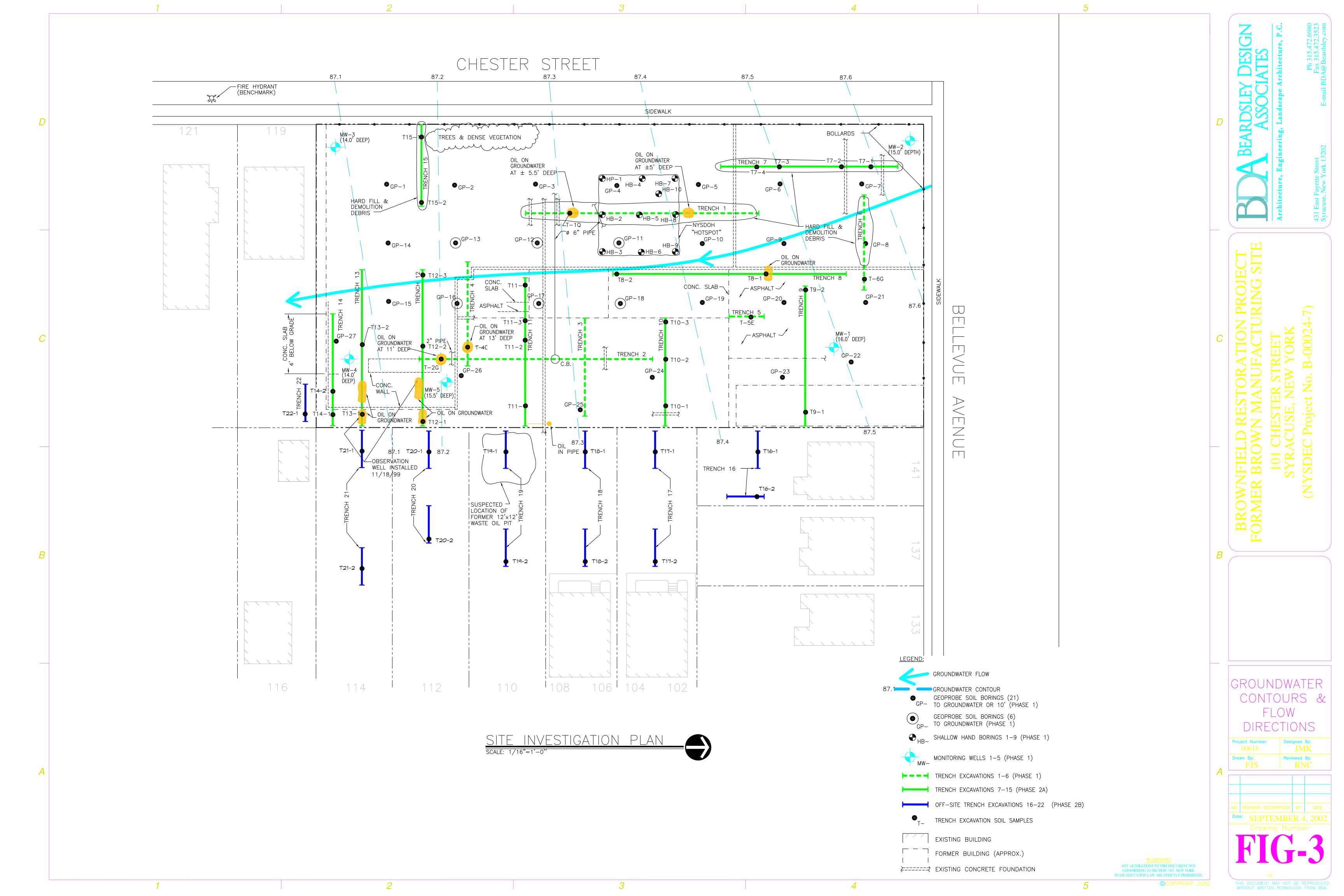


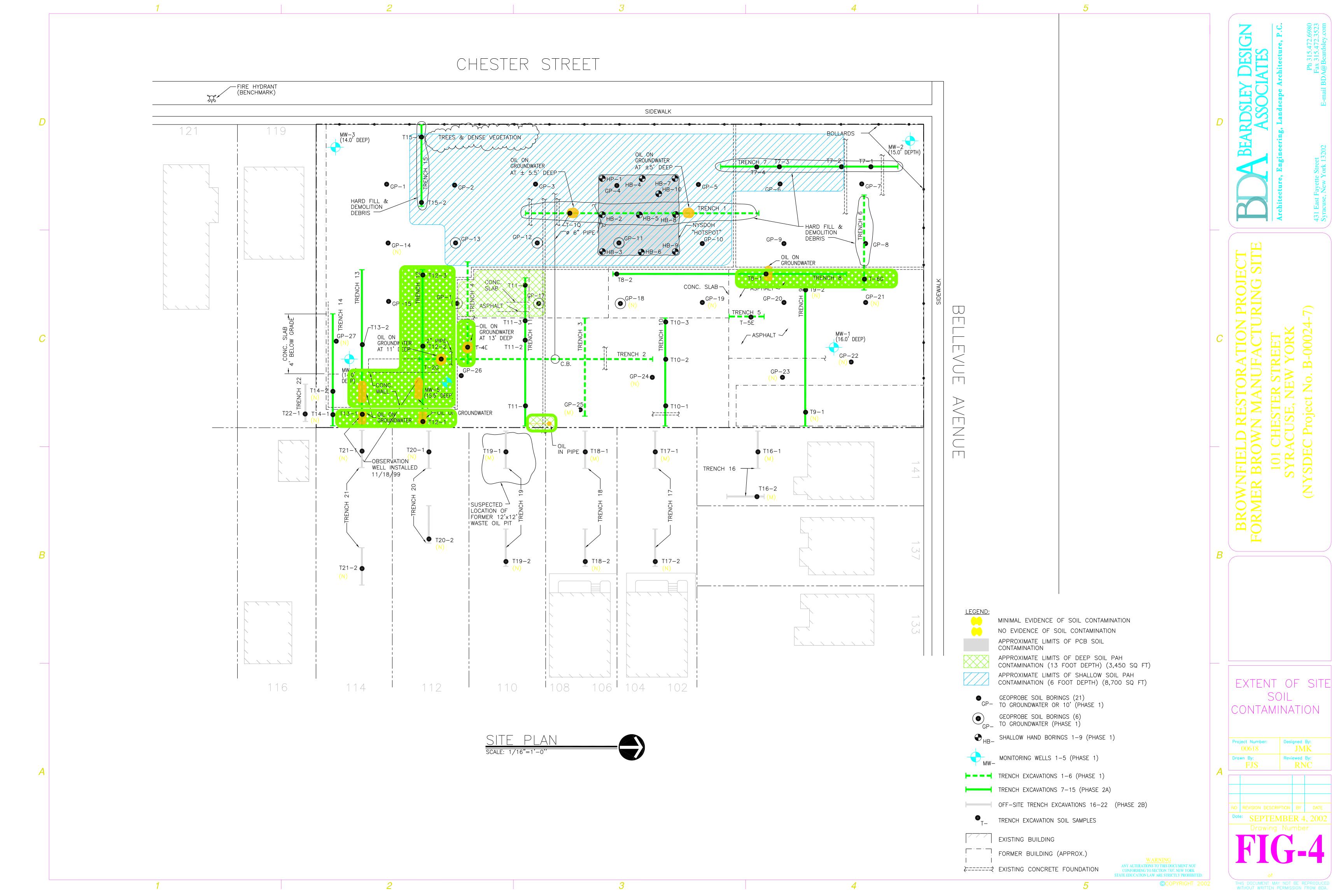
FIGURE 1-1 - LOCATION PLAN

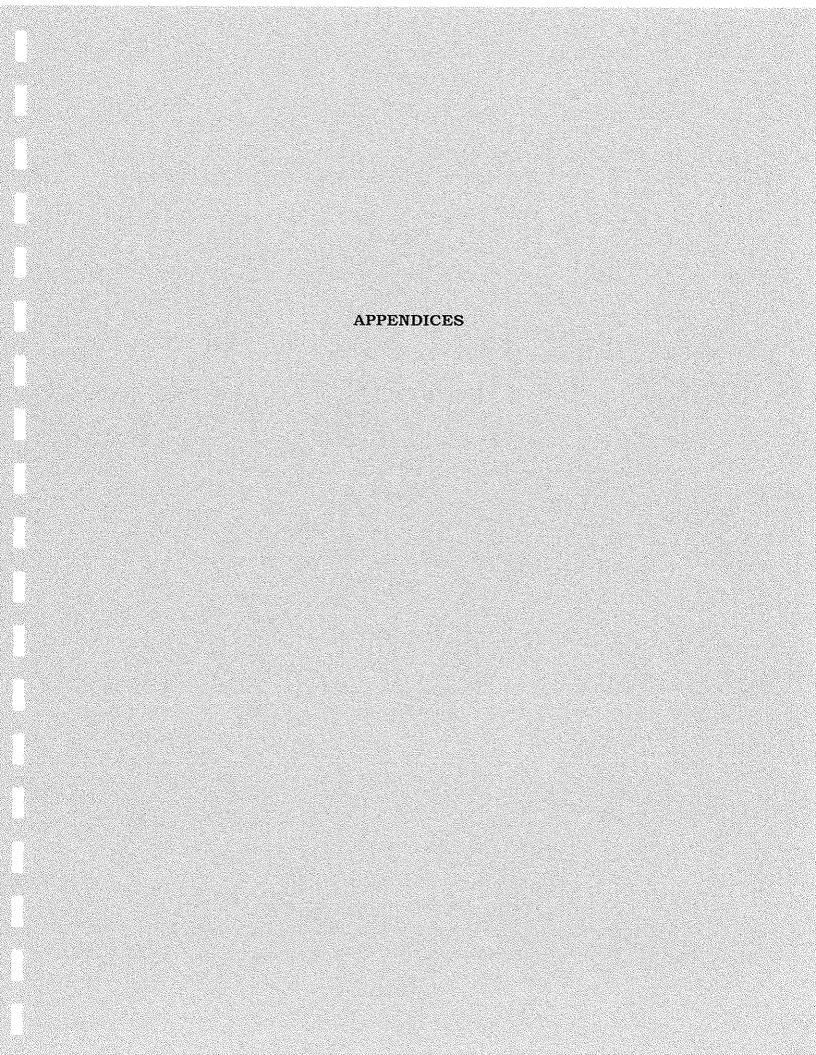
Former Brown Manufacturing Site 101 Chester Street Property Brownfields Project No. B-00024-7 Syracuse, New York

Scale: 1'' = 2,000'









APPENDIX A SCREENING AND IMMUNOASSAY LOGS

Soil Borings

C&I ENGINEER Street Syracuse, New York 13202

Project ID: Brownfield Restoration Project

Site Name: Former Brown Manufacturing Site

101 Chester Street - Syracuse, New York Location:

7/20/1998 26042 Date: C & H Project Number:

B-00024-7 NYSDEC Project Number:

	wasanssaage	***************************************		ienziona anno aprile	none in the second	ouvenceange		opometrass.	***************************************	n i minimornal ascerca.	en inchistration	SISSESSION SINGS AND SINGS	pontonenenen	AARRESENSONES	promovanement	ACTIONAL COMPA	***************************************	nama bindan
Remarks	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No adors or staining	No odors or staining	No odors or staining								
PCB Immunoassay	1 - 10	01 - 1	< 7	<i>y</i> - >	× ×	V	Y- V	1 - 10	10 - 50	1 - 10								
Headspace PID	2.0 ppm	0.0	0.0 ppm	0.0 ppm	0.0 ppm	1.5 ppm	тен 0.0	0.0 ppm	mdd p	0.0 ppm								
In-Situ PID	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	таа 0.0	0.0 ppm								
	Dark, loose fill; gravel; stones	Dark, native organic material	Dark, native organic material	Dark, native organic material	Dark, native organic material	Dark, native organic material	Loose native soil; stone, organic material											
Sample Depth (ft.)	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5								
Location	HB-1	HB-2	HB-3	HB-4	HB-5	HB-6	HB-7	HB-8	6-8H*	HB-10							42	

C&T engineers, p.c.

SOLL SCREENING LOG

Soil Borings

431 East Fayette Street Tel: (315) 472-6980

Syracuse, New York 13202 Fax: (315) 472-3523

Project ID: Brownfield Restoration Project

Site Name: Former Brown Manufacturing Site

Location: 101 Chester Street - Syracuse, New York

R-00024-7 radera torica cuckya

7/21/1998

Date:

26042

C & H Project Number:

Location:	101 Chester Street - Syracuse, New York	Syracuse, New York			DA SA	NYSUEC Project Number: B-00024-7
Location	Sample Depth (ft.)	Description	In-Situ PID	Headspace PID	PCB Immunoassay	Remarks
SP-1 A	0.0 - 0.5	Non-native fill	0.0 ppm	0.0 ppm	4 - 10	No odors or staining
GP-1 B	0.5 - 2.0	Stone, gravel fill; organics	1.0 ppm	1.0 ppm	0 : 10	No odors or staining
GP-1 C	2.0 - 4.0	Stone, gravel fill; organics; trace clay	0.0 ppm	maa 0.0		No odors or staining
GP-1 D	4.0 - 6.0	Moist clay, tight silt	0.0 ppm	0.0 ррт		No odors or staining
GP-1 E	6.0 - 8.0	Moist clay, tight silt	0.0 ppm	0.0 ppm		No odors or staining
GP-1 F	8.0 - 10.0	Moist clay, tight silt	0.0 ppm	0.0 ppm		No odors of staining
GP-2 A	0.0 - 0.5	Non-native fill	0.0 ppm	0.0 ppm	< 1	No odors or staining
GP-2 B	0.5 - 2.0	Fill; loose sittstones; organics	1.0 ppm	2.8 ppm		Some petroleum adors; staining
GP-2 C	2.0 - 4.0	Moist fine-coarse sand, gravel, wood, brick	1.0 ррт	0.8 ppm		Some petroleum odors; staining
*GP-2 D	4.0 - 5.7	Moist fine-coarse sand, gravel, wood, brick	5.0 ppm	6.8 ppm	10 - 50	Some petroleum odors; staining
GP-3 A	0.0 - 0.5	Non-native fill	6.0 ppm	0.5 ppm	۸ ۲	No odors or staining
GP-3 B	0.5 - 2.0	Fine sand/silt; stone, brick, wood fill	10.0 ppm	9,2 ррт	10 - 50	Some petroleum odors; staining
GP-4 A	0.0 - 0.5	Non-native fill	0.0 ppm	0.1 ppm	Y	No odors or staining
GP-4 B	0.5 - 2.0	Fine-med. sand/silt; stone, ash, wood fill; trace clay	2.0 ppm	3.8 ppm		Petroleum odors; dark staining
GP-4 C	2.0 - 4.0	Fine-med. sand/silt; wood, brick fill	0.0 ppm	2.5 ppm		Petroleum odors; dark staining
GP-4 D	4.0 - 6.0	Moist, fine-med, sand/silt; wood fill; stone	4.0 ppm	1.8 ppm		Some petroleum odors; staining
GP-4 E	6.0 - 8.0	Moist, fine-med. sand/silt; wood fill, stone; trace clay	4.0 ppm	7.2 ppm	10 - 50	Some petroleum odors; staining

Soil Borings

Syracuse, New York 13202 Fax: (315) 472-3523 431 East Fayette Street Tel: (315) 472-6980

C&E engineers, p.c.

Brownfield Restoration Project Project ID:

Some petroleum odors; staining 8-00024-7 7/21/1998 Petroleum odors; dark staining Petroleum odors; dark staining 26042 No odors; some staining Some odors & staining Remarks No odors or staining Date: C & H Project Number: NYSDEC Project Number: PCB Immunoassay - 10 - 10 10 3 33 ۳. ۷ ٧ ۰-۷ ۳~ V ~~ V ۸ 30 ₹--Headspace PID 4.7 ppm 0.0 ppm 0.1 ppm 4.5 ppm 5.2 ppm 2.9 ppm 0.0 ppm 6.5 ppm 2.4 ppm 0.0 ppm 0.5 ppm 0.0 ppm 1.2 ppm 0.1 ppm 3.0 ppm 0.2 ppm 0.8 ppm 0.0 ppm 1.0 ppm 1.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm In-Situ PID 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 2.0 ppm 1.0 ppm 0.0 ppm 0.8 ppm 0.0 ppm Fine-med. sand/silt; stone, concrete (Refusal=3.7') Moist, fine-med. sand/silt; ash, brick fill (GW=6.6') Fine-med. sand/silt; wood, brick fill; trace clay Sand/silt; wood, stone, brick fill (Refusal=6.0') Fine-med. sand/silt; stone, wood, brick fill Fine-med. sand/silt; stone, wood, brick fill Sand/silt; wood, brick fill (Refusal=2.0) Description Moist sand/silt; ash fill (GW=6.7) Dark sand/silt; brick, wood fill Fine sand/silt; wood fill Fine sand/silt; brick fill 101 Chester Street - Syracuse, New York Non-native fill Non-native fill Non-native fill Non-native fill Non-native fill Site Name: Former Brown Manufacturing Site Sand/silt Sample Depth (ft.) - 0.5 - 2.0 . 6.0 - 0.5 - 2.0 - 0.5 - 4.0 - 2.0 - 40 - 6.0 - 0.5 - 3.7 - 20 - 0.5 - 2.0 - 4.0 - 6.0 0.5 4.0 0.0 2.0 0.0 0.5 0.0 5.5 . O 0.0 2.0 0.5 . ⊘. 2.0 0.0 0.5 2.0 Q 00 Q Œ () Ω ΩΩ Ç Ø (C) O Q 41 Κţ Location Location: GP-5 GP-5 *GP.5 67-5 GP-6 GP-8 8.45, GP-6 960 GP-7 GP-7 GP-9 GP-9 GP-9 GP-9 9-0 0 0 GP-7

C&I engineers, p.c.

Syracuse, New York 13202 Fax: (315) 472-3523 431 East Fayette Street Tel: (315) 472-6980

Project ID: Brownfield Restoration Project

Site Name: Former Brown Manufacturing Site

101 Chester Street - Syracuse, New York Location:

26042 C & H Project Number:

7/21/1998

Date:

SOIL SCREENING LOG

Soil Borings

B-00024-7 NYSDEC Project Number:

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Remarks	No odors or staining	No odors or staining	Some odors; no staining	Some odors; no staining													
PCB Immunoassay	1 - 10		10 - 50														
Headspace PID	mda 0.0	0.6 ppm	1.1 ppm	0.5 ppm													
In-Situ PID	0.0 ppm	0.0 ppm	0.2 ppm	0.0 ppm													
Description	Non-native fill	Sand/silt; brick fill	Moist sand/silt; ash fill	Moist sift; gravel, brick fill (GW=5.7')													
Sample Depth (ft.)	0.0 - 0.5	0.5 - 2.0	2.0 - 4.0	4.0 - 5.7													
Location	GP-10 A	GP-10 B	GP-10 C	GP-10 D		- Control of the Cont						***************************************			Maria Caracteria de Caracteria	××××××××××××××××××××××××××××××××××××××	

Soil Borings

C& F engine C. S. D. C. 431 East Fayette Street Syracuse, New York 13202

Project ID: Brownfield Restoration Project

26042 Date: C & H Project Number:

7/22/1998

Site Name:	Site Name: Former Brown Manufacturing Site	acturing Site			٥	C & n Pioject National.
Location:	101 Chester Street - Syracuse, New York	Syracuse, New York			NYSDI	NYSDEC Project Number: 8-00024-7
			THE REAL PROPERTY OF THE PROPE			В при в не в при
Location	Sample Depth (ft.)	Description	In-Situ PID	Headspace PID	PCB Immunoassay	Remarks
GP-11 A	0.0 - 0.5	Non-native fill	0.0 ррт	0.0 ppm	Y~~	No odors or staining
GP-11 B	0.5 - 2.0	Moist sand/silt; brick fill	0.0 ppm	1.0 ppm		No odors or staining
GP-11 C	2.0 - 4.0	Moist sand/silt; ash fill	1.0 ppm	5.0 ppm	10 - 50	Some odors & staining
GP-11 D	4.0 - 6.5	Wet sand/silt; brick, ash fill (GW=6.5")	1.0 ppm	4.0 ppm		Some odors & staining
GP-12 A	0.0 - 0.5	Non-native fill	0.0 ppm	0.0 ppm	7 - 10	No odors or staining
GP-12 B	0.5 - 2.0	Sand/silt; brick, wood fill	1.0 ppm	3.0 ppm		Some odors & staining
GP-12 C	2.0 - 4.0	Sand/silt; brick, wood fill	0.0 ppm	2.0 ppm		Some odors & staining
GP-12 D	4.0 - 5.2	Saturated sand/silt (GW=5.2')	1.0 ppm	6.0 ppm	1 - 10	Some odors & staining
*GP-13 A	6.0 - 0.5	Non-native fill	0.0 ppm	2.0 ppm	7 - 70	No odors or staining
GP-13 B	0.5 - 2.0	Sand/silt; brick, concrete fill	0.0 ppm	6.0 ppm	1 - 10	Some odors & staining
GP-13 C	2.0 - 6.0	Wet sand/silt; brick fill (poor recovery)	0.0 ppm	4.0 ppm		Some odors & staining
GP-14 A	0.0 - 0.5	Non-native fill	0.0 ppm	0.0 ррт	1 - 10	No odors or staining
GP-14 B	0.5 - 2.0	Sand/silt, ash fill	0.0 ppm	0.0 ppm		No odors or staining
GP-14 C	2.0 - 4.0	Sand/silt, ash fill	0.0 ppm	0.0 ppm		No odors or staining
GP-14 D	7 4.0 - 8.0	Sand/silt; trace clay (poor recovery)	0.0 ppm	1.0 ppm	۸ ۸	No odors or staining
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^{*} Sample analyzed for PCBs (8080), VOCs (8240), Semi-VOCs (8270), and Metals (200.7). ** Sample analyzed for VOCs (8240), Semi-VOCs (8270), and Metals (200.7), ONLY.

Soil Borings

C&I engineers, p.c. Syracuse, New York 13202 Fax: (315) 472-3523

431 East Fayette Street Tel: (315) 472-6980

Project ID: Brownfield Restoration Project

Site Name: Former Brown Manufacturing Site

101 Chester Street - Syracuse, New York Location:

 Date: 7/22/1998
C & H Project Number: 26042
NYSDEC Project Number: B-00024-7

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Remarks	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	Odors & staining	Odors & staining	Odors & staining					
PCB Immunoassay	\ \ \			< 1			1 - 10						1 - 10					
Headspace PID	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	6.0 ррт	1.0 ppm	1,0 ppm	0.0 ррт	40.0 ppm	20.0 ppm	80.0 ppm					
In-Situ PID	0.0 ppm	0.0 ррт	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	mdd 0'0	0.0 ppm	0.0 ppm	0.0 ppm	25.0 ppm	15.0 ppm	30.0 ppm				auropa de Junkalina	
Description	Non-native fill	Fine-med, silt, ash, stone fill	Fine-med. silt, ash, stone fill	Moist fine sand/silt, trace clay	Moist-wet fine sand/silt; trace clay	Wet fine sand/silt; some organics	Non-native fill; stone	Fine-med. sand/silt; brick fill	Fine-med. sand/silt; wood, ash fill	Fine-med. sand/silt; ash fill; trace clay	Moist dense clay; trace dark silt	Moist, fine-med. sand/silf	Moist, fine sand/sill (GW=11.2')					
Sample Depth (ft.)	0.0 - 0.5	0.5 - 2.0	2.0 - 4.0	4.0 - 6.0	6.0 - 8.0	8.0 - 10.0	0.0 - 0.5	0.5 - 2.0	2.0 - 4.0	4.0 - 6.0	6.0 - 8.0	8.0 - 10.0	10.0 - 12.0					
Location	GP-15 A	GP-15 B	GP-15 C	GP-15 D	GP-15 E	GP-15 F	¥GP-16 A	GP-16 B	GP-16 C	G 91-45	GP-16 E	GP-16 F	GP-16 G	Section of the Control of the Contro				- CONTRACTOR OF THE CONTRACTOR

^{*} Sample analyzed for PCBs (8080), VOCs (8240), Semi-VOCs (8270), and Metals (200.7). ** Sample analyzed for VOCs (8240), Semi-VOCs (8270), and Metals (200.7), ONLY.

Soil Borings

Syracuse, New York 13202 Fax: (315) 472-3523 431 East Fayette Street Tel: (315) 472-6980

C&I ergineers, p.c.

Project ID: Brownfield Restoration Project

Site Name: Former Brown Manufacturing Site

101 Chester Street - Syracuse, New York Location:

B-00024-7 26042 C & H Project Number: NYSDEC Project Number:

7/22/1998

Date:

Location	Sample Depth (ft.)	Description	In-Situ PID	Headspace PID	PCB Immunoassay	Remarks
GP-17 A	0.0 - 0.5	Non-native fill	0.0 ppm	1.0 ppm	1 - 10	No odors or staining
GP-17 B	0.5 - 2.0	Med. silt, ash fill	1.0 ppm	4.0 ppm		No odors or staining
GP-17 C	2.0 - 4.0	Moist med, siit; ash fill	1.0 ppm	18.0 ppm		Some odors; no staining
GP-17 D	4.0 - 6.0	Moist med. sand/silt	50.0 ppm	120.0 ppm		Odors & staining
GP-17 E	6.0 - 8.0	Moist med. silt	50.0 ppm	140.0 ppm		Odors & staining
*GP-17 F	8.0 - 10.0	Moist med. silt	100.0 ppm	140.0 ppm	1 - 10	Strong odors & staining
GP-17 G	10.0 - 12.0	Moist med, silt (GW=10.1)	80.0 ppm	130.0 ppm		Strong odors & staining
GP-18 A	0.0 - 0.5	Non-native fill	0.0 ppm	2.0 ppm	V-	No odors or staining
GP-18 B	0.5 - 2.0	Sand/silt; stone; brick fill	0.0 ррт	3.0 ppm	V	No odors or staining
GP-18 C	2.0 - 4.0	Fine sand/silt; trace clay; ash, brick fill	0.0 ppm	1.0 ppm		No odors or staining
GP-18 D	4.0 . 6.5	Sand/silt; trace clay; ash fill (GW=6.5)	0.0 ppm	1.0 ppm		No odors or staining
GP-19 A	0.0 - 0.5	Non-native fill	0.0 ppm	0.0 ppm	<i>§</i> ∨	No odors or staining
GP-19 B	0.5 - 2.0	Fine sand/sit; stone (Refusal=2.0')	0.0 ppm	0.0 ppm	V Free	No odors or staining
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^{*} Sample analyzed for PCBs (8080), VOCs (8240), Semi-VOCs (8270), and Metals (200.7). ** Sample analyzed for VOCs (8240), Semi-VOCs (8270), and Metals (200.7), ONLY.

Soil Borings

C&I engineers, p.c. Syracuse, New York 13202 Fax: (315) 472-3523 431 East Fayette Street Tel: (315) 472-6980

Project ID: Brownfield Restoration Project

Location:

7/22/1998 B-00024-7 26042 Date: C & H Project Number: NYSDEC Project Number: 101 Chester Street - Syracuse, New York Site Name: Former Brown Manufacturing Site

Location	Sample Depth (ft.)	Description	In-Situ PID	Headspace PID	PCB Immunoassay	Remarks
GP-20 A	0.0 - 0.5	Dark fine sand/silt; some fill	0.0 ppm	0.0 ppm	. v	No odors or staining
GP-20 B	0.5 - 2.0	Ash filt; some fine sand/silt	0.0 ppm	0.0 ppm		No odors or staining
GP-20 C	2.0 - 4.0	Ash fill; some fine sand/silt	0.0 ppm	0.0 ppm		No adors or staining
GP-20 D	4.0 - 6.0	Ash fiff; some fine sand/silt	0.0 ppm	0.0 ppm		No odors or staining
GP-20 E	6.0 - 8.0	Silt, clay	0.0 ppm	0.0 ppm		No odors or staining
GP-20 F	8.0 - 10.0	Moist fine sand/silt, clay	8.0 ppm	#.0 pom	¥~~ V	Petroleum odors, dark staining
GP-21 A	0.0 - 0.5	Dark fine sand/silt; some fill	0.0 ppm	0.0 ppm	Y	No odors or staining
GP-21 B	0.5 - 2.0	Fine sand/silt; stone	0.0 ppm	0.0 ppm		No odors or staining
GP-21 C	2.0 - 4.0	Fine sand/silt; stone	0.0 ppm	0.0 ppm		No odors or staining
GP-21 D	4.0 - 6.0	Ash fill, some moist fine sand/silt	0.0 ррт	0.0 ppm		No odors or staining
GP-21 E	6.0 - 8.0	Moist fine sand/silt, clay	0.0 ppm	0.0 ppm	7 >	Slight odors, staining
GP-21 F	8.0 - 10.0	Moist fine sand/silt, clay, organic material	0.0 ppm	тод 0.0		Slight odors, staining
GP-22 A	0.0 - 0.5	Fine sand/silt; gravel; fill; organic material	0.0 ppm	0.0 ppm	ъ., У	No odors or staining
GP-22 B	0.5 - 2.0	Ash fili, some sand/silt	0.0 ppm	0.0 ppm		No odors or staining
GP-22 C	2.0 - 4.0	Fine sand/silt; some ash	0.0 ppm	0.0 ppm		No odors or staining
GP-22 D	4.0 - 8.0	Ash; fine sand; trace silt	тда 0.0	0.0 ppm	V	No odors or staining
GP-22 E	6.0 - 8.0	Fine sand/silt; trace clay	0.0 ppm	0.0 ppm		No odors or staining
GP-22 F	8.0 - 19.0	Fine sand/silt; trace clay	maq 0.0	0.0 ppm		No odors or staining

^{*}Sample analyzed for PCBs (8080), VOCs (8240), Semi-VOCs (8270), and Metals (200.7). **Sample analyzed for VOCs (8240), Semi-VOCs (8270), and Metals (200.7), ONLY.

Soil Borings

7/22/1998

Date:

C& Hengineers, p.c. Syracuse, New York 13202 Fax: (315) 472-3523 431 East Fayette Street rel: (315) 472-6980

Former Brown Manufacturing Site Project ID: Brownfield Restoration Project Site Name:

B-00024-7 Petroleum odors, dark staining 26042 Remarks Some odors, staining Some odors, staining Some odors, staining No odors or staining NYSDEC Project Number: C & H Project Number: PCB Immunoassay - 10 10 ۍ. ۷ Headspace PID 0.0 ppm 0.0 ppm 1.0 ppm 1.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 4.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm In-Situ PID 1.0 ppm 0.0 ppm 5.6 ppm 0.0 ppm 0.0 ppm 1.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm 0.0 ppm Moist fine sand/silt; trace clay & ash Fine sand/silt; trace clay (GW=±9.7') Description Moist fine sand; someash & silt Fine sand; gravel; some silt/fill Moist fine sand/silt; trace clay Moist fine sand/silt; gravel Fine sand/silt; trace clay Fine sand/silt; gravel fill Ash fill; some sand/silt Ash fill; some sand/silt Moist fine sand/silt 101 Chester Street - Syracuse, New York Sample Depth (ft.) - 10.0 - 6.0 . 8.0 - 0.5 . 2.0 1 4.0 - 6.0 - 8.0 0.0 - 0.5 0.5 - 2.0 - 4.0 . ⊖. 0 2.0 6.0 0.0 0.5 Ø, 20 8.0 \Diamond a Location Location: GP-23 GP-24 GP-23 GP-24 GP-24 GP-24 GP-23 GP-23 GP-23 GP-23 GP-24

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* Sample analyzed for PCBs (8080), VOCs (8240), Semi-VOCs (8270), and Metals (200.7).	
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Wet fine sand/silt (GW=9.7')

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Fine sand/silt; trace clay

6.0 - 8.0

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Some odors, staining Some odors, staining Some odors, staining Some odors, staining Some adors, staining Some odors, staining

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0.0 ppm

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1.0 ppm

Moist fine sand/silt; trace clay (GW=11.1')

- 10.0

8.0

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GP-24

- 0.5 2.0

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'GP-25 GP-25 GP-25 GP-25 GP-25 GP-25

1.0 ppm

1.0 ppm

Moist fine sand/silt; fill; organic material

Fine sand/silt; some fill; trace clay

- 6.0

Moist sand/silt; stone

- 4.0

2.0 4.0

 \Diamond

Fine sand/silt; fill; organic material

9

1.0 ppm

2.0 ppm 2.0 ppm

1.0 ppm 0.0 ppm 1.0 ppm

0.0 ppm 2.0 ppm

Some odors, staining

^{**} Sample analyzed for VOCs (8240), Semi-VOCs (8270), and Metals (200.7), ONLY.

C&H engineers, p.c.

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Soil Borings

SOIL SCREENING LOG

Location:

7/22/1998 B-00024-7 26042 Date: C & H Project Number: NYSDEC Project Number: 101 Chester Street - Syracuse, New York Site Name: Former Brown Manufacturing Site Project ID: Brownfield Restoration Project

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Remarks	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	Some odors, staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining	No odors or staining					
PCB immunoassay	7 - 10					1 - 10	1 - 10			1 - 10							
Headspace PID	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	6.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm					
In-Situ PID	0.0 ppm	0.6 ppm	0.0 ppm	0.0 ppm	0.0 ppm	9.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm					
Description	Fine sand/silt, fill material	Fine sand/siit, fill material	Fine sand/silt, fill material; some ash	Fine sand/silt, clay & fill material	Fine sand/silt, trace clay	Wet fine sand/silt; trace clay	Fine sand/silt, fill material	Fine sand/silt, fill material	Fine sand/siit, ash	Moist fine sand/silt; trace clay	Moist fine sand/silt; trace clay	Wet fine sand/sift (GW≔9.9′)					
Sample Depth (ft.)	0.0 - 0.5	0.5 - 2.0	2.0 - 4.0	4.0 - 6.0	6.0 - 8.0	8.0 - 70.0	0.0 - 0.5	0.5 - 2.0	2.0 - 4.0	4.0 - 6.0	6.0 - 8.0	8.0 - 10.0					
Location	GP-26 A	GP-26 B	CP-26 C	GP-26 D	GP-26 E	GP-26 F	GP-27 A	GP-27 B	GP-27 C	GP-27 D	GP-27 E	GP-27 F	2242550440	and the second s	200000000000000000000000000000000000000		

^{*} Sample analyzed for PCBs (8080), VOCs (8240), Semi-VOCs (8270), and Metals (200.7). ** Sample analyzed for VOCs (8240), Semi-VOCs (8270), and Metals (200.7), ONLY.

Trench Excavations

C& H engineers, p.c.

Syracuse, New York 13202 Fax: (315) 472-3523 431 East Fayette Street Tel: (315) 472-6980

Project ID: Brownfield Restoration Project

Site Name: Former Brown Manufacturing Site

Location:

B-00024-7 26042 C & H Project Number:

7/30/1998

Date:

NYSDEC Project Number: 101 Chester Street - Syracuse, New York

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Remarks	Some odors & staining	Some odors; Dark staining			Some odors; Dark staining	No odors; Some staining		No odors or staining	Some odors; Dark staining	No odors or staining	Some odors; Dark staining	Some odors; Dark staining	No odors or staining	Strong odors; Dark staining	Strong odors; Dark staining	Strong odors; Dark staining	Strong odors; Dark staining	
PCB Immunoassay					A CONTRACTOR OF THE CONTRACTOR							10-50 ppm			1-10 ppm	10-50 ppm	10-50 ppm	
Headspace PID												2.0 ppm			1.1 ppm	2.8 ppm	6.6 ppm	
In-Situ PID	0.0 ppm	3.0-5.0 ppm			3.0 ppm	1.0 ppm		0.0 ppm	1.0 ррт	0.0 ppm	0.0 ppm	0.0 ppm	0.0 ррт	0.0-1.0 ррт	0.0-1.0 ppm	0.0-1.0 ppm	maa 0.1-0.0	
Description	Brick, conc., rebar, metaí, wood, stone	Ash, conc., fine sand/silt, rebar	Conc. slab	Conc. foundation	Brick, conc., rebar, stone, sand/silt	Ash, moist sand/silt	Groundwater	Brick, conc. fill	Ásh, moisť sand/silť	Brick, conc. fill	Ash, moist sand/silt	(SOIL SAMPLE COLLECTED)	Brick, conc., rebar	Ash, sand/sift, brick, conc.	[SOIL SAMPLE COLLECTED]	[SOIL SAMPLE COLLECTED]	ISOIL SAMPLE COLLECTED]	
Depth (ft.)	0 - 3	3 - 4	4	2 - 2	0 - 3	3 - 5	หา	0 - 3	ب ت	2 - 0	2 . 35	r,	0 - 2	2 - 5	ĵ,	ક	ક	
Length (ft.)	6 - 0	6-0	s · 0	9 - 10	10 - 20	10 - 20	10 - 20	20 - 30	20 - 30	30 ~ 50	30 - 50	33	50 - 100	50 - 100	90	77	84	
Trench I.D.	T-1 A	77 8	7-1 C	7.7.0	T-7	11.	7-1 6	T-1 H	T-7 1	7-1 3	7-1 K	7 1-1	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	T-1 N	T-1 O	T-7	47-10	

C&H CIS INCOIS, D.C. 431 East Fayette Street Syracuse, New York 13202 Tel. (315) 472-6980 Fax: (315) 472-3523

Project ID: Brownfield Restoration Project

Site Name: Former Brown Manufacturing Site

101 Chester Street - Syracuse, New York Location:

B-00024-7 7/30/1998 26042 NYSDEC Project Number: Date: C & H Project Number:

Trench Excavations

SOIL SCREENING LOG

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Remarks	No odors or staining	No odors or staining	Odors & staining	Some odors & staining	Some odors & staining	Some odors & staining	Strong adors; Dark staining		No odors or staining	Odors & staining	Odors & staining						
PCB Immunoassay				1-10 ppm	<1 ppm '	1-10 ppm	1-10 ppm										
Headspace PID				2.0 ppm	1.4 ppm	1.6 ppm	28.0 ppm										
In-Situ PID	0.0 ppm	0.5 ppm	10.0-15.0 ppm	10.0-15.0 ppm	10.0-15.0 ppm	10.0-15.0 ppm	10.0-15.0 ppm		0.0 ppm	1.0 ppm	1.0 ppm					antipara managan familian (m. 1	
Description	Conc., top soil, organics, sand/silt	Ash, fine sand/sift	Fine sand, some silt	(SOIL SAMPLE COLLECTED)	SOIL SAMPLE COLLECTED]	SOIL SAMPLE COLLECTED	[SOIL SAMPLE COLLECTED]		Top soil, organics, sand/silf	Ash, fine sand/silf	Fine sand, some silt	Conc. slab (Trench terminated)					
Depth (ft.)	0 - 2	2 - 5	5 - 11	9.5	ın	ŀО	11		0 - 2	2 - 5	11	0.5					
Length (ft.)	0 - 100	0 - 100	0 - 100	12	40	75	92		0 - 42	0 - 42	0 - 10	43		and the second s		Validated de de la companya de la com	
Trench I.D.	T-2 A	T-2 B	T-2 C	T-2 D	7-2 E	7-2 7	* 7-2 G	000000000000000000000000000000000000000	T-3 A	7-3 B	T-3 C	23	************************************			and processing the same of the	tanico o o o o o o o o o o o o o o o o o o

C&E engineers, p.c.

431 East Fayette Street Tel: (315) 472-6980

Syracuse, New York 13202 Fax: (315) 472-3523

Trench Excavations

SOLL SCREENING LOG

Location:

7/31/1998 B-00024-7 26042 C & H Project Number: Date: NYSDEC Project Number: 101 Chester Street - Syracuse, New York Site Name: Former Brown Manufacturing Site Project ID: Brownfield Restoration Project

Remarks	No odors or staining	Some odors & staining	Odors & staining	Strong odors & staining	No odors or staining	Some odors & staining	Odors & staining	Strong odors & staining	Strong odors & staining	Strong odors	Strong odors & staining	No odors or staining	No odors or staining	No odors or staining	Some odors & staining	Some odors & staining	
PCB Immunoassay									1-10 ppm	10-50 ppm	<1 ppm					<1 ppm	TOTAL TRANSPORTED AND AND AND AND AND AND AND AND AND AN
Headspace PtD	denge kannya Grego,								25.0 ppm	25.0-50.0 ppm	40.0 ppm					11.0 ppm	
In-Situ PID	0.0 ppm	1.0-2.0 ppm	5.0-7.0 ppm	5.0-10.0 ppm	0.0 ppm	1.0 ppm	5.0-10.0 ppm	10.0-15.0 ppm	5.0-10.0 ppm		10.0-15.0 ppm	0.0 ppm	0.0 ppm	0.0 ppm	2.0-3.0 ppm	2.0-3.0 ppm	
Description	Brick, stone, organics, debris, sand/sift	Ash, some fine sand/siit	Fine sand/silt, trace clay	Wet sand/sitt	Organics, brick, misc. fill	Ash, some fine sand/silt	Fine sand/silt, trace clay	Wet sand/silt	[SOIL SAMPLE COLLECTED]	(OILWATER SAMPLE COLLECTED).	ISOIL SAMPLE COLLECTED]	Asphalt, sand/silt, organics, debris	Ash, some fine sand/silf	Fine sand/silt, trace clay	Wet sand/silt	ISOIL SAMPLE COLLECTED]	
Depth (ff.)	0 - 2	2 - 5	5. 1. S	9 - 13	0 - 2	2 - 5	& . &	9 - 13	13	73	13	0 - 2	2 - 5	5 - \$	9 - 13	13	
Length (ft.)	0 - 13	0 - 13	0 . 13	0 - 13	13 - 45	13 - 45	13 - 45	13 - 45	8	පි	27	0 - 10	0 - 10	0 - 10	0 - 10	5	
Trench I.D.	massimus A A	7.4 8	Z Z	2 2 0	U T	7.4.7.	0 7	I	141	€ F-T**	7. 7.	7-5 A	7-5 8	7.5 C	7-5 0	*T-5 E	

^{*} Soil sample analyzed for PCBs (8080), VOCs (8240), Semi-VOCs (8270), and Metals (200.7). ** Oil sample analyzed at laboratory for PCBs (8080), ONLY.

C&I engineers, p.c.

431 East Fayette Street Tel: (315) 472-6980

Syracuse, New York 13202 Fax: (315) 472-3523

Project ID: Brownfield Restoration Project

Site Name: Former Brown Manufacturing Site

101 Chester Street - Syracuse, New York

Location:

7/31/1998 B-00024-7 26042 C & H Project Number: Date: NYSDEC Project Number:

Trench Excavations

SOIL SCREENING LOG

												 whatefore			opposition of the second	
Remarks	No odors or staining		No odors or staining	No odors or staining	No odors; Dark soils	No odors; Dark soils	No odors; Dark soils									
PC8 Immunoassay							<1 ppm									
Headspace PID							mdd 0:0									
Old mys-ul	0.0 ppm		0.0 ppm	0.0 ppm	0.0 ppm	6.0 ррт	0.0 mdd									
Description	Brick, gravel, wood, conc., debris	Conc. foundation	Organics, stone, debris	Ash	Fine sand/silt, trace clay	Wet fine sand/silt, gravel, trace clay	SOL SAMPLE COLLECTED]	- Herinaton-wido								
Depth (ft.)	0 - 6	2	0 - 3	3 - 3.5	3.5 - 12	12 - 13	13							a a mariju ardičeta.		
Length (ft.)	0 - 31	30 - 31	33 - 41	31 - 41	31 - 41	37 - 41	35									
Trench LD.	7-6 A	7-6 8	7-6 C	T-6 D	7-6 E	7. 7.	Y-6 G	COLONIA POR PORTO		sessa negarija ez	geroegessoon	ou eccasion dára:	Norman Medicine	annonia rasana	******************************	

C&H engineers, p.c.

431 East Fayette Street Tel: (315) 472-6980

Syracuse, New York 13202 Fax: (315) 472-3523

Site Name: Former Brown Manufacturing Site

101 Chester Street - Syracuse, New York Location:

B-00024-7 26042 NYSDEC Project Number: C & H Project Number:

Phase 2A Site Investigation On-Site Trench Excavations

SOIL SCREENING LOG

· · · · · · · · · · · · · · · · · · ·				Control of the contro			
Date	Sample ID	Length (ft.)	Depth (ft.)	Description	In-Situ PID	Headspace PID	Remarks
11/15/1999	,	A ^{re} s Area	4	Demo debris; Black/dark sand, silf, gravel	1.5 ppm	14.0 ppm	Odor; Stained soil & debris
11/15/1999	17-2	23	("")	Demo debris; Black/dark sand, silt, gravel	1.0 pp.m	6.0 ppm	Odor; Stained soil & debris
11/15/1999	77-3	52	" "	Demo debris; Black/dark sand, silt, gravel	1.5 ppm	13.0 ppm	Odor; Stained soil & debris
11/15/1999	\$-11	09	Arm Ange	Gray, moist sift with clay and sand	0.0 ppm	0.0 ppm	No odor; Stained soil
Amerika a kombo (Ardon							
11/15/1999	18-1	35	Û	Gray, moist sand/silt with some gravel	3.0 ppm	130 ppm	Odor, Oil/sheen on GW
11/16/1999	T8-2	96	ري. دي	Gray, moist sand/silt with some gravel	10.0 ppm	40 ppm	Strong odor; Oil/sheen on GW
11/16/1999	T8 - 2 Dup.	100	<u>د</u> ري	Gray, moist sand/silt with some gravel	10.0 ppm	46 ppm	Strong odor, Oil/sheen on GW
on the state of th							
11/16/1999	19-1	lo	d	Gray, moist gravel, sand, silf	0.0 ppm	1.8 ppm	No odor; Sheen on GW
11/17/1999	18-2	99	- Aces	Gray, moist gravel, sand, sift	1.0 ppm	3.5 ppm	No odor; Sheen on GW
11/17/1989	T10-1	8	12	Gray, moist gravel, sand, sift	3.0 ppm	2.0 ppm	Slight odor; Same sheen on GW
11/17/1999	T10-2	29	72	Moist sand/silt, some gravel	1.5 ppm	1.6 ppm	Slight odor; Some sheen on GW
11/17/1999	110 - 3	45	12	Moist sand/silt, some gravel	1.0 ppm	2.2 ppm	Slight odor; Some sheen on GW

C&H CIRTIE CORS, D.C. 431 East Fayette Street Syracuse, New York 13202

Phase 2A Site Investigation On-Site Trench Excavations

B-00024-7

26042

C & H Project Number.

SOIL SCREENING LOG

Location:

101 Chester Street - Syracuse, New York

NYSDEC Project Number: Site Name: Former Brown Manufacturing Site

		a markan sasah bid diddirikan funda s	Pender, 1, 1000 - 3 - 1000 - 3 - 1								ga agus agus ann ann aig shi dha aig sh		enga na mangangan kanan kanan	
Remarks	Slight odor; Some sheen on GW	Odor, Some sheen on GW	Odor; Some sheen on GW	Odor; Sheen & oil on GW	Odor; Sheen & oil on GW	Odor; Sheen & oil on GW	Strong odor; Sheen & oil on GW		Odor, Sheen & oil on GW	No odor; No sheen or oil on GW		No odor; No sheen or oil on GW	No odor; No sheen or oil on GW	
Headspace PID	4.4 ppm	32 ppm	84 ppm	89 ppm	2.0 ppm	29 ppm	40 ppm		10.3 ppm	0.0 ppm		1.0 ppm	1.4 ppm	
In-Situ PID	2.5 ppm	15.0 ppm	mdd 09	50 ppm	1.0 ppm	15.0 ppm	25 ppm		5.0 ppm	0.0 ppm		0.0 ppm	0.0 ppm	
Description	Gray, moist sand/silt, some gravel	Gray, moist sand/silt, some gravel	Gray, moist sand/silt, some gravel	Gray, moist sand/sift, some gravel	Gray, moist sand/silt, some gravel	Gray, moist sand/silt, some gravel	Gray, moist sand/silt, some gravel		Gray, moist gravel, some sand/silt	Gray, moist sand/silt, some gravel		Gray, moist sand/silt, some gravel	Gray, moist sand/silt, some gravel	
Depth (ft.)	Ć.	€3	Ů,	\$	400	de.e.	alena elena		10	Ç		10	Ö	
Length (ft.)		37	45	09	ເດ	35	65	many private count of the last	5	35	man de l'arconne l'anti-recibile	w	r.	
Sample ID	gun gun jun	711-2	111.3	4	T12 - 1	112-2	T12 - 3		T13-1	113-2		£. \$	14.2	
Date	11/17/1999	11/17/1999	11/17/1939	11/17/1999	 11/18/1939	11/18/1999	11/18/1999		11/18/1999	11/18/1999		11/18/1999	11/18/1999	

C& Hengineers, p.c.

431 East Fayette Street Tel: (315) 472-6980

Phase 2A Site Investigation On-Site Trench Excavations

NYSDEC Project Number: B-00024-7

26042

C & H Project Number:

SOIL SCREENING LOG

Syracuse, New York 13202 Fax: (315) 472-3523

Former Brown Manufacturing Site Site Name:

101 Chester Street - Syracuse, New York Location:

Remarks Odor; Stained soil & debris Odor; Stained soil & debris Headspace PID 3.7 ppm 2.8 ppm In-Situ PID 1.0 ppm 1.0 ppm Demo debris; Black/dark sand, silt, gravel Demo debris; Black/dark sand, silt, gravel Description Depth (ft.) KO Length (ft.) ťΩ ιΩ (Ω Sample ID 715-2 100 11/18/1999 11/18/1959 Date

Page 3 of 3

Architecture, Engineering & Landscape Architecture, P.C.

Phase 2B Site Investigation Off-Site Trench Excavations

B-00024-7

NYSDEC#

90618

80A #

SOLL SCREENING LOG

Former Brown Manufacturing Site Site Name:

101 Chester Street - Syracuse, New York

Location;

Date	Sample ID	Location	Depth (ft.)	Soil Conditions/Observations	In-Situ PID	Headspace PID
5/15/2001		141 Bellevue Ave. ±10 feet east of fence at 101 Chester St.	10.0	Moist/wet dark gray sand/silt; Odors	1.1 ppm	145 ppm
5/15/2001	T16-2	141 Bellevue Ave. ±30 feet east of fence at 101 Chester St.	10.0	Moist/wet dark gray sand/silt; Odors	0.0 ppm	19.3 ppm
5/15/2001	T47-1	102-104 Huron St. ±10 feet east of fence at 101 Chester St.	12.0	Moist/wet dark gray sand/silt; Odors	0.0 ppm	10.6 ppm
5/16/2001	7-7-2	102-104 Huron St. ±64 feet east of fence at 101 Chester St.	11.0	Moist/wet gray sand/silt; No odors	0.0	0.0 ppm
5/16/2001	118-1	106-108 Huron St. ±10 feet east of fence at 101 Chester St.	12.0	Moist/wet dark gray sand/silt; Odors	0.0 ppm	19.5 ppm
5/16/2001	T18-2	106-108 Huron St. ±64 feet east of fence at 101 Chester St.	11.0	Moist/wet gray sand/silt; No odors	0.0 ppm	0.0 ppm
5/16/2001	119-1	110 Huron St. ±10 feet east of fence at 101 Chester St.	12.0	Moist/wet gray sand/silt; Odors	0.0 ppm	4.1 ppm
5/16/2001	719-2	110 Huron St. ±64 feet east of fence at 101 Chester St.	10.5	Moist/wet gray sand/silt; No odors	0.0 ppm	0.1 ppm
5/17/2001	120-1	112 Huron St. ±10 feet east of fence at 101 Chester St.	12.0	Moist/wet dark gray sand/silt; Odors	0.0 ppm	1.7 ppm
5/17/2001	120-2	112 Huron St. ±50 feet east of fence at 101 Chester St.	11.0	Moist/wet dark gray sand/silt; Odors	0.0 ppm	3.6 ppm
5/17/2001	77	114 Huron St. ±10 feet east of fence at 101 Chester St.	10.0	Moist/wet dark gray sand/silt; Odors	0.0 ppm	0.0 acm
5/17/2001	121-2	114 Huron St. ±64 feet east of fence at 101 Chester St.	11.0	Moist/wet gray sand/silt; No odors	0.0 ppm	0.0
5/17/2061	722-1	119 Chester St. Northeast corner ±3 feet south of 101 Chester St.	O.	Moist/wet gray sand/sitt; No odors	0.0 ppm	0.0 man
	anna kanakana si sisak sanna si					
	nyanga an hiji panana.					

Project: Brownfield Restoration Project Date: 7/23/1998

Site: Former Brown Manufacturing Site C & H Project: 26042

Test No.	Sample ID	Photometer Value	PCB Conc. (ppm)
A 1	Neg. Control	1.51	< 1
A 2	Neg. Control Dup.	1.49	< 1
A 3	1 ppm Control	1.27	1
A 4	10 ppm Control	0.77	10
A 5	50 ppm Control	0.41	50
A 6	HB-1 (0.0'-0.5')	1.26	1 - 10
A 7	HB-2 (0.0'-0.5')	1.26	1 - 10
A 8	HB-3 (0.0'-0.5')	1.38	< 1
A 9	HB-4 (0.0'-0.5')	1,53	< 1
A 10	HB-5 (0.0'-0.5')	1.34	< 1
A 11	HB-6 (0.0'-0.5')	1.36	< 1
A 12	HB-7 (0.0'-0.5')	1,41	< 1
A 13	HB-8 (0.0'-0.5')	1.21	1 - 10
A 14	HB-9 (0.0'-0.5')	0.48	10 - 50
A 15	HB-10 (0.0'-0.5')	1.22	1 - 10
A 16	HB-10 Dup. (0.0'-0.5')	1.02	1 - 10
A 17	GP-1 (0.0'-0.5')	1.25	1 - 10
A 18	GP-2 (0.0'-0.5')	1.44	< 1
A 19	GP-3 (0.0'-0.5')	1.25	< 1
A 20	GP-4 (0.0'-0.5')	1.49	< 1

Project: Brownfield Restoration Project Date: 7/23/1998

Site: Former Brown Manufacturing Site C & H Project: 26042

Test No.	Sample ID	Photometer Value	PCB Conc. (ppm)
B 1	Neg. Control	1.34	< 1
B 2	Neg. Control Dup.	1.35	< 1
B 3	1 ppm Control	0.96	1
B 4	10 ppm Control	0.53	10
B 5	50 ppm Control	0.27	50
B 6	GP-5 (0.0'-0.5')	1.05	< 1
87	GP-6 (0.0'-0.5')	1.20	< 1
B 8	GP-7 (0.0'-0.5')	1.21	< 1
B 9	GP-8 (0.0'-0.5')	1.08	< 1
B 10	GP-9 (0.0'-0.5')	1.00	< 1
B 11	GP-10 (0.0'-0.5')	0.76	1 - 10
B 12	GP-11 (0.0'-0.5')	1.16	< 1
B 13	GP-12 (0.0'-0.5')	0.92	1 - 10
B 14	GP-13 (0.0'-0.5')	0.54	1 - 10
B 15	GP-14 (0.0'-0.5')	0.74	1 - 10
B 16	GP-15 (0.0'-0.5')	1.09	< 1
B 17	GP-16 (0.0'-0.5')	0.75	1 ~ 10
B 18	GP-17 (0.0'-0.5')	0.80	1 - 10
B 19	GP-18 (0.0'-0.5')	1.11	× 1
B 20	GP-18 Dup. (0.0'-0.5')	1.10	

Project: Brownfield Restoration Project Date: 7/23/1998

Site: Former Brown Manufacturing Site C & H Project: 26042

Test No.	Sample ID	Photometer Value	PCB Conc. (ppm)
C 1	Neg. Control	1.37	< 1
C 2	Neg. Control Dup.	1.34	< 1
C 3	1 ppm Control	1.09	1
C 4	10 ppm Control	0.59	10
C 5	50 ppm Control	0.31	50
C 6	GP-19 (0.0'-0.5')	1.32	K 1
C 7	GP-20 (0.0'-0.5')	1.30	< 1
C 8	GP-21 (0.0'-0.5')	1.26	* 1
C 9	GP-22 (0.0'-0.5')	1.31	
G 10	GP-23 (0.0'-0.5')	1.28	< 1
C 11	GP-24 (0.0'-0.5')	1.22	< 1
C 12	GP-25 (0.0'-0.5')	0.54	10 - 50
C 13	GP-26 (0.0'-0.5')	1.00	1 - 10
C 14	GP-27 (0.0'-0.5')	0.98	1 - 10
C 15	GP-1 (0.5'-2.0')	0.86	1 - 10
C 16	GP-2 (4.0'-5.7')	0.47	10 - 50
C 17	GP-3 (0.5'-2.0')	0.53	10 - 50
C 18	GP-3 Dup. (0.5'-2.0')	0.46	10 - 50
C 19	GP-4 (6.0'-8.0')	0.50	10 - 50
C 20	GP-5 (2.0'-4.0')	0.37	10 ~ 50

Project: Brownfield Restoration Project Date: 7/23/1998

Site: Former Brown Manufacturing Site C & H Project: 26042

Test No.	Sample ID	Photometer Value	PCB Conc. (ppm)
D 1	Neg. Control	1.25	< 1
D 2	1 ppm Control	0.99	1
D 3	10 ppm Control	0.50	10
D 4	50 ppm Control	0.28	50
D 5	GP-6 (0.5'-2.0')	0.60	1 - 10
D 6	GP-7 (0.5'-2.0')	0.66	1 - 10
D 7	GP-8 (0.5'-2.0')	0.19	> 50
B Q	GP-9 (2.0'-4.0')	0.65	1 - 10
D 9	GP-10 (2.0'-4.0')	0.48	10 - 50
D 10	GP-11 (2.0'-4.0')	0.32	10 ~ 50
D 11	GP-12 (4.0'-5.2')	0.58	1 - 10
D 12	GP-13 (0.5'-2.0')	0.66	1 - 10
D 13	GP-14 (4.0'-8.0')	1.20	< 1
D 14	GP-15 (4.0'-6.0')	1.23	< 1
D 15	GP-16 (10.0'-12.0')	0.86	1 - 10
D 16	GP-17 (8.0'-10.0')	0.62	1 - 10
D 17	GP-17 Dup. (8.0'-10.0')	0.57	1 - 10
D 18	GP-18 (0.5'-2.0')	1.06	< 1
D 19	GP-19 (0.5'-2.0')	1.06	< 1
	Noted to contact is select a major submers to a management of contact size of the first of the select of the selec		

Project:Brownfield Restoration ProjectDate:7/23/1998Site:Former Brown Manufacturing SiteC & H Project:26042

Test No.	Sample ID	Photometer Value	PCB Conc. (ppm)
E 1	Neg. Control	1.26	en e
E 2	1 ppm Control	0.86	1
E 3	10 ppm Control	0.49	10
E 4	50 ppm Control	0,22	50
E 5	GP-20 (8.0'-10.0')	0.93	< 1
E 6	GP-21 (6.0'-8.0')	1.23	< 1
E 7	GP-22 (4.0'-6.0')	1.12	< 1
E 8	GP-23 (8.0'-10.0')	0.83	1 - 10
E 9	GP-24 (4.0'-6.0')	0.69	1 - 10
E 10	GP-25 (2.0'-4.0')	0.50	1 ~ 10
E 11	GP-26 (8.0'-10.0')	0.70	1 - 10
E 12	GP-26 Dup. (8.0'-10.0')	0.76	1 - 10
E 13	GP-27 (4.0'-6.0')	0.63	1 ~ 10
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Project: Brownfield Restoration Project Date: 7/31/1998

Site: Former Brown Manufacturing Site C & H Project: 26042

Test No.	Sample ID	Photometer Value	PCB Conc. (ppm)
	Neg. Control	1.41	- 1
2	Neg. Control Dup.	1.41	< 1
3	1 ppm Control	1.00	1
4	10 ppm Control	0.63	10
5	50 ppm Control	0.31	50
6	T-1 (L=31', D=5')	0.55	10 - 50
7	T-1 (L=60', D=5')	0.93	1 - 10
8	T-1 (L=77', D=5')	0.57	10 - 50
9	T-1 (L=84', D=5')	0.37	10 - 50
10	T-2 (L=12', D=9.5')	1.31	< 1
11	T-2 (L=40', D=5')	0.92	1 - 10
12	T-2 (L=75', D=5')	1.04	< 1
13	T-2 (L=92', D=11')	0.75	1 - 10
14	T-4 (L=8', D=13')	0.69	1 ~ 10
15	T-4 (L=27', D=13')	1.13	< 1
16	T-4 Dup. (L=27', D=13')	1.08	< 1
17	T-5 (L=5', D=13')	1.26	< 1
18	T-6 (L=35', D=13')	1.62	< 1
19	T-4 (OII)	0.55	10 - 50
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APPENDIX B PHASE I ANALYTICAL DATA

DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES 431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG CH08 Sampled 7/20-22/98, 7/30/98, 8/6/98

SOILS and AQUEOUS SAMPLES for VOLATILE ORGANICS

HB-9	(20598180)	GP-2	(20598181)	GP-8	(20598182)
GP-5	(20598183)	GP-13	(20598184)	GP-16	(20598185)
GP-17	(20598186)	GP-25	(20598187)	T-1	(21598005)
T-2	(21598006)	T-4	(21598007)	T-5	(21598008)
T-6	(21598009)	MW-1	(21998023)	MW-2	(21998024)
MW-3	(21998025)	MM~ 4	(21998026)	MW-5	(21998027)

DATA ASSESSMENT

A volatile organics data package containing analytical results for thirteen soils and five aqueous samples was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8240, addressed Target Compound List analytes. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

When present in samples, acetone, methylene chloride, and TIC's identified as hexane and Freon 113 are assumed to represent laboratory or program artifacts. These analytes should be considered undetected in program samples. One exception is noted. The acetone concentration detected in GP-5 exceeded the range requiring qualification.

The chloroform concentrations detected in ten samples have been qualified as estimations. Chloroform is also assumed to represent a program or laboratory artifact. The reported concentrations can not be completely ignored, however, because chloroform was not detected in associated blanks. The presence of chloroform should only be considered significant if consistent with site history.

The 1,1,2,2-tetrachloroethane, bromoform and dibromochloromethane results reported from each groundwater sample have been qualified due to poor calibration performance.

Positive analyte results reported from GP-2 and GP-5 have been qualified as estimations due to high surrogate standard recoveries.

Analytes dependant upon the response if internal standards #2 and #3 have been qualified as estimations in GP-8, GP-5 and GP-25. Analytes dependant upon the response of Internal Standard #3 have also been qualified as estimations in GP-2 and GP-16. A low response was reported for each affected internal standard.

The identification of benzene in GP-5, and o-xylene in T-2 and T-4 could not be confirmed, based on the reference mass spectra included in the raw data. Benzene and o-xylene should be considered undetected in the affected samples.

Library searches were performed to identify each reported Tentatively Identified Compound (TIC). When the supporting mass spectra

failed to provide a conclusive identification, or when a more definitive identification was possible, Form 1E was edited.

CORRECTNESS AND USABILITY

Cooler temperatures between 11.9°C and 14.9°C were reported when this group of samples arrived at the laboratory. Because the samples were not properly chilled to 4°C at the time of collection, the possibility of volatile and degradative losses cannot be ignored. The results reported from this group of samples have been qualified as estimations. In addition, sample T-1 was held in the laboratory for three weeks prior to analysis. Results obtained from this sample have been rejected.

Reported data should be considered technically usable in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J" or "UJ". Data that is felt to be unusable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

ames B. Baldwin

Date

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved or are not analyzed within established holding times may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. VOA analyses must be completed within 14 days of receipt. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included thirteen soils and five acid preserved aqueous samples, was collected from the Former Brown Manufacturing site between 20Jul98 and 06Aug98. The samples were delivered to the laboratory in five groups (samples collected on 20Jul98, samples collected on 21Jul98, samples collected on 22Jul98, samples collected on 30Jul98 and 31Jul98, and samples collected on 06Aug98). Each group of samples arrived at the laboratory within 2 days of collection. A custody seal was present on every sample cooler, with the exception of the cooler used to transport the groundwater samples collected on 06Aug98. The groundwaters were sampled and immediately delivered to the laboratory. This delivery group also contained three trip blanks, and an equipment blank that was created on 20Jul98.

Although the laboratory record indicates that most of the sample coolers contained ice, the loading was inadequate to properly chill the samples. Sample temperatures between 11.9°C and 14.9°C were recorded by the laboratory at the time of receipt. Due to the possibility of analyte losses caused by improper handling, the results reported from this group of samples have been qualified as estimations.

The analysis of each sample except T-1 was completed within the program holding time limitation. T-1 was held for 21 days prior to analysis. Based on the length of this excedence, and because the sample was originally received warm, results reported from T-1 must be considered unreliable. This information should not be included in data tables.

BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank. Any sample concentration less than 5 times the level determined in a blank must be qualified. The qualification criteria is extended to ten times the concentration observed in blanks for common laboratory artifacts. These include acetone, methylene chloride and 2-butanone. Chloroform is also frequently present as a laboratory artifact.

Six method blanks, three trip blanks, an equipment blank, and two holding blanks were analyzed with this group of samples. Five of the method blanks contained traces of methylene chloride. Chloromethane, methylene chloride and acetone were also present in blanks. Hexane, 1,1,2-trichlorotrifluoroethane and an unknown eluting at 5.74 minutes were also reported as Tentatively Identified Compounds (TIC). When present in samples, similar artifacts should be interpreted as undetected. A detection limit equaling CRDL or the reported concentration, whichever is greater, should be assumed. It is noted that the acetone concentration reported from GP-5 exceeded the range requiring qualification.

Traces of chloroform were also detected throughout this group of samples. The presence of chloroform appears to represent a laboratory artifact. When present, the reported chloroform concentrations have been flagged as estimations. They have not been removed from sample reports because chloroform was not detected in the associated blanks. The presence of chloroform should only be considered significant if consistent with site history.

MS TUNING

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of BFB was analyzed prior to each analytical sequence and during every 12 hour period of instrument operation. An Instrument Performance Check Form is present for each BFB evaluation. The BFB tunes associated with this group of samples satisfied the program acceptance criteria.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The required levels of initial calibration were performed on 29Jul98, 01Aug98, 07Aug98. The 01Aug98 calibration incorporated a heated purge. Each sequence of calibration standards included analyte concentrations of 10, 20, 50, 100 and 200 μ g/l. During the initial instrument calibrations, most targeted analytes produced the required levels of instrument response and an acceptable degree of linearity.

During the 29Jul98 and 07Aug98 calibrations, 1,1,2,2-tetrachloroethane standards failed to produce the required minimum levels of instrument response, and bromomethane demonstrated poor linearity. In each case, the response of these analytes was sufficient to assume they would be detected if present in samples. Because they were not detected, 1,1,2,2-tetrachloroethane and bromomethane results have been left unqualified.

Continuing calibration verification standards were analyzed prior to each twelve hour period of instrument operation. In most cases, these checks demonstrated an acceptable level of instrument stability.

When compared to the initial calibrations, unacceptable changes were observed in the response of dibromochloromethane on 20Aug98, and bromoform on 03Aug98 and 20Aug98. 1,1,2,2-Tetrachloroethane also failed to produce the required minimum level of instrument response during both of these checks, and on 10Aug98. Based on this performance, the 1,1,2,2-tetrachloroethane result reported from each aqueous sample has been qualified as a estimation. The bromoform results reported from every sample except the Trip Blank and Holding Blank received on 31Jul98 have been similarly qualified. The dibromochloromethane results reported from each groundwater sample and the Trip Blank received on 06Aug98 have also been qualified as estimations.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Surrogate standard summary reports were properly prepared; the correct acceptance criteria applied. The surrogate standard recoveries reported from this group of samples included unacceptably high results for the 4-bromofluorobenzene additions to GP-17, GP-2 and GP-5, and the toluene-d8 addition to GP-5. GP-2 and GP-17 were reanalyzed, producing similar results. GP-5 was reanalyzed at a higher dilution. Based on this performance, the positive analyte results reported from the initial analyses of GP-2 and GP-5 have been qualified as estimations. The negative results reported from GP-17 have been left unqualified.

INTERNAL STANDARDS

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. The response produced by the internal standard additions to GP-2, GP-5, GP-8, GP-16 and

GP-25 failed to satisfy the calculated limits of acceptance. Each affected sample was reanalyzed. Only the repeated analyses of GP-16 and GP-25 produced an improvement. This information should be included in data tables. The remaining repeated analyses should be ignored. The observed performance would require the qualification of analytes associated with each affected internal standard. However, because data from this group of samples has been previously qualified, an action at this tim is not required.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS
Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide
an indication of laboratory accuracy. The analysis of a duplicate
spiked aliquot provides a measurement of precision.

MW-01 and T-01 were selected for matrix spiking. The recoveries reported for analyte additions to two portions of each of these samples demonstrated acceptable levels of analytical precision and accuracy. Acceptable recoveries were also obtained from six spiked blanks. It is noted, however, that MS/MSD samples were not prepared with a low level soil.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects or poor laboratory technique.

Field split duplicates were not included in this group of samples.

REPORTED ANALYTES

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts. Laboratory results have been adjusted to reflect sample size and moisture content. Reference mass spectra were provided to confirm the identification of each targeted analyte that was detected in this group of samples. It is noted that the identifications of benzene in GP-5, and o-xylene in T-02 and T-04 could not be conclusively confirmed using the mass spectra references supplied by the laboratory. Benzene and o-xylene should be considered undetected in the affected samples.

Tentatively Identified Compounds (TIC) were reported from this group of samples. Frequently, these identifications were not soundly supported by the library searches contained in the raw data. Where appropriate, Form 1E has been corrected.

It is noted that GP-5 was reanalyzed at an appropriate dilution to obtain acetone, 2-butanone and 4-methyl-2-pentanone measurements within the range of calibration.

SUMMARY OF QUALIFIED DATA

SAMPLED 7/20/98 thru 8/6/98

FORMER BROWN MANUFACTURING SITE

BLANKS HEXANE TIC	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE		REMOVE										
BLANK TIC FREON 113		REMOVE		REMOVE			REMOVE										
SPECTRA ID TIC	EDIT	EDIT	EDIT	EDIT	EDIT	EDIT			EDIT	EDIT	EDIT	EDIT					EDIT
BLANKS CHLOROFORM	80 Q	90°	137	l-) ≪t ^t	4		2.7							20J		2.3	2.7
BLANK METH CHLORIDE	17UJ 160UJ	89UJ	89UJ	2803	360J	11003	5403		8603	660J	360J	240J	1001	1003	1003	1007	1007
BLANK	62UJ 150UJ					250UJ	7103		100UJ			6803	1203	1001		1001	1103
HANDLING	ALL J/UJ	ALL J/UJ	ALL J/UJ	ALL J/UJ	ALL J/UJ	ALL UJ	ALL J/UJ	REJECT ALL	ALL J/UJ	ALL J/UJ	ALL UJ	ALL UJ	ALL J/UJ	ALL J/UJ	ALL UJ	ALL J/UJ	ALL J/UJ
	(20598180)	(20598182)	(20598183)	(20598184)	(20598185)	(20598186)	(20598187)	(21598005)	(21598006)	(21598007)	(21598008)	(21598009)	(21998023)	(21998024)	(21998025)	(21998026)	(21998027)
	HB-9	GP-8	GP-5	GP-13	GP-16	GP-17	GP-25	- E	T-2	T-4	T-5	T-6	MW-1	MW-2	MW-3	MW-4	MW-5

SUMMARY OF QUALIFIED DATA

FORMER BROWN MANUFACTURING SITE

86/9/8
thru
7/20/98
SAMPLED

SPECTRA ID TARGETS				BENZENE UJ						XYLENE UJ	XYLENE UJ								
SURROGATES) (ALL POS J		ALL POS J															
INTERNAL STANDARDS		183 J/UJ	IS2,3 UJ	IS2,3 J/UJ		IS3 UI		IS2,3 UJ											
CALIBRATE	**************************************													CAL UJ	CAL UJ				
	(20598180)	059818	059818	059818	059818	059818	059818	059818	159800	159800	159800	159800	159800	199802	199802	199802	199802	199802	
	1	GP-2	1	GP-5	-	GP-16	GP-17	GP-25	F-1	T-2	T-4	T-5	J-6	MW-1	MW-2	MW-3	MW-4	MW-5	

CAL = 1,1,2,2-tetrachloroethane, bromoform, dibromochloromethane IS2 = analytes associated with internal standard #2 IS3 = analytes associated with internal standard #3

EPA SAMPLE NO.

Lab Name:	UPSTA	TE LAB	S INC.	Contract: C&H ENGIN	HB-9T	
Lab Code: 10170		·	Case No.: 01	SAS No.:S	DG No.: CH07	NATIONAL PROPERTY OF THE PROPE
Matrix: (soil/v	vater)	SOIL		Lab Sample ID:	20598180	
Sample wt/vol:		5.0	(g/ml) <u>G</u>	Lab File ID:	C0323.D	•
Level: (low/n	ned)	LOW	- Accessed to the second	Date Received:	07/22/98	
% Moisture: r	not dec.	30		Date Analyzed:	08/03/98	
GC Column:	502.2	ID:	0.53 (mm)	Dilution Factor:	1.0	
Soil Extract Volume:		ne: (uL)		Soil Aliquot Volu	ıme:	(uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
74-87-3	chloromethane	14	W Y
75-01-4	vinyl chloride	14	
74-83-9	bromomethane	14	
75-00-3	chloroethane	14	1 1
67-64-1	acetone	62	in
75-35-4	1,1-dichloroethene	14	
75-15-0	carbon disulfide	14	1-1-7-1
75-09-2	methylene chloride	17	8111
156-60-5	trans-1,2-dichloroethene	14	
75-34-33	1,1-dichloroethane	14	#
156-59-2	cis-1,2-dichloroethene	14	11
78-93-2	2-butanone	14	<u> </u>
67-66-3	chloroform	5	47
107-06-2	1,2-dichloroethane	14	U
71-55-6	1,1,1-trichloroethane	14	15.17
56-23-5	carbon tetrachloride	14	f f Y '
71-43-2	benzene	2	47
79-01-6	trichloroethene	14	Ū\
78-87-5	1,2-dichloropropane	14	
75-27-4	bromodichloromethane	14	T T
10061-1-5	cis-1,3-dichloropropene	14	<i>II</i>
10061-2-6	trans-1,3-dichloropropene	14	
79-00-5	1,1,2-trichloroethane	14	כיולע
124-48-1	dibromochloromethane	14	1(7)
75-25-2	bromoform	14	T T
108-10-1	4-methyl-2-pentanone	14	
108-88-3	toluene	2	11/
591-78-6	2-hexanone	14	il.
127-18-4	tetrachloroethene	14	
108-90-7	chlorobenzene	14	1100
100-41-4	ethylbenzene	14	
	m,p-xylene	4	11/
95-47-6	o-xylene	14	W.
100-42-5	styrene	14	1303
79-34-5	1,1,2,2-tetrachloroethane	14	

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Lo 10/2/98

EPA SAMPLE NO.

Lab Name:	UPSTA	TE LAB	S INC.	Contract: C&H ENGI	N GP-2T	
Lab Code:	10170		Case No.: 01	SAS No.:	SDG No.: CH07	
Matrix: (soil/v	vater)	SOIL	MANAGEMENT OF THE STATE OF THE	Lab Sample ID:	20598181	
Sample wt/vo	ol:	2.0	(g/ml) <u>G</u>	Lab File ID:	C0320,D	
Level: (low/n	ned)	LOW		Date Received:	07/23/98	
% Moisture: r	not dec.	11	~ ************************************	Date Analyzed:	08/03/98	
GC Column:	502.2	ID:	0.53 (mm)	Dilution Factor:	1.0	
Soil Extract V	olume:		(uL)	Soil Aliquot Volu	ume:	(uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
74-87-3	chloromethane	28	113
75-01-4	vinyl chloride	28	+-4}
74-83-9	bromomethane	28	
75-00-3	chloroethane	28	1
67-64-1	acetone	150	in
75-35-4	1,1-dichloroethene	28	IN .
75-15-0	carbon disulfide	28	1700
75-09-2	methylene chloride	160	जाम ८
156-60-5	trans-1,2-dichloroethene	28	U V
75-34-33	1,1-dichloroethane	28	
156-59-2	cis-1,2-dichloroethene	28	1100
78-93-2	2-butanone	28	(1)
67-66-3	chloroform	9	47
107-06-2	1,2-dichloroethane	28	W\
71-55-6	1,1,1-trichloroethane	28	
56-23-5	carbon tetrachloride	28	-
71-43-2	benzene	28	
79-01-6	trichloroethene	28	
78-87-5	1,2-dichloropropane	28	11
75-27-4	bromodichloromethane	28	
10061-1-5	cis-1,3-dichloropropene	28	# > \(\mathcal{V}\)
10061-2-6	trans-1,3-dichloropropene	28	
79-00-5	1,1,2-trichloroethane	28	
124-48-1	dibromochloromethane	28	
75-25-2	bromoform	28	
108-10-1	4-methyl-2-pentanone	28	
108-88-3	toluene	9	81 ~
591-78-6	2-hexanone	28	W 7
127-18-4	tetrachloroethene	28	11
108-90-7	chlorobenzene	28	
100-41-4	ethylbenzene	28	
	m,p-xylene	13	JJ/
95-47-6	o-xylene	11	
100-42-5	styrene	28	
79-34-5	1,1,2,2-tetrachloroethane	28	1200

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EPA SAMPLE NO.

Lab Name:	UPSTA	TE LAB	S INC.	Contract: C&H ENGIN	GP-5T	
Lab Code:	10170		Case No.: 01		DG No.: CH07	
Matrix: (soil/v	vater)	SOIL		Lab Sample ID:	T-1	
Sample wt/vo	ol:	5.0	(g/mi) G		C0322.D	•
Level: (low/n	ned)	LOW			07/23/98	
% Moisture: r	not dec.	14			08/03/98	
GC Column:	502.2	ID:	0.53 (mm)	Dilution Factor:	1.0	
Soil Extract V	olume:		(uL)	Soil Aliquot Volur		(uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
74-87-3	chloromethane		
75-01-4	vinyl chloride	12	47
74-83-9	bromomethane	12	
75-00-3	chloroethane	12	(U (U)
67-64-1	acetone	12	
75-35-4	1,1-dichloroethene	1700-1000-	-EDI-
75-15-0	carbon disulfide	12	1700
75-09-2	methylene chloride	12	
156-60-5	trans-1,2-dichloroethene	89	BUJ ~
75-34-33	1,1-dichloroethane	12	4
156-59-2	cis-1,2-dichloroethene	12	1707
78-93-2	2-butanone	360 930	U .
67-66-3	chloroform		E DI
107-06-2	1,2-dichloroethane	13	
71-55-6	1,1,1-trichloroethane	12	1500
56-23-5	carbon tetrachloride	12	Ψ) () ()
71-43-2	benzene	12	0'
79-01-6	trichloroethene	12 -0	J (/)
78-87-5	1,2-dichloropropane	12	h7
75-27-4	bromodichloromethane	12	<u> </u>
10061-1-5	cis-1,3-dichloropropene	12	
10061-2-6	trans-1,3-dichloropropene	12	
79-00-5	1,1,2-trichloroethane	12	0700
124-48-1	dibromochloromethane	12	
75-25-2	bromoform	12	<u> </u>
108-10-1	4-methyl-2-pentanone	12	
108-88-3	toluene	200 -260-	EDJ
591-78-6	2-hexanone	15	1
127-18-4	tetrachloroethene	86	
108-90-7	chlorobenzene	12	4707
100-41-4	ethylbenzene	12	
	m,p-xylene	14	1 (
95-47-6	o-xylene	22	
100-42-5	styrene	21	
79-34-5	1,1,2,2-tetrachloroethane	12	CU (f
		12	UZYJ

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EPA SAMPLE NO.

Lab Name: UPSTATE LABS INC.				Contr	Contract: C&H ENGIN			GP-8T	
Lab Code:	10170		Case No.: <u>01</u>	SA	S No.:	s	DG No.:	CH07	
Matrix: (soil/wa	ater)	SOIL			Lab S	ample ID:	2059818	32	
Sample wt/vol	:	5.0	(g/ml) G		Lab Fi	le ID:	C0321.)	
Level: (low/me	ed)	LOW			Date F	Received:	07/23/98	3	
% Moisture: no	ot dec.	14	~~~~		Date A	Analyzed:	08/03/98	3	
GC Column:	502.2	ID:	0.53 (mm)		Dilutio	n Factor:	1.0		
Soil Extract Vo	olume:		(uL)		Soil Al	iquot Volu	me:		(uL)
CAS NO.		CO	MPOUND	CONCENT		N UNITS: UG/KG		Q	

CAS NO.	COMPOUND (ug/L of ug/kg)	UG/KG	Q
74-87-3	chloromethane	12	U V
75-01-4	vinyl chloride	12	
74-83-9	bromomethane	12	<u> </u>
75-00-3	chloroethane	12	
67-64-1	acetone	12	
75-35-4	1,1-dichloroethene	12	
75-15-0	carbon disulfide	12	
75-09-2	methylene chloride	, 89	BUT
156-60-5	trans-1,2-dichloroethene	. 12	U
75-34-33	1,1-dichloroethane	12	
156-59-2	cis-1,2-dichloroethene	12	170
78-93-2	2-butanone	12	
67-66-3	chloroform	8	J-71/
107-06-2	1,2-dichloroethane	12	Uì
71-55-6	1,1,1-trichloroethane	12	
56-23-5	carbon tetrachloride	12	
71-43-2	benzene	12	
79-01-6	trichloroethene	12	T I
78-87-5	1,2-dichloropropane	12	T T
75-27-4	bromodichloromethane	12	
10061-1-5	cis-1,3-dichloropropene	12	T T
10061-2-6	trans-1,3-dichloropropene	12	
79-00-5	1,1,2-trichloroethane	12	
124-48-1	dibromochloromethane	12	
75-25-2	bromoform	12	
108-10-1	4-methyl-2-pentanone	12	<u> </u>
108-88-3	toluene	12	T T
591-78-6	2-hexanone	12	
127-18-4	tetrachioroethene	12	
108-90-7	chlorobenzene	12	T
100-41-4	ethylbenzene	12	
	m,p-xylene	12	
95-47-6	o-xylene	12	T T
100-42-5	styrene	12	T
79-34-5	1,1,2,2-tetrachloroethane	12	THE STATE OF THE S

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CPA	SAMPLE	NO,

Lab Name: UPSTATE LABS INC.				Contract: C&H ENG	GP13	r
Lab Code;	10170		Case No.: 01		SDG No.: CHO	I
Matrix: (soil/w	•	SOIL		Lab Sample ID		<u></u>
Sample wt/vo		5.0	(g/ml) <u>G</u>	Lab File ID:	C0327.D	**
Level: (low/m	•	LOW		Date Received:	07/24/98	***************************************
% Moisture: n GC Column:		7		Date Analyzed:	08/03/98	
	502.2	ID:	0.53 (mm)	Dilution Factor:		
Soil Extract Volume:			(uL)	Soil Aliquot Volume:		

CONCENTRATION UNITS:

040 40		CONCENTRATIO	IN UNITS:		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q
74-87-3	chloromethane			·····	
75-01-4	vinyl chloride			11	T L
74-83-9	bromomethane			11	
75-00-3	chloroethane		<u> </u>	11	
67-64-1	acetone			11	
75-35-4	1,1-dichloroethen	8		11	1 h C L
75-15-0	carbon disulfide			11	<u> </u>
75-09-2	methylene chlorid	e		11	U
156-60-5	trans-1,2-dichloro	ethene		28	20
75-34-33	1,1-dichloroethan	e		11	++
156-59-2	cls-1,2-dichloroet			11	4-4/-
78-93-2	2-butanone			11	4 7 7
67-66-3	chloroform			11	
107-06-2	1,2-dichloroethane	<u> </u>		4	1 J
71-55-6	1,1,1-trichloroetha	ne		11	4
56-23-5	carbon tetrachloric	е		11	41
71-43-2	benzene			11	<u> </u>
79-01-6	trichloroethene			11	
78-87-5	1,2-dichloropropan	0		11	1-4-1
75-27-4	bromodichlorometh	nane		11	
10061-1-5	cis-1,3-dichloropro	pene		11	4
10061-2-6	trans-1,3-dichlorop	ropene	 	11	41
79-00-5	1,1,2-trichloroethar	ie		11	4
124-48-1	dibromochlorometh	ane	<u></u>	11	
75-25-2	bromoform	······································		11	4 100
108-10-1	4-methyl-2-pentano	ne	 	11	
108-88-3	toluene		 	11	_ 4 /
591-78-6	2-hexanone		 	11	4
127-18-4	tetrachloroethene	· · · · · · · · · · · · · · · · · · ·	 	11	
108-90-7	chlorobenzene		 	11	-41
100-41-4	ethylbenzene			11 11	
	m,p-xylene			11	
95-47-6	o-xylene			11	
100-42-5	styrene			11	
79-34-5	1,1,2,2-tetrachloroet	hane		11	-44
				11	U' I

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W10/2/98

EPA SAMPLE NO.

Lab Name:	UPSTA	TE LAB	S INC.	Contract: C&H ENGIN	GP16T RE
Lab Code:	10170	West months	Case No.: 01	SAS No.: SI	DG No.: CH07
Matrix: (soil/w	vater)	SOIL	·	Lab Sample ID:	20598185RE
Sample wt/vo	ol:	5.0	(g/ml) <u>G</u>	Lab File ID:	C0328.D
Level: (low/n	ned)	LOW	arrayitar titalanda	Date Received:	07/24/98
% Moisture: r	not dec.	6	· · · · · · · · · · · · · · · · · · ·	Date Analyzed:	08/03/98
GC Column:	502.2	ID:	0.53 (mm)	Dilution Factor:	1.0
Soil Extract V	'olume:	<i></i>	(uL)	Soil Aliquot Volum	ne: (i

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
74-87-3	chloromethane	11	
75-01-4	vinyl chloride	11	[
74-83-9	bromomethane	11	- f,
75-00-3	chloroethane	11	Ti tim
67-64-1	acetone	11	
75-35-4	1,1-dichloroethene	11	Ti t
75-15-0	carbon disulfide	11	
75-09-2	methylene chloride	36	DUT /
156-60-5	trans-1,2-dichloroethene	11	¥ 7
75-34-33	1,1-dichloroethane	11	
156-59-2	cls-1,2-dichloroethene	11	1703
78-93-2	2-butanone	11	
67-66-3	chloroform	4	11/
107-06-2	1,2-dichloroethane	11	W\
71-55-6	1,1,1-trichloroethane	11	T\
56-23-5	carbon tetrachloride	11	Ū l
71-43-2	benzene	11	
79-01-6	trichloroethene	11	
78-87-5	1,2-dichloropropane	11	
75-27-4	bromodichloromethane	11	
10061-1-5	cis-1,3-dichloropropene	11	
10061-2-6	trans-1,3-dichloropropene	11	
79-00-5	1,1,2-trichloroethane	11	Thim
124-48-1	dibromochloromethane	. 11	
75-25-2	bromoform	11	1/
108-10-1	4-methyl-2-pentanone	11	- 1
108-88-3	toluene	11	1
591-78-6	2-hexanone	11	
127-18-4	tetrachloroethene	11	
108-90-7	chlorobenzene	11	
100-41-4	ethylbenzene	11	
	m,p-xylene	11	
95-47-6	o-xylene	11	1
100-42-5	styrene	11	-1 //
79-34-5	1,1,2,2-tetrachloroethane	11	11/

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W10/2/98

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EPA SAMPLE NO.

Lab Name:	UPSTA	TE LABS INC	>.	Contract; C	&H ENGIN	GP17T	
Lab Code:	10170	Cas	e No.: 01	SAS No.:	SD	G No.: CH07	٠,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Matrix: (soil/w	rater)	SOIL		Lab S	Sample ID: 2	***********	
Sample wt/vo	l;	1.0	(g/ml) G	Lab F	ile ID;	0309,D	
Level: (low/m	ed)	LOW		Date	Received: 0	7/24/98	
% Moisture: n	ot dec.	22	and the same of th	Date .	Analyzed: 0	8/02/98	•
GC Column:	502.2	ID: <u>0.53</u>	3 (mm)	Dilutio	on Factor: 1	.0	
Soil Extract Vo	olume:	· · · · · · · · · · · · · · · · · · ·	(uL)	Soil A	liquot Volum	e:	(uL)

CONCENTRATION UNITS:

	CONCENTIVATI	OIA CIALLO"	
CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
74-87-3	chloromethane	64	Wa
75-01-4	vinyl chloride	64	
74-83-9	bromomethane	64	1100
75-00-3	chloroethane	64	
67-64-1	acetone	250	117
75-35-4	1,1-dichloroethene	64	
75-15-0	carbon disulfide	64	トング
75-09-2	methylene chloride	110	807
156-60-5	trans-1,2-dichloroethene	64	UV.
75-34-33	1,1-dichloroethane	64	
156-59-2	cis-1,2-dichloroethene	64	
78-93-2	2-butanone	64	
67-66-3	chloroform	64	-
107-06-2	1,2-dichloroethane	64	-
71-55-6	1,1,1-trichloroethane	64	
56-23-5	carbon tetrachloride	64	11
71-43-2	benzene	64	-
79-01-6	trichloroethene	64	
78-87-5	1,2-dichloropropane	64	
75-27-4	bromodichloromethane	64	-
10061-1-5	cis-1,3-dichloropropene	64	
10061-2-6	trans-1,3-dichloropropene	64	
79-00-5	1,1,2-trichloroethane	64	
124-48-1	dibromochloromethane	64	
75-25-2	bromoform	64	
108-10-1	4-methyl-2-pentanone	64	
108-88-3	toluene	64	
591-78-6	2-hexanone	64	
127-18-4	tetrachloroethene	64	
108-90-7	chlorobenzene	64	
100-41-4	ethylbenzene	64	
	m,p-xylene .	64	
95-47-6	o-xylene	64	
100-42-5	styrene	64	
79-34-5	1,1,2,2-tetrachloroethane	64	

VS

EPA SAMPLE NO.

Lab Name:	UPSTA	STATE LABS INC. C			ontract:	C&ł	SH ENGIN GP25T RE			:
Lab Code:			Case No.: 01						CH07	
Matrlx: (soil/w	vater)	SOIL					•	2059818		*******
Sample wt/vo	ol:	5.0	(g/ml) G					C0338.E		
Level: (low/m				~~~~				07/24/98	·	
% Moisture: n		***************************************						***************************************		
					Dat	te An	alyzed:	08/04/98	}	
GC Column:	502.2	ID:	0.53 (mm)		Dilt	ıtion	Factor:	1.0		
Soil Extract V	olume:		(uL)		Sol	l Aliq	uot Volu	me:		(uL)
•						·		~~		(44)
				CONCE	ENTRAT	ION	UNITS:			
CAS NO		CO	MPOUND	(ug/L or	ug/Kg)	1	UG/KG		Q	
£										
74-87-3			nloromethane					11	TU	7
75-01-4	~~~		nyl chloride	······································				11	1 b	7
74-83-9			omomethane					11		トリ
75-00-3			loroethane					11	T L	ナ
67-64-1			etone					71	280	PT -
75-35-4			1-dichloroethene					11		الم
75-15-0			rbon disulfide					11		ンぐつ
75-09-2			ethylene chloride					54) BC	PI
156-60-		tra	ins-1,2-dichloroet	hene			**************************************	11	Ūγ	_4
75-34-3	3	. 1,	1-dichloroethane					11	16/	_
156-59-	2	cis	-1,2-dichloroethe	ne	······································			11	1	しいつ
78-93-2		2-1	outanone					11		H
67-66-3		ch	loroform					2	70	1 /
107-06-	2		2-dichloroethane				***************************************	11	- - 20 -	-
71-55-6			,1-trichloroethan	e	······································			11	H-147	
56-23-5			rbon tetrachloride		***************************************			11	 	\dashv
71-43-2	-		nzene					11		\dashv
79-01-6	······································		hloroethene					11	l l	
78-87-5			-dichloropropane					11		
75-27-4	***	bro	modichlorometha	ane	·			11		
10061-1	-5	cls	-1,3-dichloroprop	ene				11		-
10061-2	-6	trai	ns-1,3-dichloropro	opene				11	1	
79-00-5		1.1	,2-trichloroethane	3	*			11		-
124-48-1		*****	romochlorometha					11	- # (
75-25-2			moform	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					 	-\(\(J \)
108-10-1			nethyl-2-pentanor	18				11	- ¥.	-
108-88-3			iene	10	······································			11	¥[_	
591-78-6			exanone					11	<u> </u>	4
127-18-4	~~~~		achloroethene	······································				11		4
108-90-7			probenzene		·····				41	_
100-41-4			ylbenzene		~			11	<u> </u>	1
			-xylene	······································	•			11	<u> </u>	4
95-47-6	····		/lene	···					<u> </u>	4
100-42-5			ene					11	<u> </u>	
79-34-5	······································		2,2-tetrachloroeth	2200	······································			11	<u> </u>	4
	······································		WHEOHOLDEN	IGHC				11	{D /	1

EPA SAMPLE NO.

	AODULIET OLOWAGO V	MANCIOLO DATA OLI	CEI		A	
	TE LABS INC.				T-01T	
Lab Code: 10170	Case No.: 02	SAS No.: _	SDO	3 No.:	CH08	
Matrix: (soil/water)	SOIL		nple ID: 2			
	6.0 (g/ml) . G			***************************************	***************************************	
			ID: E			
Level: (low/med)	MED	Date Re	eceived: 0	7/31/98		
% Moisture: not dec.	43	Date An	alyzed: 0	8/20/98	***************************************	
GC Column: DR-62	24 ID: 0.25 (mm)		Factor: 1.	**********		
,			Market			
Soil Extract Volume:	10000 (uL)	Soil Aliq	uot Volume	e: <u>100</u>		(uL
		•				
		CONCENTRATION	UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
74-87-3	aplacamatt		T		,	
75-01-4	chloromethane vinyl chloride		 	500	h-	_ \
74-83-9	bromomethane			500	 	_
75-00-3	chloroethane		<u> </u>	500	├ ┈ ┞	_
67-64-1	acetone			500	<u>-</u>	
75-35-4	1,1-dichloroethene			500 500	<u> </u>	_
75-15-0	carbon disulfide			500	<u> </u>	
75-09-2	methylene chloride			200		
156-60-5	trans-1,2-dichloroet			500		41
75-34-33	1,1-dichloroethane	110110		500	- K -	[
156-59-2	cls-1,2-dichloroethe	ne	1	500	-# $-$	-11
78-93-2	2-butanone		1	\$0b	K-	\dashv
67-66-3	chloroform	i	1	50b	— [-11
107-06-2	1,2-dichloroethane			soo	- 5-	٦(
71-55-6	1,1,1-trichloroethand	е	1	500	[- \ \
56-23-5	carbon tetrachloride		1	do	— [7
71-43-2	benzene		1	5do		7
79-01-6	trichloroethene			500		7 /
78-87-5	1,2-dichloropropane		1	5000	- t	7/
75-27-4	bromodichlorometha		1	500 500	T U	7/
10061-1-5	cis-1,3-dichloroprop		1:	500	U	
10061-2-6	trans-1,3-dichloropro		1	500	U	
79-00-5	1,1,2-trichloroethane		1:	5 0 0	U]
124-48-1	dibromochlorometha	ine	1:	5 0 0	U	
75-25-2	bromoform		1:	500	U	
108-10-1	4-methyl-2-pentanor	10	1;	500	_U	
108-88-3	toluene		w"†	0-]+
591-78-6	2-hexanone		1	00	Ψ_	
127-18-4	tetrachloroethene		1	d 0	U	_] [
108-90-7	chlorobenzene		18	qo	Ψ	
100-41-4	ethylbenzene			80- 00-		1
95.47.6	m,p-xylene			90-]
. Mr. Land L. 1973	· A VIII AND	1	4 14		121	

95-47-6

100-42-5

79-34-5

1,1,2,2-tetrachloroethane

o-xylene

styrene

w 10/2/48

1500 1500 1500

EPA SAMPLE NO.

Lab Name:	UPSTA	TE LABS	S INC.	Contract: C&H ENGIN	T-02T	
Lab Code:	10170	······································	Case No.: 01	SAS No.: S	DG No.: CH08	
Matrix: (soil/w	vater)	SOIL		Lab Sample ID:	21598006	
Sample wt/vo	ol:	1.0	(g/ml) G	Lab File ID:	C0353.D	
Level: (low/n	ned)	LOW		Date Received:	07/31/98	
% Moisture: r	ot dec.	17		Date Analyzed:	08/06/98	
GC Column:	502.2	ID:	0.53 (mm)	Dilution Factor:	1.0	
Soil Extract V	olume:		(uL)	Soil Aliquot Volu	me:	(uL)

CONCENTRATION UNITS:

		CONCERTIVATION	NA CIALLO!			
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
74-87-3	chloromethane			16	7	7
75-01-4	vinyl chloride			60	W	
74-83-9	bromomethane			60		517
75-00-3	chloroethane			60	1	
67-64-1	acetone			100	Ň	一 ァ
75-35-4	1,1-dichloroethene			60	اتهز	7
75-15-0	carbon disulfide			13	1	77 ,
75-09-2	methylene chloride			86	200	7
156-60-5	trans-1,2-dichloroeti	nene		60		V
75-34-33	1,1-dichloroethane			60	F\	
156-59-2	cis-1,2-dichloroethe	ne	·	60	F	
78-93-2	2-butanone			60		H
67-66-3	chloroform			60	K	 -
107-06-2	1,2-dichloroethane			60		H
71-55-6	1,1,1-trichloroethane	}		60	- 1	\vdash
56-23-5	carbon tetrachloride			60	1	
71-43-2	benzene		~	60		
79-01-6	trichloroethene			60	- 1	-
78-87-5	1,2-dichloropropane			60	 ⊁+	\dashv
75-27-4	bromodichiorometha	ne		60	-F	J
10061-1-5	cis-1,3-dichloroprope			60	- 1,)	رد ۲۲
10061-2-6	trans-1,3-dichloropro			60	-	
79-00-5	1,1,2-trichloroethane			60		-
124-48-1	dibromochlorometha	ne		60	- 11	-
75-25-2	bromoform			60		-
108-10-1	4-methyl-2-pentanon	е		60	— ř il-	-
108-88-3	toluene			60	-F	-
591-78-6	2-hexanone	······································	-	60	一十十	4
127-18-4	tetrachloroethene			60		
108-90-7	chlorobenzene			60	- 	1
100-41-4	ethylbenzene			60	- 1;/-	-
	m,p-xylene			330	7	س ا
95-47-6	o-xylene		60.	65	_ 17-	1
100-42-5	styrene		100	60		4
79-34-5	1,1,2,2-tetrachloroeth	ane		60	~~~ ~	CV

EPA SAMPLE NO.

Lab Name:	UPSTA	TE LABS	S INC.	Contract: C&H ENGIN	T-04T	
Lab Code:	10170		Case No.: 01	SAS No.:	SDG No.: CH08	
Matrix: (soil/w	vater)	SOIL		Lab Sample ID:	21598007	a Proposition de la particione
Sample wt/vo	ol:	1.0	(g/ml) <u>G</u>	Lab File ID:	C0354.D	-
Level: (low/m	ned)	LOW	····	Date Received:	07/31/98	•
% Moisture: r	not dec.	24		Date Analyzed:	08/06/98	•
GC Column:	502.2	ID:	0.53 (mm)	Dilution Factor:	1.0	•
Soil Extract V	olume:		(uL)	Soil Aliquot Volu	ıme:	- _ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
74-87-3	chloromethane	66	il a l
75-01-4	vinyl chloride	66	
74-83-9	bromomethane	66	
75-00-3	chloroethane	66	
67-64-1	acetone	66	
75-35-4	1,1-dichloroethene	66	-
75-15-0	carbon disulfide	66	
75-09-2	methylene chloride	66.38	11-81
156-60-5	trans-1,2-dichloroethene	66	U ₂
75-34-33	1,1-dichloroethane	66	
156-59-2	cis-1,2-dichloroethene	66	
78-93-2	2-butanone	66	- [
67-66-3	chloroform	66	
107-06-2	1,2-dichloroethane	66	- F-H
71-55-6	1,1,1-trichloroethane	66	-
56-23-5	carbon tetrachloride	66	
71-43-2	benzene	66	-Fi-}-
79-01-6	trichloroethene	66	-
78-87 - 5	1,2-dichloropropane	66	
75-27-4	bromodichloromethane	66	
10061-1-5	cis-1,3-dichloropropene	66	- F-\-
10061-2-6	trans-1,3-dichloropropene	66	-Fi-/-
79-00-5	1,1,2-trichloroethane	66	
124-48-1	dibromochloromethane	66	
75-25-2	bromoform	66	
108-10-1	4-methyl-2-pentanone	66	
108-88-3	toluene	66	
591-78-6	2-hexanone	66	~ F ()
127-18-4	tetrachloroethene .	66	
108-90-7	chlorobenzene	66	
100-41-4	ethylbenzene	66	
	m,p-xylene	140	
95-47-6	o-xylene	66 -36	
100-42-5	styrene	66	
79-34-5	1,1,2,2-tetrachloroethane	66	{\bu_0

711)

EPA SAMPLE NO.

Lab Name:	UPSTA	TE LAB	S INC.	Contract: C&H ENGIN	T-05T	
Lab Code:	10170		Case No.: 01	SAS No.: S	DG No.: CH08	<u></u>
Matrix: (soil/v	vater)	SOIL		Lab Sample ID:	21598008	·····
Sample wt/vo	ol;	2.5	(g/ml) G	Lab File ID:	C0355.D	
Level: (low/m	ned)	LOW		Date Received:	07/31/98	
% Moisture: r	not dec.	37		Date Analyzed:	08/06/98	
GC Column:	502.2	ID:	0.53 (mm)	Dilution Factor:	1.0	
Soil Extract V	'olume:		(uL)	Soil Aliquot Volu	me:	(uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
74-87-3	chloromethane	32	UT
75-01-4	vinyl chloride	32	
74-83-9	bromomethane	32	
75-00-3	chloroethane	32	
67-64-1	acetone	32	
75-35-4	1,1-dichloroethene	32	1
75-15-0	carbon disulfide	32	"
75-09-2	methylene chloride	36	<u> </u>
156-60-5	trans-1,2-dichloroethene	32	W .
75-34-33	1,1-dichloroethane	32	
156-59-2	cis-1,2-dichloroethene	32	
78-93-2	2-butanone	32	
67-66-3	chloroform	32	
107-06-2	1,2-dichloroethane	32	
71-55-6	1,1,1-trichloroethane	32	- [/ /
56-23-5	carbon tetrachloride	32	
71-43-2	benzene	32	
79-01-6	trichloroethene	32	
78-87-5	1,2-dichloropropane	32	-1, 1
75-27-4	bromodichloromethane	32	
10061-1-5	cis-1,3-dichloropropene	32	
10061-2-6	trans-1,3-dichloropropene	32	
79-00-5	1,1,2-trichloroethane	32	
124-48-1	dibromochloromethane	32	
75-25-2	bromoform	32	
108-10-1	4-methyl-2-pentanone	32	
108-88-3	toluene	32	
591-78-6	2-hexanone	32	
127-18-4	tetrachloroethene	32	
108-90-7	chlorobenzene	32	- [
100-41-4	ethylbenzene	32	
	m,p-xylene	32	
95-47-6	o-xylene	32	
100-42-5	styrene	32	
79-34-5	1,1,2,2-tetrachloroethane	32	1

74)

W 10/2/98

EPA SAMPLE NO.

Lab Name:	UPSTA	TE LABS	S INC.	Contract: C&H EN	IGIN	T-06T	
Lab Code:	10170		Case No.: 01	SAS No.:	SD	G No.: CH08	
Matrix: (soil/w	vater)	SOIL		Lab Sample	ID: 2	21598009	*******
Sample wt/vo	d:	5.0	(g/ml) G	Lab File ID:	_	C0359.D	
Level: (low/m	ned)	LOW	transplant Advised	Date Receiv	ed: _C	07/31/98	
% Moisture: r	ot dec.	32		Date Analyz	ed: C	08/06/98	
GC Column:	502.2	ID:	0.53 (mm)	Dilution Fac	tor: <u>1</u>	1.0	
Soil Extract V	'olume:	······	(uL)	Soil Aliquot	Volum	ne:	(uL

CONCENTRATION UNITS:

		OOHOMITHOTHE	NA OTALLO.				
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q		
74-87-3	chloromethane			15	Ü	`	٦
75-01-4	vinyl chloride			15	Ū	7	1
74-83-9	bromomethane			15	T.	7	いつ
75-00-3	chloroethane			15	J	<u> </u>	
67-64-1	acetone			68	ij	Ť	7~
75-35-4	1,1-dichloroethe	ne		15	Ψ٠		
75-15-0	carbon disulfide			15	T.) (اد <u>ا</u> ر
75-09-2	methylene chlor	ide		24	الجار	īr	1
156-60-5	trans-1,2-dichlor	oethene		15	W	>==s. ``	1
75-34-33	1,1-dichloroetha	ne		15	T.	+	1
156-59-2	cis-1,2-dichloroe	thene		15	T	_	1
78-93-2	2-butanone			15	T)	+	1
67-66-3	chloroform			15	- 	+	1
107-06-2	1,2-dichloroetha	ne		15	i	1-	1
71-55-6	1,1,1-trichloroeth			15	<u> </u>	†	1
56-23-5	carbon tetrachlo			15	<u> </u>	}_	
71-43-2	benzene			15			
79-01-6	trichloroethene			15	ji f		
78-87-5	1,2-dichloroprop	ane		15	- 		
75-27-4	bromodichlorome			15			
10061-1-5	cis-1,3-dichlorop			15			
10061-2-6	trans-1,3-dichlore			15	∦-		
79-00-5	1,1,2-trichloroeth			15	I	7	V.
124-48-1	dibromochlorome	ethane		15	Ti-	7	
75-25-2	bromoform			15	<u> </u>	1-1	
108-10-1	4-methyl-2-penta	inone		15	 	H	
108-88-3	toluene			15		H	
591-78-6	2-hexanone			15	- li		
127-18-4	tetrachloroethene			15			
108-90-7	chlorobenzene			15			
100-41-4	ethylbenzene	hynnonie mayony and a substitution of the subs		15	Ti-	Н	
	m,p-xylene			15	Ť	\vdash	
95-47-6	o-xylene			15	Ť	H	
100-42-5	styrene			15		H	
79-34-5	1,1,2,2-tetrachlor	nethane		15	1/		

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LA 10/2/98

EPA SAMPLE NO.

Lab Name:	UPSTA	TE LABS INC	·	Contract:	C&H ENGIN	MW-01	
Lab Code:	10170	Case	No.: 02	SAS No).: S	DG No.: CH08	
Matrix: (soil/v	vater)	WATER		La	b Sample ID:	21998023	
Sample wt/vo	ol:	5.0	(g/ml) ML	La	o File ID:	E1957,D	
Level: (low/n	ned)	LOW		Da	te Received:	08/06/98	
% Moisture: r	not dec.	No. American Street, American Street, Company	non-much control	Da	te Analyzed:	08/20/98	
GC Column:	DB-62	4 ID: <u>0.25</u>	(mm)	Dili	ution Factor:	1.0	
Soil Extract V	olume:		(uL)	Soi	i Aliquot Volu	me:	(uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/L	Q
74-87-3	chloromethane	10	DI A
75-01-4	vinyl chloride	10	
74-83-9	bromomethane	10	COL
75-00-3	chloroethane	10	
67-64-1	acetone	12	1 2-1
75-35-4	1,1-dichloroethene	10	
75-15-0	carbon disulfide	10	1707
75-09-2	methylene chloride	10 &	JBU1 /
156-60-5	trans-1,2-dichloroethene	10	U\
75-34-33	1,1-dichloroethane	10	4
156-59-2	cis-1,2-dichloroethene	10	
78-93-2	2-butanone	10	
67-66-3	chloroform	10	
107-06-2	1,2-dichloroethane	10	-
71-55-6	1,1,1-trichloroethane	10	1
56-23-5	carbon tetrachloride	10	
71-43-2	benzene	10	ILA
79-01-6	trichloroethene	10	- }
78-87-5	1,2-dichloropropane	10	
75-27-4	bromodichloromethane	10	
10061-1-5	cis-1,3-dichloropropene	10	<u> </u>
10061-2-6	trans-1,3-dichloropropene	10	
79-00-5	1,1,2-trichloroethane	10	11
124-48-1	dibromochloromethane	10	1/
75-25-2	bromoform	10	1
108-10-1	4-methyl-2-pentanone	3	¥ J
108-88-3	toluene	10	- W
591-78-6	2-hexanone	10	- }
127-18-4	tetrachloroethene	10	11
108-90-7	chlorobenzene	10	
100-41-4	ethylbenzene	10	
	m,p-xylene	10	
95-47-6	o-xylene	10	- 1
100-42-5	styrene	10	
79-34-5	1,1,2,2-tetrachloroethane	10	

W/0/2/88

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	,	1 VOLATILE ORGANIC	A S ANAL	YSIS DATA	SHEET	EPA S	AMPLE	NO.
Lab Name:		TE LABS INC.				1	MW-02	
Lab Code;	10170	Case No.: 02			,: S		CHOs	
		WATER	***************************************					
					Sample ID:	***************************************		
		5.0 (g/ml) <u>N</u>	1L		File ID:			
Level: (low/n	ned)	LOW		Dat	e Received:	08/06/98	}	
% Moisture: r	not dec.				e Analyzed:			
					-	***************************************		•
		4 ID: <u>0.25</u> (mm)	<i>}</i>	Dilu	ition Factor:	1.0		
Soil Extract V	olume: .	(uL)		Soil	Aliquot Volu	me:		(uL)
						***************************************		•
_			CON	CENTRAT	ION UNITS:			
CAS NO		COMPOUND	(ug/L	or ug/Kg)	UG/L_	*******************************	Q	
74-87-	3	chloromethane				10	1 A: -	
75-01-4	4	vinyl chloride		·		10	 }	
74-83-9)	bromomethane				10		7
75-00-3	3	chloroethane	***************************************	······································		10	 	H^{-}
67-64-1		acetone		·····		10 7		-
75-35-4	1	1,1-dichloroether	ne	1 11111		10		11/
75-15-0		carbon disulfide				10	 >	U 7
75-09-2		methylene chlorid	ie	<u></u>		10 8		711~
156-60-		trans-1,2-dichloro	ethene			10	813	۲.
75-34-3		1,1-dichloroethar	10			10	11	
156-59-		cis-1,2-dichloroet	hene			10	T T	4
78-93-2		2-butanone				10	1)	\dashv
67-66-3	~~~~~	chloroform				20	7	1
107-06-		1,2-dichloroethan				10	Ψ.	- '
71-55-6		1,1,1-trichloroetha	ane			10	11	-
56-23-5		carbon tetrachlori	de			10	<u> </u>	-
71-43-2		benzene				10	- #+	-
79-01-6		trichloroethene				10	- 1	-
78-87-5		1,2-dichloropropa	ne			10		-

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bromodichloromethane

cis-1,3-dichloropropene

1,1,2-trichioroethane

bromoform

2-hexanone

tetrachloroethene

chlorobenzene

ethylbenzene

m,p-xylene

o-xylene

styrene

toluene

dibromochloromethane

4-methyl-2-pentanone

1,1,2,2-tetrachloroethane

trans-1,3-dichloropropene

75-27-4

79-00-5

124-48-1

75-25-2

108-10-1

108-88-3

591-78-6

127-18-4

108-90-7

100-41-4

95-47-6

100-42-5

79-34-5

10061-1-5

10061-2-6

EPA SAMPLE NO.

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					t Cot I Souther I		1
Lab Name:	UPSTA	TE LABS I	NC.	Contract:	C&H ENGIN	I MVV-	-03
Lab Code:	10170	C	ase No.; <u>02</u>	SAS No).; S	DG No.: CH	I 108
Matrix: (soll/	water)	WATER		Lat	Sample ID:	*******	
Sample wt/vo	ol:	5.0	_ (g/ml) ML		File ID:	E1961.D	
Level: (low/r	ned)	LOW		Dat	te Received:	08/06/98	
% Moisture: ı	not dec.			Dat	te Analyzed:	08/20/98	
GC Column:	DB-62	4 ID: 0	.25 (mm)	Dilu	ution Factor:		
Soil Extract V	/olume:	·	(uL)	Sol	l Aliquot Volu		(uL)
CAS NO) .	COMP	OUND	CONCENTRAT (ug/L or ug/Kg)	TON UNITS: UG/L		Q

74-87-3 chloromethane 10 75-01-4 vinyl chloride 10 74-83-9 bromomethane 10 75-00-3 chloroethane 10 67-64-1 acetone 10

75-35-4 1,1-dichloroethene 10 75-15-0 carbon disulfide 10 75-09-2 methylene chloride ABUD / 10 B 156-60-5 trans-1,2-dichloroethene 10 75-34-33 1,1-dichloroethane 10 156-59-2 cis-1,2-dichloroethene 10 78-93-2 2-butanone

10 67-66-3 chloroform 10 107-06-2 1,2-dichloroethane 10 71-55-6 1,1,1-trichloroethane 10 56-23-5 carbon tetrachloride 10 71-43-2 benzene 10 79-01-6 trichloroethene 10 78-87-5 1,2-dichloropropane

10 75-27-4 bromodichloromethane 10 10061-1-5 cis-1,3-dichloropropene 10 10061-2-6 trans-1,3-dichloropropene 10 79-00-5 1,1,2-trichloroethane 10 124-48-1 dibromochloromethane 10 75-25-2 bromoform 10 108-10-1 4-methyl-2-pentanone 10

108-88-3 toluene 10 591-78-6 2-hexanone 10 127-18-4 tetrachloroethene 10 108-90-7 chlorobenzene 10 100-41-4 ethylbenzene 10 m.p-xvlene 10 95-47-6 o-xylene

100-42-5 styrene 79-34-5 1,1,2,2-tetrachloroethane

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EPA SAMPLE NO.

Lab Name:	UPSTA	TE LABS INC.	Contract: C&H ENGIN M	N-04
Lab Code:	10170	Case No.: 02		/ H08
Matrix: (soil/v	vater)	WATER	Lab Sample ID: 21998026	
Sample wt/vo	ol:	5.0 (g/ml) M	AL Lab File ID: E1962.D	***************************************
Level: (low/m	ned)	LOW	Date Received: 08/06/98	1
% Moisture: r	ot dec.	P-2	Date Analyzed: 08/20/98	····
GC Column:	DB-62	4 ID: <u>0.25</u> (mm)	**************************************	*****
Soil Extract V	olume:	(uL)	Soil Aliquot Volume:	(uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/L	Q
74-87-3	chloromethane	10	i D m
75-01-4	vinyl chloride	10	-4)
74-83-9	bromomethane	10	1-4-4-1
75-00-3	chloroethane	10	
67-64-1	acetone	10.8	
75-35-4	1,1-dichloroethene	10	JU /
75-15-0	carbon disulfide	10	4>00
75-09-2	methylene chloride	10.8	104/191
156-60-5	trans-1,2-dichloroethene	10	10.01
75-34-33	1,1-dichloroethane	10	+)
156-59-2	cis-1,2-dichloroethene	10	P \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
78-93-2	2-butanone	10	
67-66-3	chloroform	2	<u>U'</u>
107-06-2	1,2-dichloroethane	10	37
71-55-6	1,1,1-trichloroethane	10	- #\
56-23-5	carbon tetrachloride	10	
71-43-2	benzene	10	- # }
79-01-6	trichloroethene	10	
78-87-5	1,2-dichloropropane	10	
75-27-4	bromodichloromethane	10	
10061-1-5	cls-1,3-dichloropropene	10	—
10061-2-6	trans-1,3-dichloropropene	10	
79-00-5	1,1,2-trichloroethane	10	
124-48-1	dibromochloromethane	10	CUHI
75-25-2	bromoform	10	
108-10-1	4-methyl-2-pentanone	10	#4
108-88-3	toluene	10	
591-78-6	2-hexanone	10	
127-18-4	tetrachloroethene	10	- - - - - - - - - -
108-90-7	chlorobenzene	10	
100-41-4	ethylbenzene	10	
	m,p-xylene		4
95-47-6	o-xylene	10	
100-42-5	styrene	10	
79-34-5	1,1,2,2-tetrachloroethane	10	
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EPA SAMPLE NO.

	-		00 / 11 V/ 1L	TOIG DATA	COLLECT		****	7
Lab Name:	UPSTATE	E LABS INC.		Contract:	C&H ENGI	<u> </u>	/IW-05	
Lab Code:	10170	Case No.:	02	SAS No.	.: 5	SDG No.:	CH08	
Matrix: (soil/wa	ater) V	NATER			Sample ID:			-
		5.0 (g/ml)	àлi					
			IVIL	•	File ID:			
Level: (low/me	***	~~~~~		Dat	e Received:	08/06/98	•	
% Moisture: no	ot dec.			Dat	e Analyzed:	08/20/98		
GC Column:	DB-624	_ ID: <u>0.25</u> (m	m)		tion Factor:		**************************************	
		(uL)	•			******		
		(41)		2011	Aliquot Volu	ıme:	(1	uL)
			CON	CENTRATI	ON UNITS:			
CAS NO.		COMPOUND						
10 110,		COMI COMD	(ug/L	or ug/Kg)	UG/L		Q	
74-87-3		chloromethane	·			10	The state of the s	
75-01-4		vinyl chloride	T	***************************************		10	 	
74-83-9		bromomethane)			10	1-1-7-4	J
75-00-3		chloroethane				10		
67-64-1		acetone				11	רט	
75-35-4		1,1-dichloroeth				10		et
75-15-0		carbon disulfide				10	- 4>0	J
75-09-2		methylene chlo				10 7	JĐ ():	7
156-60-5		trans-1,2-dichlo			·	10	Ψĵ	,
75-34-33		1,1-dichloroeth				10	31.7	1
156-59-2	} 	cis-1,2-dichloro	ethene	·····		10	#}0	J
78-93-2	**	2-butanone				10	T)	
67-66-3		chloroform		·····		2	ut-T	
107-06-2		1,2-dichloroetha				10	W/	
71-55-6		1,1,1-trichloroet				10	U	
56-23-5 71-43-2	······································	carbon tetrachic	oride	·····		10	U	
79-01-6		benzene				10	U I	
78-87-5	~*· <u></u>	trichloroethene				10	VI	
75-27-4		1,2-dichloroprop				10	_Ψ]	
10061-1-6		bromodichlorom cis-1,3-dichlorop				10		
10061-2-6		trans-1,3-dichlor				10	<u>Ψ</u> L	
79-00-5	·/	1,1,2-trichloroet				10		
124-48-1	·	dibromochlorom				10	4	J
75-25-2		bromoform	outaile			10	<u>4</u>	,
108-10-1	······································	4-methyl-2-penta	anone -			10	<u> </u>	
108-88-3		toluene	3110116			10	4/	
591-78-6		2-hexanone				10		
127-18-4		tetrachloroethen	e	****		10	4	
108-90-7		chlorobenzene				10 10		
100-41-4		ethylbenzene				10	- 4	

W10/2/98

ethylbenzene

1,1,2,2-tetrachloroethane

m,p-xylene

o-xylene

styrene

95-47-6

79-34-5

100-42-5

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DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES 431 EAST FAYETTE STREET EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG CH08 Sampled 7/20-22/98, 7/30/98, 8/6/98

SOILS and AQUEOUS SAMPLES for SEMIVOLATILE ORGANICS

HB-9	(20598180)	GP-2	(20598181)	GP-8	(20598182)
GP-5	(20598183)	GP-13	(20598184)	GP-16	(20598185)
GP-17	(20598186)	GP-25	(20598187)	T-1	(21598005)
T-2	(21598006)	T-4	(21598007)	T-5	(21598008)
T-6	(21598009)	MW-1	(21998023)	MW-2	(21998024)
MW-3	(21998025)	MW-4	(21998026)	MW-5	(21998027)

DATA ASSESSMENT

A semivolatile organics data package containing analytical results for thirteen soils and five aqueous samples was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8270, addressed Target Compound List analytes. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

Traces of di-n-butylphthalate, bis(2-ethylhexyl)phthalate and butylbenzylphthalate were detected throughout this group of samples. When present, these phthalates are assumed to represent laboratory artifacts. As such, di-n-butylphthalate, bis(2-ethylhexyl)phthalate and butylbenzylphthalate should be interpreted as undetected in each program sample.

Aldol Condensation products were reported as Tentatively Identified Compounds (TIC) throughout this group of samples. When present, they have been removed from Form 1F. A large number of additional unidentified TICs were present in each method blank. Because of their number, it must be assumed that some of the TICs reported from samples also represent laboratory artifacts.

2-Methylnaphthalene, n-nitroso-di-n-propylamine, bis(2-chloro-ethyl)ether, indeno[1,2,3-cd]pyrene, dibenz[a,h]anthracene and benzo[g,h,i]perylene demonstrated an unstable instrument response during the analysis of calibration verification standards. The affected analytes have been qualified as estimations in associated samples.

Internal standards #3, #4, #5 and/or #6 produced a low instrument response in samples GP-2, GP-5, GP-13, GP-25, T-1, T-2, T-4 and T-5. Analytes dependant upon the response of these internal standards have been qualified as estimations in the affected samples.

Extremely low recoveries were reported for the matrix spikes added to two portions of T-1. Based on this performance, data reported from each soil sample has been qualified as an estimation.

CORRECTNESS AND USABILITY

The identifications of naphthalene in GP-5, GP-16, GP-25, T-2 and T-4 were not conclusive, based on the mass spectra references

provided by the laboratory. Similarly, the identifications of pyrene in GP-5 and GP-17, and the identification of benzo[a]anthracene in GP-25 were inconclusive. Where affected, these analytes should be considered undetected.

The Tentatively Identified Compounds (TIC) reported from every sample except the GP-8 and T-01 included identifications that were not conclusively supported by the library searches supplied by the laboratory. The affected identifications have been edited on Form lF.

Cooler temperatures between 11.9°C and 14.9°C were reported when this group of samples arrived at the laboratory. Because the samples were not properly chilled to 4°C at the time of collection, the possibility of volatile and degradative losses cannot be ignored. The results reported from this group of samples have been qualified as estimations.

Reported data should be considered technically defensible in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J" or "UJ". Data that is felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 1/21/02

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included thirteen soils and five aqueous samples, was collected from the Former Brown Manufacturing site between 20Jul98 and 06Aug98. The samples were delivered to the laboratory in five groups (samples collected on 20Jul98, samples collected on 21Jul98, samples collected on 22Jul98, samples collected on 30Jul98 and 31Jul98, and samples collected on 06Aug98). Each group of samples arrived at the laboratory within 2 days of collection. A custody seal was present on every sample cooler, with the exception of the cooler used to transport the groundwater samples collected on 06Aug98. The groundwaters were sampled and immediately delivered to the laboratory. This delivery group also included an equipment blank that was created on 20Jul98.

Although the laboratory record indicates that most of the sample coolers contained ice, the loading was inadequate to properly chill the samples. Sample temperatures between 11.9°C and 14.9°C were recorded by the laboratory at the time of receipt. Due to the possibility of analyte losses caused by improper handling, the results reported from this group of samples have been qualified as estimations.

Each soil sample was extracted within eight days of collection. Aqueous samples were extracted within seven days. The analysis of each sample, including repeated analyses, was completed within 20 days of extraction. Program holding time limitations were satisfied.

BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank. Any sample concentration less than 5 times the level determined in a blank must be qualified. The qualification criteria is extended to ten times the concentration observed in blanks for common laboratory artifacts. These include phthalate esters.

Four method blanks were analyzed with this group of samples. Traces of phthalates were detected in each blank. Di-n-butyl-

phthalate, bis(2-ethylhexyl)phthalate and butylbenzylphthalate were detected in at least one blank. When present in samples, these phthalates are assumed to represent laboratory artifacts. Each should be considered undetected in program samples. Detection limits equaling CRDL or the reported concentration, whichever is greater, should be assumed.

Aldol Condensation products (4-methyl-3-penten-2-one, 4-hydroxy-4-methyl-2-pentanone) and a large number of unidentified TIC's were also reported from each blank. When present in samples, aldol products have been removed from Form 1F. Because of the large number of TICs present in blanks, it must be assumed that some of the TICs reported from samples represent laboratory artifacts.

MS TUNING

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of DFTPP was analyzed prior to each analytical sequence and during every 12 hour period of instrument operation. An Instrument Performance Check Form is present for each DFTPP evaluation. The DFTPP tunes associated with this group of samples satisfied the program acceptance criteria.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The required levels of initial calibration were performed on 03Aug98. Standards of 20, 50, 80, 120 and 160 ng were included. The calibration curve for each analyte demonstrated the required levels of instrument response and an acceptable degree of linearity.

A continuing calibration verification was completed prior to each twelve hour period of instrument operation. In most cases, these checks demonstrated an acceptable level of instrument stability. When compared to the initial instrument calibration, the calibration verification conducted on 10Aug98 demonstrated an unacceptable shift in the response of 2-methylnaphthalene. Based on this observation, the 2-methylnaphthalene results reported from T-05, T-06, T-04, T-02 and T-01 have been qualified as estimations.

The calibration check on 17Aug98 demonstrated unacceptable shifts of the signals of N-nitroso-di-n-propylamine, 4-chloro-3-methyl-phenol, 2,4,6-trichlorophenol and 2,4,5-trichlorophenol. This performance, however, warrants no concern. The samples associated with this standard were sample reruns that should not be included in data tables.

N-nitroso-di-n-propylamine demonstrated unstable performance during the calibration check on 19Aug98. This performance requires the qualification of the N-nitroso-di-n-propylamine result reported from MW-05.

Similarly, the bis(2-chloroethyl)ether, N-nitroso-di-n-propylamine, indeno[1,2,3-cd]pyrene, dibenz[a,h]anthracene and benzo[g,h,i]-perylene results reported from MW-01, MW-02, MW-03 and MW-04 have been qualified as estimations based on calibration performance.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Surrogate Summary Sheets were properly prepared; the correct acceptance criteria applied. The surrogate additions to each program sample were recovered successfully. No more than one surrogate of either fraction, acid or base/neutral, produced an unacceptable result.

INTERNAL STANDARDS

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. The response produced by the internal standard additions to GP-2, GP-5, GP-13, GP-25, T-01, T-02, T-04, T-05 and T-06 failed to satisfy the calculated limits of acceptance. GP-5, GP-25, T-02, T-04 and T-05 were reanalyzed, each producing a similar result. GP-2 and GP-13 were reanalyzed at a higher dilution. Based on this performance, only data reported from the initial analysis of these samples should be included in data tables. Results reported for analytes dependant

upon the response of each affected internal standard, should be considered an estimation. The affected internal standards are tabulated below. However, because data from this group of samples has been previously qualified, an action at this time is not required.

SAMPLE	AFFECTED	INT	ERNAL	STA	NDARDS
GP-2	IS	5#4,	#5,	#6	
GP-5	IS	3#5,	#6		
GP-13	IS	3#3			
GP-25	IS	3#5,	#6		
T-01	IS	3#4,	#5 ,	#6	
T-02	IS	5#4,	#5,	#6	
T-04	IS	5#4,	#5,	#6	
T-05	18	5#5			

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS
Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide
an indication of laboratory accuracy. The analysis of a duplicate
spiked aliquot provides a measurement of precision.

Samples MW-01 and T-01 were selected for matrix spiking. The additions to two portions of the groundwater sample demonstrated acceptable levels of measurement accuracy and precision. Although slightly elevated recoveries were reported for 4-nitrophenol (105%, 121%) and pentachlorophenol (105%), the observed performance does not warrant data qualifications. Poor precision was indicated by duplicate measurements of pyrene. However, because both individual pyrene measurements were within the limits of acceptance, data qualifications are not required.

An extremely low recovery was reported for each analyte addition to two portions of T-01. With the exception of pyrene, each of these additions produced a recovery below 23%. The additions of 2,4-dinitrotoluee, 4-chloro-3-methylphenol and pentachlorophenol were completely unrecovered. Based on spiking performance, data reported from each soil sample must be considered an estimation. However, because data from these samples has been previously qualified, an action against data has not been taken.

Two aqueous spiked blanks produced acceptable recoveries.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision, may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates were not included in this group of samples.

SAMPLE INFORMATION

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts. Sample chromatograms were properly attenuated. Mass spectra references were provided to confirm the identification of each reported analyte. When the laboratory generated references failed to provide a conclusive identification, Form 1 was edited to

indicate a negative result. Questionable identifications are tabulated below.

SAMPLE	QUESTIONABLE IDENTIFICATIONS
GP-5	naphthalene, pyrene
GP-16	naphthalene
GP-17	pyrene
GP-25	naphthalene, benzo[a]anthracene
T-2	naphthalene
T-4	naphthalene

In several cases, TIC identifications were not conclusively supported by the library searches included in the raw data. In such cases, Form 1F has been edited to indicate an appropriate identification. The Form 1F of every sample except GP-8 and T-01 has been corrected.

HB-9 and GP-13 were reanalyzed at appropriate dilutions to obtain measurements of phenanthrene, fluoranthene and pyrene within the range of calibration. GP-2 was reanalyzed to obtain reportable concentrations of phenanthrene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene and benzo[a]pyrene. GP-16 was reanalyzed to obtain a reportable pyrene result.

SUMMARY OF QUALIFIED DATA

SAMPLED 7/20/98 thru 8/6/98

FORMER BROWN MANUFACTURING SITE

BLANKS SPECTRA ID TICS TARGETS	REMOVE	:		REMOVE ID1,2 UJ		REMOVE ID1 UJ	ID2 UJ	REMOVE ID1,3 UJ		IDI UJ	ID1 UJ		REMOVE
BLANKS BL. PHTHALATES	R		X		360UJ R	23	2903	RE			550UJ	620UJ	1200UJ/97UJ R
CALIBRATE CAL#2													·
CALIBRATE CAL#1													
CALIBRATE 2-METHYLNAPTHALENE									2800J	4900J	1400J	7107	B
HANDLING	_	ALL J/UJ	-		-	-	-	•	-	-		-	_
	(20598180)		(20598182)	(20598183)	(20598184)	(20598185)	F	(20598187)	(21598005)	(21598006)	(21598007)	(21598008)	(21598009)
	HB-9	GP-2	GP-8	GP-5	GP-13	GP-16	GP-17	GP-25	T-T	T-2	丁-4	E-12	9-L

REMOVE REMOVE

3701/3001/4703 26UJ/13UJ/30UJ

rn IJ

(21598009) (21998023)

21998024

MW-1

REMOVE REMOVE REMOVE	
49UJ/26UJ/44UJ REMOVE 61UJ/8UJ/16UJ REMOVE 9UJ REMOVE	
BB	
CO.	
(21998025) (21998026) (21998027)	
4W-3 4W-4 4W-5	

N-nitroso-di-n-propylamine 1 CAL#1

bis(2-chloroethyl)ether, N-nitroso-di-n-propylamine, indeno[1,2,3-cd]pyrene dibenz[a,h]anthracene, benzo[g,h,i]perylene 11 CAL#2

naphthalene I

pyrene H ID2 ID3

benzo[a]anthracene l

SUMMARY OF QUALIFIED DATA

FORMER BROWN MANUFACTURING SITE

SAMPLED 7/20/98 thru 8/6/98

CTRA ID TIC)IT	EDIT		TIC	EDIT)IT	OIT	DIT		OIT	OIT)IT)IT)IT)IT	EDIT)IT		!
SPECTRA TIC	E	a		田	固	딦	国	固		I	回	窗	田	딥	E	田	E	E	
MATRIX SPIKES	_	ALL J/UJ	-	-	_	-	-	_	_	-	-	-	-						
INT.STAND		IS4,5,6 J/UJ		IS5,6 J/UJ	IS3 J/UJ			IS5,6 J/UJ	IS4,5,6 J/UJ	IS4,5,6 J/UJ	IS4,5,6 J/UJ	IS5,6 J/UJ							
	059818	(20598181)	059818	059818	059818	059818	059818	059818	159800	159800	1598	159800	159800	199802	1998	199802	199802	1998	
	ŧ	GP-2	- 1	1	4	1	덖	N	F-1	Z-E	T-4	H - 13	9-I	MW-1	MW-2	MW-3	MW-4	MW-5	

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EPA SAMPLE NO.

Lab Name:	Upstate	Labs., lı	nc.	(Contract:	C&H Engine	нв-9Х	
Lab Code:	10170		Case No.:		SAS No).:S	DG No.: <u>CH07</u>	
Matrix: (soil/v	vater)	SOIL			Lal	o Sample ID:	SA1642 20598	1180
Sample wt/vo	ol:	30	(g/ml) <u>G</u>	autori tetritori anteriori anteriori anteriori del	Lai	o File ID:	A5364.D	
Level: (low/n	ned)	LOW			Da	te Received:	07/22/98	
% Moisture:	30		decanted:(Y/N)	N	Da	te Extracted:	07/28/98	
Concentrated	d Extract	Volume:	5000 (uL)	Da	te Analyzed:	08/11/98	_
Injection Volu	ıme: <u>2</u>	<u>.0</u> (uL)		Dili	ution Factor:	1.0	_
GPC Cleanu	p: (Y/N)	N	pH:				-	

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/	Kg) UG/KG	Q
111-44-4	bis(2-Chloroethyl)ether	2400	W\
108-95-2	Phenol	2400	U \
95-57-8	2-Chlorophenol	2400	
541-73-1	1,3-Dichlorobenzene	2400	T I
106-46-7	1,4-Dichlorobenzene	2400	
95-50-1	1,2-Dichlorobenzene	2400	
108-60-1	2,2'-oxybis(1-Chloropropane)	2400	T T
95-48-7	2-Methylphenol	2400	
67-72-1	Hexachloroethane	2400	
621-64-7	N-Nitroso-di-n-propylamine	2400	1111
106-44-5	4-Methylphenol	2400	
98-95-3	Nitrobenzene	2400	
78-59-1	Isophorone	2400	Ū
88-75-5	2-Nitrophenol	2400	U
105-67-9	2,4-Dimethylphenol	2400	
111-91-1	bis(2-Chloroethoxy)methane	2400	
120-83-2	2,4-Dichlorophenol	2400	
120-82-1	1,2,4-Trichlorobenzene	2400	
91-20-3	Naphthalene	1500	J-7 /
106-47-8	4-Chloroaniline	2400	U\
87-68-3	Hexachlorobutadiene	2400	1501
59-50-7	4-Chloro-3-methylphenol	2400	17
91-57-6	2-Methylnaphthalene	1000	81.
77-47-4	Hexachlorocyclopentadiene	2400	U٦
88-06-2	2,4,6-Trichlorophenol	2400	
95-95-4	2,4,5-Trichlorophenol	12000	1707
91-58-7	2-Chloronaphthalene	2400	
88-74-4	2-Nitroaniline	12000	U J
208-96-8	Acenaphthylene	720	8
131-11-3	Dimethyl phthalate	2400	W\1
606-20-2	2,6-Dinitrotoluene	2400	
83-32-9	Acenaphthene	2200	8
99-09-2	3-Nitroaniline	12000	W\ 111
51-28-5	2,4-Dinitrophenol	12000	1707
132-64-9	Dibenzofuran	2100	87
121-14-2	2,4-Dinitrotoluene	2400	V\u3
100-02-7	4-Nitrophenol	12000	

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., Inc	7.	Contract:	C&H Engine	HB-9X
Lab Code:	10170	C	ase No.:	SAS No	.:SI	DG No.: CH07
Matrix: (soll/\	water)	SOIL	anoma	Lat	Sample ID:	SA1642 20598160
Sample wt/vo	oi:	30	(g/ml) G	Lat	File ID:	A5364.D
Level: (low/r	ned)	LOW	Para-Number	Da	te Received:	07/22/98
% Moisture:	30	d	ecanted:(Y/N)	N Da	te Extracted:	07/28/98
Concentrated	d Extract	Volume:	5000 (uL)	Dat	te Analyzed:	08/11/98
njection Volt	ume: 2	.0 (uL)		Dilu	ution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH:			

CONCENTRATION UNITS:

		OOHOLIVII	STITUTE CHILD,		
CAS NO.	COMPOUND	(ug/L, or ug/K	(g) <u>UG/KG</u>	Q	
86-73-7	Fluorene		2900	IJV	•
7005-72-3	4-Chlorophenyl phenyl ethe	r	2400	V)	
84-66-2	Diethyl phthalate		2400	U	
100-01-6	4-Nitroaniline		12000	U	
534-52-1	4,6-Dinitro-2-methylphenol		12000	U	
86-30-6	n-Nitrosodiphenylamine		2400	1 b 7 V 7	
101-55-3	4-Bromophenyl phenyl ethe	r	2400	ΨI	
118-74-1	Hexachlorobenzene		2400		
87-86-5	Pentachlorophenol		12000	U/	
85-01-8	Phenanthrene	20	COO -21000	-ED1/	
120-12-7	Anthracene		5800	13/	
84-74-2	Di-n-butyl phthalate		2400	WU]	
86-74-8	Carbazole		2600	13/	^
206-44-0	Fluoranthene	26	<i>000</i> 20000	EDJ/	•
129-00-0	Pyrene		TOUO 31000	EDI/	•
85-68-7	Butyl benzyl phthalate		2400	4100	
91-94-1	3,3'-Dichlorobenzidine		2400	- # > W	
56-55-3	Benzo[a]anthracene		19000	11/6	う ★
218-01-9	Chrysene		12000	77%	
117-81-7	bis(2-Ethylhexyl)phthalate		2400	W	
117-84-0	Di-n-octyl phthalate		2400	Bus	
205-99-2	Benzo[b]fluoranthene		9900	711	
207-08-9	Benzo[k]fluoranthene		4900	311	$\sim 1/5$
50-32-8	Benzo[a]pyrene		6500	7110	DR 181
193-39-5	Indeno[1,2,3-cd]pyrene		2500	310	м Д. ·
53-70-3	Dibenz[a,h]anthracene		1200	150	\mathcal{M}
191-24-2	Benzo[g,h,i]perylene		2400	11/	111

EPA SAMPLE NO. 1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET GP-2T Lab Name: Contract: C&H Engine Upstate Labs., Inc. Lab Code: Case No.: 10170 SAS No.: SDG No.: CH07 Lab Sample ID: 20598181 Matrix: (soil/water) SOIL Lab File ID: Sample wt/vol: 30 (g/ml) G A5365.D Level: (low/med) LOW Date Received: 07/23/98 % Moisture: 11 decanted:(Y/N) Date Extracted: 07/28/98 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 08/11/98 Injection Volume: 2.0 (uL) Dilution Factor: 1.0 GPC Cleanup: (Y/N) N pH: **CONCENTRATION UNITS:** CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 111-44-4 1900 bis(2-Chloroethyl)ether 108-95-2 Phenol 1900 95-57-8 2-Chlorophenol 1900 541-73-1 1,3-Dichlorobenzene 1900 106-46-7 1,4-Dichlorobenzene 1900 95-50-1 1,2-Dichlorobenzene 1900 108-60-1 2,2'-oxybis(1-Chloropropane) 1900 95-48-7 2-Methylphenol 1900

N

67-72-1	Hexachloroethane	1900	
621-64-7	N-Nitroso-di-n-propylamine	1900	[] }4]
106-44-5	4-Methylphenol	1900	U
98-95-3	Nitrobenzene	1900	IJ
78-59-1	Isophorone	1900	ע
88-75-5	2-Nitrophenol	1900	μ
105-67-9	2,4-Dimethylphenol	1900	U U
111-91-1	bis(2-Chloroethoxy)methane	1900	ע
120-83-2	2,4-Dichlorophenol	1900	U J
120-82-1	1,2,4-Trichlorobenzene	1900	U'_
91-20-3	Naphthalene	11000	J -
106-47-8	4-Chloroaniline	1900	LY.
87-68-3	Hexachlorobutadiene	1900	[V \ V]
59-50-7	4-Chloro-3-methylphenol	1900	UZ
91-57-6	2-Methylnaphthalene	5100	J
77-47-4	Hexachlorocyclopentadiene	1900	V) /V
88-06-2	2,4,6-Trichlorophenol	1900	U('/
95-95-4	2,4,5-Trichlorophenol	9400	נעלט
91-58-7	2-Chloronaphthalene	1900	<u> </u>
88-74-4	2-Nitroaniline	9400	U
208-96-8	Acenaphthylene	2600	J
131-11-3	Dimethyl phthalate	1900	כעכע
606-20-2	2,6-Dinitrotoluene	1900	
83-32-9	Acenaphthene	5800	
99-09-2	3-Nitroaniline	9400	עליין
51-28-5	2,4-Dinitrophenol	9400	
132-64-9	Dibenzofuran	6900	7
121-14-2	2,4-Dinitrotoluene	1900	H>10001296
100-02-7	4-Nitrophenol	9400	DY ANDTY 32

EPA SAMPLE NO.

		A. 1	PM	(GP-2T	
V	s., Inc.			L	***************************************	
Lab Code: 10170	Case No.:	SAS No.:	SD	G No.:	CH07	
Matrix: (soil/water) SO	<u> </u>	Lab Sam	iple ID: 2	2059818	31	
Sample wt/vol: 30	(g/mi) G	Lab File	ID:	45365.D)	
Level: (low/med) LO			celved: (07/23/98	3	
***************************************	decanted:(Y/N) N	Date Ext	racted: (07/28/98	3	
Concentrated Extract Volu			alyzed: (
Injection Volume: 2.0	**************************************		Factor:			
		. Dilution	acioi.	1.0	······································	
GPC Cleanup: (Y/N)	<u>N</u> pH:					
		CONCENTR	ATION U	INITS:		
CAS NO.	COMPOUND	(ug/L or ug/k	(g) UG	/KG	Q	
<u></u>		, 0				
86-73-7	Fluorene			9200	J] ⁄
7005-72-3	4-Chlorophenyl phenyl e	ther		1900	Wh	
84-66-2	Diethyl phthalate			1900	+ #)	
100-01-6	4-Nitroaniline			9400		
534-52-1	4,6-Dinitro-2-methylpher	nol		9400		
86-30-6	n-Nitrosodiphenylamine).— ·		1900	1 1	إسر [7.
101-55-3	4-Bromophenyl phenyl e	ther		1900	1 1	7
118-74-1	Hexachlorobenzene		ļ	1900		7
87-86-5	Pentachlorophenol			9400		7
85-01-8	Phenanthrene	920	200	38000	ET	71/
120-12-7	Anthracene			13000	:1	7/
84-74-2	Di-n-butyl phthalate			1900	100	7
86-74-8	Carbazole			5100		7/
206-44-0	Fluoranthene	721	XXX 4	41000	JE-R	プレ
129-00-0	Pyrene	and and	000	34000	2	~
85-68-7	Butyl benzyl phthalate		**************************************	1900		J J
91-94-1	3,3'-Dichlorobenzidine			1900	<u> </u> >	ΨJ
56-55-3	Benzo[a]anthracene	34	000 2	23000	.27	1
218-01-9	Chrysene			18000	2t	
117-81-7	bis(2-Ethylhexyl)phthalai	e		1900	U.V	1
117-84-0	Di-n-octyl phthalate			1900	1/	47
205-99-2	Benzo[b]fluoranthene	43	000	33000	Z.D	1
207-08-9	Benzo[k]fluoranthene			7600	T	-
50-32-8	Benzo[a]pyrene	_24	000	18000	Z*D	1
193-39-5	Indeno[1,2,3-cd]pyrene	2,24		12000		V

749

185

1900 15000

0001297

Dibenz[a,h]anthracene

Benzo[g,h,l]perylene

53-70-3

191-24-2

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., li	nc.	(Contract:	C&H Engine	GP-51
Lab Code:	10170	***************************************	Case No.:		SAS No	o.: S	DG No.: CH07
Matrix: (soil∧	vater)	SOIL			La	b Sample ID:	20598183
Sample wt/vo	ol:	30	(g/ml) <u>G</u>	the frequency the management	Lal	b File ID:	A5367.D
Level: (low/r	ned)	LOW	***************************************		Da	te Received:	07/23/98
% Moisture:	14		decanted:(Y/N)	N	Da	te Extracted:	07/28/98
Concentrated	d Extract	Volume:	10000 (uL)		Da	te Analyzed:	08/12/98
Injection Volu	ume: <u>2</u>	.0 (uL)		DII	ution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH:				
GPC Cleanu	p: (Y/N)	N	pH:				

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/h	(g) UG/KG	Q
111-44-4	bis(2-Chloroethyl)eth	er	3900	UN
108-95-2	Phenol		3900	- T-
95-57-8	2-Chlorophenol		3900	
541-73-1	1,3-Dichlorobenzene		3900	
106-46-7	1,4-Dichlorobenzene		3900	T.
95-50-1	1,2-Dichlorobenzene		3900	
108-60-1	2,2'-oxybis(1-Chlorop		3900	
95-48-7	2-Methylphenol		3900	Ū
67-72-1	Hexachloroethane		3900	T I
621-64-7	N-Nitroso-di-n-propyl	amine	3900	T t
106-44-5	4-Methylphenol		3900	
98-95-3	Nitrobenzene		3900	
78-59-1	Isophorone		3900	T
88-75-5	2-Nitrophenol		3900	
105-67-9	2,4-Dimethylphenol		3900	
111-91-1	bis(2-Chloroethoxy)m	ethane	3900	
120-83-2	2,4-Dichlorophenol		3900	
120-82-1	1,2,4-Trichlorobenzer	ne	3900	17
91-20-3	Naphthalene		3900 2000	J-U1
106-47-8	4-Chloroaniline		3900	U1
87-68-3	Hexachlorobutadiene		3900	U EUO
59-50-7	4-Chloro-3-methylphe	nol	3900	
91-57-6	2-Methylnaphthalene		· 470	1
77-47-4	Hexachlorocyclopenta	adiene	3900	Ü.
88-06-2	2,4,6-Trichlorophenol		3900	U
95-95-4	2,4,5-Trichlorophenol		19000	U
91-58-7	2-Chloronaphthalene		3900	U
88-74-4	2-Nitroaniline		19000	U
208-96-8	Acenaphthylene		3900	T T
131-11-3	Dimethyl phthalate		3900	Ilm
606-20-2	2,6-Dinitrotoluene		3900	1717
83-32-9	Acenaphthene		3900	
99-09-2	3-Nitroaniline		19000	
51-28-5	2,4-Dinitrophenol		19000	
132-64-9	Dibenzofuran		3900	
121-14-2	2,4-Dinitrotoluene		3900	U/
100-02-7	4-Nitrophenol		19000	

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., Ir	1C.	(Contract:	C&H Engine	GP-51
Lab Code:	10170		Case No.:		SAS No).:S	DG No.: CH07
Matrix: (soil/	water)	SOIL			La	b Sample ID:	20598183
Sample wt/v	ol:	30	(g/ml) <u>G</u>		La	b File ID:	A5367.D
_evel: (low/	med)	LOW			Da	te Received:	07/23/98
% Moisture:	14		decanted:(Y/N)	N	Da	te Extracted:	07/28/98
Concentrate	d Extract	Volume:	10000 (uL)		Da	te Analyzed:	08/12/98
Injection Vol	ume: 2	.0 (uL)		Dil	ution Factor:	1.0
GPC Cleanu	ip: (Y/N)	N	pH:	~ ~~			,
					CONC	こんげつ ヘブレへん	I INITO

COMPOUND

CAS NO.

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

86-73-7	Fluorene	3900	D Y
7005-72-3	4-Chlorophenyl phenyl ether	3900	U
84-66-2	Diethyl phthalate	3900	
100-01-6	4-Nitroaniline	19000	U [
534-52-1	4,6-Dinitro-2-methylphenol	19000	U (
86-30-6	n-Nitrosodiphenylamine	3900	
101-55-3	4-Bromophenyl phenyl ether	3900	V I
118-74-1	Hexachlorobenzene	3900	D [
87-86-5	Pentachlorophenol	19000	
85-01-8	Phenanthrene	1700	1
120-12-7	Anthracene	3900	βŊ
84-74-2	Di-n-butyl phthalate	3900	UT.
86-74-8	Carbazole	3900	1 Y Y
206-44-0	Fluoranthene	3900	
129-00-0	Pyrene	3900 -7000-	U つ
85-68-7	Butyl benzyl phthalate	3900	W\
91-94-1	3,3'-Dichlorobenzidine	3900	ΨV
56-55-3	Benzo[a]anthracene	3900	ΨI
218-01-9	Chrysene	3900	U /
117-81-7	bis(2-Ethylhexyl)phthalate	3900	U
117-84-0	Di-n-octyl phthalate	3900	₩ ().
205-99-2	Benzo[b]fluoranthene	3900	₩ }₩
207-08-9	Benzo[k]fluoranthene	3900	
50-32-8	Benzo[a]pyrene	3900	V
193-39-5	Indeno[1,2,3-cd]pyrene	3900	V
53-70-3	Dibenz[a,h]anthracene	3900	Ų
191-24-2	Benzo[g,h,i]perylene	3900	

193

EPA SAMPLE NO.

			-	GP-	87		
	ate Labs., Inc.					I	
Lab Code: <u>1017</u>	0 Case No.:	_ SAS No.:	SD(G No.: <u>C</u>	107		
Matrix: (soil/water)	SOIL	Lab Sam	ple ID: 2	0598182			
	30 (g/ml) G		•	\5366.D			•
Level: (low/med)			_	7/23/98			
% Moisture:	decanted:(Y/N) N	N Date Ext	racted: 0	7/28/98			
	ict Volume; 5000 (uL)			8/11/98	··········		
	And the State of t						
	2.0 (uL)	Dilution i	factor: 1	.0			
GPC Cleanup: (Y/N	l) <u>N</u> pH:						
		CONCENTR					
CAS NO.	COMPOUND	(ug/L or ug/K	g) <u>UG/</u>	KG	Q		
				1000			
111-44-4	bis(2-Chloroethyl)ether			1900	1		
108-95-2	Phenol 2 Chlorophonol			1900			
95-57-8 541-73-1	2-Chlorophenol 1,3-Dichlorobenzene			1900			
106-46-7	1,4-Dichlorobenzene			1900 1900			
95-50-1	1,2-Dichlorobenzene		***************************************	1900			
108-60-1	2,2'-oxybis(1-Chloropro	nane)	~~~~~~~	1900			
95-48-7	2-Methylphenol	201107		1900			
67-72-1	Hexachloroethane			1900			
621-64-7	N-Nitroso-di-n-propylam	nine	······································	1900	V	1	
106-44-5	4-Methylphenol			1900	TI /Y	J	
98-95-3	Nitrobenzene			1900	6		
78-59-1	Isophorone			1900	U		
88-75-5	2-Nitrophenol			1900	U		
105-67-9	2,4-Dimethylphenol			1900	U		
111-91-1	bis(2-Chloroethoxy)meth	hane		1900	U		
120-83-2	2,4-Dichlorophenol		•	1900			
120-62-1	1,2,4-Trichlorobenzene		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1900	<u>U'</u>		
91-20-3	Naphthalene Naphthalene			850	87		
106-47-8	4-Chloroaniline			1900	N)	•	
87-68-3	Hexachlorobutadiene	.1		1900	11500	1	
59-50-7 91-57-6	4-Chloro-3-methylpheno	2		1900	(1)		
77-47-4	2-Methylnaphthalene			460	41/		
88-06-2	Hexachlorocyclopentadi 2,4,6-Trlchlorophenol	E11G		1900 1900	¥)		
95-95-4	2,4,5-Trichlorophenol			9700	1700		
91-58-7	2-Chloronaphthalene			1900	1/-1		
88-74-4	2-Nitroaniline			9700	11)		1/1
208-96-8	Acenaphthylene			330	-87JV	()	ľY
131-11-3	Dimethyl phthalate			1900	Ť.	i	
606-20-2	2,6-Dinitrotoluene			1900	17	İ	
83-32-9	Acenaphthene			930	35		
99-09-2	3-Nitroaniline			9700	W.	1	
51-28-5	2,4-Dinitrophenol			9700	17/12		
132-64-9	Dibenzofuran			740	8J1	001369	ļ
121-14-2	2,4-Dinitrotoluene			1900	150	7	
100-02-7	4-Nitrophenol		(9700	0/	~	

EPA SAMPLE NO.

Lab Name:	Upstate La	abs., Inc.	Contract: C	&H Engine	L Gr	-01
		Case No.:				H07
Matrix: (soil/w			-	ample ID: 2		
		0 (g/ml) G	Lab Fi	ile ID;	5366.D	·····
Level: (low/m				Received: 0	7/23/98	***************************************
% Moisture:	14	decanted:(Y/N)N	Date E	Extracted: 0	7/28/98	
		olume: 5000 (uL)		- Analyzed: 0		****
Injection Volu				n Factor: 1		
		-	200 (1 24 21 Av			
Or o oleanup). (1/M)	N pH:				
			CONCEN [®]	TRATION U	NITS:	
CAS NO		COMPOUND		g/Kg) UG/I		Q
			(-9/			V4
86-73-		Fluorene			1200	8-
7005-7		4-Chlorophenyl phenyl e	ther		1900	<u>р</u> 7
84-66-2		Diethyl phthalate			1900	
100-01		4-Nitroaniline			9700	Ų
534-52		4,6-Dinitro-2-methylpher	nol		9700	<u> </u>
86-30-6		n-Nitrosodiphenylamine			1900	<u> </u>
101-55	~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	4-Bromophenyl phenyl e	ther		1900	Į Į
118-74		Hexachlorobenzene			1900	J
87-86-8	~	Pentachlorophenol			9700	J /
85-01-8		· Phenanthrene			8000	J .
120-12	· · · · · · · · · · · · · · · · · · ·	Anthracene			2500	1 1
84-74-2	~~~~~~	Di-n-butyl phthalate			270	15
86-74-8		Carbazole	·		920	- July 1
206-44		Fluoranthene			7400	
129-00-	~~~~~	Pyrene		1	2000	
85-68-7		Butyl benzyl phthalate	to The size A manufactural material materials and the manufactural manufactural materials and the same and the		1900	1>0:
91-94-1		3,3'-Dichlorobenzidine			1900	U/Y-
56-55-3	~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Benzo[a]anthracene	***************************************		3500	1
218-01-		Chrysene	**************************************		4800	1
117-81-		bis(2-Ethylhexyl)phthalat	e		1900	4/1
117-84-		Di-n-octyl phthalate			1900	171
205-99-		Benzo[b]fluoranthene			5300	1
207-08-	*****	Benzo[k]fluoranthene	4.000		1600	81
50-32-8	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Benzo[a]pyrene	·····		3100	1
193-39-		Indeno[1,2,3-cd]pyrene	·		1600	J. 1.
53-70-3		Dibenz[a,h]anthracene		***************************************	1900	WUJ
191-24-	·2	Benzo[g,h,i]perylene		.	1600	100

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., Inc	C	C	ontract:	C&H Engine		
Lab Code:	10170		Case No.:		SAS No	.: S	DG No.: <u>CH07</u>	
Matrix: (soil/v	vater)	SOIL			Lak	Sample ID:	20598184	
Sample wt/vo	ol;	30	(g/ml) <u>G</u>		Lab	File ID:	A5368.D	
Level: (low/n	ned)	LOW	nd Koskjonovsky		Dat	le Received:	07/24/98	
% Moisture:	7	d	ecanted:(Y/N)	N	Dat	te Extracted:	07/28/98	
Concentrated	d Extract	Volume:	1000 (uL)		Dat	te Analyzed:	08/12/98	
Injection Volu	ıme: <u>2</u>	.0 (uL)			Dilu	ution Factor:	1.0	
GPC Cleanu _l	p: (Y/N)	N	pH:					

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
111-44-4	bls(2-Chloroethyl)ether	T	360	70
108-95-2	Phenol		360	T T T
95-57-8	2-Chlorophenol		360	
541-73-1	1,3-Dichlorobenzene		360	U
106-46-7	1,4-Dichlorobenzene		360	
95-50-1	1,2-Dichlorobenzene		360	
108-60-1	2,2'-oxybis(1-Chloropro	pane)	360	U
95-48-7	2-Methylphenol		360	U
67-72-1	Hexachloroethane		360	U
621-64-7	N-Nitroso-di-n-propylam	nine	360	U
106-44-5	4-Methylphenol		360	U 1,11
98-95-3	Nitrobenzene		360	1747
78-59-1	Isophorone		360	U
88-75-5	2-Nitrophenol		360	U
105-67-9	2,4-Dimethylphenol		360	Ψ/
111-91-1	bis(2-Chloroethoxy)met	hane	360	UT
120-83-2	2,4-Dichlorophenol		360	V
120-82-1	1,2,4-Trichlorobenzene		360	U)
91-20-3	Naphthalene	•	200	21/
106-47-8	4-Chloroaniline		360	Ψኝ
87-68-3	Hexachlorobutadiene		360	4(0)
59-50-7	4-Chloro-3-methylpheno)	360	Ψ
91-57-6	2-Methylnaphthalene		130	200
77-47-4	Hexachlorocyclopentadi	ene	360	ΨΛ
88-06-2	2,4,6-Trichlorophenol		360	4 /
95-95-4	2,4,5-Trichlorophenol		1800	V Sin
91-58-7	2-Chloronaphthalene		360	Ψ(σ,
88-74-4	2-Nitroaniline		1800	4/_
208-96-8	Acenaphthylene		520	1/
131-11-3	Dimethyl phthalate		360	V VM
606-20-2	2,6-Dinitrotoluene		360	0 /0-
83-32-9	Acenaphthene		290	4-7
99-09-2	3-Nitroaniline		1800	4511
51-28-5	2,4-Dinitrophenol		1800	U 70 ~
132-64-9	Dibenzofuran		240	سا السلام
121-14-2	2,4-Dinitrotoluene		360	W\/
100-02-7	4-Nitrophenol		1800	U J V J

EPA SAMPLE NO.

GP13T Lab Name: Upstate Labs., Inc. Contract: C&H Engine Case No.: SAS No.: SDG No.: CH07 Lab Code: 10170 Lab Sample ID: 20598184 SOIL Matrix: (soil/water) 30 Lab File ID: A5368.D Sample wt/vol: (g/ml) G Date Received: 07/24/98 Level: (low/med) LOW % Moisture: 7 decanted:(Y/N) N Date Extracted: 07/28/98 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/12/98

GPC Cleanup: (Y/N) N pH:

Injection Volume: 2.0 (uL)

CONCENTRATION UNITS:

Dilution Factor: 1.0

CAS NO.	COMPOUND (ug/L	or ug/Kg)	UG/KG	. Q
86-73-7	Fluorene		430	JV
7005-72-3	4-Chlorophenyl phenyl ether		360	D.
84-66-2	Diethyl phthalate		360	Ü
100-01-6	4-Nitroaniline		1800	
534-52-1	4,6-Dinitro-2-methylphenol		1800	U
86-30-6	n-Nitrosodiphenylamine		360	1111
101-55-3	4-Bromophenyl phenyl ether		360	<u> </u>
118-74-1	Hexachlorobenzene		360	U
87-86-5	Pentachlorophenol		1800	J.I.
85-01-8	Phenanthrene	480	200 3200	EDI-
120-12-7	Anthracene		980	JV
84-74-2	Di-n-butyl phthalate		360	WU1)
86-74-8	Carbazole		450	1 /
206-44-0	Fluoranthene	66	20 3600	EDJ
129-00-0	Pyrene	94	(C) 6600	を力す
85-68-7	Butyl benzyl phthalate		360	1111
91-94-1	3,3'-Dichlorobenzidine		360	1,70,7
56-55-3	Benzo[a]anthracene		2600	1
218-01-9	Chrysene		1900	3
117-81-7	bis(2-Ethylhexyl)phthalate		360 100	18 U.S
117-84-0	Di-n-octyl phthalate		360	15 UT)
205-99-2	Benzo(b)fluoranthene		2700	1 -
207-08-9	Benzo[k]fluoranthene		1100	1 1 -
50-32-8	Benzo[a]pyrene		1600	1
193-39-5	Indeno[1,2,3-cd]pyrene		870	
53-70-3	Dibenz[a,h]anthracene		330	15
191-24-2	Benzo[g,h,i]perylene		910	1 -

188

131

EPA SAMPLE NO.

GP16T Lab Name: Upstate Labs., inc. Contract: C&H Engine SOIL Matrix: (soil/water) Lab Sample ID: 20598185 Sample wt/vol: 30 (g/ml) G Lab File ID: A5369.D Level: (low/med) LOW Date Received: 07/24/98 % Moisture; 6 decanted:(Y/N) N Date Extracted: 07/28/98 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 08/12/98 Injection Volume: 2.0 (uL) Dilution Factor: 1.0 GPC Cleanup: (Y/N) N pH: **CONCENTRATION UNITS:** CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 111-44-4 bis(2-Chloroethyl)ether 1800 108-95-2 Phenol 1800 95-57-8 2-Chlorophenol 1800 541-73-1 1,3-Dichlorobenzene 1800 106-46-7 1,4-Dichlorobenzene 1800 95-50-1 1,2-Dichlorobenzene 1800 108-60-1 2,2'-oxybis(1-Chioropropane) 1800 95-48-7 2-Methylphenol 1800 67-72-1 Hexachloroethane 1800 621-64-7 N-Nitroso-di-n-propylamine 1800 106-44-5 4-Methylphenol 1800 98-95-3 Nitrobenzene 1800 78-59-1 Isophorone 1800 88-75-5 2-Nitrophenol 1800 105-67-9 2,4-Dimethylphenol 1800 111-91-1 bis(2-Chioroethoxy)methane 1800 120-83-2 2.4-Dichlorophenol 1800 120-82-1 1,2,4-Trichlorobenzene 1800 1800 -970 91-20-3 Naphthalene 106-47-8 4-Chloroaniline 1800 87-68-3 Hexachlorobutadiene 1800 59-50-7 4-Chloro-3-methylphenol 1800 91-57-6 2-Methylnaphthalene 580 77-47-4 Hexachlorocyclopentadiene WJ 1800 88-06-2 2,4,6-Trichlorophenol 1800 95-95-4 2,4,5-Trichlorophenol 8900 91-58-7 2-Chloronaphthalene 1800 88-74-4 2-Nitroaniline 8900 208-96-8 Acenaphthylene 880 131-11-3 Dimethyl phthalate 1800 606-20-2 2,6-Dinitrotoluene 1800 83-32-9 Acenaphthene 1400 99-09-2 3-Nitroaniline 8900 0001515 51-28-5 2,4-Dinitrophenol 8900 132-64-9 Dibenzoturan 1100

2,4-Dinitrotoluene

4-Nitrophenol

121-14-2

100-02-7

1800

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., inc.	Contract: C&	H Engine	GP)16T
Lab Code:	10470			·	L	
			SAS No.: _	SD	3 No.: <u>С</u>	<u>H07</u>
Matrix: (soil/v	vater)	SOIL	Lab Sa	mple ID: 2	0598185	
Sample wt/vo	ol:	30 (g/ml) G	Lab File	D: A	5369.D	
Level: (low/n	ned)			- eceived: 0		
% Moisture:	•	decanted:(Y/N)		tracted: 0	***************************************	
			**************************************		····	
		Volume; 5000 (uL)	Date Ar	nalyzed: 0	8/12/98	
Injection Volu	lme: <u>2.</u>	0 (uL)	Dilution	Factor: 1	.0	
GPC Cleanur	o: (Y/N)	N pH:		****	***************************************	
•	((()))		*****			
			CONCENT	RATION UN	VITS:	
CAS NO),	COMPOUND	(ug/L or ug/	Ka) UG/k	(G	Q
·					1	•
86-73-	*******	Fluorene		,	1700	1-1
7005-7		4-Chlorophenyl phe	nyl ether		1800	U
84-66-2		Diethyl phthalate		-	1800	
100-01		4-Nitroaniline		······································	3900	
534-52	Married Street, Street	4,6-Dinitro-2-methyl	phenol		3900	11
86-30-6		n-Nitrosodiphenylar	nine		800	
101-55		4-Bromophenyl pher	nyl ether		800	于入州
118-74		Hexachlorobenzene			800	
87-86-8	j	Pentachlorophenol			3900	-1/-
85-01-8	}	Phenanthrene	···		3000	-
120-12-	-7	Anthracene	······································	•	900	->
84-74-2)	Di-n-butyl phthalate	· · · · · · · · · · · · · · · · · · ·	7	800	رً ل ليد
86-74-8		Carbazole			800	-27
206-44-	.0	Fluoranthene			000	
129-00-	0	Pyrene	28		000	EDT.
85-68-7		Butyl benzyl phthalat	le		800	
91-94-1		3,3'-Dichlorobenzidin			800	#>U.
56-55-3		Benzo[a]anthracene			000	7
218-01-		Chrysene	· · · · · · · · · · · · · · · · · · ·		200	─────── `
117-81-		bls(2-Ethylhexyl)phth	nalate		800	_
117-84-		DI-n-octyl phthalate			800	#>4
205-99-		Benzo[b]fluoranthene			000	7
207-08-		Benzo[k]fluoranthene			400	
50-32-8		Benzo[a]pyrene	•		500	
193-39-		Indeno[1 2 3-cd]nyre	na		700	

245

Dibenz[a,h]anthracene

Benzo[g,h,i]perylene

53-70-3

191-24-2

1500

EPA SAMPLE NO.

Q

Lab Name:	Upstate	Labs., Inc.		Contract:	C&H Engine	GP1/1
Lab Code:	10170	Cas	e No.:	SAS No	.:S	DG No.: CH07
Matrix: (soil/	water)	SOIL		La	Sample ID:	20598186
Sample wt/v	ol:	30	(g/ml) G	Lai	File ID:	A5363.D
Level: (low/i	med)	LOW		Da	te Received:	07/24/98
% Moisture:	22	deca	anted:(Y/N)	N Da	te Extracted:	07/28/98
Concentrate	d Extract	Volume: 10	000 (uL)	Da	te Analyzed:	08/11/98
njection Vol	ume: <u>2</u>	.0 (uL)		DIII	ution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH:			

COMPOUND

CAS NO.

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

111-44-4	bls(2-Chloroethyl)ether	430	- N
108-95-2	Phenol	430	#\
95-57-8	2-Chlorophenol	430	
541-73 - 1	1,3-Dichlorobenzene	· · · · · · · · · · · · · · · · · · ·	
106-46-7	1,3-Dichlorobenzene	430	- 4. 1.
95-50-1	·	430	- ¥.
	1,2-Dichlorobenzene	430	4/
108-60-1	2,2'-oxybis(1-Chloropropane)	430	-
95-48-7	2-Methylphenol	430	41
67-72-1	Hexachloroethane	430	<u> </u>
621-64-7	N-Nitroso-di-n-propylamine	430	4
106-44-5	4-Methylphenol	430	<u> </u>
98-95-3	Nitrobenzene	430	一杠.
78-59-1	Isophorone	430	470
88-75-5	2-Nitrophenol	430	4
105-67-9	2,4-Dimethylphenol	430	
111-91-1	bis(2-Chloroethoxy)methane	430	<u>U</u>
120-83-2	2,4-Dichlorophenol	430	
120-82-1	1,2,4-Trichlorobenzene	430	<u> </u>
91-20-3	Naphthalene	430	V
106-47-8	4-Chloroaniline	430	W/
87-68-3	Hexachlorobutadiene	430	TITLE OF
59-50-7	4-Chloro-3-methylphenol	430	1/
91-57-6	2-Methylnaphthalene	3300	
77-47-4	Hexachlorocyclopentadiene	430	Vλ
88-06-2	2,4,6-Trichlorophenol	430	#
95-95-4	2,4,5-Trichiorophenol	2100	
91-58-7	2-Chloronaphthalene	430	
88-74-4	2-Nitroaniline	2100	
208-96-8	Acenaphthylene	430	Ū
131-11-3	Dimethyl phthalate	430	
606-20-2	2.6-Dinitrotoluene	430	150
83-32-9	Acenaphthene	430	
99-09-2	3-Nitroaniline	2100	
51-28-5	2,4-Dinitrophenol	2100	
132-64-9	Dibenzofuran	430	1
121-14-2	2,4-Dinitrotoluene	430	T)
100-02-7	4-Nitrophenol	2100	1/

MS

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., In	C.	(Contract:	C&H Engine	e GP1/1
Lab Code:	10170	(Case No.:		SAS No	.:S	DG No.: CH07
Matrix: (soil/w	vater)	SOIL			La	b Sample ID:	20598186
Sample wt/vo	l:	30	(g/ml) <u>G</u>		La	b File ID:	A5363.D
Level: (low/m	ned)	LOW	*******		Da	te Received:	07/24/98
% Moisture:	22		iecanted:(Y/N)	N	Da	te Extracted:	07/28/98
Concentrated	Extract	Volume:	1000 (uL)	Da	te Analyzed:	08/11/98
Injection Volu	me: <u>2</u>	.0 (uL)			Dil	ution Factor:	1.0
GPC Cleanup	o: (Y/N)	N	pH:				

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/l	or ug/Kg) <u>UG/KG</u>	Q
86-73-7	Fluorene	430	U
7005-72-3	4-Chlorophenyl phenyl ether	430	U
84-66-2	Diethyl phthalate	430	U
100-01-6	4-Nitroaniline	2100	U
534-52-1	4,6-Dinitro-2-methylphenol	2100	U
86-30-6	n-Nitrosodiphenylamine	430	[74]
101-55-3	4-Bromophenyl phenyl ether	430	T I
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	2100	Ü
85-01-8	Phenanthrene	1300	1
120-12-7	Anthracene	230	8
84-74-2	Di-n-butyl phthalate	430	D. Jon
86-74-8	Carbazole	430	
206-44-0	Fluoranthene	130	1
129-00-0	Pyrene	430 -180	JU1
85-68-7	Butyl benzyl phthalate	430	לט
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo[a]anthracene	430	
218-01-9	Chrysene	430	U J
117-81-7	bis(2-Ethylhexyl)phthalate	59	JB 6/1
117-84-0	Di-n-octyl phthalate	430	Va
205-99-2	Benzo[b]fluoranthene	430	U
207-08-9	Benzo[k]fluoranthene	430	U I
50-32-8	Benzo[a]pyrene	430	נעלט
193-39-5	Indeno[1,2,3-cd]pyrene	430	UTT
53-70-3	Dibenz[a,h]anthracene	430	U
191-24-2	Benzo[g,h,l]perylene	430	U J

N

EPA SAMPLE NO.

Q

Lab Name:	Upstate	Labs., In	C.	c	Contract:	C&H Engine	grza!
Lab Code:	10170		Case No.:		SAS No	.:s	DG No.: CH07
Matrix: (soil/	water)	SOIL			Lat	Sample ID:	20598187
Sample wt/v	ol:	30	(g/ml) <u>G</u>		Lat	File ID:	A5370.D
Level: (low/i	med)	LOW			Dat	te Received:	07/24/98
% Moisture:	12		lecanted:(Y/N)	N	Dai	te Extracted:	07/28/98
Concentrate	d Extract	Volume:	5000 (uL)		Da	te Analyzed:	08/12/98
njection Vol	ume: <u>2</u>	.0 (uL)			Dilu	ution Factor:	1.0
GPC Cleanu	ip: (Y/N)	N	pH:				

COMPOUND

CAS NO.

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

111-44-4	bis(2-Chloroethyl)ether	1900	W\
108-95-2	Phenol	1900	TI
95-57-8	2-Chlorophenol	1900	
541-73-1	1,3-Dichlorobenzene	1900	
106-46-7	1,4-Dichlorobenzene	1900	U
95-50-1	1,2-Dichlorobenzene	1900	
108-60-1	2,2'-oxybis(1-Chloropropane)	1900	
95-48-7	2-Methylphenol	1900	
67-72-1	Hexachloroethane	1900	
621-64-7	N-Nitroso-dl-n-propylamine	1900	
106-44-5	4-Methylphenol	1900	1/
98-95-3	Nitrobenzene	1900	T I
78-59-1	Isophorone	1900	J.
88-75-5	2-Nitrophenol	1900	
105-67-9	2,4-Dimethylphenol	1900	
111-91-1	bis(2-Chloroethoxy)methane	1900	
120-83-2	2,4-Dichlorophenol	1900	
120-82-1	1,2,4-Trichlorobenzene	1900	Į į
91-20-3	Naphthalene	1900 -360	J-111
106-47-8	4-Chloroaniline	1900	U\
87-68-3	Hexachlorobutadiene	1900	U JW
59-50-7	4-Chloro-3-methylphenol	1900	1/
91-57-6	2-Methylnaphthalene	450	8-1-
77-47-4	Hexachlorocyclopentadiene	.1900	47
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	9500	LV3 U
91-58-7	2-Chloronaphthalene	1900	U
88-74-4	2-Nitroaniline	9500	
208-96-8	Acenaphthylene	220	1
131-11-3	Dimethyl phthalate	1900	UNIM
606-20-2	2,6-Dinitrotoluene	1900	
83-32-9	Acenaphthene	250	1-
99-09-2	3-Nitroaniline	9500	UNIM
51-28-5	2,4-Dinitrophenol	9500	1747
132-64-9	Dibenzofuran	300	4
404 440	1 - 1 - 1		
121-14-2	2,4-Dinitrotoluene	1900	USIM

18

EPA SAMPLE NO.

GP25T

Lab Name:	Upstate	Labs., Ir	IC.	(Contract:	C&H Engine	
Lab Code:	10170		Case No.:		SAS No	.: S	DG No.: CH07
Matrix: (soil/v	water)	SOIL			Lal	Sample ID:	20598187
Sample wt/vo	oi:	30	(g/ml) <u>G</u>	~	Lal	File ID:	A5370.D
Level: (low/n	ned)	LOW			Dat	te Received:	07/24/98
% Moisture:	12	(decanted:(Y/N) _	N	Da	te Extracted:	07/28/98
Concentrated	Extract	Volume:	5000 (uL)		Da	te Analyzed:	08/12/98
Injection Volu	ıme: <u>2</u>	<u>.0</u> (uL)	•		Dilt	ution Factor:	1.0
GPC Cleanu _l	p: (Y/N)	N	pH:				

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L	or ug/Kg) <u>UG/KG</u>	Q
86-73-7	Fluorene	310	
7005-72-3	4-Chlorophenyl phenyl ether	1900	UN
84-66-2	Diethyl phthalate	1900	6
100-01-6	4-Nitroaniline	9500	U
534-52-1	4,6-Dinitro-2-methylphenol	9500	
86-30-6	n-Nitrosodiphenylamine	1900	[V]
101-55-3	4-Bromophenyl phenyl ether	1900	
118-74-1	Hexachlorobenzene	1900	
87-86-5	Pentachlorophenol	9500	
85-01-8	Phenanthrene	4600	1
120-12-7	Anthracene	880	1
84-74-2	Di-n-butyl phthalate	1900	U\ m
86-74-8	Carbazole	1900	#>\v3
206-44-0	Fluoranthene	2400	1/
129-00-0	Pyrene	9500	1/
85-68-7	Butyl benzyl phthalate	1900	4217
91-94-1	3,3'-Dichlorobenzidine	1900	1747
56-55-3	Benzo[a]anthracene	1900 -2700	- 101
218-01-9	Chrysene	2500	7 /
117-81-7	bis(2-Ethylhexyl)phthalate	1900	U\
117-84-0	Di-n-octyl phthalate	1900	U
205-99-2	Benzo[b]fluoranthene	1900	U
207-08-9	Benzo[k]fluoranthene	1900	Ula
50-32-8	Benzo[a]pyrene	1900	
193-39-5	Indeno[1,2,3-cd]pyrene	1900	U
53-70-3	Dibenz[a,h]anthracene	1900	U
191-24-2	Benzo[g,h,i]perylene	1900	17

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., Ind	,	(Contract:	C&H Engine	7-017
Lab Code:	10170	C	ase No.:		SAS No	.: 8	DG No.: CH08
Matrix: (soil/v	vater)	SOIL			Lal	Sample ID:	21598005
Sample wt/vo	ol:	30	(g/ml) <u>G</u>	***	Lat	File ID:	A5338.D
Level: (low/m	ned)	LOW			Da	le Received:	07/31/98
% Moisture:	43	d	ecanted:(Y/N)	N	Dat	te Extracted:	08/05/98
Concentrated	Extract	Volume:	10000 (uL)		Dat	te Analyzed:	08/10/98
njection Volu	me: <u>2.</u>	0 (uL)			Dilu	ution Factor:	1.0
GPC Cleanup	o: (Y/N)	<u>N</u>	_ pH:	****			

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug	/Kg) <u>UG/KG</u>	Q
111-44-4	bis(2-Chloroethyl)ether	5800	0 \
108-95-2	Phenol	5800	
95-57-8	2-Chlorophenol	5800	
541-73-1	1,3-Dichlorobenzene	5800	
106-46-7	1,4-Dichlorobenzene	5800	
95-50-1	1,2-Dichlorobenzene	5800	
108-60-1	2,2'-oxybis(1-Chloropropane)	5800	
95-48-7	2-Methylphenol	5800	Ti-l-l
67-72-1	Hexachloroethane	5800	
621-64-7	N-Nitroso-di-n-propylamine	5800	
106-44-5	4-Methylphenol	5800	
98-95-3	Nitrobenzene	5800	11
78-59-1	Isophorone	5800	
88-75-5	2-Nitrophenol	5800	
105-67-9	2,4-Dimethylphenol	5800	
111-91-1	bis(2-Chloroethoxy)methane	5800	
120-83-2	2,4-Dichlorophenol	5800	[
120-82-1	1,2,4-Trichlorobenzene	5800	
91-20-3	Naphthalene	8700	
106-47-8	4-Chloroaniline	5800	0
87 - 68-3	Hexachlorobutadiene	5800	
59-50-7	4-Chloro-3-methylphenol	5800	1/10
91-57-6	2-Methylnaphthalene	2800	17
77-47-4	Hexachlorocyclopentadiene	5800	U\
88-06-2	2,4,6-Trichlorophenol	5800	
95-95-4	2,4,5-Trichlorophenol	29000	
91-58-7	2-Chloronaphthalene	5800	T H
88-74-4	2-Nitroanlline	29000	
208-96-8	Acenaphthylene	5800	
131-11-3	Dimethyl phthalate	5800	
606-20-2	2,6-Dinitrotoluene	5800	
83-32-9	Acenaphthene	5800	- # > VI
99-09-2	3-Nitroaniline	29000	
51-28-5	2,4-Dinitrophenol	29000	
132-64-9	Dibenzofuran	5800	T
121-14-2	2,4-Dinitrotoluene	5800	TH.
100-02-7	4-Nitrophenol	29000	

EPA SAMPLE NO.

Lab Name: Upstate La	abs., Inc.	Contract: C8	kH Engine	Т-0)1T
Lab Code: 10170	Case No.:	SAS No.:	SE	G No.: Cl	-108
Matrix: (soil/water) S	OIL			21598005	
	0 (g/ml) G	Labor	- 15.	. 1000000	
lough /l/	(grill) G				
Level: (low/med) Low		Date R	leceived: ()7/31/98	
% Molsture: 43	decanted:(Y/N) N	Date E	xtracted: (08/05/98	
Concentrated Extract Vo	lume: 10000 (uL)		nalyzed: (
Injection Volume: 2.0			Factor:		
		Dilution	11 actor, _	1.0	**********
GPC Cleanup: (Y/N)	N pri;				
		CONCENT	DATIONEL	NUTO.	
CAS NO.	COMPOLIND				
	OOMI COMD	(ug/L or ug/	rkg) <u>UG/</u>	KG	Q
86-73-7	Fluorene		T	E000	
7005-72-3	4-Chlorophenyl phenyl et	her		5800 5800	
84-66-2	Diethyl phthalate	1101		5800	- <u>!</u>
100-01-6	4-Nitroaniline				<u>-Y</u> -
534-52-1	4,6-Dinitro-2-methylpheno	<u></u>		9000	<u>- </u>
86-30-6	n-Nitrosodiphenylamine	/ L		9000	
101-55-3	4-Bromophenyl phenyl eth	1er		5800	
118-74-1	Hexachlorobenzene	101		5800	411
87-86-5	Pentachlorophenol			5800	1 7 11
85-01-8	l mi			9000	<u>-</u> Ł- -
120-12-7	Anthracene	·····		5800	
84-74-2	Di-n-butyl phthalate			5800	4
86-74-8	Carbazole		Į	5800	4.
206-44-0	Fluoranthene	····		7800 7800	
129-00-0	Pyrene			5800	
85-68-7	Butyl benzyl phthalate		,	800	1
91-94-1	3,3'-Dichlorobenzidine			800	
56-55-3	Benzo[a]anthracene	,		800	t +
218-01-9	Chrysene		7	800	TH
117-81-7	bis(2-Ethylhexyl)phthalate			800	
117-84-0	Di-n-octyl phthalate			800	
205-99-2	Benzo[b]fluoranthene			800	上人い
207-08-9	Benzo[k]fluoranthene			800	
50-32-8	Benzo a pyrene			800	1
193-39-5	Indeno[1,2,3-cd]pyrene	****		800	#
53-70-3	Dibenz[a,h]anthracene			800	
191-24-2	Benzo[g,h,i]perylene			800	#/-

0001630

EPA SAMPLE NO.

Lab Name: Upstate Labs., Inc.			nc.		Contract:	C&H Engine	T-02T
Lab Code:	10170		Case No.:		SAS No	***************************************	DG No.: CH08
Matrix: (soil/	water)	SOIL			Lal	Sample ID:	
Sample wt/v	ol:	30	(g/ml) <u>G</u>	v		File ID:	A5337.D
Level: (low/i	med)	LOW	-		Da	te Received:	07/31/98
% Moisture:	17		decanted:(Y/N)	N	Dat	e Extracted:	08/05/98
Concentrate	d Extract	Volume:	2000 (uL)		Dat	e Analyzed;	08/10/98
njection Vol	ume: 2	<u>0</u> (uL)		Dilu	ition Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH:				**************************************

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 111-44-4 bis(2-Chloroethyl)ether 800 U 1 108-95-2 Phenol 800 U 1 95-57-8 2-Chlorophenol 800 U 1 541-73-1 1,3-Dichlorobenzene 800 U 1 541-73-1 1,2-Dichlorobenzene 800 U 1 95-50-1 1,2-Dichlorobenzene 800 U 1 95-50-1 1,2-Dichlorobenzene 800 U 1 95-48-7 2-Methylphenol 800 U 1 95-48-7 2-Methylphenol 800 U 1 67-72-1 Hexachloroethane 800 U 1 621-64-7 N-Nitroso-di-n-propylamine 800 U 1 106-44-5 4-Methylphenol 800 U 1 98-95-3 Nitrobenzene 800 U 1 105-67-9 2,4-Dimethylphenol 800 U 1 111-91-1 bis(2-Chloroethoxy)methane 800 U 1 120-83-2 2,4-Dichlorophenol 800 U 1 120-83-2 2,4-Dichlorophenol 800 U 1 120-83-3 Naphthalene 800 U 1 120-82-1 1,2,4-Trichlorobenzene 800 U 1 120-83-1 1,2,4-Trichlorobenzene 800 U 1 191-20-3 Naphthalene 800 U 1 191-20-3 Naphthalene 800 U 1 191-57-6 2-Methylphenol 800 U 1 191-58-7 2-Chlorophenol 800 U 1 191-59-6 2-Methylphenol 800 U 1 191-59-6 2-Methylphenol 800 U 1 191-59-7 2-Chlorophenol 800 U 1 191-19-19-19-19-19-19-19-19-19-19-19-19-			CONCENTRA	HON UNITS:		
108-95-2	CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	_ Q	
108-95-2	111-44-4	bis(2-Chloroethyl)ethe	er I	800	1 2	· ·
Section Sect	108-95-2				├ ├-	+
1.3-Dichlorobenzene	95-57-8	2-Chlorophenoi			۲-	+-
106-46-7						+
95-50-1	106-46-7					-{-
108-60-1	95-50-1	1,2-Dichlorobenzene			·	H
95-48-7 2-Methylphenol 800 U 621-64-7 Hexachloroethane 800 U 621-64-7 N-Nitroso-di-n-propylamine 800 U 70-64-5 4-Methylphenol 800 U 70-659-3 Nitrobenzene 800 U 70-659-1 Isophorone 800 U 70-659-1 Isophorone 800 U 70-659-1 Isophorone 800 U 70-659-1 105-67-9 2,4-Dimethylphenol 800 U 70-67-9 2,4-Dimethylphenol 800 U 70-67-9 2,4-Dimethylphenol 800 U 70-68-2 2,4-Dichlorophenol 800 U 70-68-2 2,4-Dichlorophenol 800 U 70-68-3 1,2,4-Trichlorobenzene 800 U 70-68-3 Hexachlorobutadiene 800 U 70-68-3 Hexachlorobutadiene 800 U 70-68-3 Hexachlorobutadiene 800 U 70-68-3 Hexachlorocyclopentadiene 800 U 70-68-3 Hexachlorocyclopentadiene 800 U 70-68-3 4-Chloro-3-methylphenol 800 U 70-68-3 4-Chloro-3-methylphenol 800 U 70-68-3 4-Chloro-3-methylphenol 800 U 70-68-3 4-Chloro-3-methylphenol 800 U 70-68-3 8-76-2 2,4,6-Trichlorophenol 800 U 70-68-3 8-76-4 2,4,5-Trichlorophenol 800 U 70-68-4 2,4,5-Trichlorophenol 800 U 70-68-5 2,4,5-Trichlorophenol 800 U 70-68-6 8-74-4 2-Nitroaniline 800 U 70-68-7 2-Chloronaphthalene 800 U 70-68-7 2-Chlorophenol 800 U 70-68-7	108-60-1		opane)	The second secon		f -
67-72-1						
106-44-5	67-72-1					
106-44-5	621-64-7		mine			
Section Sect	106-44-5				- F)
Respective		Nitrobenzene			- K-/	4
105-67-9 2,4-Dimethylphenol 800 U 111-91-1 bis(2-Chloroethoxy)methane 800 U 120-83-2 2,4-Dichlorophenol 800 U 120-83-2 2,4-Dichlorophenol 800 U 120-82-1 1,2,4-Trichlorobenzene 800 U 120-82-1 1,2,4-Trichlorobenzene 800 U 160-47-8 4-Chloroaniline 800 U 160-47-8 4-Chloroaniline 800 U 160-47-8 4-Chloro-3-methylphenol 800 U 160-47-8 4-Chloro-3-methylphenol 800 U 160-47-4					F 1	\dashv
105-67-9		2-Nitrophenol	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7			
111-91-1 bis(2-Chloroethoxy)methane	The state of the s					-
120-83-2			thane		- 11	-
1,2,4-Trichlorobenzene 800 1 91-20-3 Naphthalene 800 2000 1 1 1 1 1 1 1 1 1						
91-20-3	120-82-1	1,2,4-Trichlorobenzene	· · · · · · · · · · · · · · · · · · ·			
106-47-8	91-20-3	Naphthalene	\$8			7
87-68-3 Hexachlorobutadiene 800 Image: Control of the control of th	106-47-8	4-Chloroaniline				-
59-50-7 4-Chloro-3-methylphenol 800 0 91-57-6 2-Methylnaphthalene 4900 0 77-47-4 Hexachlorocyclopentadiene 800 0 88-06-2 2,4,6-Trichlorophenol 800 0 95-95-4 2,4,5-Trichlorophenol 4000 0 91-58-7 2-Chloronaphthalene 800 0 88-74-4 2-Nitroaniline 4000 0 208-96-8 Acenaphthylene 800 0 131-11-3 Dimethyl phthalate 800 0 606-20-2 2,6-Dinitrotoluene 800 0 83-32-9 Acenaphthene 800 0 99-09-2 3-Nitroaniline 4000 0 51-28-5 2,4-Dinitrotoluene 800 0 132-64-9 Dibenzofuran 800 0 121-14-2 2,4-Dinitrotoluene 800 0 100-02-7 4-Nitrophenol 4000 0		Hexachlorobutadiene	***************************************		- \	TM.
91-57-6 2-Methylnaphthalene 4900 77-47-4 Hexachlorocyclopentadiene 800 0 88-06-2 2,4,6-Trichlorophenol 800 0 95-95-4 2,4,5-Trichlorophenol 4000 0 91-58-7 2-Chloronaphthalene 800 0 88-74-4 2-Nitroaniline 4000 0 208-96-8 Acenaphthylene 800 0 131-11-3 Dimethyl phthalate 800 0 131-11-3 Dimethyl phthalate 800 0 1 131-11-3 Dimethyl phthalate 800 0 1 1 1 1 1 1 1 1			ol			73
77-47-4					- Je	-
88-06-2 2,4,6-Trichlorophenol 800 0 95-95-4 2,4,5-Trichlorophenol 4000 0 91-58-7 2-Chloronaphthalene 800 0 88-74-4 2-Nitroaniline 4000 0 208-96-8 Acenaphthylene 800 0 131-11-3 Dimethyl phthalate 800 0 606-20-2 2,6-Dinitrotoluene 800 0 83-32-9 Acenaphthene 800 0 99-09-2 3-Nitroanlline 4000 0 51-28-5 2,4-Dinitrophenol 4000 0 121-14-2 2,4-Dinitrotoluene 800 0 100-02-7 4-Nitrophenol 4000 0	}	Hexachlorocyclopentad	liene	The second secon	الم	~
95-95-4			***		- 11 +	-
91-58-7 2-Chloronaphthalene 800 1		2,4,5-Trichlorophenol				-
88-74-4 2-Nitroaniline 4000 1 208-96-8 Acenaphthylene 800 1 131-11-3 Dimethyl phthalate 800 1 1 1 1 1 1 1 1 1		2-Chloronaphthalene				
208-96-8 Acenaphthylene		2-Nitroaniline				1
131-11-3		Acenaphthylene				
606-20-2 2,6-Dinitrotoluene 800 0 83-32-9 Acenaphthene 800 0 99-09-2 3-Nitroanlline 4000 0 51-28-5 2,4-Dinitrophenol 4000 0 132-64-9 Dibenzofuran 800 0 121-14-2 2,4-Dinitrotoluene 800 0 100-02-7 4-Nitrophenol 4000 0		Dimethyl phthalate				-
83-32-9 Acenaphthene 800 0 0 0 0 0 0 0 0		2,6-Dinitrotoluene			E	
99-09-2 3-Nitroanlline 4000 U 51-28-5 2,4-Dinltrophenol 4000 U 132-64-9 Dibenzofuran 800 U 121-14-2 2,4-Dinltrotoluene 800 U 100-02-7 4-Nitrophenol 4000 U)	Acenaphthene				- 1,1
51-28-5 2,4-Dinitrophenol 4000 0 132-64-9 Dibenzofuran 800 0 121-14-2 2,4-Dinitrotoluene 800 0 100-02-7 4-Nitrophenol 4000 0		3-Nitroanlline	,		-1	1
132-64-9 Dibenzofuran 800 U 121-14-2 2,4-Dinitrotoluene 800 U 100-02-7 4-Nitrophenol 4000 U		2,4-Dinitrophenol		***************************************	F- -	1
121-14-2 2,4-Dinitrotoluene 800 U		Dibenzofuran				1
100-02-7 4-Nitrophenol 4000 1.1		2,4-Dinitrotoluene			-#H	1
	100-02-7	4-Nitrophenol				_

N/S

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., Ir	ic.	c	ontract:	C&H Engine	1-021
Lab Code:	10170	 	Case No.:		SAS No	.:S	DG No.: CH08
Matrix: (soil/w	ater)	SOIL			Lai	Sample ID;	21598006
Sample wt/vo	l :	30	(g/ml) G		Lai	File ID:	A5337.D
Level: (low/m	red)	LOW	·		Da	te Received:	07/31/98
% Moisture:	17	{	decanted:(Y/N)	N	Da	te Extracted:	08/05/98
Concentrated	Extract '	Volume:	2000 (uL)		Da	te Analyzed;	08/10/98
Injection Volu	me: <u>2</u> .	0 (uL)	•		Dili	ution Factor:	1.0.
GPC Cleanup): (Y/N)	N	pH:				

CONCENTRATION UNITS: 1

CAS NO.	COMPOUND (ug	g/L or ug/Kg)	UG/KG	Q
86-73-7	Fluorene		800	D/
7005-72-3	4-Chlorophenyl phenyl ether		800	U
84-66-2	Diethyl phthalate		800	T T T
100-01-6	4-Nitroaniline		4000	
534-52-1	4,6-Dinitro-2-methylphenol		4000	
86-30-6	n-Nitrosodiphenylamine		800	1707
101-55-3	4-Bromophenyl phenyl ether		800	U
118-74-1	Hexachlorobenzene		800	U
87-86-5	Pentachlorophenol		4000	U/
85-01-8	Phenanthrene		3500	1
120-12-7	Anthracene		800	VΛ
84-74-2	Di-n-butyl phthalate		800	U
86-74-8	Carbazole		800	
206-44-0	Fluoranthene		800	
129-00-0	Pyrene		800	U
85-68-7	Butyl benzyl phthalate		800	U
91-94-1	3,3'-Dichlorobenzidine		800	
56-55-3	Benzo[a]anthracene		800	U /
218-01-9	Chrysene		800	
117-81-7	bis(2-Ethylhexyl)phthalate		800	$\mathcal{L}V$
117-84-0	Di-n-octyl phthalate		800	
205-99-2	Benzo[b]fluoranthene		800	T T
207-08-9	Benzo[k]fluoranthene		800	
50-32-8	Benzo[a]pyrene		800	
193-39-5	Indeno[1,2,3-cd]pyrene		800	11
53-70-3	Dibenz[a,h]anthracene		800	
191-24-2	Benzo[g,h,i]perylene		800	1/

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., In	с.	~~~~	Contract:	C&H Engine	T-04T
Lab Code:	10170	(Case No.:		SAS No	.: S	DG No.: CH08
Matrix: (soll/w	/ater)	SOIL	habhyseane		Lat	Sample ID:	21598007
Sample wt/vo	d:	30	(g/ml) <u>G</u>		Lab	File ID:	A5336.D
Level: (low/m	red)	LOW	-		Dat	e Received:	07/31/98
% Moisture:	14		ecanted:(Y/N)	N	Dat	e Extracted:	08/05/98
Concentrated	Extract	Volume:	1000 (uL)		Dat	e Analyzed:	08/10/98
Injection Volu	me: 2	0 (uL)			Dilu	ition Factor:	1.0
GPC Cleanup	: (Y/N)	N	pH:				

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)		Q	
111-44-4	bis(2-Chloroethyl)ethe				_
108-95-2	Phenol	3 [390	47	_
95-57-8	2-Chlorophenol		390	Ψ\	_
541-73-1			390	<u> </u>	_
106-46-7	1,3-Dichlorobenzene		390	Ψ	_
95-50-1	1,4-Dichlorobenzene		390	Ψ.	
108-60-1	1,2-Dichlorobenzene		390	<u> </u>	
95-48-7	2,2'-oxybis(1-Chioropi	ropane)	390	<u> </u>	
67-72-1	2-Methylphenol		390	<u> </u>	_}
621-64-7	<u>Hexachloroethane</u>		390	<u> </u>	_
	N-Nitroso-di-n-propyla	imine	390	<u> </u>	
106-44-5	4-Methylphenol		390	<u> </u>	11
98-95-3	Nitrobenzene		390	<u> </u>	y
78-59-1	Isophorone		390		
88-75-5	2-Nitrophenol	***************************************	390	<u> </u>	
105-67-9	2,4-Dimethylphenol		390	Ų (7
111-91-1	bis(2-Chloroethoxy)me	ethane	390	U	7
120-83-2	2,4-Dichlorophenol		390	U	1
120-82-1	1,2,4-Trichlorobenzene	9	390	T/	7
91-20-3	Naphthalene		790 -620-	US	7
106-47-8	4-Chloroaniline		390	U \	7
87-68-3	Hexachlorobutadiene		390	U >	门
59-50-7	4-Chloro-3-methylpher	nol	390		T
91-57-6	2-Methylnaphthalene		1400	7	1
77-47-4	Hexachlorocyclopentae	diene	390	W٦	1
88-06-2	2,4,6-Trichlorophenol		390	U T	4
95-95-4	2,4,5-Trichlorophenol		1900	T	1
91-58-7	2-Chloronaphthalene		390		1
88-74-4	2-Nitroaniline		1900	17	1
208-96-8	Acenaphthylene		390		1
131-11-3	Dimethyl phthalate		390	1/1	۱ ۵
606-20-2	2,6-Dinitrotoluene		390	1 1	
83-32-9	Acenaphthene		390	11	
99-09-2	3-Nitroaniline	***************************************	1900	11	ĺ
51-28-5	2,4-Dinitrophenol		1900	- 1	
132-64-9	Dibenzofuran		390	-} -	
121-14-2	2,4-Dinitrotoluene		390		
100-02-7	4-Nitrophenol		1900	1/	

EPA SAMPLE NO.

						1 .	
Lab Name:	Upstate I	abs., Inc.	Contr	act: <u>C&</u> F	l Engine		Γ-04T
		Case No.:					CH08
Matrix: (soil/	water)	SOIL				2159800	
		30 (g/ml) G			-		
					•	***************************************	
Level: (low/r	med)	LOW		Date Re	ceived:	07/31/98	
% Moisture:	14	decanted:(Y/N)	N	Date Ex	tracted:	08/05/98	
		olume: 1000 (uL)		Date An	•		
njection Vol	ume: 2.0) (uL)			Factor:		
				what our	autor.	1.0	***************************************
orc Cleanu	p: (Y/N)	<u>N</u> pH:					
			CC	ONCENTR	ATION I	INITQ:	
CAS NO	1	COMPOUND					^
0110140	•	COMI COND	ζuξ	g/L or ug/k	yy <u>UG</u>	'NG	_ Q
86-73-		Fluorene		~~~~~~~		390	
7005-		4-Chlorophenyl phe	envl ether	· · · · · · · · · · · · · · · · · · ·		390	
84-66-	·2	Diethyl phthalate				390	
100-01	**	4-Nitroaniline	·	*		1900	
534-52		4,6-Dinitro-2-methy	lohenol		····	1900	
86-30-		n-Nitrosodiphenylar	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			390	
101-58		4-Bromophenyl phe		······································		390	1-1/-
118-74		Hexachlorobenzene		********	·····	390	
87-86-		Pentachlorophenol		~-~		1900	
85-01-		Phenanthrene				390	
120-12		Anthracene					
84-74-		Di-n-butyl phthalate	·····			390	
86-74-	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Carbazole				550	BU.
206-44		Fluoranthene		*	****	390	# \
129-00	*************************************	Pyrene				390	
85-68-		Butyl benzyl phthala	ote .			390	#
91-94-	<u>. </u>	3,3'-Dichlorobenzidi				390	
56-55-		Benzo[a]anthracene				390	
218-01		Chrysene	····			390	#
117-81			halata			390	
117-84		bis(2-Ethylhexyl)pht	ildidt6			390	<u> </u>
***************************************		Di-n-octyl phthalate				390	<u> </u>
205-99	***************************************	Benzo[b]fluoranthen				390	<u> </u>
207-08		Benzo[k]fluoranthen	e			390	<u> </u>
50-32-8		Benzo[a]pyrene				390	<u> </u>
193-39		Indeno[1,2,3-cd]pyre				390	4
53-70-3		Dibenz[a,h]anthrace				390	
191-24	-4	Benzo[g,h,i]perylene	9			390	U /

EPA SAMPLE NO.

C&H Engine	T-05T
o.: SE	DG No.: CH08
ab Sample ID:	21598008
ab File ID:	A5333.D
ate Received:	07/31/98
ate Extracted:	08/05/98
ate Analyzed:	08/10/98
ilution Factor:	1.0
·	
CENTRATION L or ug/Kg) <u>UG</u>	JNITS: /KG Q
	io.: SI ab Sample ID: ab File ID: ate Received: ate Extracted: ate Analyzed: ilution Factor:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	୍ଦ	
111-44-4	bis(2-Chloroethyl)ether		530	Da	7
108-95-2	Phenol		530	- Ū	1
95-57-8	2-Chlorophenol		530		1
541-73-1	1,3-Dichlorobenzene		530	l l	
106-46-7	1,4-Dichlorobenzene	-	530		1
95-50-1	1,2-Dichlorobenzene		530	}	1
108-60-1	2,2'-oxybis(1-Chloroprop	ane)	530		1
95-48-7	2-Methylphenol		530	fil	1
67-72-1	Hexachloroethane		530	Ū	1
621-64-7	N-Nitroso-di-n-propylamir	ne	530	- Et	1
106-44-5	4-Methylphenol		530	fit	1
98-95-3	Nitrobenzene		530	- Et	10
78-59-1	Isophorone		530	$-\tilde{h}$	נע
88-75-5	2-Nitrophenol		530	<u> </u>	1
105-67-9	2,4-Dimethylphenol		530	fit	ĺ
111-91-1	bis(2-Chloroethoxy)metha	ane	530		
120-83-2	2,4-Dichlorophenol		530		
120-82-1	1,2,4-Trichlorobenzene		530	1	
91-20-3	Naphthalene		530		
106-47-8	4-Chloroaniline		530		
87-68-3	Hexachlorobutadiene	***************************************	530	-51	
59-50-7	4-Chloro-3-methylphenol		530	5/	
91-57-6	2-Methylnaphthalene		110	7	
77-47-4	Hexachlorocyclopentadie	ne	530	U/	
88-06-2	2,4,6-Trichlorophenol		530		
95-95-4	2,4,5-Trichlorophenol		2600		
91-58-7	2-Chloronaphthalene		530		
88-74-4	2-Nitroaniline		2600	<u> </u>	
208-96-8	Acenaphthylene		530		
131-11-3	Dimethyl phthalate		530		~
606-20 - 2	2,6-Dinitrotoluene		530	$ \lceil \cdot \rangle$ \setminus	IJ
83-32-9	Acenaphthene		530		~
99-09-2	3-Nitroaniline		2600		
51-28-5	2,4-Dinitrophenol		2600		
132-64-9	Dibenzofuran		530		
121-14-2	2,4-Dinitrotoluene		530		
100-02-7	4-Nitrophenol		2600	1.	

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EPA SAMPLE NO.

Lab Name: <u>Upstate La</u>	bs., Inc.	Contract: 0	C&H Engine		T-05T	
Lab Code: 10170	Case No.:	SAS No.:	SI	DG No.:	CH08	***************************************
Matrix: (soil/water) Si	OIL		Sample ID:			***************************************
				~		
) (g/ml) G		File ID:			
_evel: (low/med) <u>LC</u>	<u>OW</u>	Date	Received:	07/31/98	}	
% Moisture: 37	decanted:(Y/N) N	Date	Extracted:	08/05/98	}	
Concentrated Extract Vol	ume: 1000 (uL)	Date	Analyzed:	08/10/98		
njection Volume: 2.0			on Factor:			
SPC Cleanup: (Y/N)		i i i i i i i i i i i i i i i i i i i	on radion.	1.0		
o oleanup. (1714)	w pn.					
		CONCEN	ITRATION L	INITS:		
CAS NO.	COMPOUND		g/Kg) UG		_	
A	with the service and	(ugr. or u	iging) <u>uu</u>	/NG	Q	
86-73-7	Fluorene			530	In.	7
7005-72-3	4-Chlorophenyl phenyl et	her		530	+#}-	1
84-66-2	Diethyl phthalate			530		1
100-01-6	4-Nitroaniline	************		2600	+ 11	-
534-52-1	4,6-Dinitro-2-methylphen	ol		2600	 	1
86-30-6	n-Nitrosodiphenylamine			530		1_
101-55-3	4-Bromophenyl phenyl et	her		530	17	U
118-74-1	Hexachlorobenzene			530		4
87-86-5	Pentachlorophenol			2600		1
85-01-8	Phenanthrene		·	390	17	
120-12-7	Anthracene		- 	530		7
84-74-2	Di-n-butyl phthalate			620	ک اور د استقد	4
86-74-8	Carbazole			530		J
206-44-0	Fluoranthene			530	 	
129-00-0	Pyrene			530		į
85-68-7	Butyl benzyl phthalate	······································		530	T T	ii
91-94-1	3,3'-Dichlorobenzidine		- 	530		
56-55-3	Benzo[a]anthracene	······································		530		
218-01-9	Chrysene			530		
117-81-7	bis(2-Ethylhexyl)phthalate	 		530		1
117-84-0	Di-n-octyl phthalate	*		530	-#}4	J,
205-99-2	Benzo(b)fluoranthene			530		
207-08-9	Benzo[k]fluoranthene			530		
50-32-8	Benzo[a]pyrene			530		
193-39-5	Indeno[1,2,3-cd]pyrene			530		
53-70-3	Dibenz[a,h]anthracene		- 	530		
191-24-2	Benzo[g,h,i]perylene			530	#/	
			ş	UUU 1	111 *	

18 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

~~~		ALLOID DITTILL			1
Lab Name: Upstate L	.abs., Inc.	Contract: C&H En	gine   ·	T-06T	
	Case No.:			CHOS	ı
Matrix: (soil/water)			ID: <u>2159800</u>		
	30 (g/ml) G	Lab File ID:	<u>A5335.D</u>		
_evel: (low/med) <u>l</u>	LOW	Date Receive	ed: 07/31/98	<del>,                                    </del>	
•	decanted:(Y/N) N				
	olume: 1000 (uL)				
njection Volume: 2.0	(uL)	Dilution Fact	or: <u>1.0</u>		
SPC Cleanup: (Y/N)					
		CONCENTRATION	ON UNITS:		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
111-44-4	bis(2-Chloroethyl)ether		490	b /	
108-95-2	Phenol		490	<u> </u>	
95-57-8	2-Chlorophenol		490	<u>                                       </u>	
541-73-1	1,3-Dichlorobenzene		490	l h	
106-46-7	1,4-Dichlorobenzene		490	<u>                                     </u>	
95-50-1	1,2-Dichlorobenzene		490	<u>                                     </u>	
108-60-1	2,2'-oxybis(1-Chioroprop	oane)	490	<del>          </del>	
95-48-7 67-72-1	2-Methylphenol Hexachloroethane		490	<del>                                     </del>	
621-64-7	N-Nitroso-di-n-propylami	ina .	490	<del>                                     </del>	
106-44-5	4-Methylphenol		490 490		
98-95-3	Nitrobenzene		490 490	<del>                                     </del>	^
78-59-1	Isophorone		490	<del>├─}</del>	刀
88-75-5	2-Nitrophenol		490	<del>                                     </del>	_
105-67-9	2,4-Dimethylphenoi		490		
111-91-1	bis(2-Chloroethoxy)meth	ane	490		
120-83-2	2,4-Dichlorophenol		490		
120-82-1	1,2,4-Trichlorobenzene	,	490	- <b>1</b> - 1	
91-20-3	Naphthalene		490		
106-47-8	4-Chloroaniline		490	6	
87-68-3	Hexachlorobutadiene		490	17	
59-50-7	4-Chloro-3-methylphenol		490		
91-57-6	2-Methylnaphthalene		490	100	
77-47-4	Hexachlorocyclopentadie	ne	490	VV.	,
88-06-2	2,4,6-Trichlorophenol		490	<u> </u>	/
95-95-4	2,4,5-Trichlorophenol		2500	V	
91-58-7	2-Chloronaphthalene		490	<u> </u>	
88-74-4	2-Nitroaniline		2500	<u> </u>	
208-96-8	Acenaphthylene		490	<u> </u>	
131-11-3	Dimethyl phthalate		490	<u> </u>	^
606-20-2 83-32-9	2,6-Dinitrotoluene		490	<del>∦-}</del> } ∪	
99-09-2	Acenaphthene 3-Nitroaniline	·····	490	<u> </u>	~
51-28-5	2,4-Dinitrophenol		2500	<del>-      </del>	
132-64-9	Dibenzofuran		2500	<del>    -   </del>	
121-14-2	2,4-Dinitrotoluene		490 490	#	
100-02-7	4-Nitrophenol		2500	# /	
L 100 VA 1	[				

#### 1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

				· · · · · · · · · · · · · · · · · · ·	1.	T 007
Lab Name:	Upstate	Labs., Inc.	Contract;	C&H Engine	<u> </u>	Т-06Т
Lab Code:	10170	Case No.:	SAS No.	: S	DG No.:	CH08
Matrix: (soil/w	vater)	SOIL		Sample ID:		
Sample wt/vo	ol:	30 (g/mi) G	Lah	File ID:		
Level: (low/m						
		····		e Received:		<del></del>
		decanted:(Y/N)		e Extracted:	08/05/98	
		Volume: 1000 (uL)	Dat	e Analyzed:	08/10/98	
njection Volu	me: <u>2.</u>	0 (uL)	Dilu	tion Factor:	1.0	
		N pH:				
,	•					
			CONCE	NTRATION I	JNITS;	
CAS NO.	•	COMPOUND	(ug/L or	ug/Kg) <u>UG</u>	J/KG	_ Q
86-73-7	7	Fluorene			400	T 3
7005-7		4-Chlorophenyl pheny	vi ether		490	14
84-66-2	· · · · · · · · · · · · · · · · · · ·	Diethyl phthalate	AI OTIEI		490	+ + + -
100-01-		4-Nitroaniline			490	4
534-52-		4,6-Dinitro-2-methylpl	henoi		2500	- 4
86-30-6		n-Nitrosodiphenylami			2500	4
101-55-		4-Bromophenyl pheny			490 490	##
118-74-		Hexachlorobenzene	1 411141		490	
87-86-5		Pentachlorophenol			2500	470
85-01-8		Phenanthrene			490	1
120-12-	7	Anthracene	······································		490	
84-74-2		Di-n-butyl phthalate			1200	201
86-74-8		Carbazole			490	
206-44-		Fluoranthene		***************************************	490	#7
129-00-		Pyrene			490	
85-68-7		Butyl benzyl phthalate			490	1/
91-94-1		3,3'-Dichlorobenzidine			490	
<u>56-55-3</u>		Benzo[a]anthracene			490	1/1/
218-01-9		Chrysene			490	<del>- []  </del>
117-81-7		bls(2-Ethylhexyl)phtha	late		97	1811
117-84-0		Di-n-octyl phthalate			490	
205-99-2		Benzo[b]fluoranthene			490	TW
207-08-9	<u> </u>	Benzo[k]fluoranthene	***************************************		490	前月「
50-32-8		Benzo[a]pyrene			340	
193-39-8	)	Indeno[1,2,3-cd]pyrene			490	
53-70-3		Dibenz[a,h]anthracene	)		490	
191-24-2	<u> </u>	Benzo[g,h,i]perylene			490	

#### 1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., Inc		_ Contract:	C&H Eng	ine	MW-01	
Lab Code:	10170	C	ase No.:	SAS No	o.;	SDO	3 No.: CH08	-
Matrix: (soil/v	vater)	WATER		La	b Sample I	D: 2	1998023	
Sample wt/vo	ol:	1000	(g/ml) ML	La	b File ID:	A	.5472.D	
_evel: (low/n	ned)	LOW		Da	te Receive	d: 0	8/06/98	
% Moisture:	***************************************	de	canted:(Y/N)	N Da	te Extracte	ed: 0	8/13/98	
Concentrated	i Extract	Volume:	1000 (uL)	Da	te Analyze	d: 0	8/24/98	
njection Volu	ıme: <u>2</u>	.0 (uL)		Dil	ution Facto	or: 1	.0	
3PC Cleanu _l	o: (Y/N)	N	pH:					
CAS NO	).	COMF	POUND		ENTRATIC r ug/Kg)		•	

0,10,10.	COM COMP (dg/	/L of ug/Ng) UG/L	Q
111-44-4	bis(2-Chloroethyl)ether	10	XVI
108-95-2	Phenol	10	01
95-57-8	2-Chlorophenol	10	Ū
541-73-1	1,3-Dichiorobenzene	10	
106-46-7	1,4-Dichlorobenzene	10	U I
95-50-1	1,2-Dichlorobenzene	10	[ט ל נו
108-60-1	2,2'-oxybis(1-Chloropropane)	10	
95-48-7	2-Methylphenol	10	T I
67-72-1	Hexachloroethane	10	1
621-64-7	N-Nitroso-dl-n-propylamine	10	UU
106-44-5	4-Methylphenol	10.	U\
98-95-3	Nitrobenzene	10	T T
78-59-1	Isophorone	10	T T
88-75-5	2-Nitrophenol	10	T T
105-67-9	2 ₁ 4-Dimethylphenol	10	
111-91-1	bis(2-Chloroethoxy)methane	10	
120-83-2	2,4-Dichlorophenol	10	T T
120-82-1	1,2,4-Trichlorobenzene	10	T I
91-20-3	Naphthalene	10	
106-47-8	4-Chloroaniline	10	1
87-68-3	Hexachlorobutadiene	10	
59-50-7	4-Chloro-3-methylphenol	10	
91-57-6	2-Methylnaphthalene	10	
77-47-4	Hexachlorocyclopentadiene	10	
88-06-2	2,4,6-Trichlorophenol	10	于加
95-95-4	2,4,5-Trichlorophenol	50	15 1
91-58-7	2-Chloronaphthalene	10	
88-74-4	2-Nitroaniline	50	<u> </u>
208-96-8	Acenaphthylene	10	
131-11-3	Dimethyl phthalate	10	
606-20-2	2,6-Dinitrotoluene	10	<b>-</b>
83-32-9	Acenaphthene	10	
99-09-2	3-Nitroaniline	50	
51-28-5	2,4-Dinitrophenol	50	
132-64-9	Dibenzofuran	10	<b>-</b> [-
121-14-2	2,4-Dinitrotoluene	10	
100-02-7	4-Nitrophenol	50	T/-
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#### 1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

						· 1			
Lab Name:	Upstate I	Labs., Inc.		Contract:	C&H Eng	ine	1	MW-01	
Lab Code:	10170	Case No.	4	SAS No	.;	SDG	No.:	CH08	
Matrix: (soil/w	/ater)	WATER	· · · · · · · · · · · · · · · · · · ·		Sample II				
	-		1\ \$.40						
		1000 (g/m	I) ML	Lab	File ID:	A	5472.C	)	
Level: (low/m	ned)	LOW		Dat	e Receive	d: 08	3/06/98	}	
% Moisture:		decanted:	:(Y/N) N						
Concentrated	Extract V	olume: 1000	(ui_)		e Analyze				
njection Volu			··· ·		ition Facto				
	*********	*******		بااال	won racio	1. 1.	U		
or o oleanup	· (1/14) ~	N pH:	No feerfree and a second						
				CONCE	NTRATIO	NilN	ITS:		
CAS NO.		COMPOUND			ug/Kg)			~	
,				(agric Of	ugring)	UG/L		_ Q	
86-73-7		Fluorene		· · · · · · · · · · · · · · · · · · ·	<u> </u>		10	D ₁	٦
7005-72		4-Chlorophe	nyl phenyl et	her		<del></del>	10	+ $t$ $+$	1
84-66-2		Diethyl phtha	alate	<del></del>	<del></del> -		10	+ $+$ $+$	-
100-01-	***************************************	4-Nitroaniline	)	······································	~		50		-
534-52-		4,6-Dinitro-2-		ol			50	<del>                                      </del>	1
86-30-6		n-Nitrosodiph			<del></del>		10		1
101-55-		4-Bromopher	nyl phenyl et	her			10	+ K\n	7
118-74-		Hexachlorob				· · · · · · · · · · · · · · · · · · ·	10	17	נן
87-86-5		Pentachlorop					50		1
85-01-8		Phenanthren		·····			<u> </u>	<del>                                      </del>	-
120-12-		Anthracene					10	Ū	1
84-74-2		Di-n-butyl phi	thalate				37	.80	ا
86-74-8		Carbazole					10	ΨV	,
206-44-0		Fluoranthene					10	13	5
129-00-0		Pyrene					10	11	لبدء
85-68-7		Butyl benzyl p				····	30	JB V	1-
91-94-1		3,3'-Dichlorob	enzidine			*****	10	U\	•
56-55-3		Benzo[a]anthi					10	170	М
218-01-9		Chrysene					10		J
117-81-7		bis(2-Ethylhe)			<del></del>		47	8V.	1
117-84-0		Di-n-octyl phti	halate				10		i
205-99-2		Benzo[b]fluora	anthene				10	-#\	. م
207-08-9		Benzo[k]fluora	anthene				10	<del>"                                    </del>	门
50-32-8		Benzolalpyrer	пе				10		
193-39-5		Indeno[1,2,3-c	cd]pyrene				10	LUV	!
53-70-3		Dibenz[a,h]an	thracene		······································		10	10 W	1
191-24-2		Benzo[g,h,i]pe		<del></del>	<del>-  </del>		10	ע ע	)

## 1B

EPA SAMPLE NO.

	90	MIVOLATILE ORGANIC	S ANALYSIS L	JAIA SHE	E l		T-4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		7
Lab Name:	Upstate	Labs., Inc.	Contract	: C&H En	gine	N	IW-02		
Lab Code:	10170	Case No.:	SAS	No.:	SD	3 No.:	CH08		
Matrix: (soil/w				ab Sample				···········	•
		1000 (g/ml) ML			_				
campic wove		1000 (g/III) <u>IVIL</u>		ab File ID:	_			<del></del>	
Level: (low/m	red)	<u>LOW</u>		ate Receiv	'ed: <u>0</u>	8/06/98			
% Moisture:		decanted:(Y/N)	N E	ate Extract	ted: 0	8/13/98		····	
Concentrated	Extract	Volume: 1000 (uL)		ate Analyz				•••	
Injection Volu	me: 2.	.0 (uL)		ilution Fact				-	
		N pH:	-					<del></del>	
or o oleanap	. (1714)	his							
			CON	CENTRATI	ON UI	NITS:			
CAS NO		COMPOUND		or ug/Kg)			C	,	
						•	- 4	•	
111-44		bis(2-Chloroethyl)e	ther			10	bl	V.)	
108-95	******************	Phenol			***************************************	10	W	200	
95-57-8	}	2-Chlorophenol				10	T T		
541-73	-1	1,3-Dichlorobenzer	10			10	Ī	1	
106-46-	-7	1,4-Dichlorobenzer	ie			10	- Y	- -	
95-50-1		1,2-Dichlorobenzer				10		+	
108-60-		2,2'-oxybis(1-Chlore					1	$\rightarrow$	j
95-48-7		2-Methylphenol	2biobalie)			10		$\mathcal{A}$	
67-72-1	***************************************	Hexachloroethane				10	1	- -	
621-64-						10	Ú		
		N-Nitroso-di-n-prop	yıamıne			10		UI	
106-44-		4-Methylphenol				10	IJ,		
98-95-3		Nitrobenzene	***************************************			10		1	
78-59-1		Isophorone				10			
88-75-5		2-Nitrophenol	<del></del>			10	Ų		
105-67-		2,4-Dimethylphenol				10	ψ		
111-91-		bis(2-Chioroethoxy)				_10	Ψ	T	
120-83-		2,4-Dichlorophenol				10	U		
120-82-		1,2,4-Trichiorobenze	ene	-		10	U	7	
91-20-3		Naphthalene				10	T		
106-47-	8	4-Chloroanlline				10	- T	1-1	
87-68-3		Hexachlorobutadien	ie			10	Ti-		
59-50-7		4-Chloro-3-methylph	nenol			10	<del>-  </del>	<del>                                      </del>	
91-57-6		2-Methylnaphthalen				10	<u> </u>	┪.	
77-47-4		Hexachlorocycloper				10	<del></del>	<del>\</del>  U	ĺ
88-06-2		2,4,6-Trichlorophene				10	<del>- 1</del>	$\mathcal{H}$	
95-95-4	•	2,4,5-Trichloropheno		<del></del>	<del></del>	50	- <del>V</del>	+-	
91-58-7		2-Chloronaphthalen					<u> </u>	1-	
88-74-4		2-Nitroaniline	<u> </u>			10	—∦_		
208-96-8	₹	Acenaphthylene				50	<u>¥</u> -	$\vdash$	
131-11-3			· · · · · · · · · · · · · · · · · · ·			10	<u> </u>	Ш	
		Dimethyl phthalate				10	Ψ.		
606-20-2	<u> </u>	2,6-Dinitrotoluene				10	<u> </u>	Ш	
83-32-9		Acenaphthene				10	Ψ		
99-09-2		3-Nitroaniline				50	l i		

2,4-Dinitrophenol

2,4-Dinitrotoluene

Dibenzofuran

4-Nitrophenol

51-28-5

132-64-9

121-14-2

100-02-7

50

50

10

10

#### 1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

				• -	SLEZ OO
Lab Name: Upstate	Labs., Inc.	Contract: C&H	Engine	N	/IW-02
	Case No.:			3 No.:	CH08
Matrix: (soll/water)			ple ID: 2		
,	1000 (g/ml) ML		ID: A	<del></del>	······································
					<del></del>
Level: (low/med)	LOW	Date Red	ceived; <u>0</u>	8/06/98	Marchine and a second a second and a second
% Moisture:	decanted:(Y/N)N	Date Ext	racted: 0	8/13/98	ı
Concentrated Extract V	/olume: 1000 (uL)	Date Ana	alyzed: 0	8/24/98	······································
Injection Volume: 2.0		•	actor: 1		
******		Diadon	actor,	.0	
GPC Cleanup: (Y/N)	рн.				
		CONCENTR	ATION UP	NITS:	
CAS NO.	COMPOUND	(ug/L or ug/K			Q
		(wg/ w or dg//	9/ 00/1	***************************************	W
86-73-7	Fluorene			10	
7005-72-3	4-Chlorophenyl phenyl e	ther		10	<del>                                     </del>
84-66-2	Diethyl phthalate		···	10	
100-01-6	4-Nitroaniline			50	
534-52-1	4,6-Dinitro-2-methylphen	iol	<del></del>	50	
86-30-6	n-Nitrosodiphenylamine	1	<del></del>	10	T T
101-55-3	4-Bromophenyl phenyl e	ther	<del></del>	10	1.1.
118-74-1	Hexachlorobenzene			10	- <del>                                     </del>
87-86-5	Pentachlorophenol	<del>-</del>		50	
85-01-8	Phenanthrene			10	
120-12-7	Anthracene			10	
84-74-2	Di-n-butyl phthalate			26	BUJ.
86-74-8	Carbazole		······································	10	T.
206-44-0	Fluoranthene			10	
129-00-0	Pyrene			10	1747
85-68-7	Butyl benzyl phthalate			13	807
91-94-1	3,3'-Dichlorobenzidine		······································	10	
56-55-3	Benzo[a]anthracene			10	150
218-01-9	Chrysene			10	# <b>/</b> Y J
117-81-7	bis(2-Ethylhexyl)phthalate	a		30	BUJ-
117-84-0	Di-n-octyl phthalate			10	
205-99-2	Benzo[b]fluoranthene			10	#\
207-08-9	Benzo[k]fluoranthene		**************************************	10	<b>₩</b> }₩
50-32-8	Benzo[a]pyrene			10	
, , , , , , , , , , , , , , , ,				· • (	. w/

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Indeno[1,2,3-cd]pyrene

Dibenz[a,h]anthracene

Benzo[g,h,i]perylene

193-39-5

53-70-3

191-24-2

10

10

#### 18 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

		METOLO DATA	ZIIIm bus I	*****		
	Labs., Inc.			NVV-0		
Lab Code: 10170	Case No.:	SAS No.:	SDG	No.: CHO		
Matrix: (soil/water)			nple ID: 2		**************************************	
Sample wt/vol:	1000 (g/ml) ML			5476,D	***************************************	•
Level: (low/med)			celved: 08		<del></del>	
•	decanted:(Y/N)N		*******	····	<del>_</del>	
F-4	Volume: 1000 (uL)		alyzed: 08		····	
Injection Volume: 2.				<del></del>	<del></del>	
·		Diration	racioi. 1.	0		
GPC Cleanup: (Y/N)	N pH:					
•		CONCENTR	ATIONI I IN	uro.		
CAS NO.	COMPOUND				_	
0/10/110.	COMFORND	(ug/L or ug/l	(g) <u>UG/L</u>	~~~	Q	
111-44-4	bis(2-Chloroethyl)ether		T	10	<b>BUJ</b>	
108-95-2	Phenol				<b>6</b> 1	
95-57-8	2-Chlorophenol			10	<del>*************************************</del>	
541-73-1	1,3-Dichlorobenzene				TH	
106-46-7	1,4-Dichlorobenzene			10		
95-50-1	1,2-Dichlorobenzene			10		
108-60-1	2,2'-oxybis(1-Chloroprop	ane)			UT I	
95-48-7	2-Methylphenol			10		
67-72-1	Hexachloroethane					
621-64-7	N-Nitroso-di-n-propylami	ne			4U]	
106-44-5	4-Methylphenol	···			$h^{\prime}$	
98-95-3	Nitrobenzene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~	10	Λ/_	
78-59-1 88-75-5	Isophorone				h h	
105-67-9	2-Nitrophenol			10		
111-91-1	2,4-Dimethylphenol			10	<u> </u>	
120-83-2	bis(2-Chloroethoxy)meth 2,4-Dichlorophenol	ane		10	<u> </u>	
120-82-1	1,2,4-Trichlorobenzene			10	<del>!</del>	
91-20-3	Naphthalene					
106-47-8	4-Chloroaniline			10 10		N
87-68-3	Hexachlorobutadiene					11
59-50-7	4-Chloro-3-methylphenol					
91-57-6	2-Methylnaphthalene			10		
77-47-4	Hexachlorocyclopentadie	ne	·	10	$+$ \ $\mathcal{I}$	
88-06-2	2,4,6-Trichlorophenol	110		10		
95-95-4	2,4,5-Trichlorophenol	***************************************		50		
91-58-7	2-Chloronaphthalene			10		
88-74-4	2-Nitroaniline		7-2	50	<del></del>	
208-96-8	Acenaphthylene	·········		10	<u>i</u>	
131-11-3	Dimethyl phthalate			10		

10

10

50

50

10

10

50

2,6-Dinitrotoluene

Acenaphthene

2,4-Dinitrophenol

2,4-Dinitrotoluene

3-Nitroanlline

Dibenzofuran

4-Nitrophenol

606-20-2

83-32-9

99-09-2

51-28-5

132-64-9

121-14-2

100-02-7

#### 1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

					•		R.	//W-03
Lab Name:	Upstate	Labs., Inc.		Contra	ct: <u>C&amp;</u>	H Engine	<u> </u>	
Lab Code:	10170	Case No.		SAS	No.:	s	DG No.;	CH08
Matrix: (soil/v							2199802	***************************************
		1000 (g/m	) MI				A5476.D	
			17160					
Level: (low/n	•						08/06/98	
% Moisture:		decanted	(Y/N)	N	Date E	xtracted:	08/13/98	
		Volume: 1000					08/24/98	
Injection Volu			· , ,			Factor:		Hithoddiffeeny <u>spap</u>
	*****	***************************************			with the	i uvivi.	1.0	******************
Gru Cleanu	p: (Y/N)	N pH:						
				co	NCENT	RATION	UNITS:	
CAS NO	).	COMPOUND				Kg) U		0
	•			(ug/	- vi ugi	, <u>uc</u>	<i>⊅1</i>	_ Q
86-73-		Fluorene					10	ψì
7005-7		4-Chlorophe	nyl phenyl	ether			10	T T
84-66-	2	Diethyl phtha	alate				10	T T
100-01	-6	4-Nitroanilin					50	
534-52	!-1	4,6-Dinitro-2	-methylph	enol			50	
86-30-6		n-Nitrosodip					10	6
101-55	i-3	4-Bromophe					10	
118-74	-1	Hexachlorob	enzene				10	
87-86-	5	Pentachloro	phenol				50	U I
85-01-8	8	Phenanthren	6				10	
120-12	-7	Anthracene					10	
84-74-2		Di-n-butyl ph	thalate				49	æV]
86-74-8	<del></del>	Carbazole					10	Ψ.
206-44		Fluoranthene	)				10	U
129-00		Pyrene					10	U/
85-68-7		Butyl benzyl					26	80)
91-94-1	······································	3,3'-Dichlorol	enzidine		,		10	Ψ
56-55-3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Benzo[a]anth	racene				10	
218-01-		Chrysene					10	y Ju
117-81-		bis(2-Ethylhe	xyl)phthal	ate			44	BUJ.
117-84-		Di-n-octyl phi					10	
205-99-		Benzo[b]fluor	anthene		<del></del>		10	-11
207-08-		Benzo[k]fluor					10	T tu
50-32-8	}	Benzo[a]pyre					10	
193-39-		Indeno[1,2,3-			·····		10	र्षण
F2 70 2	·	Dil	. 42.			<del> </del>		

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191-24-2

#### 1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:	Upstate	Labs., Inc		c	ontract:	C&H Engine	MW-04
Lab Code:	10170	с	ase No.:	·	SAS No	.;S	DG No.: CH08
Matrix: (soil/v	vater)	WATER			Lal	o Sample ID:	21998026
Sample wt/vo	ol:	1000	(g/ml) ML	~~~~~	Lal	o File ID:	A5477.D
_evel: (low/n	ned)	LOW		,	Da	te Received:	08/06/98
% Moisture:	***********	de	ecanted:(Y/N)	N	Da	te Extracted:	08/13/98
Concentrated	i Extract	Volume:	1000 (uL)		Da	te Analyzed:	08/24/98
njection Volu	ıme: 2	.0 (uL)			Dili	ution Factor:	1.0
3PC Cleanu	o: (Y/N)	N	pH:				

#### **CONCENTRATION UNITS:**

CAS NO.	COMPOUND	(ug/L or ug/Kg)		Q	
1 444 44 4	111/0015				
111-44-4	bis(2-Chloroethyl)ethe	91	10	NO	)
108-95-2	Phenol		10	<u> </u>	
95-57-8	2-Chlorophenol	·····	10		
541-73-1	1,3-Dichlorobenzene		10	U	_
106-46-7	1,4-Dichlorobenzene		10	U	
95-50-1	1,2-Dichlorobenzene		10	<u> </u>	
108-60-1	2,2'-oxybis(1-Chlorop	ropane)	10	U (	Y
95-48-7	2-Methylphenol		10	U	
67-72-1	Hexachloroethane		10	UΓ	7
621-64-7	N-Nitroso-di-n-propyla	ımine	10	س کار	7
106-44-5	4-Methylphenol		10	U\	<b>1</b>
98-95-3	Nitrobenzene		10	U	1
78-59-1	Isophorone		10		
88-75-5	2-Nitrophenol		10	U	7
105-67-9	2,4-Dimethylphenol		10	U	1
111-91-1	bis(2-Chloroethoxy)me	ethane	10	Ū	1
120-83-2	2,4-Dichlorophenol		10	Ū	1
120-82-1	1,2,4-Trichlorobenzen	e	10	Ū	1
91-20-3	Naphthalene		10	Ū	1
106-47-8	4-Chloroanlline		10	Ū	1
87-68-3	Hexachlorobutadiene		10	- fi	
59-50-7	4-Chloro-3-methylphei	nol	10	- [i	
91-57-6	2-Methylnaphthalene		10	- fi t	1
77-47-4	Hexachlorocyclopenta	diene	10	Ti \	11
88-06-2	2,4,6-Trichlorophenol		10	T-1	W
95-95-4	2,4,5-Trichlorophenol		50	- fi +	1
91-58-7	2-Chloronaphthalene		10	· [ ]	
88-74-4	2-Nitroaniline		50	11	1
208-96-8	Acenaphthylene	<u> </u>	10	<b>─ऻॕ</b>	ĺ
131-11-3	Dimethyl phthalate		10	- <b>f</b> ill	ĺ
606-20-2	2,6-Dinitrotoluene		10	fi -	ĺ
83-32-9	Acenaphthene		10	一十一	
99-09-2	3-Nitroaniline		50		
51-28-5	2,4-Dinitrophenol		50	-F	
132-64-9	Dibenzofuran		10	-K-H	
121-14-2	2,4-Dinitrotoluene		10	$-\mathbf{F}$	
100-02-7	4-Nitrophenol	<del></del>	50	╶╁┼	

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# 1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CONCENTRATION UNITS:  CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q  86-73-7 Fluorene 10 U  7005-72-3 4-Chlorophenyl phenyl ether 10 U  84-66-2 Diethyl phthalate 10 U  100-01-6 4-Nitroaniline 50 U  534-52-1 4,6-Dinitro-2-methylphenol 50 U  86-30-6 n-Nitrosodiphenylamine 10 U  101-55-3 4-Bromophenyl phenyl ether 10 U
Matrix: (soil/water)         WATER         Lab Sample ID:         21998026           Sample wt/vol:         1000 (g/ml) ML         Lab File ID:         A5477.D           Level: (low/med)         LOW         Date Received:         08/06/98           % Molsture:         decanted:(Y/N) N Date Extracted:         08/13/98           Concentrated Extract Volume:         1000 (uL) Date Analyzed:         08/24/98           Injection Volume:         2.0 (uL) Dilution Factor:         1.0           GPC Cleanup: (Y/N) N pH:         CONCENTRATION UNITS:         CAS NO.           CAS NO.         COMPOUND (ug/L or ug/Kg) UG/L Q         Q           86-73-7 Fluorene 7005-72-3 4-Chlorophenyl phenyl ether 10 U NO.         10 U NO.           84-66-2 Diethyl phthalate 100-01-6 4-Chlorophenyl phenyl ether 10 U NO.         50 U NO.           534-52-1 4,6-Dinitro-2-methylphenol 50 U NO.         50 U NO.           86-30-6 n-Nitrosodiphenyl phenyl ether 10 U NO.         10 U NO.           101-55-3 4-Romonhenyl phenyl ether 10 U NO.         10 UN.
Matrix: (soil/water)         WATER         Lab Sample ID:         21998026           Sample wt/vol:         1000 (g/ml) ML         Lab File ID:         A5477.D           Level: (low/med)         LOW         Date Received:         08/06/98           % Molsture:         decanted:(Y/N) N Date Extracted:         08/13/98           Concentrated Extract Volume:         1000 (uL) Date Analyzed:         08/24/98           Injection Volume:         2.0 (uL) Dilution Factor:         1.0           GPC Cleanup: (Y/N) N pH:         CONCENTRATION UNITS:         CAS NO.           CAS NO.         COMPOUND (ug/L or ug/Kg) UG/L Q         Q           86-73-7 Fluorene 7005-72-3 4-Chlorophenyl phenyl ether 10 U NO.         10 U NO.           84-66-2 Diethyl phthalate 100-01-6 4-Chlorophenyl phenyl ether 10 U NO.         50 U NO.           534-52-1 4,6-Dinitro-2-methylphenol 50 U NO.         50 U NO.           86-30-6 n-Nitrosodiphenyl phenyl ether 10 U NO.         10 U NO.           101-55-3 4-Romonhenyl phenyl ether 10 U NO.         10 UN.
Sample wt/vol: 1000 (g/ml) ML
Level: (low/med)   LOW   Date Received:   08/06/98
% Molsture:         decanted:(Y/N)         N         Date Extracted:         08/13/98           Concentrated Extract Volume:         1000 (uL)         Date Analyzed:         08/24/98           Injection Volume:         2.0 (uL)         Dilution Factor:         1.0           GPC Cleanup: (Y/N)         N         pH:    CONCENTRATION UNITS:  CAS NO.  COMPOUND  (ug/L or ug/Kg)  UG/L  Q  86-73-7  Fluorene  10  U  7005-72-3  4-Chlorophenyl phenyl ether  10  U  100-01-6  4-Nitroaniline  50  U  86-30-6  10-Nitrosodiphenylamine  10  U  101-55-3  4-Bromophenyl phenyl ether  10  U
Concentrated Extract Volume: 1000 (uL)   Date Analyzed: 08/24/98
Dilution Factor: 1.0   GPC Cleanup: (Y/N)   N   pH:
Dilution Factor: 1.0   GPC Cleanup: (Y/N)   N   pH:
CONCENTRATION UNITS:  CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q  86-73-7 Fluorene 10 U 7005-72-3 4-Chlorophenyl phenyl ether 10 U 84-66-2 Diethyl phthalate 10 U 100-01-6 4-Nitroaniline 50 U 534-52-1 4,6-Dinitro-2-methylphenol 50 U 86-30-6 n-Nitrosodiphenyl phenyl ether 10 U
CONCENTRATION UNITS:  CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q  86-73-7 Fluorene 10 U  7005-72-3 4-Chlorophenyl phenyl ether 10 U  84-66-2 Diethyl phthalate 10 U  100-01-6 4-Nitroaniline 50 U  534-52-1 4,6-Dinitro-2-methylphenol 50 U  86-30-6 n-Nitrosodiphenylamine 10 U  101-55-3 4-Bromophenyl phenyl ether 10 U
CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           86-73-7         Fluorene         10         U           7005-72-3         4-Chlorophenyl phenyl ether         10         U           84-66-2         Diethyl phthalate         10         U           100-01-6         4-Nitroaniline         50         U           534-52-1         4,6-Dinitro-2-methylphenol         50         U           86-30-6         n-Nitrosodiphenylamine         10         U           101-55-3         4-Bromophenyl phenyl ether         10         U
CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           86-73-7         Fluorene         10         U           7005-72-3         4-Chlorophenyl phenyl ether         10         U           84-66-2         Diethyl phthalate         10         U           100-01-6         4-Nitroaniline         50         U           534-52-1         4,6-Dinitro-2-methylphenol         50         U           86-30-6         n-Nitrosodiphenylamine         10         U           101-55-3         4-Bromophenyl phenyl ether         10         U
86-73-7   Fluorene   10   U   7005-72-3   4-Chlorophenyl phenyl ether   10   U   84-66-2   Diethyl phthalate   10   U   100-01-6   4-Nitroaniline   50   U   534-52-1   4,6-Dinitro-2-methylphenol   50   U   86-30-6   n-Nitrosodiphenylamine   10   U   101-55-3   4-Bromophenyl phenyl ether   10   U   101-55-3   4-Bromophenyl ether   10   U   101-55-3   4-Bromopheny
7005-72-3   4-Chlorophenyl phenyl ether   10   10   10   10   10   10   10   1
7005-72-3   4-Chlorophenyl phenyl ether   10   0   0   0   0   0   0   0   0
100-01-6
534-52-1 4,6-Dinitro-2-methylphenol 50 U 86-30-6 n-Nitrosodiphenylamine 10 U 101-55-3 4-Bromophenyl phenyl ether 10 U
86-30-6 n-Nitrosodiphenylamine 10 U
101-55-3 4-Bromonhenyl phenyl ether 10
101-55-3 4-Bromonhenyl phenyl ether 10 till
118-74-1 Hexachiorobenzene 10
87-86-5 Pentachlorophenol 50
120-12-7 Anthracene 10
84-74-2 Di-n-butyl phthalate 61
86-74-8 Carbazole 10 U
206-44-0 Fluoranthene 10
129-00-0 Pyrene 10
85-68-7 Butyl benzyl phthalate 8 Jay
91-94-1 3.3'-Dichlorobenzidine 10 III.
56-55-3 Benzo[a]anthracene 10
218.01.0 Chargons
117-81-7 bis(2-Ethylhexyl)phthalate 16
117-84-0 Di-n-octyl phthalate 10 U
205-99-2 Benzo[b]fluoranthene 10
207-08-9 Benzo[k]fluoranthene 10
50-32-8 Benzo[a]pyrene 10
193-39-5 Indeno[1,2,3-cd]pyrene 10

10

10

Dibenz[a,h]anthracene

Benzo[g,h,i]perylene

53-70-3

191-24-2

#### 1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

		~	1411 4 O'ES (1)	iem Ottoritioo A	HULLOIO D	MIM (3)	rice!		21.8.4 6 #	
La	b Name:	Upstate	Labs., Inc	**	_ Contract:	C&H	Engine	<u> </u>	/W-05	
La	b Code:	10170	C	ase No.:	SAS N	o.:	S	DG No.:	CH08	
Ma	itrix: (soil/w	ater)						2199802		
	mple wt/voi		***************************************	(g/ml) ML				~~~~~	<del></del>	•
	•			_ (9/11/1) <u>IVIL</u>				A5423.D	<del></del>	
L.e	vel: (low/m	ed)	LOW		Da	ate Red	eived:	08/06/98		
%	Moisture:		de	ecanted:(Y/N)	N Da	ate Ext	racted:	08/12/98		•
Co	ncentrated	Extract		1000 (uL)				08/19/98		
Inje	ection Volur	me: 2.	.0 (uL)		Di	lution F	actor:	1.0		
	C Cleanup	******		pH:						
					CONC	FNTR	ΔΤΙΩΝ	UNITS:		
	CAS NO.		COME	POUND			g) UC		~	
			OOM	COND	(ug/L C	Ji ug/N	g) <u>UC</u>	<b>7/L</b>	_ Q	
	111-44-	4	bis(2	-Chloroethyl)ether	7	·T	<u> </u>	10	U	
	108-95-	2	Pher			1	······································	10	<del>├─╏</del>	
	95-57-8		2-Ch	lorophenol				10	1 Ti	<del>- </del> -
	541-73-	1	1,3-[	Dichlorobenzene	· · · · · · · · · · · · · · · · · · ·			10		+
	106-46-	7		Dichlorobenzene				10		$+$ $_{-}$
	95-50-1			Dichlorobenzene				10	U	为切
	108-60-	1	2,2'-0	exybis(1-Chloropro	pane)			10	l t	410
	95-48-7			thylphenol				10	l b	╂-
	67-72-1			chloroethane	······································			10	l l	<del>                                      </del>
	621-64-	7		roso-di-n-propylar	nine		······································	10	اللا	
	106-44-	^	4-Me	thylphenol				10		2
	98-95-3			oenzene	W			10	- 4	<u></u>
	78-59-1			orone				10	F	+
	88-75-5			ophenol			<del></del>	10	<u> </u>  _	+
	105-67-9	<del>*~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>		imethylphenol					<u>-</u> -	+
	111-91-1	<del></del>		Chloroethoxy)met	hane			10 10	<u>-</u> -	-
	120-83-2	~~~	24-0	ichlorophenol	nane		····		<u></u>	
	120-82-1			Trichlorobenzene			<del></del>	10	<u>-</u>	-
	91-20-3			thalene				10	<u>U</u>	
	106-47-8			oroaniline				10	Y	Щ.
	87-68-3			chlorobutadiene			<del></del>	10	<u> </u>	4
	59-50-7			oro-3-methylpheno	.1			10	<u> </u>	4
	91-57-6				21		***************************************	10	Ψ_	$\perp$
	77-47-4			hylnaphthalene				10	<u> </u>	4.5
	88-06-2	***************************************		chlorocyclopentadi	ene			10		MUI
	95-95-4			Trichlorophenol			·	10	<u> </u>	Ц
	91-58-7	······		Trichiorophenol				50	<u> </u>	Ц
	88-74-4	······································		oronaphthalene				10		
	208-96-8		·	paniline				50	U	
	131-11-3			phthylene	***************************************		····	10	<u>U</u>	
}	606-20-2			hyl phthalate			<del>~~</del>	10	U_	L
ł	83-32-9	<del></del>		nitrotoluene				10	<u> </u>	Ц
}	99-09-2			phthene			·~ ·········	10	<u> </u>	Ц
}		<del></del>		<u>paniline</u>			······································	50	U	
}	51-28-5	····		nitrophenol	<del></del>		<del></del>	50	· U	
	132-64-9	<del>^</del>		zofuran pitrotokuana	······································		****	10	<u> </u>	
- 1	2 m / Lu /		2 /L. 13ki	THEATABLANA		t		ة مسد		. 1

4-Nitrophenol

100-02-7

#### 1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: Upstate	Labs., Inc.	Contract: C	&H Engine	į į	VIVV-05	
Lab Code: 10170		SAS No.:		G No.:	CHOS	I
Matrix: (soil/water)	<del></del>	-				***************************************
			ample ID: 2			•
· ,	1000 (g/ml) ML	Lab Fi	le ID: A	.5423.D	)	
Level: (low/med)	LOW	Date F	Received: 0	8/06/98	}	
***************************************	decanted:(Y/N) N	Date E	xtracted: 0	8/12/98		
Concentrated Extract V	olume: 1000 (uL)	· · ·	.nalyzed: 0			
Injection Volume: 2.0			n Factor: 1.			
GPC Cleanup: (Y/N)		21,4410		.V .		
	, v , v ,					
		CONCENT	RATION UN	IITS:		
CAS NO.	COMPOUND		/Kg) UG/L		. Q	
06.70.7					_	
86-73-7 7005-72-3	Fluorene	*********		10	DV	
84-66-2	4-Chlorophenyl phenyl et	her		10	U	
100-01-6	Diethyl phthalate			10	U	T
534-52-1	4-Nitroaniline			50	U	T
86-30-6	4,6-Dinitro-2-methylphen	ol		50	U	П
101-55-3	n-Nitrosodiphenylamine			10	U	Π
118-74-1	4-Bromophenyl phenyl et	her		10	Ų	$\prod$
87-86-5	Hexachlorobenzene			10	Ų	
85-01-8	Pentachlorophenol Phenanthrene			50	<u> </u>	
120-12-7	Anthracene			10	<u> </u>	
84-74-2	Di-n-butyl phthalate		<u> </u>	10	h	
86-74-8	Carbazole			10	<u> </u>	[VI
206-44-0	Fluoranthene		<b></b>	10	U	$\Box$
129-00-0	Pyrene			10		
85-68-7	Butyl benzyl phthalate			10		
91-94-1	3,3'-Dichlorobenzidine			10	_ [	_
56-55-3	Benzo[a]anthracene			10		_
218-01-9	Chrysone			10	<u> </u>	_
117-81-7	bis(2-Ethylhexyl)phthalate		<del> </del>	10	<u>U 1</u>	
117-84-0	Di-n-octyl phthalate			9	JETU	1/
205-99-2	Benzo[b]fluoranthene			10	<u> </u>	_
207-08-9	Benzo[k]fluoranthene		<del> </del>	10	<u> </u>	_
50-32-8	Benzo[a]pyrene			10		
193-39-5	Indeno[1,2,3-cd]pyrene			10	- ሦ ኦ	W)
53-70-3	Dibenz[a,h]anthracene			10 10	<del>- ! (</del>	1
191-24-2	Benzo[g,h,i]perylene	····		10	<del>- }</del> }	-

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#### DATA USABILITY SUMMARY REPORT

for

# BEARDSLEY DESIGN ASSOCIATES 431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG CH07, CH08 Sampled 7/20-22/98, 7/30/98, 8/6/98

#### SOILS and AQUEOUS SAMPLES for PCB

HB-9	(20598180)	GP-2	(20598181)	GP-8	(20598182)
GP-5	(20598183)	GP-13	(20598184)	GP-16	(20598185)
GP-25	(20598187)	T-1	(21598005)	T-2	(21598006)
T-4	(21598007)	T-5	(21598008)	Т-б	(21598009)
T-4011	(21598010)	MW-1	(21998023)	MW-2	(21998024)
MM-3	(21998025)	MW-4	(21998026)	MW-5	(21998027)

#### DATA ASSESSMENT

A PCB data package containing analytical results for twelve soils, five aqueous samples, and one sample of oil that was collected with groundwater, was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8080, addressed PCB analytes. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

#### CORRECTNESS AND USABILITY

Cooler temperatures between 11.9°C and 14.9°C were reported when this group of samples arrived at the laboratory. Because the samples were not properly chilled to 4°C at the time of collection, the possibility of degradative losses cannot be ignored. The results reported from every sample except T-4oil, a concentrated waste, have been qualified as estimations.

The concentrations of AR-1254 reported from HB-9 and GP-13, and the positive AR-1248 result from T-4 were not confirmed by a second analysis using a different chromatography system. Due to this omission, the positive PCB results reported from this group of samples have been qualified as estimations.

The header information on every Form 1 contained errors. Each report form has been edited to reflect correct analysis dates, sample dilutions, and units of concentration.

Reported data should be considered technically defensible in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly.

DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 1/21/02

#### SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included twelve soils, five aqueous samples, and one sample of oil that was collected with groundwater, was collected from the Former Brown Manufacturing site between 20Jul98 and 06Aug98. The samples were delivered to the laboratory in five groups (samples collected on 20Jul98, samples collected on 21Jul98, samples collected on 21Jul98, samples collected on 30Jul98 and 31Jul98, and samples collected on 06Aug98). Each group of samples arrived at the laboratory within two days of collection. A custody seal was present on each sample cooler, with the exception of the cooler used to transport the groundwater samples collected on 06Aug98. The groundwaters were sampled and immediately delivered to the laboratory.

Although the laboratory record indicates that most of the sample coolers contained ice, the loading was inadequate to properly chill the samples. Sample temperatures between 11.9°C and 14.9°C were recorded by the laboratory at the time of receipt. Due to the possibility of analyte losses caused by improper handling, the results reported from every sample except T-40il, a concentrated waste, have been qualified as estimations.

Each soil sample was extracted within eight days of collection. Aqueous samples were extracted within five days. The analysis of each sample, including repeated analyses, was completed within nine days of extraction. Program holding time limitations were satisfied.

Method 8080 requires that each positive Aroclor result be confirmed by a similar analysis using a second, dissimilar chromatography column. The results obtained from both systems must be in close agreement. A second analysis was not performed to confirm the presence of AR-1254 in HB-9 and GP-13, or the presence of AR-1248 in T-4. Each of these results has been qualified as an estimation.

Errors were present on the report form of every sample. Where necessary, the date of analysis, the level of dilution, and the units of concentration have been corrected.

#### BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

Four method blanks were analyzed with this group of samples. Each of these blanks was free of PCB contamination.

#### CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The initial instrument calibration was performed on 10Jun98. Five levels of concentration were included for AR1016 and AR1260. Three standards were included for the remaining Aroclors. With the exception of AR1221, the lowest calibration standard for each Aroclor equaled PQL. The detection limit for AR1221 has been doubled, to reflect the concentration of the lowest standard.

Poor linearity was observed in the calibrations for AR1016, AR1232 and AR1242. Although errors would be expected in concentrations calculated from these curves, it may be assumed that AR1016, AR1232 and AR1242 would be detected if present in samples. Because they were not detected, associated data has been left unqualified.

A continuing calibration verification was completed prior to and following each group of program samples. These checks produced acceptable recoveries of AR1016 and AR1260.

#### SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Two surrogates, TCX and DCB, were added to each sample. In most cases, these additions were recovered successfully. High recoveries were reported for the surrogate additions T-4oil. This indication of positive bias warrants no concern. PBC's were not detected in this sample.

Low surrogate recoveries were reported from HB-9 and T-1. In both cases, the low recoveries were reported from sample dilutions that were prepared following the addition of surrogates. The low recoveries reported from these samples are not considered significant. The surrogates added to the remaining samples were recovered successfully.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS
Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide
an indication of laboratory accuracy. The analysis of a duplicate
spiked aliquot provides a measurement of precision.

Samples HB-9 and T-1 were selected for matrix spiking. MS/MSD recoveries were also reported for a sample from an unrelated program. Only the results obtained from HB-9 and T-1 should be considered significant. Low spike recoveries were reported for the analyte additions to both samples. Again, the reported recoveries were obtained following large sample dilutions. Data has not been qualified based on matrix spike performance.

#### **DUPLICATES**

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision, may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates were not included in this group of samples.

# SUMMARY OF QUALIFIED DATA

SAMPLED 7/20/98 thru 8/6/98

FORMER BROWN MANUFACTURING SITE

CONFIRMATION AR-1254	72J 22J
CONFIRMATION AR-1248	5.03
CRDL AR1221	000000000000000000000000000000000000000
FORM 1 HEADER	CORRECT CORRECT CORRECT CORRECT CORRECT CORRECT CORRECT CORRECT CORRECT CORRECT CORRECT CORRECT CORRECT CORRECT
HANDLING	ALL J/UJ ALL UJ
	(20598180) (20598181) (20598182) (20598183) (20598184) (20598184) (20598187) (21598005) (21598006) (21598006) (215980024) (21598023) (21598023) (21998023) (21998025) (21998025)
	HB-9 GP-2 GP-8 GP-8 GP-13 GP-16 GP-16 GP-25 T-4 T-4 T-4 T-5 T-6 T-6 MW-3 MW-4

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix:

Soil

Lab Sample ID:

Lab File ID:

C&H 205-180

Sample wt.:

30

PA4401

% Moisture:

20

Decanted:

10000 (uL)

(g)

No

Date Received:

7/28/98

Extraction:

Son Dis

Date Extracted:

Conc Extract Vol.: GPC Cleanup:

No

pH:

Date Analyzed: Dilution Factor:

£ 500

Instr. ID:

50.0

Column:

DB-608

ID: <u>(.53) mm</u>

Sulfur Cleanup:

Yes

***************************************	4400-4100-4100-4100-4100-4100-4100-4100	CONCENTRATION UNITS	
CAS NO.	COMPOUND	mg/Kg	a
12674-11-2	Aroclor 1016	1.00	U \
11104-28-2	Aroclor 1221	2,00 <del>1.00</del>	
11141-16-5	Aroclor 1232	1.00	1 5 0
53469-21-9	Arocior 1242	1.00	
12672-29-6	Aroclor 1248	1.00	
11097-69-1	Aroclor 1254	72.00	
11096-82-5	Aroclor 1260	1.00	Ψ V

Prepared by:	Date:
Keypunched :	Date:

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix:

<u>Soil</u>

Lab Sample ID:

C&H 205-181

Sample wt.:

30

(g)

Lab File ID:

PA4401

% Molsture:

<u>11</u>

Decanted:

No

Date Received:

Extraction:

Son Dis

Date Extracted:

7/28/98

Conc Extract Vol.:

10000 (uL)

Date Analyzed:

GPC Cleanup:

<u>No</u>

pH:

**Ollution Factor:** 

<u>50</u>

Instr. ID:

50.0

Column:

DB-608

ID: (.53)mm

Sulfur Cleanup:

Yes

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	mg/Kg	a
12674-11-2	Aroclor 1016	,09	<u> </u>
11104-28-2	Aroclor 1221	0.18 -09	
11141-16-5	Aroclor 1232	.09	<b>b</b>
53469-21-9	Aroclor 1242	.09	t d
12672-29-6	Aroclor 1248	.09	J /
11097-69-1	Aroclor 1254	.09	Th
11096-82-5	Aroclor 1260	.09	<b></b>

Prepared by:	Date;	
Keypunched:	Date:	

Lab Name: Upstate Labs Inc.

Lab Code: <u>10170</u>

Matrix Soil Lab Sample ID: C&H 205-182

Sample wt.: <u>30</u> (g) Lab File ID: <u>PA4401</u>

% Moisture: 14 Decanted: No Date Received:

Extraction: Son Dis Date Extracted: 7/28/98

Conc Extract Vol.: 10000 (uL) Date Analyzed: -7/31/98 5/3/48

GPC Cleanup: No pH: Dilution Factor 50

Instr. ID: <u>50.0</u>

Column: DB-608 ID: (.53)mm Sulfur Cleanup: Yes

CAS NO.	COMPOUND	CONCENTRATION UNITS mg/Kg	Q		
12674-11-2	Aroclor 1016	.10	Ú	_	-
11104-28-2	Aroclor 1221	0.20 +10	T T	7	1
11141-16-5	Aroclor 1232	.10		7	1
53469-21-9	Aroclor 1242	.10		t	سررا [
12672-29-6	Aroclor 1248	.10	J	T	~
11097-69-1	Aroclar 1254	.10	U	十	1
11096-82-5	Aroclor 1260	.10		7	1

Prepared by:	6-1-1-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Date:	
Keypunched	<b>:</b>	Date:	

Lab Name: Upstate Labs Inc.

Lab Code: <u>10170</u>

Matrix Soil Lab Sample ID: C&H 205-183

Sample wt.: 30 (g) Lab File ID: PA4401

% Moisture: 14 Decanted: No Date Received:

Extraction: Son Dis Date Extracted: 7/28/98

Conc Extract Vol.: 10000 (uL) Date Analyzed: -7/31/98 8/3/98

GPC Cleanup: No pH: Dilution Factor 50

Instr. ID: <u>50.0</u>

Column: DB-608 ID: (.53)mm Sulfur Cleanup: Yes

·		CONCENTRATION UNITS	
CAS NO.	COMPOUND	mg/Kg	Q
12674-11-2	Aroclor 1016	.10	Ψ ,
11104-28-2	Aroclor 1221	0,20 -10	1 1
11141-16-5	Aroclor 1232	.10	
53469-21-9	Aroclor 1242	.10	T t
12672-29-6	Aroclor 1248	.10	U (
11097-69-1	Aroclor 1254	.10	T I
11096-82-5	Aroclor 1260	.10	

MS

Prepared by:	Date:
Keypunched:	Date:

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix Soil Lab Sample ID: C&H 205-184

Sample wt.: 30 (g) Lab File ID: <u>PA4401</u>

% Moisture: 7 Decanted: No Date Received:

Extraction: Son Dis Date Extracted: 7/28/98

Conc Extract Vol.: 10000 (uL) Date Analyzed: 7/91/98 8/3/98

GPC Cleanup: No pH: Dilution Factor 50

Instr. ID: <u>50.0</u>

Column: DB-608 ID: (.53)mm Sulfur Cleanup: Yes

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	mg/Kg	Q
12674-11-2	Aroclor 1016	.09	ሀን
11104-28-2	Aroclor 1221	0.18 <del>-09</del>	T/
11141-16-5	Aroclor 1232	.09	450
53469-21-9	Aroclor 1242	.09	t fl
12672-29-6	Aroclor 1248	.09	<b>b</b>
11097-69-1	Aroclor 1254	22.00	1
11096-82-5	Aroclor 1260	.09	U

YYS

Prepared by:	 Date:
Keypunched:	Date

Lab Name: Upstate Labs Inc.

Lab Code: <u>10170</u>

Matrix <u>Soil</u> Lab Sample ID: <u>C&H 205-185</u>

Sample wt.: 30 (g) Lab File ID:  $\underline{PA4401}$ 

% Moisture: 8 Decanted: No Date Received:

Extraction: Son Dis Date Extracted: 7/28/98

Conc Extract Vol.: 10000 (uL) Date Analyzed: -3/31/98 8/3/98

GPC Cleanup: No pH: Dilution Factor 50

Instr. ID: <u>50.0</u>

Column: DB-608 ID: (.53)mm Sulfur Cleanup: Yes

CAS NO.	COMPOUND	CONCENTRATION UNITS mg/Kg	Q	
12674-11-2	Aroclor 1016	.09	11	
11104-28-2	Aroclor 1221	0.18 -09		}
11141-16-5	Aroclor 1232	.09		1
53469-21-9	Aroclor 1242	.09		1
12672-29-6	Aroclor 1248	,09		<b>〉</b> (),
11097-69-1	Aroclor 1254	.09		
11096-82-5	Aroclor 1260	.09		

Prepared by: _	 Date:	
Keypunched:	Data:	

Lab Name: <u>Upstate Labs Inc.</u>

Lab Code: 10170

Matrix Soil Lab Sample ID: C&H 205-187

Sample wt.: 30 (g) Lab File ID: PA4401

% Moisture: 12 Decanted: No Date Received:

Extraction: Son Dis Date Extracted: 7/28/98

Conc Extract Vol.: 10000 (uL) Date Analyzed: 3/3/98

GPC Cleanup: No pH: Dilution Factor 50

Instr. ID: 50.0

Column: DB-608 ID: (.53)mm Sulfur Cleanup: Yes

		CONCENTRATION UNITS		1
CAS NO.	COMPOUND	mg/Kg	Q	
12674-11-2	Aroclor 1016	.09	<u>u \</u>	
11104-28-2	Aroclor 1221	0.1809-		
11141-16-5	Aroclor 1232	.09	i l	
53469-21-9	Aroclor 1242	.09	t t	17
12672-29-6	Aroclar 1248	.09	<u> </u>	ľ
11097-69-1	Aroclor 1254	.09	t t	
11096-82-5	Aroclor 1260	,09		

Prepared by:	Date:	***************************************
Keypunched	Date:	

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix: <u>soil</u>

Lab Sample ID:

C&H 215-5

Sample wt.:

<u>30</u> (mL)

Lab File ID:

PA4413

% Moisture:

<u>43</u>

Date Received:

Extraction:

Decanted: No

Conc Extract Vol.:

Spn Dis

Date Extracted:

8/5/98

GPC Cleanup:

10000 (uL)

Date Analyzed:

8/14/98

 $\underline{\mathtt{No}}$ 

pH:

Dilution Factor:

50 5000

Instr. ID:

50.0

Column:

DB-608

ID: (.53) mm

Sulfur Cleanup:

Yes

CAS NO. COMPOUND		CONCENTRATION UNITS	
	my/L	Q	
12674-11-2	Aroclor 1016	15.0	81 N
11104-28-2	Araclor 1221	30.0 -15.0	
11141-16-5	Aroclor 1232	, 15.0	
53469-21-9	Aroclor 1242	16.0	
12672-29-6	Aroclor 1248	15.0	<u>-</u> }
11097-69-1	Aroclor 1254	15.0	
11096-82-5	Aroclor 1260	15.0	4

Prepared by:	Date:
Keypunched	Date:

Lab Name: <u>Upstate Labs Inc.</u>

Lab Code: 10170

Matrix:

<u>soil</u>

Lab Sample ID:

C&H 215-6

Sample wt.:

Extraction:

30

(mL)

Lab File ID:

PA4413

% Moisture:

17

Decanted:

10000 (uL)

No

Date Received:

Conc Extract Vol.:

Spn Dis

Date Extracted:

8/5/98

GPC Cleanup:

Date Analyzed:

8/13/98

 $\underline{No}$ 

pH;

Dilution Factor:

<u>50</u>

Instr. ID:

50,0

Column:

809-8d

ID: (.53) mm

Sulfur Cleanup:

Yes

CAS NO. COMPOUND		CONCENTRATIONUNITS		7
	118/1 Mg/kg	Q		
12674-11-2	Aroclor 1016	0.1	111 2	1
11104-28-2	Aroclor 1221	0.20 -0.4		1
11141-16-5	Arocior 1232	0.1		1
53469-21-9	Aroclor 1242	0.1		١, ا
12672-29-6	Aroclor 1248	0.1	<b>*</b>	١V
11097-69-1	Aroclor 1254	0.1		
11096-82-5	Aroclor 1260	0.1		

Prepared by:	Date:
Keypunched:	Date:

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix: soi

soil

Lab Sample ID:

C&H 215-7

Sample wt.:

30

(ml.)

Lab File ID:

PA4413

% Moisture:

24

Decanted:

No

0 15 100

Extraction:

Spn Dis

Date Extracted:

Date Received:

8/5/98

Conc Extract Vol.:

10000 (uL)

Date Analyzed:

8/14/98

GPC Cleanup:

No

pH:

**Dllution Factor:** 

<u>50</u>

Instr. ID:

50.0

Column:

DB-608

ID: (.53) mm

Sulfur Cleanup:

Yes

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	mg/ks	Q .
12674-11-2	Aroclor 1016	0.1	
11104-28-2	Aroclor 1221	0,20 -0.4-	
11141-16-5	Aroclor 1232	0.1	<del></del>
53469-21-9	Aroclor 1242	0.1	
12672-29-6	Aroclor 1248	5.0	
11097-69-1	Aroclor 1254	0.1	
11096-82-5	Aroclor 1260	0.1	<b>──</b> }\

Prepared by:		Date:
Keypunched	•	Date:

**1A** PCB ANALYSIS DATA SHEET

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix:

soil

Lab Sample ID:

C&H 215-8

Sample wt.:

30

(mL)

Lab File ID:

PA4413

% Moisture:

<u>37</u>

Decanted:

10000 (uL)

No

Date Received:

Extraction:

Spn Dis

Date Extracted:

8/5/98

Conc Extract Vol.:

Date Analyzed:

-8/13/98 8/14/98

GPC Cleanup:

No

pH:

Dilution Factor:

50

Instr. ID:

50.0

Column:

DB-608

ID: (.53) mm

Sulfur Cleanup:

Yes

		CONCENTRATION UNITS	····	
CAS NO.	COMPOUND	ms/ks	a	
12674-11-2	Aroclor 1016	0.1	Ð	1
11104-28-2	Aroclor 1221	0,20 <del>-0.1</del>		
11141-16-5	Aroclor 1232	0.1		(
53469-21-9	Arocior 1242	0.1		> V)
12672-29-6	Aroclor 1248	0.1		1
11097-69-1	Aroclor 1254	. 0.1		1
11096-82-5	Aroclor 1260	0.1		1.

Prepared by: Date: Keypunched : _____ Date: ____

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix: soil

Lab Sample ID:

C&H 215-9

Sample wt.:

30

Lab File ID:

PA4413

% Moisture:

32

Decanted:

10000 (uL)

(mL)

No

Date Received:

Extraction:

Spn Dis

Date Extracted:

8/5/98

Conc Extract Vol.:

____

Date Analyzed:

9/0/20

GPC Cleanup:

No

pH:

Dilution Factor:

~<del>8/13/98</del> \$/14/98 50

Instr. ID:

50.0

Column:

DB-608

ID: (.53) mm

Sulfur Cleanup:

Yes

		CONCENTRATION UNITS		
CAS NO.	COMPOUND	ms/ks	a	
12674-11-2	Aroclor 1016	0.1	111	1
11104-28-2	Aroclor 1221	0,20-8.1		)
11141-16-5	Aroclor 1232	0.1		1
53469-21-9	Aroclor 1242	0.1		L
12672-29-6	Arocior 1248	0.1		7
11097-69-1	Aroclor 1254	0.1		1
11096-82-5	Aroclor 1260	0.1		

M

ij

Prepared by:	Date:	,
Keypunched:	Date:	

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix:

OIL

Lab Sample ID:

C&H 215-10

Sample wt.:

0.05

(g)

Lab File ID:

PA4416

% Moisture:

N/A

Decanted:

Date Received:

Extraction:

Son Dis

Date Extracted:

8/5/98

Conc Extract Vol.:

<u>5000</u> (uL)

Date Analyzed:

-8/12/98 8/12/98

GPC Cleanup:

No

pH:

No

**Dllution Factor:** 

× 10

Instr. ID:

Column:

50.0

DB-608

ID: (.53) mm

Sulfur Cleanup:

Yes

***************************************	<u> </u>	CONCENTRATION UNITS	······································
CAS NO.	COMPOUND	mg/Kg	Q
12674-11-2	Aroclor 1016	5.00	· U
11104-28-2	Aroclor 1221	10, 0-5.00	U
11141-16-5	Aroclor 1232	5.00	U
53469-21-9	Aroclor 1242	5.00	U
12672-29-6	· Aroclor 1248	5.00	U
11097-69-1	Aroclor 1254	5.00	U
11096-82-5	Aroclor 1260	5.00	U

Prepared by:	Date:
Kevpunched :	Date

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix: Water Lat

Decanted:

Lab Sample ID: C&H 219-23

Sample wt.:

1000 (g)

Lab File ID:

PA4427

% Moisture:

N/A

No

Date Received:

Extraction:

Sep Fun

Date Extracted:

8/11/98

Conc Extract Vol.:

10000 (uL)

Date Analyzed:

8/20/98

GPC Cleanup:

No

nH.

**Dilution Factor:** 

1

Instr. ID:

50.0

Column:

DB-608

ID: (.53) mm

Sulfur Cleanup;

Yes

		CONCENTRATION UNITS		]
CAS NO.	COMPOUND	<del>mg/Kg</del> ピタノム	Q	
12674-11-2	Aroclor 1016	.05	Ψ'n	1
11104-28-2	Aroclor 1221	0, 10 - <del>.05</del>	t//-	1
11141-16-5	Aroclor 1232	.06		M
53469-21-9	Aroclor 1242	.05	17	191
12672-29-6	Aroclor 1248	.05	The state of the s	
11097-69-1	Aroclor 1254	.05	U I	
11096-82-5	Aroclor 1260	.05	t j	

Prepared by:	Date:
Keypunched:	Date:

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix: Water

Lab Sample ID:

C&H 219-24

Sample wt.:

1000

(g)

Lab File ID:

PA4427

% Moisture:

N/A

Decanted:

No

Date Received:

Extraction:

Sep Fun

Date Extracted:

8/11/98

Conc Extract Vol.:

10000 (uL)

Date Analyzed:

8/20/98

GPC Cleanup:

No

pH:

**Dilution Factor:** 

1

Instr. ID:

50.0

Column: DB-608 ID: (.53) mm

Sulfur Cleanup:

Yes

	÷	CONCENTRATION UNITS		7
CAS NO.	COMPOUND	- <del>mg/Kg</del> - 44 / <u>/                               </u>	Q	
12674-11-2	Aroclor 1016	.05	<b>U</b> 7	1
11104-28-2	Aroclor 1221	O,/C) +05-		1
11141-16-5	Aroclor 1232	.05	T t	س ا
53469-21-9	Aroclor 1242	.05	1/	رب _ا
12672-29-6	Aroclor 1248	.06	T l	1
11097-69-1	Aroclor 1254	.05		1
11096-82-5	Aroclor 1260	.05	T /	1

Prepared by:		Date:
Keypunched	:	Date:

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix: Water Lab Sample ID: C5H 219-25

Sample wt.: 1000 (g) Lab File ID: PA4427

% Moisture: N/A Decanted: No Date Received:

Extraction: Sep Fun Date Extracted: 8/11/98

Conc Extract Vol.: 10000 (uL) Date Analyzed: 8/20/98

GPC Cleanup: No pH: Dilution Factor: 1

Instr. ID: 50.0

Column: DB-608 ID: (.53)mm Sulfur Cleanup: Yes

		CONCENTRATION UNITS		1
CAS NO.	COMPOUND	<del>-mg/Kg</del> Y9/∠	Q.	
12674-11-2	Aroclor 1016	.05	ψ.\	1
11104-28-2	Aroclor 1221	Q,(⊘ <del>√0</del> 5	Ψ	] .
11141-16-5	Aroclor 1232	.05	ΨI	] . , ,
53469-21-9	Aroclor 1242	.05	Ψ)	]V.
12672-29-6	Aroclor 1248	.05	Ų. (	]
11097-69-1	Aroclor 1254	.05	Ų	
11096-82-5	Aroclor 1260	.05	U/	]'

194

Prepared by:	Date:
Keypunched:	Date:

#### 1A **PCB ANALYSIS DATA SHEET**

Lab Name: Upstate Labs Inc.

Lab Code: 10170

Matrix: Water

Lab Sample ID:

C&H 219-26

Sample wt.:

1000

(g)

Lab File ID:

PA4427

% Molsture:

Extraction:

N/A

Decanted:

10000 (uL)

No

Date Received:

Conc Extract Vol.:

Sep Fun

Date Extracted:

8/11/98

GPC Cleanup:

pH:

Date Analyzed: Dilution Factor:

8/20/98

Instr. ID:

 $\underline{\mathtt{No}}$ 

50.0

Column:

DB-608

ID: (.53) mm

Sulfur Cleanup:

Yes

<u>1</u>

	**************************************	CONCENTRATION UNITS		]
CAS NO.	COMPOUND	-mg/Kg	Q.	1
		<u> </u>		
12674-11-2	Aroclor 1016	7.05	Ú	ħ
11104-28-2	Aroclor 1221	O(D +95	Ų	1/
11141-16-5	Aroclor 1232	.05	Ú	K
53469-21-9	Aroclor 1242	.05	U	1  し
12672-29-6	Aroclor 1248	٠٥5	Ú	il
11097-69-1	Aroclor 1254	.05	<u> </u>	
11096-82-5	Arccior 1260	.05		/

Prepared by:	Date:
Keypunched :	Date:

#### **1A** PCB ANALYSIS DATA SHEET

Lab Name: Upstate Labs Inc.

Leb Code: 10170

Matrix: Water

Lab Sample ID:

C&H 219-27

Sample wt.:

1000

Lab File ID:

PA4427

% Moisture:

N/A

Decanted:

10000 (uL)

(g)

Extraction:

No

Date Received:

8/11/98

Conc Extract Vol.:

Sep Fun

Date Analyzed:

GPC Cleanup:

Date Extracted:

8/20/98

No

pH:

**Dilution Factor:** 

1

Instr. ID:

50.0

Column:

DB-608

(,53) mm

Sulfur Cleanup:

Yes

		CONCENTRATION UNITS		7
CAS NO.	COMPOUND	<del>rág/Kg</del> UG/L	Q	
12674-11-2	Aroclor 1016	.05	<u> </u>	1
11104-28-2	Arocior 1221	O,ID-+95		1
11141-16-5	Aroclor 1232	.05	<i></i>	1
53469-21-9	Aroclor 1242	.05	<del>- 1 )</del>	Ur
12672-29-6	Aroclor 1248	.05		1 `
11097-69-1	Aroclor 1254	,05	<del>- 1 \</del>	1
11096-82-5	Aroclor 1260	.05		

Prepared by:		Date:
Keypunched	÷	Date:

#### DATA USABILITY SUMMARY REPORT

for

### BEARDSLEY DESIGN ASSOCIATES 431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

### FORMER BROWN MANUFACTURING SITE SDG CH08 Sampled 7/20-22/98, 7/30/98, 8/6/98

#### SOILS and AQUEOUS SAMPLES for INORGANICS

HB-9	(20598180)	GP-2	(20598181)	GP-8	(20598182)
GP-5	(20598183)	GP-13	(20598184)	GP-16	(20598185)
GP-17	(20598186)	GP-25	(20598187)	T-1	(21598005)
T-2	(21598006)	T-4	(21598007)	T~5	(21598008)
T-6	(21598009)	MW-1	(21998023)	MW-2	(21998024)
MW-3	(21998025)	MW-4	(21998026)	MW-5	(21998027)

#### DATA ASSESSMENT

A inorganics data package containing analytical results thirteen soils and five aqueous samples was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 methodologies, addressed Target Compound List analytes. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SOW HW-2, Rev. 11, Jan. 1992, Evaluation of Metals Data for the Contract Laboratory Program), was used as a technical reference.

The arsenic results reported from GP-5, GP-13, GP-16 and GP-17; the lead results from HB-9 and T-1, and the calcium results from GP-2 and T-1 have been qualified as estimations do to poor calibration performance.

Do to unacceptable CRDL recoveries, the lad results from T-5 and T-6, and the arsenic concentrations reported rom GP-25, T-2, T-4, T-5, MW-1, MW-2, MW-3 and MW-4 have been rejected. Similarly, the cadmium results from HB-9, GP-2, GP-8, GP-13, GP-17, T-2, T-4, T-5 and T-6; the nickel results from GP-5, T-2 and T-5; the chromium results from T-2, T-4 and T-6; the selenium results from T-5, T-6, T-6, T-1, 
The cadmium results reported from every soil sample except GP-5 and T-1 have been qualified as estimations do to possible interferences caused by high background concentrations of calcium.

The cadmium and zinc concentrations reported from each groundwater sample, and the silver results from T-1, T-2, T-4, T-5 and T-6 have been rejected due to poor matrix spike recoveries. The remaining silver and all zinc results have been qualified as estimations. Also due to poor spike recoveries, the antimony and mercury results reported from each soil sample have been qualified as estimations.

The cadmium, calcium, manganese and zinc results reported from each groundwater sample, and the arsenic, chromium, copper, lead, iron, manganese, nickel, potassium, selenium, sodium and thallium results reported from each soil have been qualified due to the poor precision demonstrated by the analysis of laboratory split duplicate samples.

With the exception of the cadmium result from GP-5, the antimony,

selenium, cadmium, manganese and zinc results from each soil sample have been qualified as estimations due to unacceptable Laboratory Control Sample recoveries.

The aluminum and iron results reported from each soil sample have been qualified as estimations due to poor serial dilution performance.

#### CORRECTNESS AND USABILITY

The mercury result reported from HB-9 has been qualified as an estimation because the program holding time limitation had expired one day prior to the analysis of this sample.

The metals results reported for every soil sample have been qualified as estimations because the associated ICP digestion records were incomplete. Similarly, the mercury results from every sample except T-1, T-2, T-4, T-5 and T-6 have been rejected.

Results reported from this group of samples should be considered technically defensible in their present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J", "UJ" or "BJ". felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated results should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be quaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: //i/r

#### SAMPLE HISTORY

Sample holding times are calculated between the time of sampling and the time of analysis. Mercury samples must be analyzed within 28 days of sampling; the remaining metals within 180 days. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a laboratory split duplicate, a matrix spiked sample, and a rinsate blank.

This sample delivery group, which included thirteen soils and five acid preserved aqueous samples, was collected from the Former Brown Manufacturing site between 20Jul98 and 06Aug98. The samples were delivered to the laboratory in five groups (samples collected on 20Jul98, samples collected on 21Jul98, samples collected on 22Jul98, samples collected on 30Jul98 and 31Jul98, and samples collected on 06Aug98). Each group of samples arrived at the laboratory within 2 days of collection. A custody seal was present on every sample cooler, with the exception of the cooler used to transport the groundwater samples collected on 06Aug98. The groundwaters were sampled and immediately delivered to the laboratory. This delivery group also contained an equipment blank that was created on 20Jul98.

The mercury sample from HB-9 was held for 29 days prior to analysis, exceeding the program holding time limitation by one day. That result has been qualified as an estimation. The remaining analyses were completed within established holding time limitations.

It is noted that the digestion records for this group of samples were incomplete. Dates, signatures, sample weights and standards information was missing. Although some sample weights and volumes were provided, only the ICP digestions of groundwater samples were properly documented.

None of the mercury digestions were properly documented. Sample weights were only provided for samples T-1, T-2, T-4, T-5 and T-6. The work was otherwise completely undocumented.

Due to inadequate documentation, the ICP results obtained from each soil sample, and the mercury results obtained from T-1, T-2, T-4, T-5 and T-6 have been qualified as estimations. Although these results may be considered technically usable, it should be understood that they would not withstand a legal challenge. The remaining mercury results have been rejected. Only the ICP results obtained from groundwater samples remain unqualified.

#### **CALIBRATIONS**

Calibration curves are constructed, using certified materials, to define the linear range of each analytical instrument. Beyond this

range measurements cannot be made with confidence. The calibration curve is immediately tested by analyzing an initial calibration verification standard (ICV). Continuing verifications (CCV) must bracket each group of up to ten samples. ICV and CCV recoveries must meet established criteria (90-110%).

ICP calibrations were performed with a blank and one standard. Mercury calibrations included a blank and four standards. Although CRDL was not demonstrated during the initial instrument calibration, a CRA standard was analyzed. Both mercury calibrations did demonstrate an acceptable degree of linearity.

Instrument calibrations were immediately verified by the analysis of an ICV standard. Continuing calibration checks were made following each group of 10 samples. Most of the calibration checks that were used to bracket samples from this program satisfied the program acceptance criteria.

Unacceptably high calibration results were reported for antimony (111%, 112%), arsenic (113%), calcium (129%) and lead (117%). Based on this performance, the positive arsenic results reported from GP-5, GP-13, GP-16, GP-17, and the Equipment Blank; the lead concentrations reported from T-1 and HB-9; and the calcium results from T-1 and GP-2 have been qualified as estimations.

#### CONTRACT REQUIRED DETECTION LIMIT STANDARDS (CRDL)

To verify instrument linearity near CRDL, an ICP standard at a concentration of twice CRDL (CRI) is analyzed at the beginning and end of each analytical sequence. A standard equaling CRDL (CRA) must be included in each atomic absorption sequence. CRDL standards must produce a recovery between 80% and 120%.

The required CRDL verifications were made at the beginning and end of each ICP run. A CRA standard was analyzed at the beginning of each mercury run. The CRDL recoveries reported by the laboratory included unacceptable results for arsenic (0%,13%, 63%), cadmium (138%,133%), chromium (123%), nickel (146%), selenium (73%,74%), lead (236%,394%), silver (140%,233%) and zinc (71%). Based on CRDL performance, arsenic, cadmium, chromium, nickel, selenium, lead, and zinc results less than two times CRDL have been qualified. Positive lead results, and all arsenic results within this range have been rejected. Positive cadmium, chromium, and nickel results, and all selenium and zinc results have been qualified as estimations.

#### BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Preparation blanks are carried through the digestion process with each group of

samples to evaluate general laboratory technique. Calibration blanks are run periodically to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

An initial blank (ICB) was analyzed following the calibration in each analytical sequence. Additional blanks were analyzed after every ten samples (CCB) and at the end of each sequence. Preparation blanks were digested, prior to analysis, with each group of samples. Although aluminum, arsenic, lead and silver calibration blanks did exceed CRDL, the analyte concentrations present in the associated samples exceeded the range requiring qualification.

#### ICP INTERFERENCE CHECK SAMPLE (ICS)

ICS standards are analyzed at the beginning and end of each ICP analysis sequence to verify background and interelement correction factors. The recoveries of specified analytes are measured in the presence of high Al, Ca, Mg and Fe concentrations.

Interference check standards, ICSA and ICSAB, were run at the beginning and end of each ICP analysis sequence. These produced unacceptable recoveries of cadmium (122%,123%), iron (73%) and calcium (123%). The iron and calcium results warrant no concern, the affected measurements were made beyond the linear range of the analytical instrument. The positive bias affecting cadmium must be considered. The traces of cadmium present in HB-9, GP-2, GP-8, GP-13, GP-16, GP-17, GP-25, T-2, T-4, T-5 and T-6 might be attributed to the high concentrations of calcium present in these samples. The affected results have been qualified as estimations.

#### PREDIGESTION SPIKE

The recovery of spike concentrations added to samples prior to digestion and analysis demonstrates measurement bias caused by sample matrix effects. Predigestion spikes must be recovered within control limits of 75-125%.

Samples MW-1, HB-9 and T-1 were selected for matrix spiking. Analyte additions to the groundwater produced extremely low recoveries of cadmium (2.3%) and zinc (0.5%). The spiked soils produced unacceptable recoveries of antimony (37%,22%), mercury (64%,141%), silver (0%,47%) and zinc (72%). Based on this performance, the cadmium and zinc results obtained from groundwater samples, and the silver results from T-1, T-2, T-4, T-5, T-6 have been rejected. Antimony, mercury, zinc and the remaining silver results have been qualified as estimations.

#### DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced

by this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Laboratory split duplicates of MW-1, T-01 and HB-9 were analyzed with this group of samples. The duplicates of MW-1 demonstrated poor precision during measurements of cadmium, calcium, manganese and zinc. These analytes have been qualified in the associated groundwater samples. The soils produced unacceptable differences in measurements of arsenic, chromium, copper, lead, iron, manganese, nickel, potassium, selenium, sodium and thallium. These metals have been qualified as estimations on each soil report.

Field split duplicates were not included in this group of samples.

#### LABORATORY CONTROL SAMPLE (LCS)

Laboratory control samples are prepared by adding analytes to clean sand or reagent water. Analyte concentrations are then determined without interferences caused by sample matrix effects.

Aqueous and solid LCS samples were digested and analyzed with this group of samples. Acceptable recoveries were reported for the aqueous sample. One solid LCS sample produced a low antimony recovery and high recoveries of cadmium, manganese, selenium and zinc. The second LCS produced a low selenium recovery. Based on LCS performance, positive cadmium, manganese and zinc results reported from soils have been qualified as estimations. All antimony and selenium results reported from soils have been likewise qualified.

#### ICP SERIAL DILUTION SAMPLE

Possible matrix effects are verified by the process of serial dilutions. Samples are diluted 1:5 to reduce matrix contributions that might bias measurements. The original sample result, and the corrected concentration of the diluted sample are compared. Sample data is qualified if the original concentrations are not recovered within 10%. Analytes with initial concentrations below 10 times IDL are not considered.

MW-01, T-06 and GP-25 were prepared as serial dilutions. The measurements obtained from MW-01 were acceptable. Of the analytes present in the soil samples, at concentrations exceeding ten times IDL, measurements of aluminum and iron differed by more than 10%. Based on this performance, the aluminum and iron results reported from soil samples have been qualified as estimations.

## SUMMARY OF QUALIFIED DATA

SAMPLED 7/20/98 thru 8/6/98

FORMER BROWN MANUFACTURING SITE

CRDL	REJECT REJECT REJECT REJECT REJECT REJECT REJECT
CRDL	REJECT
CALIBRATE	1690003
CALIBRATE LEAD	1073
CALIBRATE ARSENIC	6.94 20.34 12.64
RECORDS MERCURY	REJECT REJECT REJECT REJECT REJECT UJ UJ UJ UJ REJECT REJECT REJECT REJECT REJECT REJECT
RECORDS ICP METALS	ALL 3/U3
HOLD TIME MERCURY	Th .
THE THE PARTY OF T	(20598180) (20598181) (20598182) (20598183) (20598184) (20598185) (20598185) (21598005) (21598006) (21598006) (21598002) (21598002) (21598025) (21998025) (21998025) (21998025)
And the second s	HB-9 GP-2 GP-13 GP-13 GP-13 GP-13 GP-13 T-2 T-2 MW-2 MW-2 MW-3

# SUMMARY OF QUALIFIED DATA

FORME	FORMER BROWN MANUFACTURING SITE	FACTURING S	E E				0,2	SAMPLED 7,	SAMPLED 7/20/98 thru 8/6/98	86/9/8 n.
		CRDL	CRDL	CRDL	CRDL	CRDL	ICP ICS CADMIUM	SPIKES Cd, Zn	SPIKES SILVER	SPIKES Sb, Hg, Zn
HB-9	HR-9 (20598180)	2.03					2.03		E	J/UJ

			NTCKEL	CHROMIUM	SELENIUM	ZINC	CADMIUM	Cd, Zn	SILVER	Sb, Hg, Zn
							, , , , , , , , , , , , , , , , , , ,			
o - dh	2	7 O.T					2.03		S	J/UJ
	010000	† c					1.7			J/UJ
1	022818	•					) ;		1	T /117
GP-8	059818	2.37					2.30		<u> </u>	つ / つ / つ
- 1	059818		13.91						3	70/r
( ا	200000000000000000000000000000000000000	2,0,1					2.07		rn	3/103
1	0 1 0 0 1 C	)					2.5J		n	מי/ב
ייים לייים	000000000000000000000000000000000000000	ر ح					2.07		n	J/UJ
בין הבי מיני כני		4					2.77		th	3/03
V	(20330101)						•		REJECT	3/13
-			7.7.	3.7B.T			1,51		REJECT	3/03
7 - 5	100000	) <		0			2.4.		REJECT	3/03
<b>*</b>	ONORCI	# (	l L		# 2 #				中ではいる	7.11.7
7-5	159800	•	15.27		3		) ) (			)
J-6	-	0		12.17	4.73		7.07		ということ	70.70
MW-1	199802							REJECT	ng	3
WW-2	199802					14.83		REJECT	ນາ	a.
MM - 2	{ m				FII	ΓŊ		REJECT	Ωĵ	S
, 1714 C	0000					111		REJECT	m	CT
	700007					בי בי כ		DE TECH	11.1	111
MW-5	199802					2		7777	3	)

## SUMMARY OF QUALIFIED DATA

SAMPLED 7/20/98 thru 8/6/98

FORMER BROWN MANUFACTURING SITE

SERIAL DILUTE Al / Fe	T/T'	17/17	3/3	5/5	3/3	5/3	3/3	ت/ت	5/5	5/5	5/5	ت/ت	5/5					
LCS Cd/Mn/Zn	1/1/1	1/1/1	3/3/5	-/3/3	3/3/3	3/3/3	3/3/3	3/3/3	3/3/3	3/1/1	3/3/3	3/3/3	3/1/3					
LCS Sb, Se	T'/ L'11	11.77.7	03/3	U3/3	UJ/J	U3/3	U3/3	UJ/J	UJ/J	U3/3	U3/J	UJ/II	UJ/J					
DUPLICATES	SOTT, I/II.T	SOLE STOS	SOLL J/UJ	SOIL J/UJ	SOIL J/UJ	SOIL J/UJ	SOIL J/UJ	SOIL J/UJ	SOIL J/UJ	SOIL J/UJ	SOIL J/UJ	SOIL J/UJ	SOIL J/UJ	_	GW J/UJ	•	_	•
	70508180)		(20598182)	_	200		-	~~~	, ,			(21598008)	Part.	(21998023)	**	(21998025)		(21998027)
	1 7	· 1	20 - QC	1	ا ا	1	7~i	7	r	T-2	Ţ-Ţ	T-5	9-L	1	F	ł	MW-4	MW-5

GW = cadmium, calcium, manganese, zinc

arsenic, chromium, copper, lead, iron, manganese, nickel, potassium, selenium, sodium, thallium 1 SOIL

SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc Contract:

HB-9TT

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 20598180

Level (low/med):

LOW

Date Received: 07/22/98

% Solids:

70.0

'Concentration Units (ug/L or mg/kg dry weight): MG/KG

	·····	·····		·	<del></del>	1
CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5	Aluminum	6760		PI	P	
7440-36-0	Antimony	4.3	IJ	米し丁		
7440-38-2	Arsenic	21.5	_	- The same	P	
7440-39-3	Barium	456		1	P	
7440-41-7	Beryllium	2,01 0.86	الملك	- 07	P	
7440-43-9	Cadmium	<del>216</del> 4-2-0		NX	P,	RIS
7440-70-2	Calcium	124000		<del>, 13-&gt;10</del> -		. \ _
7440-47-3	Chromium	25.7		ال سلا		
7440-48-4	Cobalt	5.7	Ū	UJ	P	
7440-50-8	Copper	46.6		3-1	P	
7439-89-6	Iron	15600		Jun J	P	
7439-92-1	Lead	107	_	T ME	P	
7439-95-4	Magnesium	17100			P	
7439-96-5	Manganese	309		J- J		
74.39-97-6	Mercury	~14	,	W U J	GV	- R
7440-02-0	Nickel	29.3		July 1	P	•
7440-09-7	Potassium	920	Ď	*BJ	Ð.	
7782-49-2	Selenium	5.4		<b></b>		
7440-22-4	Silver	2.9	15	N UJ	P	
7440-23-5	Sodium	422	B	* BJ	P	
7440-28-0	Thallium	5.4		少了	P	
7440-31-5	Tin					
7440-62-2	Vanadium	22.6	_	J	P	
7440-66-6	Zinc	205		N#T	P P	
	Cyanide					
**************************************	1 <del></del>		Person 3		1	

olor Before: BROWN

Clarity Before: OPAQUE Texture:

COARSE

olor After: YELLOW

Clarity After: CLEAR

Artifacts: NO

SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc Contract:

GP-2TT

Lab Code: 10170

Case No.: SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 20598181

Level (low/med):

LOW

Date Received: 07/22/98

% Solids:

89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	<del></del>	T		<del></del>		•
CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5	Aluminum	6310		FI	P	
7440-36-0	Antimony	3.4	1	MUT	P	
7440-38-2	Arsenic	7.2	7	* 1	P	
7440-39-3	Barium	170		3	P	i
7440-41-7	Beryllium	0.67	تقر	UST	유 의 의 의 의	
7440-43-9	Cadmium	173 17	***	<u> </u>	D.	-R.753
7440-70-2	Calcium	169000		J#J	P	
7440-47-3	Chromium	22.6		7	되 의 의	
7440-48-4	Cobalt	5.1	<b>P</b>	B	P	
7440-50-8	Copper	35.8	*****	X	P	
7439-89-6	Iron	11300	m	Ex T	p	
7439-92-1	Lead	243		* 14	P	
7439-95-4	Magnesium	25700	*****	1		
7439-96-5	Manganese	253	*****	7	P	
7439-97-6	Mercury		Ü	<u> </u>	-ev	R
7440-02-0	Nickel	21.7	~~~	FJ	P	, 🔪
7440-09-7	Potassium	1160		*	P	
7782-49-2	Selenium	7.1	-	*	P	
7440-22-4	Silver	2.2	رخز	TO W	P	
7440-23-5	Sodium	225	Id	W U1	<u>1</u>	
7440-28-0	Thallium	2.2	$\overline{\mathbf{U}}$	1	P	
7440-31-5	Tin			· ····································		
7440-62-2	Vanadium	17.7		TIN	P	
7440-66-6	Zinc	246		W.J	<u>p.</u>	م
	Cyanide			· · · · · · · · · · · · · · · · · · ·		N
I ************************************		·				10_

color Before: BROWN

Clarity Before: OPAQUE

Texture: COARSE

olor After: YELLOW

Clarity After: CLEAR

Artifacts: NO

^~mments:

SAMPLE NO.

1. INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc Contract:

GP-5TT

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 20598183

Level (low/med):

LOW

Date Received: 07/22/98

% Solids:

86.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

					ĺ
Analyte	Concentration	С	Q	М	
Aluminum	4540		P.J	p	
Antimony	3.5	10	TU TK	P	
Arsenic	6.9	_	*	P	
Barium	68.0	-	. 7	P	
Beryllium	0.70	莎	רט	P	
Cadmium	1,20 1.2	Ψ̈	W*	Þ.	- P 739
Calcium	66800	_	E of a	P	
Chromium	9.2	***	- M	P	
Cobalt	5.7	Ī	73	P	
Copper	43.3	<b></b>	* 7	P	
Iron	12700		E#	P	
Lead	115			P	
Magnesium	19400			p	
Manganese	232	~~~	Jan		_
Mercury	-1-2	ij	<u> </u>	e₩	- R
Nickel	73,9 J -13.9		· L.	<b>P</b> -	- F373
Potassium	792	$\overline{B}$	7	P	
Selenium	5.8		-	p	
Silver	2.3	الخلآ	AF UT	P	
Sodium	233	B	*177	p	
Thallium	2.3	TI	* 1	P	
Tin		7			
Vanadium	17.2		-	F	
Zinc	112	-	W 7	$\overline{\mathbf{p}}$	
Cyanide					
	Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Chromium Chromium Chromium Chromium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Tin Vanadium Zinc	Aluminum       4540         Antimony       3.5         Arsenic       6.9         Barium       68.0         Beryllium       0.70         Cadmium       66800         Chromium       9.2         Cobalt       5.7         Copper       43.3         Iron       12700         Lead       115         Magnesium       19400         Manganese       232         Mercury       1.2         Nickel       792         Potassium       5.8         Silver       2.3         Sodium       233         Thallium       2.3         Tin       Vanadium         Zinc       112	Aluminum       4540         Antimony       3.5         Arsenic       6.9         Barium       68.0         Beryllium       0.70         Cadmium       668.0         Calcium       66800         Chromium       9.2         Cobalt       5.7         Copper       43.3         Iron       12700         Lead       115         Magnesium       19400         Manganese       232         Mercury       1.2         Nickel       792         B       5.8         Silver       2.3         Sodium       233         Thallium       2.3         Tin       2.3         Vanadium       17.2         Zinc       112	Aluminum	Aluminum

( )lor Before: BROWN

Clarity Before: OPAQUE Texture:

COARSE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: NO

SAMPLE NO.

I INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc

Contract:

GP-8TT

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 20598182

Level (low/med): LOW

Date Received: 07/22/98

% Solids:

86.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	· · · · · · · · · · · · · · · · · · ·				7	
CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5	Aluminum	8640		*3	<u> </u>	
7440-36-0	Antimony	3.5	78		7	
7440-38-2	Arsenic	22.4	*****	<u>* ]                                   </u>	<u>P</u>	
7440-39-3	Barium	201			P_	
7440-41-7	Beryllium	0.98	4	3	<u>P</u>	
7440-43-9	Cadmium	231 2.3	_	1/4	<u> </u>	-K-137
7440-70-2	Calcium	42300		E*	P	
7440-47-3	Chromium	16.6		<u> </u>	P	
7440-48-4	Cobalt	7.4	B	137		
7440-50-8	Copper	66.7		<u>* ]</u>	P	
7439-89-6	Iron	17500		Entra J		
7439-92-1	Lead	243		划 了	P	
7439-95-4	Magnesium	6550		-5	P	
7439~96~5	Manganese	294		× 7	P	_
7439-97-6	Mercury	1.2	Ū	<i>y</i>	ev	· R
7440-02-0	Nickel	21.0	Ι,	mit mit	P	• •
7440-09-7	Potassium	1060	$\overline{B}$	*	₽	
7782-49-2	Selenium	7.5	,	ملار		
7440-22-4	Silver	2.3	Ī	XU1	P	
7440-23-5	Sodium	249	B	* 07	P	
7440-28-0	Thallium	4.5		Jan J	P	
7440-31-5	Tin					
7440-62-2	Vanadium	24.0		7	P P	
7440-66-6	Zinc	229	*	WAY!	P	
***************************************	Cyanide	**************************************	P			
	I				t	

color Before: BROWN

Clarity Before: OPAQUE

CLEAR

Texture: COARSE

olor After: YELLOW

CLOW Clarity After:

Artifacts: NO

mments:

SAMPLE NO.

1

Case No.:

INORGANIC ANALYSIS DATA SHEET

inc Contract:

Lab Name: Upstate Laboratories, Inc

SAS No.:

SDG No.: CH07

GP13TT

Matrix (soil/water): SOIL

Lab Sample ID: 20598184

Level (low/med): LOW

Date Received: 07/22/98

% Solids:

Lab Code: 10170

93.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

1	T****	<u> </u>	Γ	T	Т	1
CAS No.	Analyte	Concentration	С	Ď	М	
7429-90-5	Aluminum	7650	•	PJ	P	
7440-36-0	Antimony	3.2	3	W UJ	PP	
7440-38-2	Arsenic	19.0	-	* 1	P	
7440-39-3	Barium	258	-	3	P	
7440-41-7	Beryllium	0.74	Ē	RET	P	_
7440-43-9	Cadmium	2,03 2.0		N*		RM
7440-70-2	Calcium	107000		E-tr	P	
7440-47-3	Chromium	17.8	~~~	ال معلا	P	
7440-48-4	Cobalt	6.8	ď	37	P	
7440-50-8	Copper	54.5		سطر	P	
7439-89-6	Iron	15900		正本了	P	
7439-92-1	Lead	230	_	*1	P	
7439-95-4	Magnesium	13800		7	p	
7439-96-5	Manganese	380		73	P	
7439-97-6	Mercury	-1-1	Ü	N	-GYZ	R
7440-02-0	Nickel	22.3		. The second	p	
7440-09-7	Potassium	1150		*	p	
7782-49-2	Selenium	5.0	_	×	P	
7440-22-4	Silver	2.2	إنتز	10 W	P	
7440-23-5	Sodium	215	บี	* 1	P	
7440-28-0	Thallium	2.2	Ū		<u>q</u>	
7440-31-5	Tin	**************************************	_			
7440-62-2	Vanadium	19.2		1	P	•
7440-66-6	Zinc	184		D.W.D	P	
	Cyanide	,	-			
	1		***** }	·		

MI

Color Before: BROWN

Clarity Before: OPAQUE

Texture: COARSE

( )lor After: YELLOW

LLOW Clarity After: CLEAR

Artifacts: NO

SAMPLE NO.

#### INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc Contract:

GP16TT

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 20598185

Level (low/med):

Date Received: 07/22/98

% Solids: 94.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	<del>,</del>	~~~~	~		_
CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5	Aluminum	7810		更 . 1	p-	
7440-36-0	Antimony	3.2	Z	TU W	P	
7440-38-2	Arsenic	20.3	#	M	P	
7440-39-3	Barium	343		2 1	P	1
7440-41-7	Beryllium	0.88	3	137	P	
7440-43-9	Cadmium	2.5	-	L #14	P	
7440-70-2	Calcium	104000		E		
7440-47-3	Chromium	22.1	-	×- J	P	
7440-48-4	Cobalt	7.2	Ē	61	P	l
7440-50-8	Copper	87.8	-	*	P	
7439-89-6	Iron	22400		EX	P	
7439-92-1	Lead	320	_	**	P	
7439-95-4	Magnesium	16600			P	
7439-96-5	Manganese	359	_		p	_
7439-97-6	Mercury	-1:1-	<del>-</del>	Ň	-GV-	R
7440-02-0	Nickel	22.3			P	
7440-09-7	Potassium	1330		**	P	
7782-49-2	<u>Selenium</u>	8.1		*	P	
7440-22-4	Silver	2.1	B B	1- U 14	P	
7440-23-5	Sodium	238	В	* AJ	P	
7440-28-0	Thallium	2.1	J.	*U3	P	
7440-31-5	Tin					
7440-62-2	Vanadium	21,7			P P	
7440-66-6	Zinc	323	_	MAI	P	
	Cyanide					

color Before: BROWN

Clarity Before: OPAQUE Texture:

COARSE

olor After: YELLOW

Clarity After: CLEAR . . Artifacts: NO

~mments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc Contract:

GP17TT

SAMPLE NO.

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 20598186

Level (low/med):

Date Received: 07/22/98

% Solids:

78.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

**************************************	1				<u> </u>	1
CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5	Aluminum	10500		<b>P</b> 1	P	
7440-36-0	Antimony	3.8	37	X UT	P	
7440-38-2	Arsenic	12.6	_	W J	P	
7440-39-3	Barium	120		J	P	
7440-41-7	Beryllium	1.0	æ	37	P	
7440-43-9	Cadmium	2.03 -2.0		N#		Q791
7440-70-2	Calcium	13400				((2))
7440-47-3	Chromium	17.9		1	P P P P	
7440-48-4	Cobalt	10.3	<b></b>		P	
7440-50-8	Copper	19.9		The same of	P	
7439-89-6	Iron	19900		Jun 1	P	
7439-92-1	Lead	48.1		T K*	P	
7439-95-4	Magnesium	6240			P	
7439-96-5	Manganese	450		* ]		
7439-97-6	Mercury	1.3	۲	CUK	CV	
7440-02-0	Nickel	23.2		J. J.	P	
7440-09-7	Potassium	1210	$\overline{B}$	<b>77</b>		
7782-49-2	Selenium	5.2		Jan 1	P	
7440-22-4	Silver	2.6	1	X UT	P	
7440-23-5	Sodium	256	ับไ	多の丁	P	
7440-28-0	Thallium	2,6	บ		P	
7440-31-5	Tin	***************************************				
7440-62-2	Vanadium	19.3		7	P	
7440-66-6	Zinc	58.4		NW T	$\frac{1}{P}$	
	Cyanide			o <del>z</del> -		
I					l	

Color Before: BROWN

Clarity Before: OPAQUE

Texture:

COARSE

olor After: YELLOW

Clarity After:

CLEAR

Artifacts: NO

^nmments:

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

GP25TT

Lab Name: Upstate Laboratories, Inc Contract:

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 20598187

Level (low/med):

LOW

Date Received: 07/22/98

% Solids:

88.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	γ	¥*************************************	·	·		
CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5	Aluminum	7230	-	EJ	- F	
7440-36-0	Antimony	3.4	17	FIF ()		
7440-38-2	Arsenic	3.0	Ū.	*	\ <del>\</del>	+R
7440-39-3	Barium	2150			p	1
7440-41-7	Beryllium	1.0	B	137	<del> </del> <del> </del> <del> </del> <del> </del> <del> </del>	
7440-43-9	Cadmium	2.7		NW-7	<del>p</del>	
7440-70-2	Calcium	34200	*****	E.	P-	
7440-47-3	Chromium	33.2		الم ميلار	P	
7440-48-4	Cobalt		2	KI	P	
7440-50-8	Copper	99.5		77	P	
7439-89-6	Iron	27300		E#	P	
7439-92-1	Lead	2460	-	*NJ	P	1
7439-95-4	Magnesium	7310	****		P	<u> </u>
7439-96-5	Manganese	285			<del> </del>	
7439-97-6	Mercury		Ü	N	Levi	R
7440-02-0	Nickel	426	-	W.T	P	100
7440-09-7	Potassium	1320	-		Ē	
7782-49-2	Selenium	5.2		المستغر	P	
7440-22-4	Silver	2.3	Ü	W CM	P	
7440-23-5	Sodium	227	֓֟֟֟֓֟֟֟֓֟֓֟֓֓֓֟֓֓֓֟֟֓֓֓֟֟֓֓֟֟֓֓֓֟֟֓֓	*111	P	
7440-28-0	Thallium	2.3	ซิโ	Jun (1) -1	<del>-</del> q	
7440-31-5	Tin		-			
7440-62-2	Vanadium	15.1	~-	7	P	
7440-66-6	Zinc	234	-	NAW T	P P	
	Cyanide		-	4		
——————————————————————————————————————			1		· 1	

Olor Before: BROWN

Clarity Before: OPAQUE

Texture: COARSE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: NO

INORGANIC ANALYSIS DATA SHEET

ميد و ز

Lab Name: Upstate Laboratories, Inc Contract:

TI-01T

SAMPLE NO.

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 21598005

Level (low/med):

LOW

Date Received: 07/31/98

% Solids:

57.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	c	o	м	
	-			~		
7429-90-5	Aluminum	5940		27	P	
7440-36-0	Antimony	5.3	8	CUW		
7440-38-2	Arsenic	29.3	-	* The state of the	p	
7440-39-3	Barium	10300		7	P	
7440-41-7	Beryllium	0.93		7	교교교	
7440-43-9	Cadmium	14.7	***	Har		
7440-70-2	Calcium	44400	_	FXJ	P	
7440-47-3	Chromium	156		7	P	
7440-48-4	Cobalt	6.1	B			
7440-50-8	Copper	536		7	P	
7439-89-6	Iron	27700		J* ]	P	
7439-92-1	Lead	641		***	p	
7439-95-4	Magnesium	8550	*****		P	
7439-96-5	Manganese	545			P	
7439-97-6	Mercury	1.8	لخار	LU K	CV	-44
7440-02-0	Nickel	342		シブ	P	
7440-09-7	Potassium	922	B	罗了	P	
7782-49-2	Selenium	13.5		× 1		_
7440-22-4	Silver	-1.8	بنتر	N US	P	R
7440-23-5	Sodium	1220	B	* 17	P	. **
7440-28-0	Thallium	3.5	W	Jr () -	P P	
7440-31-5	Tin			·		
7440-62-2	Vanadium	14.2	-	7	P	
7440-66-6	Zinc	686	_	W/CI	PP	
-	Cyanide		-			
	,	\$	1			

Color Before: BROWN

Clarity Before: OPAQUE

Texture:

COARSE

olor After:

YELLOW

Clarity After: CLEAR

Artifacts: NO

comments:

SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc Contract:

TI-02T

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 21598006

Level (low/med): LOW

Date Received: 07/31/98

% Solids:

83.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

		1	T	T	<b></b>	ŧ
CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5	Aluminum	2460		FJ	<del>-</del> -	
7440-36-0	Antimony	1.8	18	W UT	P P	
7440-38-2	Arsenic	2.0	-	*	声	R
7440-39-3	Barium	34.5	5	12-5	P P	
7440-41-7	Beryllium	0.36	15	77	P	
7440-43-9	Cadmium	1/50 -1-5	1	<del>*************************************</del>	Ē,	1 221
7440-70-2	Calcium	80700		-17		15 230
7440-47-3	Chromium	2,7 7 -2-7		*	P P	A 700
7440-48-4	Cobalt	2.4	Ţ,	V)	P	10000
7440-50-8	Copper	5.0	~~~	**		
7439-89-6	Iron	3540		EW		
7439-92-1	Lead	31.2		大大	P	
7439-95-4	Magnesium	9630	-		P	
7439-96-5	Manganese	82.4		J. J.	P	
7439-97-6	Mercury	3.9	-1	W :	CV	**
7440-02-0	Nickel	3.787 -3.7	B B	***************************************		-R-373
7440-09-7	Potassium	407	B	* 1	P	10
7782-49-2	Selenium	3.0		<b>*</b>	마 마 마 마	
7440-22-4	Silver	1.2	ŢĿ,	N A	<u>P</u>	· R
7440-23-5	Sodium	241	أخز	来 1/1	P	, ,
7440-28-0	Thallium		戼	× 13	P	
7440-31-5	Tin	***************************************	~			
7440-62-2	Vanadium	4.5	25	33	P	
7440-66-6	Zinc	29.3		<b>工</b> ***	$\frac{\hat{p}}{p}$	
	Cyanide			- L		
		***************************************	1			21

Color Before: BROWN

Clarity Before: OPAQUE Texture:

COARSE

olor After: YELLOW

Clarity After:

CLEAR

Artifacts: NO

SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc Contract:

TI-04T

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 21598007

Level (low/med):

LOW

Date Received: 07/31/98

% Solids:

76.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

1	T	T	Γ		Т	ı
CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5	Aluminum	5730		2	P	
7440-36-0	Antimony	2.0	Ī	WUT	P P	
7440-38-2	Arsenic	~·4-5	~	*	匤	- R
7440-39-3	Barium	95.3			P	10
7440-41-7	Beryllium	0.39	نتتر	177	P	
7440-43-9	Cadmium	2.47 -2-4		14	Ē.	-A 751
7440-70-2	Calcium	70700	5-0-09	<b>是</b> 体。	의교 의교교교	
7440-47-3	Chromium	6.1		Je Tour	P	
7440-48-4	Cobalt	2.9	Ē	37	P	
7440-50-8	Copper	11.6		7	P	
7439-89-6	Iron	7650		E* 3	P P	
7439-92-1	Lead	56.4		**	P	
7439-95-4	Magnesium	11700		7	P	
7439-96-5	Manganese	197	_	**	<u>q</u>	
7439-97-6	Mercury	1.3	Ĭ,	<b>FUX</b>	CV	<b>-</b>
7440-02-0	Nickel	812 -8-2		*	CV P P	-A777
7440-09-7	Potassium	642	B	*	p	
7782-49-2	Selenium	5.4	-	×1	P	
7440-22-4	Silver		V.	W CT	Ţ.	R
7440-23-5	Sodium	263	التر	* (1)	P	, ,
7440-28-0	Thallium	2.6	القذ	W (2)	P	
7440-31-5	Tin					
7440-62-2	Vanadium	7.7			P	
7440-66-6	Zinc	74.0	-	TW	P	
	Cyanide					
		*	1		***************************************	

Color Before: BROWN

Clarity Before: OPAQUE

Texture:

COARSE

( )lor After: YELLOW

Clarity After: CLEAR

Artifacts: NO

SAMPLE NO.

1 INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc

Contract:

TI-05T

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 21598008

Level (low/med):

LOW

Date Received: 07/31/98

% Solids:

63.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

1	1	T	T	T	7	ł
CAS No.	Analyte	Concentration	С	Q	M	***************************************
7429-90-5	Aluminum	4740		2	P	
7440-36-0	Antimony	4.8	10	CO W	P	
7440-38-2	Arsenic	-6.0-	1	4 9 "	Į.	R
7440-39-3	Barium	40.9	N. T.	3	P	
7440-41-7	Beryllium	0.95	J	U	P P P P P	
7440-43-9	Cadmium	3,01 -3.0		714	,	+771
7440-70-2	Calcium	139000		EW		
7440-47-3	Chromium	8.9	-	ل سائر	P	
7440-48-4	Cobalt	6.3	1	UI	P	
7440-50-8	Copper	19.3		J	P	
7439-89-6	Iron	12800	_	E'm T	P	
7439-92-1	Lead	-9-4-		44	P-	<b>⊢</b> -₽
7439-95-4	Magnesium	17300			P	1
7439-96-5	Manganese	302		W -	P	
7439-97-6	Mercury	1.6	سخد	K UJ	cv	
7440-02-0	Nickel	15,5 15.5		4	ĮŢ.	-R70
7440-09-7	Potassium	890	$\widetilde{\mathbf{B}}$	罗丁	P	1 2
7782-49-2	Selenium	1.6	متحق	* 03		_
7440-22-4	Silver	-3-2	70.	* UT-	<del>-P-</del>	R
7440-23-5	Sodium	317	ŢŢ.	* U1	P	
7440-28-0	Thallium	3.2	مزرز	W UI	<u>P</u>	
7440-31-5	Tin					
7440-62-2	Vanadium	14.5	Ē	257	P	
7440-66-6	Zinc	37.7	/ imade	NIKI	P P	
	Cyanide				***************************************	

W

-olor Before: BROWN

YELLOW

Clarity Before: OPAQUE

CLEAR

Texture: COARSE

olor After:

Clarity After:

Artifacts: NO

INORGANIC ANALYSIS DATA SHEET

TI-06T

SAMPLE NO.

Lab Name: Upstate Laboratories, Inc Contract:

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): SOIL

Lab Sample ID: 21598009

Level (low/med):

LOW

Date Received: 07/31/98

% Solids:

68.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

<u></u>		1			1	
CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5	Aluminum	4560		PI	P	
7440-36-0	Antimony	4.4	W	W UT	P	
7440-38-2	Arsenic	9.7	'	J	ਰ	
7440-39-3	Barium	56.4	Z	KJ	$\frac{\overline{\overline{p}}}{\overline{p}}$	
7440-41-7	Beryllium	0.88	ستر آ	03	P	•
7440-43-9	Cadmium	2,01 -2.0	£	14#	Ē	<del>- R</del> 233
7440-70-2	Calcium	54500	۳.	-E-*	P	
7440-47-3	Chromium	8.6	-	7		
7440-48-4	Cobalt	5.9	V	07	P	
7440-50-8	Copper	11.7		ل سلا	P	
7439-89-6	Iron	9210	_	Jan 1	P	_
7439-92-1	Lead	- 6.8	<u> </u>	*14	Ď	- R
7439-95-4	Magnesium	9090			P	`
7439-96-5	Manganese	163		ل سلار	P	
7439-97-6	Mercury	1.5	14	CU W	CV	~~~~
7440-02-0	Nickel	1213 -13-1-		*		16383
7440-09-7	Potassium	562	В	米コ	P	
7782-49-2	Selenium	4.7		المناسخ	P	_
7440-22-4	Silver	-2+9	Ü	J UJ		R
7440-23-5	Sodium	294	B	米しつ	P	
7440-28-0	Thallium	2.9	TO	* ()	P	
7440-31-5	Tin				-	
7440-62-2	Vanadium	14.2	B	33	P P	
7440-66-6	Zinc	52.9	_	NW.	P	
<u></u>	Cyanide		_			
1						

Jolor Before: BROWN

Clarity Before: OPAQUE

Texture: COARSE

Color After: YELLOW

Clarity After: CLEAR

Artifacts: NO

comments:

SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc

Contract:

MW-01D

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): WATER

Lab Sample ID: 21998023

Level (low/med):

LOW

Date Received: 08/06/98

% Solids:

0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

	]	1	Τ	<u> </u>	T	1
CAS No.	Analyte	Concentration	c	Q	М	
	1 -			~		<b>]</b>
7429-90-5	Aluminum	222		E	P	
7440-36-0	Antimony	15.0	10	E VI	마 마 다	
7440-38-2	Arsenic	-10-0	<u>u</u>	*	P	<b>-</b> 化
7440-39-3	Barium	77.2	B	***************************************	P	
7440-41-7	Beryllium	3.0	BU	,	P	1
7440-43-9	Cadmium	-45-4		144		ł R
7440-70-2	Calcium	66000		更大了	P	' '
7440-47-3	Chromium	5.0	משום	**	P	
7440-48-4	Cobalt	20.0	Ū		P	
7440-50-8	Copper	10.0	U	*	P	
7439-89-6	Iron	60.0	<del>ปี</del>	E*	P	
7439-92-1	Lead	3.0	U	*N	P	
7439-95-4	Magnesium	20300			P	
7439-96-5	Manganese	15.5			P	
7439-97-6	Mercury	<del>-0,20</del> -	ij	74	GV	- R
7440-02-0	Nickel	30.0	บ	*	P	,
7440-09-7	Potassium	3540	$\overline{B}$	*	P	
7782-49-2	Selenium	5.0		* 01	P	•
7440-22-4	Silver	10VJ 10.0	ĪĪ	H	مألمالمالم	A 753
7440-23-5	Sodium	26900		**	P	
7440-28-0	Thallium	10.0	Ū	3/4	P	
7440-31-5	Tin					
7440-62-2	Vanadium	30.0	Ū		P	
7440-66-6	Zinc	<del>~445</del>		74.	<b>P</b>	R
1	Cyanide		_			*

color Before: COLORLESS

Clarity Before: CLEAR

Texture: LIQ

olor After:

COLORLESS

Clarity After: CLEAR

Artifacts: NO

SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-02D

Lab Name: Upstate Laboratories, Inc

Lab Code: 10170

Case No.:

SAS No.:

Contract:

SDG No.: CH07

Matrix (soil/water): WATER

Lab Sample ID: 21998024

Level (low/med):

LOW

Date Received: 08/06/98

% Solids:

0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	M	1
7429-90-5	Aluminum	143	B	E	P	
7440-36-0	Antimony	15.0	تتآ	100	PP	
7440-38-2	Arsenic	10.0	ŧ.	* M/J	壔	— R
7440-39-3	Barium	50.0	Ū		P	'`
7440-41-7	Beryllium	3.0	ซี		p	
7440-43-9	Cadmium	-5.0	Ū	W*		R
7440-70-2	Calcium	44500		Ext	p	
7440-47-3	Chromium	5.0	Ū	*	P	
7440-48-4	Cobalt	20.0	Ū		P	
7440-50-8	Copper	10.0	Ū	*	P	
7439-89-6	Iron	60.0	Ū	E*		
7439-92-1	Lead	3.0	$\overline{\mathbf{U}}$	*N		
7439-95-4	Magnesium	10300		<del></del>	P	
7439-96-5	Manganese	10.0	77	J- U-1	p	
7439-97-6	Mercury	-0.20	क्षांद्राधादाक्र	N	GV	R
7440-02-0	Nickel	30.0	บิ	*		' \
7440-09-7	Potassium	1480	B	*	P	
7782-49-2	Selenium	5.0	V	* 07	P P P	
7440-22-4	Silver	1003 20-0	U	K *	Ŧ-	197
7440-23-5	Sodium	8070		*	P	
7440-28-0	Thallium	10.0	Ū	*	P	
7440-31-5	Tin			***************************************		
7440-62-2	Vanadium	30.0	Ū	***************************************	P	_
7440-66-6	Zinc	-14-8	Ē	WJ	Į.	-R
	Cyanide		-	- 2000		

( lor Before: COLORLESS

Clarity Before: CLEAR

Texture: LIO

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: NO

SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc Contract:

MW-03D

Lab Code: 10170

Case No.: SAS No.:

SDG No.: CH07

Matrix (soil/water): WATER

Lab Sample ID: 21998025

Level (low/med):

LOW

Date Received: 08/06/98

% Solids:

0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	м	
10215	***************************************		_	**		
7429-90-5	Aluminum	139	B	E VV]	p	
7440-36-0	Antimony	15.0	10	TUM	P	
7440-38-2	Arsenic	10.0	M G G G G G G G G G G G G G G G G G G G	*	유 유 유 유	- R
7440-39-3	Barium	201			P	
7440-41-7	Beryllium	3.0	Ū		P	
7440-43-9	Cadmium	5.0	Ū	<u>14 Y</u>	P	R
7440-70-2	Calcium	81500		J. J.	P	
7440-47-3	Chromium	5.0	<del>U</del>	*	<u>P</u>	
7440-48-4	Cobalt	20.0	U			
7440-50-8	Copper	10.0	บี บี	*	P	
7439-89-6	Iron	60.0	Ū	三*	P	
7439-92-1	Lead	3.0	Ū	ナル	P	
7439-95-4	Magnesium	20500			P	
7439-96-5	Manganese	216			P	
7439-97-6	Mercury	-0.20	Ü	-124		R
7440-02-0	Nickel	30.0	U	7/4	p	-
7440-09-7	Potassium	11400		*	P	
7782-49-2	Selenium	5.0	10	TU X	P P P P P P P P P P P P P P P P P P P	_
7440-22-4	Silver	1000 3000	Ü		<u> F</u>	RIB
7440-23-5	Sodium	44700		*		
7440-28-0	Thallium	10.0	$\overline{\overline{\mathbf{U}}}$	*	p	
7440-31-5	Tin					
7440-62-2	Vanadium	30.0	Ŭ		p	_
7440-66-6	Zinc	- <del>10-0</del>	7	W 0.7-	P.	-16
	Cyanide		,,,,,,,			. 3

color Before: COLORLESS

Clarity Before: CLEAR

Texture: LIQ

olor After: COLORLESS

Clarity After: CLEAR

Artifacts: NO

^ mments:

SAMPLE NO.

MW-04D

INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc

Contract:

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): WATER

Lab Sample ID: 21998026

Level (low/med):

LOW

Date Received: 08/06/98

% Solids:

0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5	Aluminum	169	$\overline{\mathbf{B}}$	E	p	
7440-36-0	Antimony	15.0	Ū	N	q	
7440-38-2	Arsenic	10.0	BUT	*	p-	- R
7440-39-3	Barium	491		***************************************	p	100
7440-41-7	Beryllium	3.0	ΰ			
7440-43-9	Cadmium	-5.0	ij.	<del>11</del> *	<u> </u>	R
7440-70-2	Calcium	147000		DW 1	<del>p</del>	' \
7440-47-3	Chromium	5.0	Ū	*	$\frac{\overline{\mathbf{p}}}{\mathbf{p}}$	
7440-48-4	Cobalt	20.0	บี	<u> </u>	P	
7440-50-8	Copper	10.0	Ū	*	P	
7439-89-6	Iron	60.0	שׁמשׁ	E*	p	
7439-92-1	Lead	3.0	Ü	本乙	P	
7439-95-4	Magnesium	23700	1		P	
7439-96-5	Manganese	10.0	18	* 11	P	
7439-97-6	Mercury	-0-20	U U	N	ē₩	R
7440-02-0	Nickel	30.0	υ	*	P	10
7440-09-7	Potassium	7510		*	p	
7782-49-2	Selenium	5.0	ستتتر	* UT	P	_
7440-22-4	Silver	10UJ 10-0		<u> </u>	P	R m
7440-23-5	Sodium	36400		*		/ U×J
7440-28-0	Thallium	10.0	Ü	*	P	
7440-31-5	Tin			<u> </u>		
7440-62-2	Vanadium	30.0	ี่บี	***************************************	P	
7440-66-6	Zinc	10.0	Ū		P	-R
	Cyanide		,,,,,,	-		`

color Before: COLORLESS

Clarity Before: CLEAR

Texture: LIQ

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: NO

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Upstate Laboratories, Inc Contract:

MW-05D

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: CH07

Matrix (soil/water): WATER

Lab Sample ID: 21998027

Level (low/med):

LOW

Date Received: 08/06/98

% Solids:

0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

T429-90-5	
7440-38-2         Arsenic         10.9         #         P           7440-39-3         Barium         279         U         P           7440-41-7         Beryllium         3.0         U         P           7440-43-9         Cadmium         5.0         U         W         P           7440-47-3         Chromium         5.0         U         W         P           7440-48-4         Cobalt         20.0         U         W         P           7439-89-6         Iron         60.0         U         E*         P           7439-92-1         Lead         3.0         U         N         P           7439-95-4         Magnesium         23800         P         P           7440-02-0         Mickel         30.0         U         W         P           7440-09-7         Potassium         10400         W         P	
Table   Tabl	,
T440-43-9	
7440-43-9         Cadmium         5.0         U N*         P           7440-70-2         Calcium         114000         E*         P           7440-47-3         Chromium         5.0         U         W           7440-48-4         Cobalt         20.0         U         P           7439-89-6         Copper         10.0         U         E*         P           7439-92-1         Lead         3.0         U         E*         P           7439-95-4         Magnesium         23800         P         P           7439-97-6         Mercury         0.20         U         W         P           7440-02-0         Nickel         30.0         U         W         P           7440-09-7         Potassium         10400         W         P	
7440-43-9         Cadmium         5.0         U N*         P           7440-70-2         Calcium         114000         E*         P           7440-47-3         Chromium         5.0         U         W           7440-48-4         Cobalt         20.0         U         P           7439-89-6         Copper         10.0         U         E*         P           7439-92-1         Lead         3.0         U         E*         P           7439-95-4         Magnesium         23800         P         P           7439-97-6         Mercury         0.20         U         W         P           7440-02-0         Nickel         30.0         U         W         P           7440-09-7         Potassium         10400         W         P	
T440-70-2	
7440-47-3	
7440-50-8         Copper         10.0         U         **         P           7439-89-6         Iron         60.0         U         E*         P           7439-92-1         Lead         3.0         U         *N         P           7439-95-4         Magnesium         23800         P         P           7439-96-5         Manganese         35.3         **         7         P           7440-02-0         Nickel         30.0         U         *         P           7440-09-7         Potassium         10400         **         P	
7440-02-0 Nickel 30.0 U * P P P	
7440-02-0 Nickel 30.0 U * P P P	
7440-02-0 Nickel 30.0 U * P P P	
7440-02-0 Nickel 30.0 U * P P P	
7440-02-0 Nickel 30.0 U * Potassium 10400 P	
7440-02-0 Nickel 30.0 U * Potassium 10400 P	
7440-02-0 Nickel 30.0 U * Potassium 10400 P	
7440-09-7   POTASSIUM   10400     #   P	
7782-49-2 Selenium 5.0 W W U J P 7440-22-4 Silver 7001 10.0 U N P 740 740 740 750 750 750 750 750 750 750 750 750 75	
7440-22-4 Silver 1001 10.0 UN FORD	
7/1/0-23-5 Godium F0100 - F0100	m
7440-23-5   Sodium   59100   4   P	173
7440-28-0 Thallium 10.0 U * P	
7440-31-5 Tin	
7440-62-2 Vanadium	
7440-66-6 Zinc -10.0 UW OF P	
Cyanide	

olor Before: COLORLESS

Clarity Before: CLEAR

Texture: LIQ

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: NO

## APPENDIX C PHASE IIA ANALYTICAL DATA

#### DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES
431 EAST FAYETTE STREET
EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG CH13
Sampled 11/16/99

AQUEOUS/OIL SAMPLES for VOLATILE ORGANICS
T8-oil (32199029)

#### DATA ASSESSMENT

A volatile organics data package containing analytical results for one oil sample that was collected with groundwater was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8260, addressed Target Compound List analytes. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

The concentration of methylene chloride that was detected in T8-oil is assumed to represent a laboratory or program artifact. The result has been qualified as an estimation. Because methylene chloride was not detected in the associated method blank, the result cannot be removed from Form 1.

#### CORRECTNESS AND USABILITY

MS/MSD samples were not included with the analysis of T8-oil. This omission makes it impossible to evaluated matrix effects that might bias measurements. Because the matrix of T8-oil would be expected to cause interferences, results obtained from this sample have been qualified as estimations.

The identifications of ethylbenzene and xylene in T8-oil could not be confirmed based on the reference mass spectra included in the raw data. Ethylbenzene and xylene should be considered undetected in the affected sample.

Library searches were performed to identify each reported Tentatively Identified Compound (TIC) that was present in T8-oil. When the supporting mass spectra failed to provide a conclusive identification, or when a more definitive identification was possible, Form 1E was edited.

Reported data should be considered technically usable in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound

concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: //a/for

#### SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved or are not analyzed within established holding times may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. VOA analyses must be completed within 14 days of receipt. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included one sample of oil that was collected with groundwater, was collected from the Former Brown Manufacturing site on 16Nov99. The sample was delivered to the laboratory, after hours, on the day of collection. The cooler arrived intact, with custody seals in place. A cooler temperature of 6.9°C was recorded by the laboratory at the time of receipt. T8-oil was analyzed as a medium level oil on 18Nov99, satisfying program holding time limitations.

#### BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank. Any sample concentration less than 5 times the level determined in a blank must be qualified. The qualification criteria is extended to ten times the concentration observed in blanks for common laboratory artifacts. These include acetone, methylene chloride and 2-butanone. Chloroform is also frequently present as a laboratory artifact.

One method blank was analyzed with this group of samples. This blank was free of targeted analyte contamination. Methylene chloride was detected in T8-oil. This result has been flagged as an estimation because methylene chloride is known to be a prevalent laboratory artifact. The methylene chloride was not removed from Form 1 because a similar artifact was not present in the associated blank.

#### MS TUNING

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of BFB was analyzed prior to each analytical sequence and during every 12 hour period of instrument operation. An Instrument Performance Check Form is present for each BFB evaluation. The BFB tunes associated with this group of samples satisfied the program acceptance criteria.

### CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The required levels of initial calibration were performed on 11Nov99. This sequence of calibration standards included analyte concentrations of 10, 20, 50, 100 and 200  $\mu g/l$ . With one exception, the required levels of instrument response and an acceptable degree of linearity was demonstrated for each targeted analyte. Although bromomethane standards displayed poor linearity, the required minimum level of response was achieved by each standard. Although errors might be expected in measurements of bromomethane, it can be assumed this analyte would be detected if present in samples. Because bromomethane was not detected, data has been left unqualified.

Continuing calibration verification standards were analyzed prior to each twelve hour period of instrument operation. These checks demonstrated an acceptable level of instrument stability.

### SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Surrogate standard summary reports were properly prepared; the correct acceptance criteria applied. The surrogate standard recoveries reported from this group of samples satisfied the program acceptance criteria.

### INTERNAL STANDARDS

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. The response and retention time of each internal standard that was added to this group of samples fell within the calculated limits of acceptance.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS
Matrix spiking refers to the addition of known analyte concentra-

tions to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

Recoveries were not reported for MS/MSD samples. This omission makes it impossible to evaluate the presence of interferences that might bias the analysis of T8-oil. Because an oily sample would be expected to generate matrix effects, data reported from T8-oil has been qualified as an estimation.

### DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects or poor laboratory technique.

Field split duplicates were not included in this group of samples.

### REPORTED ANALYTES

A formal report was provided for T8-oil. The data package also included total ion chromatograms and raw instrument printouts. Laboratory results have been adjusted to reflect sample size and moisture content. Reference mass spectra were provided to confirm the identification of each targeted analyte that was detected in T8-oil. It is noted that the identifications of ethylbenzene and xylene could not be conclusively confirmed using the mass spectra references supplied by the laboratory. Ethylbenzene and xylene should be considered undetected in T8-oil.

Tentatively Identified Compounds (TIC) were reported from T8-oil. Frequently, these identifications were not soundly supported by the library searches contained in the raw data. Where appropriate, Form 1E has been corrected.

# SUMMARY OF QUALIFIED DATA

FORMER	BROWN MANUFACTURING	CTURING SITE			SAMPLED 11/16/99	11/16/99
Antonio		BLANKS METH CHLORIDE	SPECTRA ID TARGETS	SPECTRA ID TIC	MS/MSD	
T8-011	(32199029)	9700 J	34000 U	EDIT	ALL J/UJ	

TARGETS = ethylbenzene, xylene

EPA SAMPLE NO.

T8OIL

Lab Name:	UPSTA	TE LABS	S INC.	Contract:	C&H ENG.		
Lab Code:	10170	Springs & Marginson Springs	Case No.: 01	SAS No	p.: 5	SDG No.: CH13	
Matrix: (soil/v	vater)	<b>S</b> OIL		La	b Sample ID:	32199029	-
Sample wt/vo	ol:	1.0	(g/ml) G	La	b File ID:	D1268.D	
Level: (low/r	ned)	MED	a strictural de galacia terrapisas	Da	ite Received:	11/16/99	
% Moisture:	not dec.	1	TO AND AND AND ADDRESS AND ADD	Da	ate Analyzed:	11/18/99	
GC Column:	RTX \	<u>/O</u> ID:	0.53 (mm)	Di	lution Factor:	1.0	
<b>o</b> il Extract \	/oļume;	10000	(uL)		il Aliquot Vol	ume: 15	(uL

### CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG WW	Q .
74-87-3	chloromethane	34000	U
75-01-4	vinyl chloride	34000	U \
74-83-9	bromomethane	34000	U I
75-00-3	chloroethane	34000	
67-64-1	acetone	34000	<del>  -  -  -  -  -  -  -  -  -  -  -  -</del>
75-35-4	1,1-dichloroethene	34000	
75-15-0	carbon disulfide	34000	
75-09-2	methylene chloride	9700	1
156-60-5	trans-1,2-dichloroethene	34000	ΨX
75-34-33	1,1-dichloroethane	34000	UT
156-59-2	cls-1,2-dichloroethene	34000	
67-66-3	chloroform	34000	
56-23-5	carbon tetrachloride	34000	U I
107-06-2	1,2-dichloroethane	34000	
78-93-2	2-butanone	34000	
71-55-6	1,1,1-trichloroethane	34000	U T
71-43-2	benzene	34000	T [
79-01-6	trichloroethene	34000	TT T
78-87-5	1,2-dichloropropane	34000	TT.
75-27-4	bromodichloromethane	34000	し / しつ
10061-1-5	cis-1,3-dichloropropene	34000	<b>V</b> /
10061-2-6	trans-1,3-dichloropropene	34000	V/
79-00-5	1,1,2-trichloroethane	34000	V
124-48-1	dibromochloromethane	34000	U I
75-25-2	bromoform	34000	Ψ
108-10-1	4-methyl-2-pentanone	34000	Ų (
108-88-3	toluene	34000	Ų
591-78-6	2-hexanone	34000	U
127-18-4	tetrachloroethene	34000	UT.
108-90-7	chlorobenzene	34000	
100-41-4	ethylbenzene	34000 <del>46000</del>	- UJ
	m,p-xylene	34000 45000-	-J U 1
95-47-6	o-xylene	34000	43
100-42-5	styrene	34000	13/17
79-34-5	1,1,2,2-tetrachloroethane	34000	

W

### DATA USABILITY SUMMARY REPORT

for

### BEARDSLEY DESIGN ASSOCIATES 431 EAST FAYETTE STREET EAST SYRACUSE, NY 13202

### FORMER BROWN MANUFACTURING SITE SDG CH13 Sampled 11/15/99, 11/16/99, 11/18/99

### SOILS and AQUEOUS SAMPLES for SEMIVOLATILE ORGANICS

T7-2	(32099002)	T7-4 (32099004)	T8-OIL	(32199029)
T8-2	(32199030)	T8-2dup(32199031)	T9-1	(32199032)
T12-1	(32399037)	T13-1 (32399040)	T14-1	(32399042)
T15-1	(32399044)			

### DATA ASSESSMENT

A semivolatile organics data package containing analytical results for nine soils and one oil sample that was collected with groundwater, was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary OC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Inc., the laboratory contracted for analysis. Laboratories, Analyses, performed according to SW-846 Method 8270, addressed Target Compound List analytes. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

Traces of bis(2-ethylhexyl)phthalate were detected in T7-4, T9-1 and T15-1. When present in samples, this phthalate is assumed to represent a laboratory artifact. As such, bis(2-ethylhexyl)-phthalate should be interpreted as undetected in program samples.

Aldol Condensation products were reported as Tentatively Identified Compounds (TIC) throughout this group of samples. When present, they have been removed from Form 1F. A large number of additional unidentified TICs were present in each method blank. Because of their number, it must be assumed that some of the TICs reported from samples also represent laboratory artifacts.

Internal standards #5 and/or #6 produced a low instrument response in samples T7-2, T8-2 and T8-2dup. Analytes dependant upon the response of these internal standards have been qualified as estimations in the affected samples.

### CORRECTNESS AND USABILITY

The identifications of naphthalene, benzo[a]anthracene, pyrene, bis(2-ethylhexyl)phthalate, acenaphthalene and phenanthrene from T7-4, T8-2, T8-2dup, 9-1 or T15-1 were not conclusive, based on the mass spectra references provided by the laboratory. Where affected, these analytes should be considered undetected.

The Tentatively Identified Compounds (TIC) reported from every sample except the T12-1 included identifications that were not conclusively supported by the library searches supplied by the laboratory. The affected identifications have been edited on Form 1F.

Reported data should be considered technically defensible in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been

flagged "J" or "UJ". Data that is felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be quaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 1/21/07

### SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included nine soils and one sample of oil that was collected with groundwater, was collected from the Former Brown Manufacturing site between 15Nov99 and 18Nov99. Two samples collected on 15Nov99, four collected on 16Nov99 and four collected on 18Nov99 were delivered to the laboratory, after hours, on the day they were sampled. Each cooler of samples arrived intact, with custody seals in place. A temperature of 6.9°C was obtained from each sample cooler at the time of laboratory receipt.

Sample extractions were performed on 18Nov99, 19Nov99 and 22Nov99. Analyses, including reruns, were completed by 17Dec99. Program holding time limitations were satisfied.

### BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank. Any sample concentration less than 5 times the level determined in a blank must be qualified. The qualification criteria is extended to ten times the concentration observed in blanks for common laboratory artifacts. These include phthalate esters.

Three method blanks were analyzed with this group of samples. Traces of bis(2-ethylhexyl)phthalate were detected in two blanks. When present in samples, similar phthalates are assumed to represent laboratory artifacts. Phthalates should be considered undetected in program samples. Detection limits equaling CRDL or the reported concentration, whichever is greater, should be assumed.

Aldol Condensation products (4-methyl-3-penten-2-one, 4-hydroxy-4-methyl-2-pentanone) and a large number of unidentified TIC's were also present in blanks. When present in samples, aldol products have been removed from Form 1F. Because of the large number of TICS present in blanks, it must be assumed that some of the TICs present in samples also represent laboratory artifacts.

### MS TUNING

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of DFTPP was analyzed prior to each analytical sequence and during every 12 hour period of instrument operation. An Instrument Performance Check Form is present for each DFTPP evaluation. The DFTPP tunes associated with this group of samples satisfied the program acceptance criteria.

### CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The required levels of initial calibration were performed on 09Dec99 and 15Dec99. Standards of 20, 50, 80, 120 and 160 ng were included. The calibration curves for each analyte demonstrated the required levels of instrument response and an acceptable degree of linearity. It is noted that during the 09Dec99 initial calibration, pentachlorophenol standards demonstrated poor linearity. Each calibration standard did, however, generate the minimum required levels of instrument response. Although errors might be expected in the calculation of pentachlorophenol concentrations, this analyte would be detected if present in samples. Because pentachlorophenol was not detected, data has been left unqualified.

A continuing calibration verification was completed prior to each twelve hour period of instrument operation. These checks demonstrated an acceptable level of instrument stability.

### SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Surrogate Summary Sheets were properly prepared; the correct acceptance criteria applied. The surrogate additions to T9-1, T8-2, T8-2-dup, T-7-4 and T14-1 were recovered successfully. No more than one surrogate of either fraction, acid or base/neutral, produced an unacceptable recovery.

The surrogate additions to T8-oil, T7-2, T13-1, T12-1 and T15-1 were completely unrecovered. Poor recoveries were also reported for the additions to T7-2dl. In each case, however, these samples were diluted between 1:10 and 1:100 after the surrogates were

added. Because the observed surrogate performance may be attributed to sample dilutions, data has been left unqualified.

### INTERNAL STANDARDS

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. The response produced by the chrysene-dl2 additions to T7-2 and T7-2-dl, and the perylene-dl2 additions to T-2, T8-2DP, T7-2 and T7-2DL failed to satisfy the calculated limits of acceptance. Analytes dependant upon the response of these internal standards have been qualified as estimations in the affected samples.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS
Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide
an indication of laboratory accuracy. The analysis of a duplicate
spiked aliquot provides a measurement of precision.

Sample T8-2 was selected for matrix spiking. The additions to two portions of this sample produced unacceptable recoveries of 2,4-dinitrotoluene (90%,90%) and 4-nitrophenol (193%, 166%). Although the reported recoveries of 1,4-dichlorobenzene were acceptable, the measurements indicated poor precision. This performance alone, does not warrant data qualifications.

### **DUPLICATES**

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision, may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates of D8-2 were included in this group of samples. The low analyte concentrations detected in this pair of samples demonstrated an acceptable level of reproducibility.

	T8-2	T8-2dup
2-Methylnaphthalene	1200	1200
Fluorene	170	
Phenanthrene	670	

### SAMPLE INFORMATION

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts.

Sample chromatograms were properly attenuated. Mass spectra references were provided to confirm the identification of each reported analyte. When the laboratory generated references failed to provide a conclusive identification, Form 1 was edited to indicate a negative result. Questionable identifications are tabulated below.

<u>SAMPLE</u>	QUESTIONABLE IDENTIFICATIONS
T15-1 T9-1 T8-2 T8-2dup	benzo[a]anthracene, naphthalene, pyrene bis(2-ethylhexyl)phthalate naphthalene, acenaphthene naphthalene, phenanthrene
T7-4	bis(2-ethylhexyl)phthalate

In several cases, TIC identifications were not conclusively supported by the library searches included in the raw data. In such cases, Form 1F has been edited to indicate an appropriate identification. The Form 1F of every sample except T12-1 has been corrected.

## SUMMARY OF QUALIFIED DATA

FORMER BROWN MANUFACTURING SITE

SAMPLED 11/15/99 thru 11/18/99

SPECTRA ID TIC	EDIT EDIT	EDIT EDIT EDIT	EDIT EDIT EDIT
SPECTRA ID TARGETS	MS2 U	MS3,4 U MS3,5 U MS2 U	MS1,3 U
INTERNAL STD	IS5,6 J/UJ	186 J/UJ 186 J/UJ	
BLANK PHTHALATE	3900	420U	400000
BLANK TIC	REMOVE	REMOVE REMOVE REMOVE	REMOVE
		~~~~	(32399040) (32399040) (32399042) (32399044)
	T7-2 T7-4	T8-01L T8-2 T8-2dup T9-1	11411 11411 11511

pyrene, butylbenzylhthalate, 3,3'dichlorobenzidine, benzo[a]anthracene, chrysene, bis(2-ethylhexyl)phthalate, 11 HS3

di-n-octylphthalae, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno[1,2,3-cd]pyrene, dibenz[a,h]anthracene, benzo[g,h,i]perylene H 136

benzo[a]anthracene, pyrene bis(2-ethylhexyl)phthalate IJ MS 1

II MS2

naphthalene 11 MS3

acenaphthalene MS4

phenanthrene MS5

EPA SAMPLE NO.

Lab Name:	Upstate	Laborat	ories, Inc.	C	Contract: C&H		17-2
Lab Code:	10170		Case No.:		SAS No.:	S	DG No.: CH13
Matrix: (soil/w	vater)	SOIL			Lab Sam	~1	32099002
Sample wt/vo	ol:	30.1	(g/ml) (3	Lab File		B7606.D
Level: (low/m	ned)	LOW	ra search		Date Red	eived:	11/15/99
% Moisture:	16		decanted:(Y/I	N) N	Date Ext	racted:	11/18/99
Concentrated	I Extract ∖	/olume:	1000 (u	L)	Date Ana	alyzed:	12/16/99
Injection Volu	me: 2.0) (uL)	}		Dilution F	actor:	10.0
GPC Cleanup	o: (Y/N)	Ν	pH:				• • • • • • • • • • • • • • • • • • • •

01016		CONCENTRALL	ON UNHO.	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylamine	1	4000	U
111-44-4	bis(2-Chloroethyl)ether		4000	Ü
108-95-2	Phenol		4000	U
95-57-8	2-Chlorophenol		4000	
541-73-1	1,3-Dichlorobenzene		4000	U
106-46-7	1,4-Dichlorobenzene	words to the contract brightness was been been been been been been been bee	4000	1 0
95-50-1	1,2-Dichlorobenzene		4000	Ü
108-60-1	2,2'-oxybis(1-Chloropropa	ine\	4000	
95-48-7	2-Methylphenol		4000	U
67-72-1	Hexachloroethane		4000	A To the Committee of t
621-64-7	N-Nitroso-di-n-propylamin	Δ		· · · · ·
106-44-5	(3+4)-Methylphenol		4000	<u>U</u>
98-95-3	Nitrobenzene		4000	U
78-59-1	Isophorone		4000	Ų
88-75-5	2-Nitrophenol	garanti garan ya mata da	4000	U
105467-9	2,4-Dimethylphenol		4000	U
111-91-1	bis(2-Chloroethoxy)metha	n n	4000	U
120-83-2	2,4-Dichlorophenol	ne	4000	U
120-82-1	1,2,4-Trichlorobenzene	· · · · · · · · · · · · · · · · · · ·	4000	U
91-20-3	Naphthalene	or a second result in	4000	<u>U</u>
106-47-8	4-Chloroaniline		4600	D
87-68-3	Hexachlorobutadiene		4000	U
59-50-7	4-Chloro-3-methylphenol	1918 C. L. Den. Bres and Alexander Springer	4000	U
91-57-6			4000	U
77-47-4	2-Methylnaphthalene		2200	JD 🗸
88-06-2	Hexachlorocyclopentadien	е	4000	U
95-95-4	2,4,6-Trichlorophenol		4000	U
91-58-7	2,4,5-Trichlorophenol		40000	U
88-74-4	2-Chloronaphthalene	97-11 - 14 4 - 11 1980 - 1 40 - 140	4000	U
The second secon	2-Nitroaniline	W. 1. C. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	40000	U
208-96-8	Acenaphthylene		1200	JD 🗸
131-11-3	Dimethyl phthalate	t de la companya de La companya de la co	4000	U
606-20-2	2,6-Dinitrotoluene	t de la	4000	U
83-32-9	Acenaphthene	******	4600	DV
99-09-2	3-Nitroaniline		40000	Ü
51-28-5	2,4-Dinitrophenol	at the same of the	40000	U
132-64-9	Dibenzofuran	1	3600	JD /
121-14-2	2,4-Dinitrotoluene		4000	0000026

Lab Name:	Upstate	Laborat	ories, Inc.		Contrac	ot: C&H	T7-2
Lab Code:	10170	~	Case No.:		SAS	No.:	SDG No.: CH13
Matrix: (soil/	water)	SOIL				Lab Sample II	D: 32099002
Sample wt/vo	ol:	30.1	(g/ml)	Ğ		Lab File ID:	B7606.D
Level: (low/r	ned)	LOW				Date Received	d: 11/15/99
% Moisture:	16		decanted:(Y/N)	N .	Date Extracted	d: 11/18/99
Concentrated	i Extract	Volume:	1000	(uL)		Date Analyzed	d: 12/16/99
Injection Volu	ıme: 2	.0 (uL)			Dilution Factor	r: 10.0
GPC Cleanu	p: (Y/N)	N	pH:				180 170 170 180 180 180 180

0.0		001106111110	THE	A OMITO.		
CAS NO.	COMPOUND	(ug/L or ug/K	g) <u>L</u>	JG/KG	Q	
100-02-7	4-Nitrophenol			40000	Ü	1
86-73-7	Fluorene		* ****	6300	ď	1/
7005-72-3	4-Chlorophenyl phenyl ethe	er :		4000	U	
84-66-2	Diethyl phthalate			4000	Ü	
100-01-6	4-Nitroaniline			40000	Ú	··•
534-52-1	4,6-Dinitro-2-methylphenol			20000	Ü	'\$ 1
86-30-6	n-Nitrosodiphenylamine			4000	; U	1
101-55-3	4-Bromophenyl phenyl ethe	r	• • • • • • • • • • • • • • • • • • • •	4000	U	!
118-74-1	Hexachlorobenzene			4000	U	!
87-86-5	Pentachiorophenol		*********	7900	Ū	1
85-01-8	Phenanthrene	320	000	-4300 0	ED-D	1
120-12-7	Anthracene	~~~	S waring a self-single	12000	D	/
84-74-2	Di-n-butyl phthalate			4000	Ū	1
86-74-8	Carbazole			3400	JD	1
206-44-0	Fluoranthene	250	00	40000	ED D	· ·
129400-0	Pyrene	420	00	50000	€Đ D.	1/
85-68-7	Butyl benzyl phthalate			4000	س لا)
91-94-1	3,3'-Dichlorobenzidine			4000	4 C	
56-55-3	Benzo[a]anthracene			19000	D'DJ	
218-01-9	Chrysene			17000	DO.	
117-81-7	bis(2-Ethylhexyl)phthalate			4000	10 U	
117-84-0	Di-n-octyl phthalate			4000	ش مول	
205-99-2	Benzo[b]fluoranthene	170	OOO	34000	FD D	
207-08-9	Benzo[k]fluoranthene	2 - 4	* #	7900	POT	' /
50-32-8	Benzo[a]pyrene			18000	COG	_
193-39-5	Indeno[1,2,3-cd]pyrene		1.78	7600	Føs	,
53-70-3	Dibenz(a,h)anthracene	-		4000	(س کل	
191-24-2	Benzo[g,h,i]perylene	and the second of the second o		7600	203	/

EPA SAMPLE NO.

T7-4

Lab Name:	Upstate	Laborato	ries, Inc.	Cc	ontract: C&F	1	
Lab Code:	10170		Case No.:		SAS No.:	S	DG No.: CH13
Matrix: (soil/w	vater)	SOIL			Lab Sar	nple ID:	32099004
Sample wt/vc	ol:	30	(g/ml) G		Lab File	ID:	B7601.D
Level: (low/n	ned)	LOW			Date Re	ceived:	11/15/99
% Moisture:	15	. <u></u> .	lecanted:(Y/N)	Ν	Date Ex	tracted:	11/18/99
Concentrated	l Extract	Volume:	1000 (uL)		Date An	alyzed:	12/16/99
Injection Volu	ıme: 2	.0 (uL)			Dilution	Factor:	1.0
GPC Cleanur	o: (Y/N)	N	рН:				

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylamine		390	U
111-44-4	bis(2-Chloroethyl)ether		390	U
108-95-2	Phenol	t in the second	390	Ū
95-57-8	2-Chlorophenol		390	Ū
541-73-1	1,3-Dichlorobenzene		390	Ų
106-46-7	1,4-Dichlorobenzene		390	Ų
95-50-1	1,2-Dichlorobenzene		390	Ū
108-60-1	2,2'-oxybis(1-Chloropropa	ne)	390	Ü
95-48-7	2-Methylphenol		390	U
67-72-1	Hexachloroethane		390	U
621-64-7	N-Nitroso-di-n-propylamin	e	390	U
106-44-5	(3+4)-Methylphenol	Medical and the selection of the desire and the selection of the selection	390	U
98-95-3	Nitrobenzene		390	U
78-59-1	Isophorone	· · · · · · · · · · · · · · · · · · ·	390	U
88-75-5	2-Nitrophenol		390	U
105-67-9	2,4-Dimethylphenol		390	U
111-91-1	bis(2-Chloroethoxy)metha	ne	390	U
120-83-2	2,4-Dichlorophenol		390	Ū
120-82-1	1,2,4-Trichlorobenzene		390	U
91-20-3	Naphthalene	74,17	390	Ü
106-47-8	4-Chloroaniline		390	Ų
87-68-3	Hexachlorobutadiene		390	U
59-50-7	4-Chioro-3-methylphenol	The state of the s	390	Ų
91-57-6	2-Methylnaphthalene		390	U
77-47-4	Hexachlorocyclopentadier	ie	390	U
88-06-2	2,4,6-Trichlorophenol		390	U
95-95-4	2,4,5-Trichlorophenol		3900	U
91-58-7	2-Chloronaphthalene	, ,,,,	390	U
88-74-4	2-Nitroaniline		3900	U
208-96-8	Acenaphthylene	i.	390	U
131-11-3	Dimethyl phthalate		390	U
606-20-2	2,6-Dinitrotoluene		390	U
83-32-9	Acenaphthene		390	U
99-09-2	3-Nitroaniline		3900	U
51-28-5	2,4-Dinitrophenol		3900	U
132-64-9	Dibenzofuran		390	U
121-14-2	2,4-Dinitrotoluene		390	U ;

EPA SAMPLE NO.

Lab Name:	Upstate	Laboral	tories, Inc.		Contra	ct:	C&H	T7-4
Lab Code:	10170		Case No.:		SAS	No.:	: SI	DG No.: CH13
Matrix: (soil/v	vater)	SOIL				Lab	Sample ID:	32099004
Sample wt/vo	ol:	30	(g/ml)	G		Lab	File ID:	B7601.D
Level: (low/n	ned)	LOW				Date	e Received:	11/15/99
% Moisture;	15		decanted:(Y/N)	N	Date	e Extracted:	11/18/99
Concentrated	d Extract '	Volume:	1000	(uL)		Date	e Analyzed:	12/16/99
Injection Volu	ıme: 2.	0 (uL	.)			Dilu	tion Factor:	1.0
GPC Cleanup	p: (Y/N)	N	pH:					

CONCENTRATION UNITS:

		OONOLIVINATI	ON DINITS.	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
100-02-7	4-Nitrophenol	\$1841.500.00 pp. po. 1	3900	U
86-73-7	Fluorene		390	Ū
7005-72-3	4-Chlorophenyl pheny	/I ether	390	Ü
84-66-2	Diethyl phthalate		390	Ü
100-01-6	4-Nitroaniline		3900	Ü
534-52-1	4,6-Dinitro-2-methylpl	nenol	2000	
86-30-6	n-Nitrosodiphenylamii		390	U
101-55-3	4-Bromophenyl pheny		390	U
118-74-1	Hexachlorobenzene		390	IJ.
87-86-5	Pentachlorophenol	The second of th	780	Ü
85-01-8	Phenanthrene	***************************************	390	Ĭ.
120-12-7	Anthracene	THE THE STATE OF THE PARTY OF THE STATE OF T	390	Ű
84-74-2	Di-n-butyl phthalate	The second section of the second seco	390	Ū
86-74-8	Carbazole		390	Ŭ
206-44-0	Fluoranthene		390	Ü
129-00-0	Pyrene		390	Ü
85-68-7	Butyl benzyl phthalate	The second secon	390	Ū
91-94-1	3,3'-Dichlorobenzidine		390	Ü
56-55-3	Benzo[a]anthracene		390	Ü
218-01-9	Chrysene	The state of the s	390	U
117-81-7	bis(2-Ethylhexyl)phtha	ilate 1	390 -130	-JB V
117-84-0	Di-n-octyl phthalate		390	U
205-99-2	Benzo[b]fluoranthene		390	Ū
207-08-9	Benzo[k]fluoranthene	The last of the form of probabilities of	390	Ū
50-32-8	Benzo[a]pyrene		390	Ü
193-39-5	Indeno[1,2,3-cd]pyren	е :	390	Ū
53-70-3	Dibenz[a,h]anthracene		390	U
191-24-2	Benzo(g,h,i)perylene	The state of the second of the	390	Ū

W

EPA SAMPLE NO.

T8OIL

Lab Name:	Upstate	Laborat	ories, Inc.	Cor	itract: 🤇	2&H		
Lab Code:	10170		Case No.:		AS No.:	SI	DG No.: CH13	
Matrix: (soil/v	water)	SOIL			Lab	Sample ID:	32199029	
Sample wt/vo	ol:	1	(g/ml) G		Lab I	File ID:	B7596.D	
Level: (low/r	ned)	LOW			Date	Received:	11/16/99	
% Moisture:	0		decanted:(Y/N)	N	Date	Extracted:	11/18/99	
Concentrate	d Extract	Volume	: 1000 (uL)		Date	Analyzed:	12/15/99	
Injection Vol	ume: 2	0 (ul	L)		Dilut	lon Factor:	10.0	
GPC Cleanu	ıp: (Y/N)	N	pH:					

		CONCENTION	011 01111 0.	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylamine	3	100000	U
111-44-4	bis(2-Chloroethyl)ether		100000	U
108-95-2	Phenol	Control of the Contro	100000	U
95-57-8	2-Chlorophenol		100000	U
541-73-1	1,3-Dichlorobenzene	and the state of the seconds of the second s	100000	U
106-46-7	1,4-Dichlorobenzene		100000	U
95-50-1	1,2-Dichlorobenzene	any interpretation of the professionary and include the second of the se	100000	Ū
108-60-1	2,2'-oxybis(1-Chloropro	opane)	100000	U
95-48-7	2-Methylphenol	M. T. M. in the fact of the second	100000	Ū
67-72-1	Hexachloroethane	4 8/1 15 155/2 (1) 100/4 (1	100000	U
621-64-7	N-Nitroso-dl-n-propylar	nine	100000	U
106-44-5	(3+4)-Methylphenol	COMPANIE CONTRACTOR	100000	U
98-95-3	Nitrobenzene		100000	U
78-59-1	Isophorone	17 m. de 2 a 1 k - 2 a 1 k - 2 a 1 a 1 a 1 a 1 a 1 a 1 a 1 a 1 a 1 a	100000	U
88-75-5	2-Nitrophenol		100000	U
105-67-9	2,4-Dimethylphenol	The state of the s	100000	U
111-91-1	bis(2-Chloroethoxy)me	thane	100000	U
120-83-2	2,4-Dichlorophenol		100000	U
120-82-1	1,2,4-Trichlorobenzene	3	100000	Ų
91-20-3	Naphthalene	The same and the same community and the same specific and the same same same same same same same sam	20000	JD
106-47-8	4-Chloroaniline		100000	U
87-68-3	Hexachlorobutadiene		100000	U
59-50-7	4-Chloro-3-methylpher	nol	100000	Ū
91-57-6	2-Methylnaphthalene	171	81000	JD
77-47-4	Hexachlorocyclopenta	diene	100000	U
88-06-2	2,4,6-Trichlorophenol	Z.T. IV.	100000	U
95-95-4	2,4,5-Trichlorophenol		1000000	U
91-58-7	2-Chloronaphthalene		100000	U
88-74-4	2-Nitroaniline		1000000	U
208-96-8	Acenaphthylene		100000	U
131-11-3	Dimethyl phthalate		100000	U
	2,6-Dinitrotoluene	A particular section of a section in the money and a section for the section of the section of a section of	100000	Ū
606-20-2	Acenaphthene	and the second s	100000	Ü
83-32-9	3-Nitroaniline	-	1000000	Ü
99-09-2	2,4-Dinitrophenol	A COLD A COLD COLD AND A COLD AND A COLD COLD COLD COLD COLD COLD COLD COLD	1000000	U
51-28-5		The same of the sa	100000	<u>V</u>
132-64-9	Dibenzofuran		100000	¹ ŭ‴
121-14-2	2,4-Dinitrotoluene	and the second second second second second second	10000	

EPA SAMPLE NO.

T8OIL

_ab Name:	Upstate	Laborate	ories, Inc.	Cor	ntract: C&H		_
Lab Code:	10170		Case No.:	S	SAS No.:	S	DG No.: CH13
Matrix: (soil/\	water)	SOIL			Lab Sampl	le ID:	32199029
Sample wt/vo	ol:	1	(g/ml) G	**************************************	Lab File ID) ;	B7596.D
Level: (low/r	med)	LOW			Date Rece	eived:	11/16/99
% Moisture:	0		decanted:(Y/N)	Ν	Date Extra	acted:	11/18/99
Concentrate	d Extract	Volume:	1000 (uL)		Date Analy	yzed:	12/15/99
Injection Vol	umė: 2	0 (uL	.)		Dilution Fa	actor:	10.0
GPC Cleanu	ıp: (Y/N)	N	pH:				

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
100-02-7	4-Nitrophenol		1000000	<u>U</u>
86-73-7	Fluorene		100000	U
7005-72-3	4-Chlorophenyl pheny	lether	100000	Ų
84-66-2	Diethyl phthalate		100000	U
100-01-6	4-Nitroaniline		1000000	U
534-52 - 1	4,6-Dinitro-2-methylph	enol	500000	U
86-30-6	n-Nitrosodiphenylamin		100000	U
101-55-3	4-Bromophenyl pheny		100000	U
118-74-1	Hexachlorobenzene		100000	U .
87-86-5	Pentachlorophenol		200000	U I
85-01-8	Phenanthrene		18000	JD
120-12-7	Anthracene		100000	U
84-74-2	Di-n-butyl phthalate		100000	U
86-74-8	Carbazole	THE RESERVE OF THE PROPERTY OF	100000	U
206-44-0	Fluoranthene		100000	U
129-00-0	Pyrene	***	100000	U
85-68-7	Butyl benzyl phthalate		100000	U
91-94-1	3,3'-Dichlorobenzidine		100000	<u>U</u>
56-55 - 3	Benzo[a]anthracene	the second control of	100000	U i
218-01-9	Chrysene		100000	U į
117-81-7	bis(2-Ethylhexyl)phtha	ılate	100000	Ŭ
117-84-0	Di-n-octyl phthalate		100000	U
205-99-2	Benzo[b]fluoranthene		100000	U ;
207-08-9	Benzo[k]fluoranthene	,	100000	Ų
50-32-8	Benzo[a]pyrene		100000	U
193-39-5	Indeno[1,2,3-cd]pyren	ė	100000	U
53-70-3	Dibenz[a,h]anthracen	e	100000	U
191-24-2	Benzo[g,h,i]perylene		100000	U

EPA SAMPLE NO.

T8-2

.ab Name:	Upstate	Upstate Laboratories, Inc.				C&H	
Lab Code:	10170		Case No.:	No. 23 control of the	SAS No	o.:S	DG No.: CH13
Matrix: (soil/v	water)	SOIL			La	b Sample ID:	32199030
Sample wt/vo	ol:	30	(g/ml) G		La	b File ID:	B7599.D
Level: (low/r	med)	LOW			Da	ite Received:	11/16/99
% Moisture:	15		decanted:(Y/N	1) N	Da	ite Extracted:	11/18/99
Concentrated	d Extract	Volume	: 1000 (ul	L)	Da	ate Analyzed:	12/16/99
Injection Volt	ume: 2	.0 (ul)		Di	lution Factor:	1.0
GPC Cleanu	p; (Y/N)	N	pH:	.,			

CAS NO.	COMPOUND	(ug/L. or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylamine		390	U
111-44-4	bis(2-Chloroethyl)ether		390	Ų
108-95-2	Phenol		390	Ü
95-57-8	2-Chlorophenol		390	U
541-73-1	1.3-Dichlorobenzene		390	U
106-46-7	1,4-Dichlorobenzene		390	Ų
95-50 - 1	1,2-Dichlorobenzene		390	U
108-60-1	2,2'-oxybis(1-Chloroprop	oane)	390	U
95-48-7	2-Methylphenol		390	U
67-72-1	Hexachloroethane		390	U
621-64-7	N-Nitroso-di-n-propylam	ine	390	U
106-44-5	(3+4)-Methylphenol		390	U
98-95-3	Nitrobenzene		390	U
78-59-1	Isophorone	1	390	U
88-75-5	2-Nitrophenol		390	U
105-67-9	2,4-Dimethylphenol		390	Ü
111-91-1	bis(2-Chloroethoxy)meth	nane	390	U
120-83-2	2,4-Dichlorophenol		390	U
120-82-1	1,2,4-Trichlorobenzene		390	U
91-20-3	Naphthalene	3	70 -260 -	U
106-47-8	4-Chloroaniline		390	U
87-68-3	Hexachlorobutadiene	**************************************	390	Ü
59-50-7	4-Chloro-3-methylpheno)l	390	U
91-57 - 6	2-Methylnaphthalene		1200	1
77-47-4	Hexachlorocyclopentadi	ene	390	U
88-06-2	2,4,6-Trichlorophenol	1	390	U
95-95-4	2,4,5-Trichlorophenol		3900	U
91-58-7	2-Chloronaphthalene		390	U
88-74-4	2-Nitroaniline		3900	U
208-96-8	Acenaphthylene	,,	390	Ų
131-11-3	Dimethyl phthalate		390	U
606-20-2	2,6-Dinitrotoluene		390	U
83-32-9	Acenaphthene		390 -75	J_U
99-09-2	3-Nitroaniline		3900	U
51-28-5	2,4-Dinitrophenol		3900	U
132-64-9	Dibenzofuran		390	U
121-14-2	2,4-Dinitrotoluene	4	390	40000

EPA SAMPLE NO.

T8-2

_ab Name:	Upstate	Laborator	ies, Inc.	Contract: C&H	
_ab Code:	10170	С	ase No.:	SAS No.:	SDG No.: CH13
Matrix: (soil/	water)	SOIL		Lab Sample	ID: 32199030
Sample wt/v	ol:	30	(g/ml) G	Lab File ID:	B7599.D
Level: (low/r	med)	LOW		Date Receive	ed: 11/16/99
% Moisture:	15	d	ecanted:(Y/N)	N Date Extract	ed: 11/18/99
Concentrate	d Extract	Volume:	1000 (uL)	Date Analyz	ed: 12/16/99
Injection Vol	lume: 2	.0 (uL)		Dilution Fact	or: 1.0
GPC Cleanu	up: (Y/N)	N	pH:		

100-02-7 4-Nitrophenol 3900 U 86-73-7 Fluorene 170 J 7005-72-3 4-Chlorophenyl phenyl ether 390 U 84-66-2 Diethyl phthalate 390 U 100-01-6 4-Nitroaniline 3900 U 534-52-1 4,6-Dinitro-2-methylphenol 2000 U 86-30-6 n-Nitrosodiphenylamine 390 U 101-55-3 4-Bromophenyl phenyl ether 390 U 118-74-1 Hexachlorobenzene 390 U 87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206*44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U 91-94-1 3,3'-Dichlorobenzidine 390 U <th></th>	
86-73-7 Fluorene 170 J 7005-72-3 4-Chlorophenyl phenyl ether 390 U 84-66-2 Diethyl phthalate 390 U 100-01-6 4-Nitroaniline 3900 U 534-52-1 4,6-Dinitro-2-methylphenol 2000 U 86-30-6 n-Nitrosodiphenylamine 390 U 101-55-3 4-Bromophenyl phenyl ether 390 U 118-74-1 Hexachlorobenzene 390 U 87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206*44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
7005-72-3 4-Chlorophenyl phenyl ether 390 U 84-66-2 Diethyl phthalate 390 U 100-01-6 4-Nitroaniline 3900 U 534-52-1 4,6-Dinitro-2-methylphenol 2000 U 86-30-6 n-Nitrosodiphenylamine 390 U 101-55-3 4-Bromophenyl phenyl ether 390 U 118-74-1 Hexachlorobenzene 390 U 87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206*44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	-
84-66-2 Diethyl phthalate 390 U 100-01-6 4-Nitroaniline 3900 U 534-52-1 4,6-Dinitro-2-methylphenol 2000 U 86-30-6 n-Nitrosodiphenylamine 390 U 101-55-3 4-Bromophenyl phenyl ether 390 U 118-74-1 Hexachlorobenzene 390 U 87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206-44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
100-01-6 4-Nitroaniline 3900 U 534-52-1 4,6-Dinitro-2-methylphenol 2000 U 86-30-6 n-Nitrosodiphenylamine 390 U 101-55-3 4-Bromophenyl phenyl ether 390 U 118-74-1 Hexachlorobenzene 390 U 87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206*44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
534-52-1 4,6-Dinitro-2-methylphenol 2000 U 86-30-6 n-Nitrosodiphenylamine 390 U 101-55-3 4-Bromophenyl phenyl ether 390 U 118-74-1 Hexachlorobenzene 390 U 87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206*44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
86-30-6 n-Nitrosodiphenylamine 390 U 101-55-3 4-Bromophenyl phenyl ether 390 U 118-74-1 Hexachlorobenzene 390 U 87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206*44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
101-55-3 4-Bromophenyl phenyl ether 390 U 118-74-1 Hexachlorobenzene 390 U 87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206₂44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
118-74-1 Hexachlorobenzene 390 U 87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206₃44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
87-86-5 Pentachlorophenol 780 U 85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206₃44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
85-01-8 Phenanthrene 670 120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206-44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
120-12-7 Anthracene 390 U 84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206*44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
84-74-2 Di-n-butyl phthalate 390 U 86-74-8 Carbazole 390 U 206₃44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
86-74-8 Carbazole 390 U 206₃44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
206-44-0 Fluoranthene 390 U 129-00-0 Pyrene 390 U 85-68-7 Butyl benzyl phthalate 390 U	
85-68-7 Butyl benzyl phthalate 390 U	
Od	
01 04 1 3 3'-Dichlorohenzidine 390 U	
56-55-3 Benzo[a]anthracene 390 U	
218-01-9 Chrysene 390 U	
117-81-7 bis(2-Ethylhexyl)phthalate 390 U	
117-84-0 Di-n-octyl phthalate 390	
205-99-2 Benzo[b]fluoranthene 390	
207-08-9 Benzo[k]fluoranthene 390	
50-32-8 Benzo[a]pyrene 390 V	ΓJ
193-39-5 Indeno[1,2,3-cd]pyrene 390	
53-70-3 Dibenz[a,h]anthracene 390	
191-24-2 Benzo[g,h,i]perylene 390	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T8-2DP

Lab Name: Upstate Laboratories, Inc.				Contra	act: C&H			
Lab Code:	10170		Case No.:	SAS	3 No.:	SE	DG No.: CH13	
Matrix: (soil/w	/ater)	SOIL			Lab Sampl	le ID:	32199031	
Sample wt/vo	ol:	30.1	(g/ml) G		Lab File ID);	B7600.D	
Level: (low/m	ned)	LOW			Date Rece	ived:	11/16/99	
% Moisture:	20		decanted:(Y/N)	N	Date Extra	icted:	11/18/99	
Concentrated	l Extract	Volume	: 1000 (uL)		Date Analy	/zed:	12/16/99	
Injection Volu	ıme: 2	.0 (ul	-)		Dilution Fa	actor:	1.0	
GPC Cleanup	p: (Y/N)	N	pH:					

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylamir	ne T	420	Ū
111-44-4	bis(2-Chloroethyl)ethe		420	U
108-95-2	Phenol		420	U
95-57-8	2-Chlorophenol		420	Ū
541-73-1	1,3-Dichlorobenzene		420	U
106-46-7	1,4-Dichlorobenzene	grander and and and out the second of the se	420	U
95-50-1	1,2-Dichlorobenzene		420	U
108-60-1	2,2'-oxybis(1-Chlorop	ropane)	420	U
95-48-7	2-Methylphenol		420	U
67-72-1	Hexachloroethane		420	U
621-64-7	N-Nitroso-di-n-propyla	amine	420	U
106-44-5	(3+4)-Methylphenol	RALLES Torrespondences and the second of the second	420	U
98-95-3	Nitrobenzene	and the second section of the second section of the second section of the second section of the second section	420	Ū
78-59-1	Isophorone		420	U
88-75-5	2-Nitrophenol		420	U
105-67-9	2,4-Dimethylphenol	and agree a section of green a construction of the section of the	420	Ū
111-91-1	bis(2-Chloroethoxy)m	ethane	420	U
120-83-2	2,4-Dichlorophenol		420	U
120-82-1	1,2,4-Trichlorobenzer	ie	420	U
91-20-3	Naphthalene		120 -310	
106-47-8	4-Chloroaniline		420	U
87-68-3	Hexachlorobutadiene	4 -254-14400	420	U
59-50-7	4-Chloro-3-methylphe		420	U
91-57-6	2-Methylnaphthalene		1200	
77-47-4	Hexachlorocyclopenta	adiene	420	U
88-06-2	2,4,6-Trichlorophenol		420	Ú
95-95-4	2,4,5-Trichlorophenol		4200	Ų
91-58-7	2-Chloronaphthalene	na paga yan manananan ayang yan agin na akan gang a karan na akan banan karan karan karan karan karan karan ka	420	U
88-74-4	2-Nitroaniline		4200	U
208-96-8	Acenaphthylene	A STANCE OF THE COLUMN TWO PERSONS ASSESSED TO THE	420	U
131-11 - 3	Dimethyl phthalate		420	U
606-20-2	2,6-Dinitrotoluene		420	Ū
83-32-9	Acenaphthene	the second secon	420	Ų
99-09-2	3-Nitroaniline	watering control of the state o	4200	Ų
51-28-5	2,4-Dinitrophenol	1961 151 151 151 151 151 151 151 151 151 1	4200	U
132-64-9	Dibenzofuran	- A CANADA - MATERIA NA PARTICULA NA PARTICU	420	U
121-14-2	2,4-Dinitrotoluene	a come per trap trace in a common real state with representative whereast and a second	420	U

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EPA SAMPLE NO.

T8-2DP

Lab Name:	Upstate	Laborat	ories, Inc.		Contr	act: <u>C&H</u>		
Lab Code:	10170	-	Case No.:		SA	S No.:		DG No.: CH13
Matrix: (soil/v	vater)	SOIL	***			Lab Sample	e ID:	32199031
Sample wt/vo	ol:	30,1	(g/ml)			Lab File ID:		B7600.D
Level: (low/r	ned)	LOW				Date Receiv	ved:	11/16/99
% Moisture:	20		decanted:(Y/N)	N	Date Extrac	ted:	11/18/99
Concentrated	d Extract	Volume	1000	(uL)		Date Analya	zed:	12/16/99
Injection Volu	ume: 2	.0 (ul	-)			Dilution Fac	otor:	1.0
GPC Cleanu	p: (Y/N)	N	pH:					

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
100-02-7	4-Nitrophenol		4200	U
86-73-7	Fluorene		420	Ü
7005-72-3	: 4-Chlorophenyl phenyl ethe	r	420	Ųį
84-66-2	Diethyl phthalate		420 .	U
100-01-6	4-Nitroaniline	1	4200	U
534-52-1	4,6-Dinitro-2-methylphenol		2100	U
86-30-6	n-Nitrosodiphenylamine		420	U
101-55-3	4-Bromophenyl phenyl ethe	r	420	U
118-74-1	Hexachlorobenzene	12 447 (C) No. 2 co No. 20 A Suit Name Supersycan & \$445, Supersyche (1992 1993 1994)	420	U
87-86-5	Pentachlorophenol		830	U
85-01-8	Phenanthrene	2	120 -1000-	U
120-12-7	Anthracene		420	Ų į
84-74-2	Di-n-butyl phthalate		420	U
86-74-8	Carbazole		420	U.,
206-44-0	Fluoranthene		420	U
129-00-0	Pyrene		420	U
85-68-7	Butyl benzyl phthalate		420	U
91-94-1	3,3'-Dichlorobenzidine		420	<u>U</u>
56-55-3	Benzo(a)anthracene	-	420	<u>u</u>
218-01-9	Chrysene		420	U
117-81-7	bis(2-Ethylhexyl)phthalate	and the second section of the second section of the second section of the second section of the second section	420	<u>U</u>
117-84-0	Di-n-octyl phthalate		420	Д
205-99-2	Benzo[b]fluoranthene		420	Ψ]
207-08-9	Benzo[k]fluoranthene		420	. 41
50-32-8	Benzo(a)pyrene		420	11/10
193-39-5	Indeno[1,2,3-cd]pyrene	1 · · · · · · · · · · · · · · · · · · ·	420	4/2
53-70-3	Dibenz[a,h]anthracene	1	420	. 4
191-24-2	Benzo[g,h,i]perylene	l	420	U)

713

EPA SAMPLE NO.

T9-1

Lab Name:	Upstate	Laborate	ories, Inc.	Contract:	C&H	
Lab Code:	10170		Case No.:	SAS No	o.: S	DG No.: CH13
Matrix: (soil/w	ater)	SOIL		La	b Sample ID:	32199032
Sample wt/vol	l:	30	(g/ml) G	La	ib File ID:	B7597.D
Level: (low/m	ed)	LOW	• •	Da	ate Received:	11/16/99
% Moisture:	20	,,,,,	decanted:(Y/N)	N Da	ate Extracted:	11/18/99
Concentrated	Extract	Volume:	1000 (uL)	Da	ate Analyzed:	12/15/99
Injection Volu	me: 2	.0 (uL)	Di	lution Factor:	1.0
GPC Cleanup); (Y/N)	N	pH:			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylamin	8	420	U
111-44-4	bis(2-Chloroethyl)ether		420	U
108-95-2	Phenol		420	U
95-57-8	2-Chlorophenol		420	U
541-73-1	1,3-Dichlorobenzene		420	U
106-46-7	1,4-Dichlorobenzene		420	U
95-50-1	1,2-Dichlorobenzene	1	420	U
108-60-1	2,2'-oxybis(1-Chloropre	opane)	420	Ü
95-48-7	2-Methylphenol	:	420	U
67-72-1	Hexachloroethane	1	420	U
621-64-7	N-Nitroso-di-n-propylai	mine	420	U
106-44-5	(3+4)-Methylphenol		420	U
98-95-3	Nitrobenzene		420	U
78-59-1	Isophorone		420	U
88-75-5	2-Nitrophenol		420	U
105-67-9	2,4-Dimethylphenol		420	U
111-91-1	bis(2-Chloroethoxy)me	thane	420	U
120-83-2	2,4-Dichlorophenol		420	U
120-82-1	1,2,4-Trichlorobenzene)	420	U
91-20-3	Naphthalene		420	U
106-47-8	4-Chloroaniline		420	U
87-68-3	Hexachlorobutadiene		420	U
59-50-7	4-Chloro-3-methylpher	iol	420	U
91-57-6	2-Methylnaphthalene		420	U
77-47-4	Hexachlorocyclopenta	diene	420	U
88-06-2	2,4,6-Trichlorophenol		420	U
95-95-4	2,4,5-Trichlorophenol		4200	U
91-58-7	2-Chloronaphthalene		420	U
88-74-4	2-Nitroaniline	1	4200	U
208-96-8	Acenaphthylene		420	U
131-11-3	Dimethyl phthalate		420	U,
606-20-2	2,6-Dinitrotoluene		420	U
83-32-9	Acenaphthene		420	U
99-09-2	3-Nitroaniline	1	4200	U
51-28-5	2,4-Dinitrophenol		4200	U
132-64-9	Dibenzofuran	:	420	U
121-14-2	2,4-Dinitrotoluene		420	U

EPA SAMPLE NO.

Lab Name:	Upstate	Laborator	ies. Inc.		C	ontract: Ca	&H	19-1
Lab Code:	10170		ase No.:		one a river	SAS No.:	S	DG No.: CH13
Matrix: (soil/w	vater)	SOIL				Lab S	ample ID:	32199032
Sample wt/vo	oi:	30	(g/ml)	G		Lab F	ile ID:	B7597.D
Level: (low/m	ned)	LOW				Date F	Received:	11/16/99
% Moisture:	20	d	ecanted:(`	Y/N)	Ν	Date 8	Extracted:	11/18/99
Concentrated	l Extract	Volume:	1000	(uL)		Date /	Analyzed:	12/15/99
Injection Volu	ıme: 2	.0 (uL)				Dilutio	n Factor:	1.0
GPC Cleanur	p: (Y/N)	N	pH:		•			
						CONOCN	man a mal co b t	LIKBTON.

		OOMO EMILITARY	011 01117 01	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
100-02-7	4-Nitrophenol]	4200	U
86-73-7	Fluorene	!	420	U
7005-72-3	4-Chlorophenyl phenyl ethe	r	420	U
84-66-2	Diethyl phthalate		420	U
100-01-6	4-Nitroaniline		4200	Ų
534-52-1	4,6-Dinitro-2-methylphenol		2100	U
86-30-6	n-Nitrosodiphenylamine		420	U
101-55-3	4-Bromophenyl phenyl ethe	r	420	U
118-74-1	Hexachlorobenzene		420	U
87-86-5	Pentachlorophenol		830	U
85-01-8	Phenanthrene		420	U
120-12-7	Anthracene		420	U
84-74-2	Di-n-butyl phthalate		420	U
86-74-8	Carbazole		420	U
206-44-0	Fluoranthene		420	U
129-00-0	Pyrene		420	U
85-68-7	Butyl benzyl phthalate		420	U.,
91-94-1	3,3'-Dichlorobenzidine		420	U
56-55-3	Benzo[a]anthracene		420	. U
218-01-9	Chrysene		420	U .
117-81-7	bis(2-Ethylhexyl)phthalate		420 . 110	B ()
117-84-0	Di-n-octyl phthalate		420	U
205-99-2	Benzo[b]fluoranthene		420	U
207-08-9	Benzo[k]fluoranthene		420	.U
50-32-8	Benzo(a)pyrene		420	U
193-39-5	Indeno[1,2,3-cd]pyrene		420	U
53-70-3	Dibenz[a,h]anthracene		420	U
191-24-2	Benzo(g,h,i)perylene		420	U

T12-1

Lab Name:	Upstate	Laborat	ories, Inc.	Contr	act: C&H	L		
Lab Code:	10170		Case No.:	SA	S No.:	SDG	No.: CH13	
Matrix: (soil/	water)	SOIL			Lab Sample ID): 323	399037	
Sample wt/v	ol:	30	(g/ml) G		Lab File ID:	B70	627.D	
Level: (low/r	med)	LOW	France - page 141 MA		Date Received	t: <u>11/</u>	18/99	
% Moisture:	20		decanted:(Y/N)	N	Date Extracted	ł: <u>11/</u>	/18/99	
Concentrate	d Extract	Volume:	: 1000 (uL)		Date Analyzed	l: 12/	/17/99	
Injection Vol	ume: 2	2.0 (uL	.)		Dilution Factor	: 100	0.0	
GPC Cleanu	ip: (Y/N)	N	pH:					

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylamine		42000	U
111-44-4	bis(2-Chloroethyl)ether		42000	U
108-95-2	Phenol		42000	U
95-57-8	2-Chlorophenol	The state of the second	42000	U
541-73-1	1,3-Dichlorobenzene		42000	U
106-46-7	1,4-Dichlorobenzene		42000	U
95-50-1	1,2-Dichlorobenzene		42000	U
108-60-1	2,2'-oxybis(1-Chloropropar	ie)	42000	U
95-48-7	2-Methylphenol		42000	Ü
67-72-1	Hexachloroethane		42000	U
621-64-7	N-Nitroso-di-n-propylamine		42000	U
106-44-5	(3+4)-Methylphenol	1	42000	U
98-95-3	Nitrobenzene		42000	U
78-59-1	Isophorone		42000	U
88-75-5	2-Nitrophenol		42000	U
105-67-9	2,4-Dimethylphenol		42000	U
111-91-1	bis(2-Chloroethoxy)methan	e	42000	U
120-83-2	2,4-Dichlorophenol		42000	U
120-82-1	1,2,4-Trichlorobenzene		42000	U
91-20-3	Naphthalene		42000	U
106-47-8	4-Chloroaniline		42000	U
87-68-3	Hexachlorobutadiene		42000	U
59-50-7	4-Chloro-3-methylphenol		42000	U
91-57-6	2-Methylnaphthalene		42000	U
77-47-4	Hexachlorocyclopentadiene	∂	42000	U
88-06-2	2,4,6-Trichloropheлol		42000	U
95-95-4	2,4,5-Trichlorophenol		420000	U
91-58-7	2-Chloronaphthalene		42000	U
88-74-4	2-Nitroaniline		420000	U
208-96-8	Acenaphthylene		42000	U
131-11-3	Dimethyl phthalate		42000	U
606-20-2	2,6-Dinitrotoluene		42000	U
83-32-9	Acenaphthene		42000	Ų
99-09-2	3-Nitroaniline		420000	Ú
51-28-5	2,4-Dinitrophenol		420000	U
132-64-9	Dibenzofuran		42000	U
121-14-2	2,4-Dinitrotoluene		42000	· . <u>U</u> :

EPA SAMPLE NO.

T12-1

Lab Name:	Upstate	Laborat	ories, Inc.	C	iontract: C&H	112-1
Lab Code:	10170		Case No.:		SAS No.:	SDG No.: CH13
Matrix: (soil/w	/ater)	SOIL			Lab Sample ID:	32399037
Sample wt/vo	ol:	30	(g/ml) G	m.1	Lab File ID:	B7627.D
Level: (low/m	ned)	LOW	4		Date Received:	11/18/99
% Moisture:	20		decanted:(Y/N)	N	Date Extracted	: 11/18/99
Concentrated	Extract	Volume:	: 1000 (uL)		Date Analyzed:	12/17/99
Injection Volu	me: 2	.0 (uŁ	.)		Dilution Factor:	100.0
GPC Cleanup	o: (Y/N)	N	pH:			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
100-02-7	4-Nitrophenol		420000	U
86-73-7	Fluorene		42000	U
7005-72-3	4-Chlorophenyl phenyl	ether	42000	U
84-66-2	Diethyl phthalate		42000	U
100-01-6	4-Nitroaniline		420000	<u>U</u>
534-52-1	4,6-Dinitro-2-methylph	enol	210000	U
86-30-6	n-Nitrosodiphenylamin	e	42000	U
101-55-3	4-Bromophenyl phenyl	ether	42000	U
118-74-1	Hexachlorobenzene		42000	U
87-86-5	Pentachlorophenol		83000	U
85-01-8	Phenanthrene		42000	U
120-12-7	Anthracene		42000	U
84-74-2	Di-n-butyl phthalate		42000	Ū
86-74-8	Carbazole		42000	U
206,44-0	Fluoranthene		42000	U
129-00-0	Pyrene		42000	U
85-68-7	Butyl benzyl phthalate		42000	U
91-94-1	3,3'-Dichlorobenzidine		42000	U
56-55-3	Benzo(a)anthracene		42000	U,
218-01-9	Chrysene		42000	Ų
117-81-7	bis(2-Ethylhexyl)phtha	ate	42000	U
117-84-0	Di-n-octyl phthalate		42000	U
205-99-2	Benzo[b]fluoranthene		42000	U
207-08-9	Benzo[k]fluoranthene		42000	U
50-32-8	Benzo[a]pyrene		42000	U
193-39-5	Indeno[1,2,3-cd]pyrene		42000	U
53-70-3	Dibenz[a,h]anthracene		42000	U
191-24-2	Benzo[g,h,i]perylene		42000	U

EPA SAMPLE NO.

T13-1

Lab Name:	Upstate	Laborato	ries, Inc.		Contract:	C&H	
Lab Code:	10170	C	ase No.:		SAS No	o.:S	DG No.: CH13
Matrix: (soil/v	vater)	SOIL			La	b Sample ID:	32399040
Sample wt/vo	ol:	30.6	(g/ml)	G	La	b File ID:	B7626.D
Level: (low/r	ned)	LOW			Da	ite Received:	11/18/99
% Moisture:	6	C	lecanted:(`	Y/N)	N Da	ite Extracted:	11/18/99
Concentrated	d Extract	Volume:	1000	(uL)	Da	ate Analyzed:	12/17/99
Injection Vol	ume: 2	.0 (uL)			Di	lution Factor:	100.0
GPC Cleanu	p: (Y/N)	N	pH:				

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylami	ne	35000	U
111-44-4	bis(2-Chloroethyl)ethe		35000	U
108-95-2	Phenol	The Control of the Paris	35000	U
95-57-8	2-Chlorophenol		35000	U
541-73-1	1,3-Dichlorobenzene		35000	U
106-46-7	1,4-Dichlorobenzene	And the second s	35000	U
95-50-1	1,2-Dichlorobenzene		35000	U
108-60-1	2,2'-oxybis(1-Chlorop	ropane)	35000	U
95-48-7	2-Methylphenol	A CONTRACTOR OF THE PARTY OF TH	35000	· U
67-72-1	Hexachloroethane	A TAX TO SELECT AND DESCRIPTION OF A SECURITION OF A SECURITIO	35000	U
621-64-7	N-Nitroso-di-n-propyl	amine	35000	U
106-44-5	(3+4)-Methylphenol		35000	U
98-95-3	Nitrobenzene		35000	U
78-59-1	Isophorone	The state of the s	35000	U
88-75-5	2-Nitrophenol		35000	U
105-67-9	2,4-Dimethylphenol		35000	. U
111-91-1	bis(2-Chloroethoxy)m	nethane	35000	U
120-83-2	2,4-Dichlorophenol	The state of the s	35000	U
120-82-1	1,2,4-Trichlorobenze	ne	35000	U
91-20-3	Naphthalene	***************************************	35000	U
106-47-8	4-Chloroaniline	the second of the second second second second second	35000	U
87-68-3	Hexachlorobutadiene		35000	U
59-50-7	4-Chloro-3-methylphe		35000	U
91-57-6	2-Methylnaphthalene		35000	· U
77-47-4	Hexachlorocyclopent		35000	U
88-06-2	2,4,6-Trichloropheno		35000	U
95-95-4	2,4,5-Trichloropheno		350000	U
91-58-7	2-Chloronaphthalene		35000	U
88-74-4	2-Nitroaniline		350000	U
208-96-8	Acenaphthylene		35000	į U
131-11-3	Dimethyl phthalate	1	35000	U
606-20-2	2,6-Dinitrotoluene		35000	J. U
83-32-9	Acenaphthene		35000	U
99-09-2	3-Nitroaniline		350000	U
51-28-5	2,4-Dinitrophenol		350000	<u>U</u>
132-64-9	Dibenzofuran		35000	<u>U</u>
121-14-2	2,4-Dinitrotoluene		35000	U

EPA SAMPLE NO.

T13-1

Lab Name:	Upstate	Laborate	ories, Inc.	Cor	ntract: C&H		110-1
Lab Code:	10170		Case No.:	S	SAS No.:	SE	OG No.: CH13
Matrix: (soil/w	vater)	SOIL			Lab Sam	ple ID:	32399040
Sample wt/vo	ol:	30.6	(g/ml) G		Lab File I	ID:	B7626.D
Level: (low/n	ned)	LOW			Date Red	ceived:	11/18/99
% Moisture:	6		decanted:(Y/N)	N	Date Ext	racted:	11/18/99
Concentrated	i Extract	Volume:	1000 (uL)		Date Ana	alyzed:	12/17/99
Injection Volu	ıme: 2	.0 (uL)		Dilution F	actor:	100.0
GPC Cleanu	p: (Y/N)	N	рН:				

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
100-02-7	4-Nitrophenol		350000	U	
86-73-7	Fluorene		35000	U	
7005-72-3	4-Chlorophenyl phenyl ethe	er	35000	U.	
84-66-2	Diethyl phthalate		35000	<u> </u>	
100-01-6	4-Nitroaniline		350000	U	
534-52-1	4,6-Dinitro-2-methylphenol		170000	U	
86-30-6	n-Nitrosodiphenylamine		35000	U	
101-55-3	4-Bromophenyl phenyl ethe	er .	35000	U	
118-74-1	Hexachlorobenzene		35000	U	
87-86-5	Pentachlorophenol		70000	U	
85-01-8	Phenanthrene		35000	U	
120-12-7	Anthracene	1	35000	U	
84-74-2	Di-n-butyl phthalate		35000	U	
86-74-8	Carbazole		35000	U	
206-44-0	Fluoranthene		35000	U	
129-00-0	Pyrene		35000	U	
85-68-7	Butyl benzyl phthalate		35000	U.	
91-94-1	3,3'-Dichlorobenzidine		35000	U	
56-55-3	Benzo[a]anthracene		35000	U	
218-01-9	Chrysene		35000	U	
117-81-7	bis(2-Ethylhexyl)phthalate		35000	U	
117-84-0	Di-n-octyl phthalate		35000	U	
205-99-2	Benzo[b]fluoranthene		35000	U	
207-08-9	Benzo[k]fluoranthene		35000	U	
50-32-8	Benzo[a]pyrene		35000	Ų	
193-39-5	Indeno[1,2,3-cd]pyrene		35000	Ų	
53-70-3	Dibenz[a,h]anthracene	1	35000	U	
191-24-2	Benzo[g,h,i]perylene		35000	Ü	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	Upstate	Laborato	ories, Inc.	Contrac	et:	C&H Engine	T14-1
Lab Code:	10170	(Case No.:	SAS	No.	: S	DG No.: CH13
Matrix: (soil/v	vater)	SOIL	*****		Lab	Sample ID:	32399042
Sample wt/vo	ol:	30.3	(g/ml) G	PANADAT S. L. MICHAEL	Lab	File ID:	A9824.D
Level: (low/n	ned)	LOW			Dat	e Received:	11/18/99
% Moisture:	38		decanted:(Y/N)	N	Dat	e Extracted:	11/22/99
Concentrated	d Extract	Volume:	1000 (uL)		Dat	e Analyzed:	12/15/99
Injection Volu	ıme: 2.	0 (uL)		Dilu	itlon Factor:	1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

EPA SAMPLE NO.

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylam	ine	530	U
111-44-4	bis(2-Chloroethyl)eth		530	U
108-95-2	Phenol		530	U
95-57-8	2-Chlorophenol		530	U
541-73-1	1,3-Dichlorobenzene		530	U
106-46-7	1,4-Dichlorobenzene		530	U
95-50-1	1,2-Dichlorobenzene		530	U
108-60-1	2,2'-oxybis(1-Chloror	oropane)	530	Ų
95-48-7	2-Methylphenol		530	U
67-72-1	Hexachloroethane		530	U
621-64-7	N-Nitroso-di-n-propy	amine	530	U
106-44-5	(3+4)-Methylphenol	2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	530	U
98-95-3	Nitrobenzene	1	530	U
78-59-1	Isophorone	The second secon	530	U
88-75-5	2-Nitrophenol		530	U
105-67-9	2,4-Dimethylphenol	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	530	U
111-91-1	bis(2-Chloroethoxy)n	nethane	530	U
120-83-2	2,4-Dichlorophenol	A LANCE OF THE PARTY OF THE PAR	530	U
120-82-1	1,2,4-Trichlorobenze	ne	530	U
91-20-3	Naphthalene		530	U
106-47-8	4-Chloroaniline		530	U
87-68-3	Hexachlorobutadiene)	530	Ų
59-50-7	4-Chloro-3-methylph		530	U
91-57-6	2-Methylnaphthalene		530	U
77-47-4	Hexachlorocyclopent		530	U
88-06-2	2,4,6-Trichloropheno		530	U
95-95-4	2,4,5-Trichloropheno		5300	U
91-58-7	2-Chloronaphthalene		530	U
88-74-4	2-Nitroaniline		5300	U
208-96-8	Acenaphthylene		530	U
131-11-3	Dimethyl phthalate		530	U
606-20-2	2,6-Dinitrotoluene		530	U
83-32-9	Acenaphthene	14447-144 W.	530	U
99-09-2	3-Nitroaniline		5300	U
51-28-5	2,4-Dinitrophenol		5300	U
132-64-9	Dibenzofuran	the second second contract the second contract	530	U
121-14-2	2,4-Dinitrotoluene	ny ny garang ny ny trong ny gangang ny kanang nyakitanan ya hikupunya sahitu, kang ni hikusa Bababa sahitu sa	530	U

EPA SAMPLE NO.

T14-1

			ries, Inc.	Contract:	C&H Engine	
Lab Code:	10170	C	ase No.:	SAS N	o.:S	DG No.: CH13
Matrix: (soil/wa	ater)	SOIL	physical A.S.	La	ib Sample ID:	32399042
Sample wt/vol:	•	30.3	(g/ml) G	La	ıb File ID:	A9824.D
Level: (low/me	ed)	LOW		D:	ate Received:	11/18/99
% Moisture:	38	d	ecanted:(Y/N)	N D	ate Extracted:	11/22/99
Concentrated	Extract \	Volume:	1000 (uL)	Da	ate Analyzed:	12/15/99
njection Volur	ne: 2.	0(uL)		Di	lution Factor:	1.0
GPC Cleanup:	: (Y/N)	N	pH:	Ai		

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
100-02-7	4-Nitrophenol		5300	U
86-73-7	Fluorene		530	U
7005-72-3	4-Chlorophenyl phenyl	ether	530	U
84-66-2	Diethyl phthalate		530	Ų
100-01-6	4-Nitroaniline		5300	U
534-52-1	4,6-Dinitro-2-methylph	enol	2700	U
86-30-6	n-Nitrosodiphenylamin	0	530	U
101-55-3	4-Bromophenyl phenyl	ether	530	U
118-74-1	Hexachlorobenzene		530	U
87-86-5	Pentachlorophenol		1100	U
85-01-8	Phenanthrene		530	U
120-12-7	Anthracene		530	U
84-74-2	Di-n-butyl phthalate		530	U
86-74-8	Carbazole		530	U
206-44-0	Fluoranthene		530	U
129-00-0	Pyrene		530	U
85-68-7	Butyl benzyl phthalate		530	U
91-94-1	3,3'-Dichlorobenzidine	MAIL OF FRENCH MICH. MICH. MARKAGES SAME AS EAS A RESERVE FOR SAME AS A SAME A SAME AS A SAME A SAME AS A SAME A SAME AS A SAME A SAME AS A SAME A SAME A SAME AS A SAME A S	530	U
56-55-3	Benzo[a]anthracene	the refer for the content of the con	530	Ų
218-01-9	Chrysene		530	U
117-81-7	bis(2-Ethylhexyl)phthal	ate	530	<u>U</u>
117-84-0	Di-n-octyl phthalate		530	U
205-99-2	Benzo[b]fluoranthene		530	<u>U</u>
207-08-9	Benzo[k]fluoranthene		530	<u>U</u>
50-32-8	Benzo[a]pyrene		530	U
193-39-5	Indeno[1,2,3-cd]pyrene		530	U
53-70-3	Dibenz[a,h]anthracene	The same about the same and a second of the same and the	530	<u>U</u>
191-24-2	Benzo(g,h,i)perylene		530	U

EPA SAMPLE NO.

ab Name:	Upstate	Laborato	ries, Inc.	С	ontract:	C&H Engine	175-7
.ab Code:	10170	(Case No.:	* *********	SAS No).: S	DG No.: CH13
vlatrix: (soil/	water)	SOIL			Lal	b Sample ID:	32399044
Sample wt/v	ol:	30	(g/ml) G		La	b File ID:	A9825.D
_evel: (low/	med)	LOW			Da	te Received:	11/18/99
% Moisture:	16	(decanted:(Y/N)	N	Da	te Extracted:	11/22/99
Concentrate	d Extract	Volume:	1000 (uL)		Da	ite Analyzed:	12/15/99
njection Vol	iume: 2	.0 (uL)	•		Dil	ution Factor:	100.0
GPC Cleanu	ap: (Y/N)	Ν	pH:				

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
86-30-6	N-nitrosodimethylami	ne	40000	U
111-44-4	bis(2-Chloroethyl)eth		40000	U
108-95-2	Phenol		40000	U
95-57-8	2-Chlorophenol		40000	Ū
541-73-1	1,3-Dichlorobenzene		40000	U
106-46-7	1,4-Dichlorobenzene		40000	Ū
95-50-1	1,2-Dichlorobenzene		40000	U
108-60-1	2,2'-oxybis(1-Chloror	"Trade rate "trade trade to a distribution of the contract of	40000	U
95-48-7	2-Methylphenol	The same of the sa	40000	U
67-72-1	Hexachloroethane	The state of the s	40000	U
621-64-7	N-Nitroso-di-n-propyl	amine	40000	Ū
106-44-5	(3+4)-Methylphenol	***************************************	40000	U
98-95-3	Nitrobenzene	The state of the s	40000	U
78-59-1	Isophorone		40000	U
88-75-5	2-Nitrophenol		40000	U
105-67-9	2,4-Dimethylphenol		40000	U
111-91-1	bis(2-Chloroethoxy)m	nethane	40000	U
120-83-2	2,4-Dichlorophenol		40000	U
120-82-1	1,2,4-Trichlorobenzei	ne .	40000	U
91-20-3	Naphthalene		40000	U
106-47-8	4-Chloroaniline		40000	U
87-68-3	Hexachlorobutadiene		40000	U
59-50-7	4-Chloro-3-methylphe	enol	40000	U
91-57-6	2-Methylnaphthalene		40000	U
77-47-4	Hexachlorocyclopent		40000	U
88-06-2	2,4,6-Trichloropheno		40000	U
95-95-4	2,4,5-Trichloropheno		400000	U
91-58-7	2-Chloronaphthalene		40000	<u> </u>
88-74-4	2-Nitroaniline		400000	U
208-96-8	Acenaphthylene		40000	U
131-11-3	Dimethyl phthalate	**************************************	40000	U
606-20-2	2,6-Dinitrotoluene		40000	U
83-32-9	Acenaphthene		40000	U
99-09-2	3-Nitroaniline		400000	U
51-28-5	2,4-Dinltrophenol		400000	U
132-64-9	Dibenzofuran		40000	U
121-14-2	2,4-Dinitrotoluene	19 cm d Comp h had a habilid d 19 c hall as a separang popularan and d salah ara gas pagasa.	40000	U

0000478

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

T15-1

Lab Name: Upstate Laboratories, Inc. Contract: C&H Engine Case No.: SAS No.: SDG No.: CH13 Lab Code: 10170 SOIL Matrix: (soil/water) Lab Sample ID: 32399044 30 (g/ml) G Sample wt/vol: Lab File ID: A9825.D Level: (low/med) Date Received: 11/18/99 LOW decanted:(Y/N) N % Moisture: 16 Date Extracted: 11/22/99 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/15/99 Injection Volume: 2.0 (uL) Dilution Factor: 100.0

GPC Cleanup: (Y/N) pH:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
100-02-7	4-Nitrophenol		400000	U	1
86-73-7	Fluorene		40000	Ū	
7005-72-3	4-Chlorophenyl pheny	ether	40000	U	j
84-66-2	Diethyl phthalate		40000	U	
100-01-6	4-Nitroaniline		400000	U]
534-52-1	4,6-Dinitro-2-methylph	enol	200000	U	
86-30-6	n-Nitrosodiphenylamir	e	40000	U]
101-55-3	4-Bromophenyl pheny	l ether	40000	U	
118-74-1	Hexachlorobenzene		40000	U	
87-86-5	Pentachlorophenol	٠	79000	U]
85-01-8	Phenanthrene		22000	JD	-
120-12-7	Anthracene		4800	JD	<u> </u>
84-74-2	Di-n-butyl phthalate		40000	U	
86-74-8	Carbazole	1	40000	U	
206-44-0	Fluoranthene		27000	JD	_
129-00-0	Pyrene		29000	JD	-
85-68-7	Butyl benzyl phthalate		40000	U]
91-94-1	3,3'-Dichlorobenzidine	The second secon	40000	U	1
56-55-3	Benzo[a]anthracene	4000	20 -10000	JD ໄ	7
218-01-9	Chrysene		13000	JD	_
117-81-7	bis(2-Ethylhexyl)phtha	late	40000	U	İ
117-84-0	Di-n-octyl phthalate		40000	U	á ni
205-99-2	Benzo[b]fluoranthene		14000	JD :	_
207-08-9	Benzo[k]fluoranthene		4200	JD	سر أ
50-32-8	Benzo[a]pyrene		9900	JD	
193-39-5	Indeno[1,2,3-cd]pyren	e	40000	U	
53-70-3	Dibenz[a,h]anthracene		40000	U	
191-24-2	Benzo[g,h,i]perylene		40000	Ų	j

DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES

431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG CH13
Sampled 11/15/99, 11/16/99, 11/18/99

SOILS SAMPLES for PCB

T7-1 (32)	099001 T7-2	(32099002)	T7-3	(32099003)
T7-4 (32)	099004) T8-1	(32099005)	T8-2	(32199030)
T8-2dup(32	199031) T9-1	(32199032)	T12-1	(32399037)
T12-2 (32)	399038) T12-3	(32399039)	T13-1	(32399040)
T13-2 (32)	399041) T14-1	(32399042)	T14-2	(32399043)
T15-1 (32	399044) T15-2	(32399045)		•

DATA ASSESSMENT

A PCB data package containing analytical results for seventeen soil samples was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8080, addressed determinations of PCB. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

The PCB results obtained from this group of samples have been qualified due to poor calibration performance. The reported sample concentrations were based on a calibration that was performed four days after the samples were actually analyzed. Calibration verifications based on the correct calibration files demonstrated poor instrument stability. Based on this performance, the data reported from this group of samples has been qualified as an estimation.

CORRECTNESS AND USABILITY

The PCB concentrations and CRDL's reported from this group of samples were calculated incorrectly. The reported values were calculated as mg/kg but reported as μ g/kg. Form 1's have been corrected.

Reported data should be considered usable in its present form. Reported concentrations that are felt to provide a reasonable estimation of the conditions being measured have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 1/21/02

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included seventeen soil samples, was collected from the Former Brown Manufacturing site between 15Nov99 and 18Nov99. Five samples collected on 15Nov99, three collected on 16Nov99 and nine collected on 18Nov99 were delivered to the laboratory, after hours, on the day of collection. Each cooler of samples arrived intact, with custody seals in place. A temperature of 6.9°C was obtained from each sample cooler at the time of laboratory receipt.

Sample extractions were performed on 19Nov99 and 23Nov99. Analyses were completed by 18Dec99. Program holding time limitations were satisfied.

BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

Two method blanks were analyzed with this group of samples. Both blanks were free of PCB contamination.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The calculations included in this data package were based on calibration files that were generated four days after this group of samples was analyzed. It must be assumed that preventative maintenance was performed prior to this calibration, and that instrument performance had changed. The laboratory provided a second data submission which included the correct initial calibration. These files were generated nine months prior to the analysis of samples. The calibration sequences could not be directly compared because, in some cases, different chromatographic peaks were used for quantitation.

In an effort to avoid data rejections, the results reported from each sample, and from the associated calibration verifications, were recalculated by this reviewer. The analysis of this group of samples was bracketed by check standards of AR-1260, AR-1232 and AR-1254. These 500 μ g/l standards produced recoveries of 75%, 149% and 122%, respectively. Although this performance does not satisfy the acceptance criteria found in SW-846 Method 8000, this work appears to provide a useful estimation of the levels of PCB present in each sample. This information should be used with caution.

An additional error was identified in the calculation of reported PCB results. The reported PCB concentrations and CRDL's were low by a factor of 1000. The laboratory's results were calculated as mq/kq, but reported as $\mu q/l$. Form 1's have been corrected.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Two surrogates, TCX and DCB were added to each sample. At least one of the additions to each sample was recovered successfully on both chromatographic columns. The surrogate performance reported for each sample satisfied the program acceptance criteria.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

Sample T8-2 was selected for matrix spiking. Aroclor 1248 was added to two portions of this sample. The recoveries reported for both additions demonstrated acceptable levels of measurement accuracy and precision. A spike of AR1248 to a clean matrix was also recovered successfully.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision, may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates of T8-2 were included in this group of samples. PCB were not detected in either sample.

SUMMARY OF QUALIFIED DATA

	100 µg/kg		2210 µg/kg	ALL J/UJ	(32099001)	T7-1
	CALCULATE	CALCULATE AR 1248	CALCULATE AR 1254	CALIBRATE		
SAMPLED 11/15/99 thru 11/18/99				CTURING SITE	FORMER BROWN MANUFACTURING	FORMER

CRDL	ļ	100 µq/kg															100 µg/kg
AR 1248			4453 µg/kg	1													
AR 1254		2400 µg/kg		i													640 µg/kg
CALIBRATE	ALL J/UJ	ALL J/UJ	ALL J/UJ	ALL UJ	ALL UJ	ALL UJ	ALL UJ	ALL UJ	ALL UJ	ALL UJ	ALL UJ	ALL UJ	ALL UJ	ALL UJ	ALL UJ	ALL J/UJ	ALL J/UJ
	209900	(32099002)	209900	209900	209900	219903	(3219903)	(3219903)	239903	239903	239903	239904	239904	239904	239904	239904	239904
	7-	T7-2	7	-	8	8	8	4	12-	12-	12-	13-	13-	14-	14-	115-1	N N

NYSDEC SAMPLE NO. T7-1

Contract: Lab Name: Upstate Labs Inc. SDG No.: CH13 SAS No.: Case No.: Lab Code: 10170 Lab Sample ID: 32099001 Matrix: Soil Lab File ID: PA5382 (g) 30 Sample wt.: 11/15/99 Date Received: Decanted: 17 % Molstura: 11/19/99 Date Extracted: Extraction: shaker /0000 1000 (ul.) 12/17/99 Date Analyzed: Conc Extract Vol.: 08:36PM Time Analyzed: 2 (uL) Injection Vol.: Dilution Factor: 50 pH: GPC Cleanup: NO Sulfur Cleanup: Yes Instr. ID: ULI 9.0

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	a
12674-11-2	Aroclor 1016	<100 €10 \	Ψ
11104-28-2	Aroclor 1221	4/00 4.10 1	Ψ
11141-16-5	Aroclor 1232	<100 <10 / U)	Ψ
53469-21-9	Aroclor 1242	∠100 €.10	Ψ
12672-29-6	Aroclor 1248	<100 <-10, 1	₩
11097-69-1	Aroclor 1254	2210 4-25 3	AK.t.
11096-82-5	Aroclor 1260	< 100 Sept UT)	<u> </u>

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NYSDEC SAMPLE NO. T7-2

Lab Name: Upstate	Labs Inc.			Contract:	
Lab Code: <u>10170</u>		Case No.:		SAS No.:	SDG No.: CH13
Matrix: Soi	<u>.1</u>			Lab Sample ID:	32099002
Sample wt.:	30	(g)		Lab File ID:	PA5382
% Molsture:	<u>16</u>	Decented:	NO	Date Received:	11/15/99
Extraction:	shaker	45/41/3	s M	Date Extracted:	11/19/99
Conc Extract Vol.:		1000 (ul.)	力化	Date Analyzed:	12/17/99
Injection Vol.;		<u>2</u> (uL)		Time Analyzed:	09:21PM
GPC Cleanup:	ЙО		pH:	Dilution Factor:	50
Instr, ID:	ULI 9.0			Sulfur Cleanup:	Yes

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	∠/00 €:10 \	Ψ
11104-28-2	Aroclor 1221	<100 <.10	ψ
11141-16-5	Aroclor 1232	< 100 < 10 \ U)	4
.53469-21-9	Aroclor 1242	4100 410	ψ
12672-29-6	Aroclor 1248	2100 4.40	Ů
11097-69-1	Arodor 1254	2400-4-44 3	8160
11096-82-5	Aroclor 1260	<100 €.10 U J	

140

NYSDEC SAMPLE NO. T7-3

Lab Name: <u>Uostate</u>	Labs Inc.			Contract:		
Lab Code: <u>10170</u>		Case No.:		SAS N	ło.;	SDG No.: CH13
Matrix: <u>soi</u>	<u>. j.</u>				Lab Sample ID:	32099003
Sample wt.:	30	(g)			Lab File ID:	PA5382
% Moisture:	12	Decanted:	йб		Date Received:	11/15/99
Extraction:	shaker	·			Date Extracted:	11/19/99
Conc Extract Vol.:		<u>1000</u> (u L)			Date Analyzed:	12/17/99
Injection Vol.:		<u>2</u> (uL)			Time Analyzed:	10:05PM
GPC Cleanup:	No		pH:		Dilution Factor:	<u>50</u>
Instr. ID:	ULT 9.0				Sulfur Cleanup:	<u>Yes</u>

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	Ω
12674-11-2	Aroclor 1016	490 -<-00)	Ψ
11104-28-2	Araclor 1221	490 -09 (0)	Ψ
11141-16-6	Aroclor 1232	c to seign	Ψ
53469-21-9	Aroclor 1242	(90.400)	Ψ.,,
12672-29-6	Aroclor 1248	4453 2.00	1/6
11097-69-1	Aroclor 1254	1585-0.85	J'K'S
11096-82-5	Aroclor 1260	< 90 < 00 U)	ů į

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NYSDEC SAMPLE NO. T7-4

Contract: Lab Name: Upstate Labs Inc. SDG No.: CH13 Case No.: SAS No.: Lab Code: 10170 Lab Sample ID: 32099004 Matrix: Soil PA5382 (g) Lab File ID: 30 Sample wt.: Decanted: NO Date Received: 11/15/99 % Molsture: 15 11/19/99 Date Extracted: Extraction: shaker Date Analyzed: 12/17/99 Conc Extract Vol.: 2 (uL) Time Analyzed: 10:50PM Injection Vol.: Dilution Factor: pH; 50 GPC Cleanup: ЙŌ Sulfur Cleanup: Yes ULI 9.0 Instr. ID:

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	< 9°O < .08 \	Ų
11104-28-2	Aroclor 1221	<90 < .09 ∫	ų l
11141-16-5	Aroclor 1232	<90 <09	ų)
53469-21-9	Aroclor 1242	<90 <-09 \((7)	ψ
12672-29-6	Aroclor 1248	<90 <00	Ų
11097-69-1	Aroclor 1254	<90 <,09 ∖	Ú
11096-82-5	Aroclor 1260	<90< .09 -1	Ų

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NYSDEC SAMPLE NO. T8-1

Lab Name: <u>Upstate Labs</u>	Inc.	Con	tract:	
Lab Code: <u>10170</u>	Case No.:		SAS No.:	SDG No.: CH13
Matrix: Soil			Lab Sample ID:	32099005
Sample wt.:	<u>30</u> (g)		Lab File ID:	PA5382
% Molsture; 28	g Decanted:	NO	Date Received:	11/15/99
Extraction: gi	haker		Date Extracted:	11/19/99 .
Conc Extract Vol.:	/0000 -1000 (ul.)	783	Date Analyzed:	12/17/99
Injection Vol.:	<u>2</u> (uL)		Time Analyzed:	11:34PM
GPC Cleanup: N	<u>o</u>	pH:	Dilution Factor:	<u>50</u>
Instr. ID: U	n. 9.0		Sulfur Cleanup:	Yes

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	<110 <41	U
11104-28-2	Aroclor 1221	4110 411	Ų
11141-16-5	Aroclor 1232	<110 KAN	Ų
53469-21-9	Aroclor 1242	<110 <11 } V)	Ų
12672-29-6	Aroclor 1248	<110 4.41	Ų
11097-69-1	Aroclor 1254	<110 <+4	Ů.
11096-82-5	Aroclor 1260	/0<+44)</td <td>ψ</td>	ψ

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NYSDEC SAMPLE NO. T8-2

Lab Name: <u>Upsta</u>	te Labs Inc.			Contracti		
Lab Code: <u>10170</u>		Case No.:		SAS	lo.:	SDG No.: CH13
Matrix:	Soil				Lab Sample ID:	32199030
Sample wt.:	30	(g)			Lab File ID:	PA5382
% Moisture:	15	Decanted:	МО		Date Received:	11/16/99
Extraction:	shaker				Date Extracted:	11/19/99
Conc Extract Vo	ol.:	/00d0 _1000 (uL)	MS		Date Analyzed:	12/18/99
Injection Vol.:		<u>2</u> (uL)			Time Analyzed:	12:18AM
GPC Cleanup:	No		pH:		Dilution Factor:	<u>50</u>
Instr. ID:	ULI 9.0				Sulfur Cleanup:	Yes

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	Ω
12674-11-2	Aroclor 1016	< 90 4.00 \	Ψ
11104-28-2	Aroclor 1221	∠90 <-09	ψ
11141-16-5	Aroclor 1232	<90 <.00	Ų
53469-21-9	Aroclor 1242	<90 =09 }	Ф
12672-29-6	Aroclor 1248	<90 ←09	Ų
11097-69-1	Aroclor 1254	<90 <-09	ď
11096-82-5	Aroclor 1260	<90 < 09)	<u> </u>

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NYSDEC SAMPLE NO. T8-2DP

Lah Name: <u>Opstate</u>	Labs Inc.		Contract:	
Lab Code: <u>10170</u>		Case No.:	SAS No.:	SDG No.: CH13
Matrix: 501	1		Lab Sample ID:	32199031
Sample wt.:	30	(g)	Lab File ID:	PA5382
% Molsture:	<u>20</u>	Decanted: <u>พื</u>	Date Received:	11/16/99
Extraction:	shaker		Date Extracted:	11/19/99
Conc Extract Vol.:		10000 (uL) 783	Date Analyzed:	12/18/99
Injection Vol.:		2 (ul.)	Time Analyzed:	02:31AM
GPC Cleanup:	<u>No</u>	pH:	Ollution Factor:	50
Instr. ID:	ULI 9.0		Sulfur Cleanup:	Yes

		CONCENTRATION UNITS	***************************************
CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	00 <del < 10 1	U
11104-28-2	Aroclor 1221	<100 <10	l l
11141-16-5	Aroclor 1232	<100 < 10	U
58469-21-9	Aroclor 1242	00 < +10 1/1	
12672-29-6	Aroclor 1248	00<10</td <td></td>	
11097-89-1	Aroclor 1254	<1004.40	i i
11096-82-5	Aroclor 1260	<100 < 40	J

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NYSDEC SAMPLE NO. T9-1

Lab Name: <u>Upstate L</u>	abs Inc.			Contract:	
Lab Code: <u>10170</u>		Case No.:		SAS No.:	SDG No.: CH13
Matrix: so1]				Lab Sample ID:	32199032
Sample wt.:	<u>30</u>	(g)		Lab File ID:	PA5382
% Moisture:	20	Decanted:	NO	Date Received:	11/16/99
Extraction:	shaker			Date Extracted:	11/19/99
Conc Extract Vol.:	-	1000 (uL)	V73	Date Analyzed:	12/18/99
Injection Vol.;		<u>2</u> (uL)		Time Analyzed:	<u>03:16AM</u>
GPC Cleanup:	<u>No</u>	pł	H:	Dilution Factor:	<u>50</u>
Instr. ID:	ULI 9.0			Sulfur Cleanup:	Yas

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	4100 -10)	V
11104-28-2	Aroclor 1221	00 <-10</td <td>•</td>	•
11141-16-5	Aroclor 1232	2100 < 110 -(•
5'3469-21-9	Aroclor 1242	00 < 10 \(\mathcal{U} \)</td <td>ų l</td>	ų l
12672-29-6	Aroclor 1248	00 < 10</td <td>ų i</td>	ų i
11097-69-1	Aroclor 1254	<100 <-10	Ų l
11096-82-5	Aroclor 1260	4100 <-+0	U

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NYSDEC SAMPLE NO. T12-1

Lab Name: Opstalle I	abs Inc.			Contract:	
Lab Code: 10170		Case No.:		SAS No.:	SDG No.: CH13
Matrix: Soi	ĩ			Lab Sample ID:	32399037
Sample wt.:	<u>30</u>	(g)		Lab File ID:	PA5387
% Moisture:	<u>20</u>	Decanted:	NO	Date Received:	11/18/99
Extraction:	shaker	(ام بدائم الاه		Date Extracted:	11/23/99
Conc Extract Vol.:		/0000 (uL)	273	Date Analyzed:	12/17/99
Injection Vol.:		<u>2</u> (uL.)		Time Analyzed:	10:09AM
GPC Cleanup:	ЙО		рН:	Dilution Factor:	50
Instr. ID:	ULI 9.0			Sulfur Cleanup:	Yes

CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	2/00 < 10 \	· · · · · · · · · · · · · · · · · · ·
11104-28-2	Aroclor 1221	6,00 €,10	Ú
11141-16-5	Aroclor 1232		ψ
53469-21-9	Aroclor 1242	<100 < 100 \(\)	Ú
12672-29-6	Aroclor 1248	00 <=+0 (</td <td>ų į</td>	ų į
11097-69-1	Aroclor 1254	2/00 €.10	Ų
11096-82-5	Aroclor 1260	00<<del 110)	ل ان

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NYSDEC SAMPLE NO. T12-2

Leb Name: Upstate	Labs Inc.			Contract:	
Lab Code: <u>10170</u>		Case No.:		SAS No.:	SDG No.; CH13
Matrix: So	211			Lab Sample ID	32399038
Sample wt.:	<u>30</u>	(g)		Lab File ID:	PA5387
% Molsture:	<u>1.1</u>	Decanted:	NO	Date Received	<u>11/18/99</u>
Extraction:	shaker			Date Extracted	i: <u>11/23/99</u>
Conc Extract Vol.:		1000 (nr)	145	Date Analyzed	i: <u>12/17/99</u>
Injection Vol.:		2 (uL)		Time Analyze	d: <u>10:54AM</u>
GPC Cleanup:	<u>No</u>		pH:	Dilution Facto	r: <u>50</u>
Instr. ID:	UL1 9.0			Sulfur Cleanu	p: <u>Yes</u>

CAS NO.	COMPOUND	CONCENTRATION UNITS ug/Kg	Q
12674-11-2	Aroclor 1016	<90 < 08 \	Y
11104-28-2	Aroclor 1221	<90 < 0 9	Ψ
11141-16-5	Aroclor 1232	< 50 ←.00	Ψ
53469-21-9	Aroclor 1242	<90 <-00 \ U	ψ
12672-29-6	Aroclor 1248	< 90 (10) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	₩
11097-69-1	Aroclor 1254	<90 < 00	Ψ
11096-82-5	Aroclor 1260	<70 ←00 ∫	U

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NYSDEC SAMPLE NO. T12-3

Lab Name: Upstate I	abs Inc.			Contract:	
Lab Code: <u>10170</u>		Case No.:		SAS No.:	SDG No.: CH13
Matrix: <u>soi</u>	Ī			Lab Sample ID:	32399039
Sample wt.:	30	(g)		Lab File ID:	PA5387
% Moisture:	15	Decanted:	NO	Date Received:	11/18/99
Extraction:	shaker		2.46	Date Extracted:	11/23/99
Conc Extract Vol.:		/0000 - 1000 (uL)	115	Date Analyzed:	12/17/99
injection Vol.:		<u>2</u> (uL)		Time Analyzed:	11:39AM
GPC Cleanup:	No		pH:	Dilution Factor:	<u>50</u>
Instr. ID:	ULI 9.0			Sulfur Cleanup:	Yes

	<u></u>	CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	a
12674-11-2	Aroclor 1016	<90 <10 9 `)	Ψ
11104-28-2	Aroclor 1221	< 90 < 00	ψ
11141-16-5	Aroclor 1232	< 90 400	ψ
53469-21-9	Aroclor 1242	<90 400 V	ψ
12672-29-6	Aroclor 1248	<90 and (V.)	ψ
11097-69-1	Aroclor 1254	< 90 < ,00	ψ
11096-82-5	Aroclor 1260	<90 <-00- /	Ú

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NYSDEC SAMPLE NO. T13-1

Contract: Lab Name: Upstate Labs Inc. SDG No.: CH13 SAS No.: Case No.: Lab Code: 10170 32399040 Lab Sample ID: Matrix: Soil Lab File ID: PA5387 Sample wt.: 30 (g) % Moisture: Decanted: ЙΟ Date Received: 11/18/99 6 Date Extracted: 11/23/99 Extraction: shaker /0000 1000 (uL) Date Analyzed: 12/17/99 Conc Extract Vol.: Time Analyzed: 12:24PM Injection Vol.: 2 (uL) Dilution Factor: GPC Cleanup: pH: 50 No Instr. ID: ULI 9.0 Sulfur Cleanup: Yes

	the first of the transfer of the second control of the second cont	CONCENTRATION UNITS	**************************************
CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	<90 <.00 \	ΰ
11104-28-2	Aroclor 1221	<90 ←00	į.
11141-16-5	Aroclor 1232	<90 ←.00	ψ
5,3469-21-9	Aroclor 1242	<90 -09 (V)	ψ
12672-29-6	Aroclor 1248	<70	ψ
11097-69-1	Aroclor 1254	< 30 < 09	U
11096-82-5	Aroclor 1260	<90 _{4:09} .)	Ų

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NYSDEC SAMPLE NO. T13-2

Lab Name: Upstate Labs Inc.

Contract:

l.ab Gode: <u>10170</u>		Case No.:	•	SAS No.:	SDG No.: CH13
Matrix: <u>Soil</u>	1			Lab Sample ID:	32399041
Sample wt.:	<u>30</u>	(g)		Lab File ID:	PA5387
% Molsture:	<u>16</u>	Decanted:	NO	Date Received:	11/18/99
Extraction:	shaker			Date Extracted:	11/23/99
Cond Extract Vol.:		/0000 -1000 (uL)	773	Date Analyzed:	<u>12/17/99</u> .
Injection Vol.:		<u>2</u> (uL)		Time Analyzed:	01:10PM
GPC Cleanup:	Йо		pH:	Dilution Factor:	<u>50</u>
Instr. ID:	ULI 9.0			Sulfur Cleanup:	<u> </u>

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	<100 -<:+0 \	Ψ
11104-28-2	Aroclor 1221	<100 €.10	ψ
11141-16-5	Aroclor 1232	100 -C-10</td <td>ψ</td>	ψ
53469-21-9	Aroclor 1242	<100 <10 > U)	Ú
12672-29-6	Aroclor 1248	<100 €10	Ų.
11097-89-1	Aroclor 1254	<100 -10	Ŵ
11096-82-5	Aroclor 1260	<100 -10	Ů

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NYSDEC SAMPLE NO. T14-1

lab Name: <u>Opstate I</u>	abs Inc.			Contract:	
1.ab Gode: <u>10170</u>		Case No.:		SAS No.:	SDG No.: CH13
Viatrix: <u>Soi</u>	<u>1.</u>			Lab Sample	ID: <u>32399042</u>
Sample wt.:	30	(g)		Lab File ID:	PA5387
% Moisture:	<u>38</u>	Decanted:	<u>NO</u>	Date Recei	ved: <u>11/18/99</u>
Extraction:	shaker		_	Date Extrac	ted: <u>11/23/99</u>
Conc Extract Vol.:		/0 <i>0</i> 00 1000- (ul.)	793	Date Analy	zed: <u>12/17/99</u>
Injection Vol.:		2 (uL)		Time Analy	zed: 04:10PM
GPC Cleanup:	No		pH:	Dilution Fa	ctor: <u>50</u>
Instr. ID:	ULI 9.0			Sulfur Clea	nup: Yes

		· · · · · · · · · · · · · · · · · · ·	
CAS NO.	COMPOUND	ug/Kg	a
12674-11-2	Aroclor 1016	30 <.19</td <td>Ϋ</td>	Ϋ
11104-28-2	Aroclor 1221	<130 <4.13	ψ
11141-16-5	Aroclor 1232	30 <del < .13	ψ
53469-21-9	Aroclor 1242	30 <13 [5]	Ψ
12672-29-6	Aroclor 1248	30 <-43</td <td>Ψ</td>	Ψ
11097-69-1	Aroclor 1254	30 < 43</td <td>ψ</td>	ψ
11096-82-5	Araclor 1260	<130 < 13	Ú

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NYSDEC SAMPLE NO. T14-2

Contract: .ab Name: Upstate Labs Inc. SDG No.: CH13 SAS No.: Case No.: -ab Code: 10170 Lab Sample ID: 32399043 Matrix: Soil Lab File ID: PA5387 (g) Sample wt.: 30 Decanted: Date Received: 11/18/99 % Moisture: NO 27 Date Extracted: 11/23/99 Extraction; shaker **/0000** 1000 (uL) Date Analyzed: 12/17/99 Conc Extract Vol.: Injection Vol.: 2 (uL) Time Analyzed: 04:54PM pH: Dilution Factor: 50 GPC Cleanup: ЙО Instr. ID: Sulfur Cleanup: Yes ULI 9.0

CAS NO.	COMPOUND	CONCENTRATION UNITS ug/Kg	a
12674-11-2	Aroclor 1016	<110 -<-,14 \	Ψ
11104-28-2	Aroclor 1221	<110 <-11	ψ
11141-16-5	Aroclor 1232	410 AM	ψ
53469-21 - 9	Aroclor 1242	∠110 ≤11 \ (r)	ф
12672-29-6	Aroclor 1248	2/10	ф
11097-69-1	Aroclor 1254	<110	ψ
11096-82-5	Aroclor 1260	(110 AM)	Ų

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NYSDEC SAMPLE NO. T15-1

Lab Name: Opetato Labs Inc.			Contract:		
Lab Code: 10170		Case No.:		SAS No.:	SDG No.: CH13
Matrix: soi	Ī			Lab Sample ID:	32399044
Sample wt.:	<u>30</u>	(g)		Lab File ID:	PA5387
% Molsture:	16	Decanted:	ЙО	Date Received:	11/18/99
Extraction:	shaker	10000		Date Extracted:	11/23/99
Conc Extract Vol.:		1900 (nr)		Date Analyzed:	12/17/99
Injection Vol.:		<u>₹</u> (uL)		Time Analyzed:	05:39PM
GPC Cleanup:	No	pl	H:	Dilution Factor:	50
Instr. ID:	uli 9.0			Sulfur Cleanup:	Yos

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	100 <-10 \	U
11104-28-2	Aroclor 1221	10010	Ų
11141-16-5	Aroclor 1232	100 -410 \ UJ	U
53469-21-9	Aroclor 1242	/6() < 10 \	Ų
12672-29-6	Aroclor 1248	100 <-40)	ų,
11097-69-1	Aroclor 1254	1480-0-80- :	PK E
11096-82-5	Aroclor 1260	100 410 U)	3

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NYSDEC SAMPLE NO. T15-2

Contract: Lab Name: Upstate Labs Inc. SDG No.: CH13 SAS No.: Case No.: Lab Coda: 10170 Lab Sample ID: 32399045 Matrix: Soil. Lab File ID: PA5387 Sample wt.: (g) 30 Date Received: 11/18/99 % Moisture: Decanted: \overline{NO} 1.6 Date Extracted: 11/23/99 Extraction: shaker 10000 1000 (uL) Date Analyzed: 12/17/99 Conc Extract Vol.: 2 (uL) Time Analyzed: 06:23PM Injection Vol.: GPC Cleanup: pH: Dilution Factor: 50 No Instr. ID: Sulfur Cleanup: Yes ULI 9.0

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	ā
12674-11-2	Aroclor 1016	∠100 < 10 \	Ψ
11104-28-2	Aroclor 1221	<100 < 10	ψ
11141-16-5	Aroclor 1232	<100 <10 \(U \) .	ψ
5,3469-21-9	Aroclor 1242	2100 470	ψ
12672-29-6	Aroclor 1248	<100 <10	ψ
11097-69-1	Aroclor 1254	1120 Ar84 J	J.K.C
11096-82-5	Aroclor 1260	<100 <10 UT	1

DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES 431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG CH13
Sampled 11/15/99, 11/16/99, 11/18/99

SOIL SAMPLES for TPH

T7-1	(32099001)	T7-2	(32099002)	T7-3	(32099003)
T7-4	(32099004)	T8-1	(32099005)	T8-oil	(32199029)
T8-2	(32199030)	T8-2du	p(32199031)	T9-1	(32199032)
T12-1	(32399037)	T12-2	(32399038)	T12-3	(32399039)
T13-1	(32399040)	T13-2	(32399041)	T14-1	(32399042)
T14-2	(32399043)	T15-1	(32399044)	T15-2	(32399045)

DATA ASSESSMENT

A TPH data package containing analytical results for seventeen soil samples and one oil was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to NYS DOH Method 310.13, addressed determinations of gasoline, Fuel Oil #1, Fuel Oil #2, lube oil and unidentified hydrocarbons. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000, and the cited method.

The TPH results obtained from T7-1, T7-2, T9-1, T12-1, T12-2, T12-3, T13-1, T13-2, T14-1, T14-2, T15-1 and T15-2 have been qualified as estimations due to poor calibration performance.

Positive TPH results from T7-1, T7-2, T7-4, T8-1, T8-2, T8-2dup and T14-2; and all data obtained from T8-oil, T12-2, T12-3 and T15-1 have been qualified as estimations due to unacceptable surrogate standard recoveries.

CORRECTNESS AND USABILITY

A petroleum fingerprint was present in the chromatography of T8-oil and identified as an unknown hydrocarbon. A similar elution pattern was identified as lube oil in other program samples. The Form 1 of T8-oil has been edited to indicate the presence of lube oil.

A late eluting peak was present in the chromatography of T7-4, T13-2, T14-1 and T14-2. The retention time and shape of this peak suggests that it might represent an instrument artifact. The positive lube oil results reported from T7-4, T13-2, T14-1 and T14-2 have been removed from Form 1.

In addition to lube oil, which was reported, the chromatography of T8-1, T8-oil, T8-2, T8-2dup, T13-1 indicated the presence of Fuel Oil #2. The fuel oil was identified as an unknown. The Form 1's of these samples have been edited to indicate the presence of Fuel Oil #2.

Reported data should be considered technically defensible in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included seventeen soils and one sample of oil that was collected with groundwater, was collected from the Former Brown Manufacturing site between 15Nov99 and 18Nov99. Five samples collected on 15Nov99, four collected on 16Nov99 and nine collected on 18Nov99 were delivered to the laboratory, after hours, on the day of collection. Each cooler of samples arrived intact, with custody seals in place. A temperature of 6.9°C was obtained from each sample cooler at the time of laboratory receipt.

Sample extractions were performed on 19Nov99 and 23Nov99. The analysis of each sample was completed by 27Dec99. Program holding time limitations were satisfied.

BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

Three method blanks were analyzed with this group of samples. The chromatography of each blank was free of fingerprint patterns indicative of the targeted petroleum products.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The initial instrument calibration was performed on 28Jan99. Fuel oil concentrations of 10, 50, 100, 500 and 5000 mg/l were included. Although calibration performance was not summarized, an acceptable degree of instrument linearity was demonstrated. Correlation coefficients of 8%, 18% and 14% RSD were calculated for the three fuel oil peaks used for quantitation. Lube oil, kerosene and gasoline standards of 1000 mg/l were also analyzed to demonstrate their chromatographic fingerprint patterns.

It is noted that the reported instrument calibrations allowed detection limits to be established. Beyond that, the targeted petroleum products were identified by their chromatographic fingerprints. When present in samples, targeted petroleum products were identified and reported as present. Quantitation was not attempted.

Calibration verification standards were analyzed to bracket each twelve hour period of instrument operation. One exception is noted. Samples analyzed on 27Dec99 were preceded by a calibration check at 09:40. Another standard was not run until 07:51 on 28Dec99. Because Method 310-13 only specifically requires a single standard, data from T7-3, T7-4, T8-1, T8-2 and T8-2DP has been left unqualified. Sample T9-1 was not analyzed until 22:11, outside the 12 hour window defined by the preceding calibration standard. Results reported from T9-1 have been qualified as estimations.

When compared to the initial calibration, unacceptable shifts were observed in the response of fuel oil during the calibration checks performed at 09:25 on 20Dec99 (19%), 09:51 on 21Dec99 (17%), 14:36 on 21Dec99 (31%) and 08:37 on 23Dec99 (28%). Based on this performance, the TPH results reported from T12-1, T12-2, T12-3, T13-1, T13-2, T14-1, T14-2, T15-1, T15-2, T7-1 and T7-2 have been qualified as estimations.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Each sample was spiked with 0.20 mg of dodecane. In most cases, these surrogate additions were not recovered successfully. Low recoveries were reported from T8-oil (63%), T12-2 (68%), T12-3 (63%) and T15-1 (61%). High surrogate recoveries were reported from T7-1 (139%), T7-2 (153%), T7-4 (150%), T8-1 (165%), T8-2 (164%), T8-2dup (147%) and T14-2 (131%). Based on this performance, the positive TPH results reported from T7-1, T7-2, T7-4, T8-1, T8-2, T8-2dup and T14-2; and all data obtained from T8-oil, T12-2, T12-3 and T15-1 has been qualified as estimations.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

1000 mg/kg of fuel oil was added to two portions of T8-2. The recovery of these additions demonstrated an acceptable level of measurement accuracy. Although not reported by the laboratory, this pair of measurements also demonstrated poor measurement precision (44% RPD).

This performance alone does not necessitate data qualifications. Acceptable fuel oil recoveries were also obtained from two spiked blanks.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision, may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates of T8-2 were included in this group of samples. Similar petroleum fingerprints were produced by both samples.

SUMMARY OF QUALIFIED DATA

SAMPLED 11/15/99 - 11/18/99

FORMER BROWN MANUFACTURING SITE

FUEL OIL 2	PRESENT PRESENT PRESENT PRESENT
ARTIFACT LUBE OIL	LUBE ND LUBE ND LUBE ND
LUBE OIL	PRESENT
SURROGATES	ALL J/UJ ALL J/UJ POS J/UJ POS J/UJ POS J/UJ ALL J/UJ ALL J/UJ ALL J/UJ ALL J/UJ
CALIBRATE	ALL J/UJ ALL J/UJ ALL J/UJ ALL J/UJ ALL J/UJ ALL J/UJ ALL J/UJ ALL J/UJ ALL J/UJ ALL J/UJ ALL J/UJ
- Conversion	(32099001) (32099002) (32099002) (32099004) (32199003) (32199031) (32199031) (32399032) (32399040) (32399041) (32399042) (32399044) (32399044) (32399044)
	HHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH

T7-1

Lab Name: <u>Upstate Labs Inc.</u>

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH13

Matrix:

SOIL

Lab Sample ID:

32099001

Sample wt.:

()

Lab File ID:

PA5381

% Moisture:

17

Decanted:

Date Received:

11/15/99

Extraction:

shaker

30g

Date Extracted:

11/19/99

Conc Extract Vol.:

10 (ML) 2 (uL)

Date Analyzed: Time Analyzed:

12/23/99

Injection Vol.: GPC Cleanup:

No

pH:

Dilution Factor:

11:41AM

Instr. ID:

53

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	Þη
⊀.	FUEL OIL #1 (KEROSENE)	<4.0	J. Corn
	FUEL OIL #2 (DIESEL)	<4.0	
	LUBE OIL	р	70
	UNIDENTIFIABLE HOCS.	ND	15 U.
	TOTAL HYDROCARBONS	D	T D &

T7-2

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH13

Matrix: <u>SOIL</u>

Lab Sample ID:

32099002

Sample wt.:

<u>30g</u>

Lab File ID: ()

PA5381

% Moisture:

<u>16</u>

Decanted:

2 (uL)

Date Received:

11/15/99

Extraction:

shaker

Date Extracted:

11/19/99

Conc Extract Vol.:

10 (ML)

Date Analyzed: Time Analyzed: 12/23/99 01:13PM

Injection Vol.: GPC Cleanup:

No

pH:

Dilution Factor:

Instr. ID:

53

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	<i>セ</i>)
	FUEL OIL #1 (KEROSENE)	<3.9	2 / 15
∢,	FUEL OIL #2 (DIESEL)	<3,9	(بد
	LUBE OIL	D	ر ک شد
	UNIDENTIFIABLE HOCS.	ND	ル (ご)
	TOTAL HYDROCARBONS	D	.J. 7

T7-3

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH13

Matrix: SOIL

Lab Sample ID:

32099003

Sample wt.:

30g

()

Lab File ID:

PA5381

% Moisture:

12

Decanted:

Date Received:

11/15/99

Extraction:

shaker

Date Extracted:

11/19/99

Conc Extract Vol.:

10 (ML)

Date Analyzed:

12/27/99

Injection Vol.:

2 (uL)

Time Analyzed:

10:44AM

GPC Cleanup;

No

pH:

Dilution Factor:

Instr. ID:

<u>53</u>

COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
GASOLINE	ND	U
FUEL OIL #1 (KEROSENE)	<3.8	U
FUEL OIL #2 (DIESEL)	<3.8	U
LUBE OIL	D	J
UNIDENTIFIABLE HOCS.	ND	U
TOTAL HYDROCARBONS	D	J

T7-4

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH13

Matrix: <u>SOIL</u>

Lab Sample ID:

32099004

Sample wt.:

Lab File ID:

PA5381

% Moisture:

30g 15

Decanted:

Date Received:

11/15/99

Extraction:

shaker

11/19/99

Conc Extract Vol.:

10 (ML)

Date Extracted: Date Analyzed:

12/27/99

Injection Vol.:

2 (uL)

Time Analyzed:

11:54AM

GPC Cleanup:

No

pH:

Dilution Factor:

Instr. ID:

53

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	Ü
	FUEL OIL #1 (KEROSENE)	<3.9	U
∢,	FUEL OIL #2 (DIESEL)	<3.9	U
	LUBE OIL	-Ð- NŢ)	ずし
	UNIDENTIFIABLE HOCS.	ND	Ŭ
	TOTAL HYDROCARBONS	DND	€ ستند

T8-1

CH13

Lab Name: Upstate Labs Inc. Contract:

Lab Code: 10170 Case No.: SDG No.:

Matrix: SOIL Lab Sample ID: 32099005

Sample wt.: 30g () Lab File ED: <u>PA5381</u>

% Moisture: 28 Decanted: Date Received: 11/15/99

Extraction: Shaker Date Extracted: 11/19/99

Conc Extract Vol.: 10 (ML) Date Analyzed: 12/27/99

Injection Vol.: 2 (uL) Time Analyzed: 01:05PM

GPC Cleanup: No pH: Dilution Factor:

Instr. ID: 53 Sulfur Cleanup:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	U .
	FUEL OIL #1 (KEROSENE)	<4.6	C
∢.	FUEL OIL #2 (DIESEL)	,<4.6 D	L&
	LUBE OIL	D	.# J
	UNIDENTIFIABLE HOCS.	ND	チリ
	TOTAL HYDROCARBONS	D	

MS

TPH ANALYSIS DATA SHEET

T8-OIL

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH-13

Matrix

OIL

Lab Sample ID:

Sample wt.:

.05 G

Lab File ID:

321-29 PA5383

% Moisture: N/A

Date Received:

Decanted: NO

Date Extracted:

11/16/99

Extraction:

5 (ML)

Date Analyzed:

11/19/99 11/29/99

Conc Extract Vol.: Injection Vol.:

2 (uL)

Time Analyzed:

16:02

GPC Cleanup: No

pH:

Dilution Factor:

N/A

Instr. ID:

53

Sulfur Cleanup:

N/V

CAS NO.	COMPOUND	CONCENTRATION UNITS mg/kg	Q
	GASOLINE	N.D.	ي جر
	FUEL OIL #1 (KEROSENE)	<1000	W U.
	FUEL OIL #2 (DIESEL)	~41000 D	A 7
	LUBE OIL	N-B- D	[بعد
	UNIDENTIFIABLE HOCS.	A: V.D	<u>)</u> -قدر
	TOTAL HYDROCARBONS	D.	<i>J</i> 1

Т8-2

Lab Name: Upstate Labs Inc. Contract:

Lab Code: 10170 Case No.: SDG No.: CH13

Matrix: SOIL Lab Sample ID: 32199030

Sample wt.: 30g () Lab File ID: PA5381

% Moisture: 15 Decanted: Date Received: 11/16/99

Extraction: Shaker Date Extracted: 11/19/99

Conc Extract Vol.: 10 (ML) Date Analyzed: 12/27/99

Injection Vol.: 2 (uL) Time Analyzed: 02:16PM

GPC Cleanup: No pH: Dilution Factor:

Instr. ID: 53 Sulfur Cleanup:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	U
	FUEL OIL #1 (KEROSENE)	<3.8	U
⁴.	FUEL OIL #2 (DIESEL)	~3.8 D	# J
	LUBE OIL	D	. j. .j
	UNIDENTIFIABLE HOCS.	O'N G	
	TOTAL HYDROCARBONS	D	A

N

T8-2DP

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH13

Matrix: SOIL

Lab Sample ID:

32199031

Sample wt.:

()

Lab File ID:

PA5381

% Moisture:

Decanted:

Date Received:

11/16/99

Extraction:

shaker

<u>30g</u>

Date Extracted:

11/19/99

Conc Extract Vol.:

10 (ML)

Date Analyzed:

12/27/99

Injection Vol.:

2 (uL)

Time Analyzed:

07:40PM

GPC Cleanup:

No

pH:

Dilution Factor:

Instr. ID:

<u>53</u>

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER \
	GASOLINE	ND	U
	FUEL OIL #1 (KEROSENE)	4 4.1	Ū
₫.	FUEL OIL #2 (DIESEL)	<4,1 D	ل الإ
	LUBE OIL	D	7
	UNIDENTIFIABLE HOCS.	DM G	J FU
	TOTAL HYDROCARBONS	D	3

T9-1

Lab Name: Upstate Labs Inc. Contract:

Lab Code: <u>10170</u>

Case No.:

SDG No.:

CH13

Matrix: SOIL

Lab Sample ID:

Sample wt.:

32199032

PA5381

<u>30g</u>

()

Lab File ID:

11/16/99

% Moisture:

20

Decanted:

Date Received:

Extraction:

shaker

Date Extracted:

11/19/99

Conc Extract Vol.:

Injection Vol.:

10 (ML) <u>2</u> (uL) Date Analyzed: Time Analyzed: 12/27/99 10:11PM

GPC Cleanup:

No

pH:

Dilution Factor:

Instr. ID:

53

Sulfur Cleanup:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	æ j
	FUEL OIL #1 (KEROSENE)	<4.1	10 \ M
* .	FUEL OIL #2 (DIESEL)	<4.1	Æ 📗
	LUBE OIL	D	J
	UNIDENTIFIABLE HOCS.	ND	J- UJ
	TOTAL HYDROCARBONS	D	ل سند

T12-1

Lab Name: Upstate Labs Inc. Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH13

Matrix: SOIL

()

32399037 Lab Sample ID:

Sample wt.:

Lab File ID:

<u>30g</u>

PA5389

% Moisture:

20

Decanted:

Date Received:

11/18/99

Extraction:

shaker

Date Extracted:

11/23/99

Conc Extract Vol.:

10 (ML)

Date Analyzed:

12/20/99

Injection Vol.:

2 (uL)

Time Analyzed:

11:33AM

GPC Cleanup:

No

:Hq

Dilution Factor:

Instr. ID:

53

Sulfur Cleanup:

COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
GASOLINE	ND	187
FUEL OIL #1 (KEROSENE)	<4.1	<i>y</i> }∪
FUEL OIL #2 (DIESEL)	<4.1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
LUBE OIL	D	J-3-7
UNIDENTIFIABLE HOCS.	ND	12-U_
TOTAL HYDROCARBONS	D	ل تر

Lab Name: Upstate Labs Inc. Contract:

Lab Code: 10170 Case No.: SDG No.: CH13

Matrix: SOIL Lab Sample ID: 32399038

Sample wt.: 30g () Lab File ID: PA5389

% Moisture: 11 Decanted: Date Received: 11/18/99

Extraction: Shaker Date Extracted: 11/23/99

Conc Extract Vol.: 10 (ML) Date Analyzed: 12/20/99

Injection Vol.: 2 (uL) Time Analyzed: 12:37PM

GPC Cleanup: No pH: Dilution Factor:

Instr. ID: 53 Sulfur Cleanup:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER	
	GASOLINE	ND	N Y	
	FUEL OIL #1 (KEROSENE)	<3.7	ال ح الم	1
∢,	FUEL OIL #2 (DIESEL)	<3.7	18	~,
	LUBE OIL	D	エゴ	
	UNIDENTIFIABLE HOCS.	D '	J-7	
	TOTAL HYDROCARBONS	D	4-1	

189

T12-2

T12-3

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: <u>10170</u>

Case No.:

SDG No.:

CH13

Matrix:

Lab Sample ID:

Sample wt.:

SOIL

32399039

30g

Lab File ID:

PA5389

% Moisture:

15

Decanted:

Date Received:

11/18/99

Extraction:

shaker

Date Extracted:

11/23/99

Conc Extract Vol.:

10 (ML)

()

Date Analyzed:

12/20/99

Injection Vol.:

2 (uL)

pH:

Time Analyzed:

01:39PM

GPC Cleanup: Instr. ID:

No

<u>53</u>

Dilution Factor:

Sulfur Cleanup:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER	
	GASOLINE	ND	٦ (هـ ا	
ж,	FUEL OIL #1 (KEROSENE)	<3.9	ر منز	U 1
	FUEL OIL #2 (DIESEL)	<3.9	<i>ji</i> }	
	LUBE OIL	D	a J	
	UNIDENTIFIABLE HOCS.	D	2]	
	TOTAL HYDROCARBONS	D	J. T	

T13-1

Lab Name: Upstate Labs Inc.

Contract:

SDG No.:

CH13

Lab Code: 10170

Case No.:

Lab Sample ID:

Matrix: SOIL

32399040

Sample wt.:

Lab File .ID:

PA5389

% Moisture:

Decanted:

Date Received:

11/18/99

Extraction:

shaker

<u>30g</u>

Date Extracted:

11/23/99

Conc Extract Vol.:

10 (ML)

Date Analyzed:

12/20/99

Injection Vol.:

2 (uL)

Time Analyzed:

02:39PM

GPC Cleanup:

No

pH:

Dilution Factor:

Instr. ID:

53

Sulfur Cleanup:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	בט מג
	FUEL OIL #1 (KEROSENE)	<3.5	1507
* ,	FUEL OIL #2 (DIESEL)	<3-5- D	#1
	LUBE OIL	D	75 7
	UNIDENTIFIABLE HOCS.	P ND	<i>-∓U</i> Ĵ
	TOTAL HYDROCARBONS	D	ل تند

T13-2

Lab Name: Upstate Labs Inc. Contract:

Lab Code: 10170 Case No.:

SDG No.:

CH13

Matrix: SOIL Lab Sample ID: 32399041

Sample wt.: 30q () Lab File ID: PA5389

% Moisture: 16 Decanted: Date Received: 11/18/99

Extraction: Shaker Date Extracted: 11/23/99

Conc Extract Vol.: 10 (ML) Date Analyzed: 12/20/99

Injection Vol.: 2 (uL) Time Analyzed: 04:20PM

GPC Cleanup: $\underline{\text{No}}$ pH: Dilution Factor:

Instr. ID: 53 Sulfur Cleanup:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER	
	CACOT THE	nig/ Ng ND	<i>μ</i> γ	
	GASOLINE FUEL OIL #1 (KEROSENE)	23 9	Jr 50	1
A.		<3.9	<i>y</i>	"
	LUBE OIL	- D - ND	-J U	1
	UNIDENTIFIABLE HOCS.	ND	J William	Ö
	TOTAL HYDROCARBONS	-D- WD	-JU	1

MS

T14-1

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: <u>10170</u>

Case No.:

SDG No.:

CH13

Matrix:

SOIL

Lab Sample ID:

32399042

Sample wt.:

Lab File ID:

PA5389

% Moisture:

38

Decanted:

11/18/99

Date Received:

Extraction:

shaker

<u>30g</u>

Date Extracted:

11/23/99

Conc Extract Vol.:

10 (ML)

Date Analyzed:

12/20/99

Injection Vol.:

2 (uL)

Time Analyzed:

05:47PM

GPC Cleanup: Instr. ID:

<u>53</u>

pH:

Dilution Factor: Sulfur Cleanup:

COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
GASOLINE	ND	<u> </u>
FUEL OIL #1 (KEROSENE)	<5.3	<u> </u>
FUEL OIL #2 (DIESEL)	<5.3	
LUBE OIL	- 	
UNIDENTIFIABLE HOCS.	ND	J- U-1
TOTAL HYDROCARBONS	-9-ND	-#UT

T14-2

CH13

SDG No.:

Lab Name: Upstate Labs Inc. Contract:

Lab Code: <u>10170</u> Case No.:

<u>53</u>

Instr. ID:

Sulfur Cleanup:

Matrix: SOIL Lab Sample ID: 32399043

Sample wt.: 30g () Lab File ID: PA5389

% Moisture: 27 Decanted: Date Received: 11/18/99

Extraction: shaker Date Extracted: 11/23/99

Conc Extract Vol.: 10 (ML) Date Analyzed: 12/21/99

Injection Vol.: 2 (uL) Time Analyzed: 10:52AM

GPC Cleanup: No pH: Dilution Factor:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER	
	GASOLINE	ND	7	
	FUEL OIL #1 (KEROSENE)	<4.5	<i>ځ</i> لا	UJ
∢,	FUEL OIL #2 (DIESEL)	<4.5	is in	•
	LUBE OIL		みし	1
	UNIDENTIFIABLE HOCS.	ND	少 ()	<u> </u>
	TOTAL HYDROCARBONS	- P ND	I I'U	7

T15-1

Lab Name: Upstate Labs Inc. Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH13

Matrix: SOIL

Lab Sample ID:

32399044

Sample wt.:

Lab File ID:

PA5389

30g 16

Decanted:

()

Date Received:

11/18/99

% Moisture: Extraction:

11/23/99

shaker

Date Extracted:

Conc Extract Vol.:

Injection Vol.:

10 (ML)

<u>2</u> (uL)

Date Analyzed: Time Analyzed: 12/21/99 11:54AM

GPC Cleanup:

:Hq

Dilution Factor:

Instr. ID:

53

Sulfur Cleanup:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER	
	GASOLINE	ND	(الاس	
	FUEL OIL #1 (KEROSENE)	<3.9	\ \mathrew \}	り
⊀.	FUEL OIL #2 (DIESEL)	<3.9	ע שו	
	LUBE OIL	D	47	
	UNIDENTIFIABLE HOCS.	. D	J. J.	
	TOTAL HYDROCARBONS	D	<u></u>	

T15-2

Lab Name: Upstate Labs Inc. Contract:

Lab Code: 10170 Case No.: SDG No.: CH13

Matrix: SOIL Lab Sample ID: 32399045

Sample wt.: 30g () Lab File ID: PA5389

% Moisture: 16 Decanted: Date Received: 11/18/99

Extraction: Shaker Date Extracted: 11/23/99

Conc Extract Vol.: 10 (ML) Date Analyzed: 12/21/99

Injection Vol.: 2 (uL) Time Analyzed: 01:15PM

GPC Cleanup: No pH: Dilution Factor:

Instr. ID: 53 Sulfur Cleanup:

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	7
	FUEL OIL #1 (KEROSENE)	<3.9	277 1
X,	FUEL OIL #2 (DIESEL)	<3.9	الالا
	LUBE OIL	D	11
	UNIDENTIFIABLE HOCS.	D	77
	TOTAL HYDROCARBONS	D	1

NB

DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES

431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG CH14 Sampled 11/17/99

SOIL SAMPLES for SEMIVOLATILE ORGANICS T10-1 (32299002) T11-1 (32299006)

DATA ASSESSMENT

A semivolatile organics data package containing analytical results for two soil samples was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for Analyses, performed according to SW-846 Method 8270, addressed Target Compound List analytes. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

The pentachlorophenol results reported from both program samples have been qualified as estimations due to poor calibration performance.

Aldol Condensation products and a large number of "unknowns" were reported as Tentatively Identified Compounds (TIC) from this group of samples. When present, they have been removed from Form 1F.

Internal standards #5 and/or #6 produced a low instrument response in samples T10-1 and T11-1. Analytes dependant upon the response of these internal standards have been qualified as estimations in the affected samples.

The results reported from T10-1 and T11-1 have been qualified as estimations due to matrix spiking performance. Matrix spiked samples were not prepared. Unacceptably low recoveries were reported for five of the eleven analyte additions to an associated spiked blank.

CORRECTNESS AND USABILITY

The Tentatively Identified Compounds (TIC) reported from both program samples included identifications that were not conclusively supported by the library searches supplied by the laboratory. The affected identifications have been edited on Form 1F.

Reported data should be considered technically defensible in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J" or "UJ". Data that is felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: //a/oz

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included two soil samples, was collected from the Former Brown Manufacturing site on 17Nov99. Both samples were delivered to the laboratory, after hours, on the day of collection. The sample cooler arrived intact, properly chilled, with a custody seal in place. A cooler temperature of 6.9°C was recorded by the laboratory at the time of receipt.

Sample extractions were performed on 19Nov99. The analysis of each sample was completed on 16Dec99. Program holding time limitations were satisfied.

BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank. Any sample concentration less than 5 times the level determined in a blank must be qualified. The qualification criteria is extended to ten times the concentration observed in blanks for common laboratory artifacts. These include phthalate esters.

One method blank was analyzed with this group of samples. Although a trace of bis(2-ethylhexyl)phthalate was detected in the method blank, a similar artifact was not detected in program samples.

Aldol Condensation products (4-methyl-3-penten-2-one, 4-hydroxy-4-methyl-2-pentanone) and a large number of unidentified TIC's were also present in the method blank. Similar artifacts have been removed from Form 1F of both samples.

MS TUNING

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of DFTPP was analyzed prior to each analytical sequence and during every 12 hour period of instrument operation. An Instrument Performance Check Form is

present for each DFTPP evaluation. The DFTPP tunes associated with this group of samples satisfied the program acceptance criteria.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The required levels of initial calibration were performed on 09Dec99. Standards of 20, 50, 80, 120 and 160 ng were included. With the exception of pentachlorophenol, the calibration curve for each analyte demonstrated the required levels of instrument response and an acceptable degree of linearity. Pentachlorophenol standards demonstrated poor linearity. The lowest pentachlorophenol standard also failed to produce the required minimum level of response. Based on this performance, the negative pentachlorophenol result reported from both samples must be considered unreliable. This information should not be included in data tables.

A continuing calibration verification was completed prior to each twelve hour period of instrument operation. These checks demonstrated an acceptable level of instrument stability.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Although the Surrogate Summary Form required correction, the changes had no affect on the interpretation of reported data. A low recovery was reported for each of the surrogates added to T11-1. However, this sample was diluted 1:10, following the addition of surrogates. Because the low recoveries may be attributed to sample dilution, data reported from T11-1 has been left unqualified.

Although the 2,4,6-tribromophenol addition to T10-1 was completely unrecovered, the remaining surrogate additions to this sample were recovered successfully. Because no more than one acid surrogate and one base/neutral surrogate produced poor recoveries, the program acceptance criteria was satisfied. Data qualifications are not required.

Both samples were reanalyzed, but at a higher dilution. The low internal standard response reported from these samples may also be attributed to sample dilution. The phenanthrene concentration obtained from T10-1DL is the only diluted result that should be

included in data tables. The phenanthrene result has been left unqualified.

INTERNAL STANDARDS

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. The response produced by the chrysene-d12 additions to T10-1, and the perylene-d12 additions to T10-1 and T11-1 failed to satisfy the calculated limits of acceptance. Analytes dependant upon the response of these internal standards have been qualified as estimations in the affected samples.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

Matrix spikes (MS/MSD) were not prepared. This omission makes it impossible to evaluate matrix effects that might bias measurements from this group of samples. Analyte recoveries were reported for a spiked blank. Five of the eleven additions to a clean matrix produced unacceptably low recoveries. Based on this performance, and the absence of spiked samples, the results reported from T10-1 and T11-1 have been qualified as estimations.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision, may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates were not included in this group of samples.

SAMPLE INFORMATION

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts. Sample chromatograms were properly attenuated. Mass spectra references were provided to confirm the identification of each reported analyte.

In several cases, the identifications of Tentatively Identified Compounds (TIC) were not conclusively supported by the library

searches included in the raw data. In such cases, Form 1F has been edited to indicate an appropriate identification. Both Form 1F's have been corrected

SUMMARY OF QUALIFIED DATA

FORMER BROWN MANUFACTURING SITE

SAMPLED 11/17/99

SPECTRA ID TIC	CORRECT
SPIKES	ALL J/UJ ALL UJ
INT STD	iss,6 J/UJ Is6 UJ
CALIBRATE 5CLPHENOL	REJECT REJECT
BLANK TIC	REMOVE REMOVE
And the second s	(32299002) (32299006)
	T10-1

H ISS

pyrene, butylbenzylhthalate, 3,3'dichlorobenzidine, benzo[a]anthracene, chrysene, bis(2-ethylhexyl)phthalate, di-n-octylphthalae, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno[1,2,3-cd]pyrene, dibenz[a,h]anthracene, benzo[g,h,i]perylene II 136

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:	Upstate	Labatorie	s, Inc.	C	ontract:	C&H Engin	T10-1
Lab Code:	10170	C	ase No.:	- 41	SAS No	.: S	DG No.: CH14
Matrix: (soil/v	vater)	SOIL			Lai	o Sample ID:	32299002
Sample wt/vo	ol:	30.2	(g/ml) G	· Na - da a l do - è e la mona.	La	o File ID:	B7604.D
Level: (low/n	ned)	L.OW	931.34		Da	te Received:	11/17/99
% Moisture:	31	d	ecanted:(Y/N)	N	Da	te Extracted:	11/19/99
Concentrated	Extract	Volume:	1000 (uL)		Da	te Analyzed:	12/16/99
Injection Volu	me: 2	0(uL)			Dili	ution Factor:	1.0
GPC Cleanup	o: (Y/N)	N	pH:	on es			

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
86-30-6	N-nitrosodimethylamine	· P. June (1994), g. J. Cong. James protection and g. v. p. demonstrate grand part for b. 174	480	υv	}
111-44-4	bls(2-Chloroethyl)ether		480	U	•
108-95-2	Phenol	to the country of the	480	U	
95-57-8	2-Chlorophenol	Total Control of the	480		·!
541-73-1	1,3-Dichlorobenzene	Shirts of the engineer between the three helders to the engineer of the engine	480	UT	
106-46-7	1,4-Dichlorobenzene	and the second s	480	UI	
95-50-1	1,2-Dichlorobenzene		480	UI	
108-60-1	2,2'-oxybis(1-Chloropro	pane)	480	V	1
95-48-7	2-Methylphenol	A Superior and the Control of the Co	480	U \	V
67-72-1	Hexachloroethane	***************************************	480	V /	נען
621-64-7	N-Nitroso-di-n-propylan	nine	480	V /	
106-44-5	(3+4)-Methylphenol	and gare managed to the special being a managed to the first	480	U J	
98-95-3	Nitrobenzene		480	V I	
78-59-1	Isophorone		480	U	
88-75-5	2-Nitrophenol	A CONTRACTOR OF THE PARTY OF TH	480	Ų	
105-67-9	2,4-Dimethylphenol	1 T W 411	480	Ų į	1
111-91-1	bis(2-Chloroethoxy)met	hane	480	Ψ	į
120-83-2	2,4-Dichlorophenol	1	480	Ų.	
120-82-1	1,2,4-Trichlorobenzene	1.4 mil 1.4 m	480	Ų /	
91-20-3	Naphthalene		500	1	
106-47-8	4-Chloroaniline		480	Ψ	
87-68-3	Hexachlorobutadiene	SALA S. 1991 MAINTAIN LIBERTAIN MANAGEMENT	480	ψ]
59-50-7	4-Chloro-3-methylpheno	ol	480	U,	
91-57-6	2-Methylnaphthalene		290	女了	V
77-47-4	Hexachlorocyclopentad	lene	480	Ψ	
88-06-2	2,4,6-Trichlorophenol		480	ψ	ļ
95-95-4	2,4,5-Trichlorophenol		4800	Ψ	j
91-58-7	2-Chloronaphthalene		480	Ψ	
88-74-4	2-Nitroaniline		4800	U	j
208-96-8	Acenaphthylene		480	Ψ	
131-11-3	Dimethyl phthalate		480	Ų,	}
606-20-2	2,6-Dinitrotoluene		480	Ų	
83-32-9	Acenaphthene		660]] /
99-09-2	3-Nitroaniline		4800	Ų	}
51-28-5	2,4-Dinitrophenol		4800	()	
132-64-9	Dibenzofuran		390	A)	
121-14-2	2,4-Dinitrotoluene		480	Ų	}

1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T10-1

Lab Name:	Upstate	Labato	ries, Inc.	Contract:	C&H Engin	
Lab Code:	10170		Case No.:	SAS N	o.:S	DG No.: CH14
Matrix: (soil/w	vater)	SOIL	· • • • • • • • • • • • • • • • • • • •	La	ab Sample ID;	32299002
Sample wt/vo	l:	30.2	(g/ml) G	La	ab File ID:	B7604.D
Level: (low/m	ned)	LOW	177	D	ate Received:	11/17/99
% Moisture:	31	74 b 1	decanted:(Y/N)	N D	ate Extracted:	11/19/99
Concentrated	Extract	Volume	: 1000 (uL)	Da	ate Analyzed:	12/16/99
Injection Volu	me: 2	.0 (ul	_)	Di	lution Factor:	1.0
GPC Cleanup): (Y/N)	N	pH:			

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
100-02-7	4-Nitrophenol		4800	e vivi
86-73-7	Fluorene		700	1
7005-72-3	4-Chlorophenyl phenyl ethe	er	480	W 1
84-66-2	Diethyl phthalate		480	U V
100-01-6	4-Nitroaniline		4800	Į į
534-52-1	4,6-Dinitro-2-methylphenol	}	2400	170
86-30-6	n-Nitrosodiphenylamine		480	V
101-55-3	4-Bromophenyl phenyl ethe	er	480	U
118-74-1	Hexachlorobenzene		480	
87-86-5	Pentachlorophenol		-900	H-K
85-01-8	Phenanthrene	5300	7300	ZOJ -
120-12-7	Anthracene		480	V.
84-74-2	Di-n-butyl phthalate		480	TO THE STATE OF TH
86-74-8	Carbazole		480	U J
206-44-0	Fluoranthene	į I	480	V
129-00-0	Pyrene		480	UT
85-68-7	Butyl benzyl phthalate		480	
91-94-1	3,3'-Dichlorobenzidine		480	1) V
56-55-3	Benzo[a]anthracene		480	V " "
218-01-9	Chrysene		480	Ψ]
117-81-7	bis(2-Ethylhexyl)phthalate		480	Ψ
117-84-0	Di-n-octyl phthalate		480	V
205-99-2	Benzo[b]fluoranthene		480	ΨI
207-08-9	Benzo[k]fluoranthene		480	4
50-32-8	Benzo[a]pyrene	1	1400	1
193-39-5	Indeno[1,2,3-cd]pyrene		470	47
53-70-3	Dibenz[a,h]anthracene		480	HUJ
191-24-2	Benzo[g,h,i]perylene		410	45

S

18 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T11-1

Lab Name:	Upstate	Labatori	es, Inc.	Co	ontract:	C&H Engli	n L
Lab Code:	10170		Case No.:		SAS No).:	SDG No.: CH14
Natrix: (soil/w	vater)	SOIL			Lal	b Sample ID	32299006
Sample wt/vo	ot;	30	(g/ml) G		La	b File ID:	B7598.D
Level: (low/m	ned)	LOW			Da	ite Received	: 11/17/99
% Moisture:	18		decanted:(Y/N)	N		ite Extracted	l: 11/19/99
Concentrated	Extract	Volume:	1000 (uL)		Da	ite Analyzed	: 12/15/99
Injection Volu	ime: 2	,0 (uL)		Dil	ution Factor	: 10.0
GPC Cleanu	p: (Y/N)	N	pH:				

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q	
86-30-6	N-nitrosodimethylamine		4100	4 \	
111-44-4	bis(2-Chloroethyl)ether		4100	\	.
108-95-2	Phenol	1	4100	, . 4	1
95-57-8	2-Chlorophenol		4100	<u> </u>	
541-73-1	1,3-Dichlorobenzene		4100	<u>U</u>	
106-46-7	1,4-Dichlorobenzene		4100	.,	l
95-50-1	1,2-Dichlorobenzene		4100	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	4100	<u> </u>	
95-48-7	2-Methylphenol		4100	<u> </u>	
67-72-1	Hexachloroethane		4100	<u> </u>	
621-64-7	N-Nitroso-di-n-propylamine		4100	; 4	
106-44-5	(3+4)-Methylphenol		4100		}
98-95-3	Nitrobenzene		4100	<u> </u>	
78-59-1	Isophorone		4100		
88-75-5	2-Nitrophenol		4100	. 4	
105-67-9	2,4-Dimethylphenol		4100	<u> </u>	
111-91-1	bis(2-Chloroethoxy)methane	3	4100		1
120-83-2	2.4-Dichlorophenol		4100	<u>U</u>	15
120-83-2	1,2,4-Trichlorobenzene	to a communication of the comm	4100	U	100
91-20-3	Naphthalene	to live the state of the state of the state of the state of	4100		1
106-47-8	4-Chloroaniline		4100	i u	(
87-68-3	Hexachlorobutadiene	en a dia non common de series de la contractica e de della presidente de la compansión de la compansión de la c	4100	U	
59-50-7	4-Chloro-3-methylphenol	Company of the control of the contro	4100	U	
91-57-6	2-Methylnaphthalene	or the first of the first of the first of the contract of the	4100	Ü	
	Hexachlorocyclopentadiene		4100	U	
77-47-4	2,4,6-Trichlorophenol	A	4100		
88-06-2	2,4,5-Trichlorophenol		41000	U	
95-95-4 91-58-7	2-Chloronaphthalene		4100	U I	1
,	2-Nitroaniline		41000		
88-74-4	Acenaphthylene	**************************************	4100		
208-96-8	Dimethyl phthalate		4100		
131-11-3	2,6-Dinitrotoluene	37*** - N. C	4100		
606-20-2	Acenaphthene		4100		
83-32-9	3-Nitroaniline		41000		1
99-09-2	2,4-Dinitrophenol		41000		/ ^
51-28-5	Dibenzofuran		4100	/	1
132-64-9	2,4-Dinitrotoluene	na anna grand na man a pagnina de de la company	4100	1	
121-14-2	"" T V'ALIMINORONORIO" "" ""	and the comment of th	and the second of the second	(

T11-1

Lab Name:	Upstate	Labatori	es, Inc.	Contract	: C&H Engin	
Lab Code:	10170		Case No.:	SAS N	lo.: S	DG No.: CH14
Matrix: (soil/w	vater)	SOIL		L	ab Sample ID:	32299006
Sample wt/vo	ol:	30	(g/ml) G	L	ab File ID:	B7598.D
Level: (low/m	ned)	LOW	W196.5.1		ate Received:	11/17/99
% Moisture:	18	- ****	decanted:(Y/N)	N D	ate Extracted:	11/19/99
Concentrated	l Extract	Volume:	1000 (uL)		ate Analyzed:	12/15/99
Injection Volu	mė: 2	.0 (uL)	D	ilution Factor:	10.0
GPC Cleanup	o: (Y/N)	N	pH:			

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
100-02-7	4-Nitrophenol		41000	UVI	
86-73-7	Fluorene	The second secon	4100	1 1	
7005-72-3	4-Chlorophenyl phenyl ether		4100	I U V	
84-66-2	Diethyl phthalate		4100	I U	
100-01-6	4-Nitroaniline		41000	. L	
534-52-1	4,6-Dinitro-2-methylphenol	The second secon	20000		
86-30-6	n-Nitrosodiphenylamine		4100	L	
101-55-3	4-Bromophenyl phenyl ether		4100		
118-74-1	Hexachlorobenzene		4100	U	•
87-86-5	Pentachlorophenol		-8100 -		-R
85-01-8	Phenanthrene		4100	U	•
120-12-7	Anthracene		4100	U	
84-74-2	Di-n-butyl phthalate		4100	U	
86-74-8	Carbazole		4100	U V	111
206444-0	Fluoranthene		4100	U /	VJ
129-00-0	Pyrene		4100	Ų	
85-6 <u>8-</u> 7	Butyl benzyl phthalate		4100	U	
91-94-1	3,3'-Dichlorobenzidine		4100	U	
56-55-3	Benzo[a]anthracene		4100	U I	
218-01-9	Chrysene		4100	Ų I	
117-81-7	bis(2-Ethylhexyl)phthalate		4100	Ų	
117-84-0	Di-n-octyl phthalate		4100	Ų II	
205-99-2	Benzo[b]fluoranthene		4100	U I	
207-08-9	Benzo[k]fluoranthene		4100	Ψ	
50-32-8	Benzo[a]pyrene		4100	T T	
193-39-5	Indeno[1,2,3-cd]pyrene	1	4100	Ψ	
53-70-3	Dibenz(a,h)anthracene		4100	V]	
191-24-2	Benzo[g,h,i]perylene		4100	U /	1

DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES

431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG CH14 Sampled 11/17/99

SOILS SAMPLES for PCB

T9-2	(32299001)	T10-1	(32299002)	T10-2	(32299003)
T10-3	(32299004)	T11-1	(32299006)	T11-2	(32299007)
	(32299008)				,

DATA ASSESSMENT

A PCB data package containing analytical results for eight soil samples was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8080, addressed determinations of PCB. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

The PCB results obtained from this group of samples have been qualified due to poor calibration performance. The reported sample concentrations were based on a calibration that was performed four days after the samples were actually analyzed. Calibration verifications based on the correct calibration files demonstrated poor instrument stability. Based on this performance, the data reported from this group of samples has been qualified as an estimation.

CORRECTNESS AND USABILITY

The PCB concentrations and CRDL's reported from this group of samples were calculated incorrectly. The reported values were calculated as mg/kg but reported as $\mu g/kg$. Form 1's have been corrected.

Spiked samples and spiked blanks (LCS) were not analyzed with this group of samples. This omission makes it impossible to evaluate the presence of interferences that might be associated with the matrix of samples from the former Brown Manufacturing site.

Reported data should be considered usable in its present form. Reported concentrations that are felt to provide a reasonable estimation of the conditions being measured have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment.

However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: Jalla Date: //a/ar

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included eight soil samples, was collected from the Former Brown Manufacturing site on 17Nov99. The entire group of samples was delivered to the laboratory, after hours, on the day of collection. The sample cooler arrived intact, properly chilled, with a custody seal in place. A cooler temperature of 6.9°C was recorded by the laboratory at the time of receipt.

Sample extractions were performed on 22Nov99. The analysis of each sample was completed on 17Dec99. Program holding time limitations were satisfied.

BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

One method blank was analyzed with this group of samples. The blank was free of PCB contamination.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The calculations included in this data package were based on calibration files that were generated four days after this group of samples was analyzed. It must be assumed that preventative maintenance was performed prior to this calibration, and that instrument performance had changed. The laboratory provided a second data submission which included the correct initial calibration. These files were generated nine months prior to the analysis of samples. The calibration sequences could not be directly compared because, in some cases, different chromatographic peaks were used for quantitation.

In an effort to avoid data rejections, the results reported from each sample, and from the associated calibration verifications, were recalculated by this reviewer. The analysis of this group of samples was bracketed by check standards of AR-1260, AR-1232 and AR-1254. These 500 $\mu \mathrm{g}/\mathrm{l}$ standards produced recoveries of 75%, 149% and 122%, respectively. Although this performance does not satisfy the acceptance criteria found in SW-846 Method 8000, this work appears to provide a useful estimation of the levels of PCB present in each sample. This information should be used with caution.

An additional error was identified in the calculation of reported PCB results. The reported PCB concentrations and CRDL's were low by a factor of 1000. The laboratory's results were calculated as mq/kq, but reported as $\mu q/l$. Form 1's have been corrected.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Two surrogates, TCX and DCB were added to each sample. The surrogate additions to each sample were recovered successfully, on both chromatographic columns. The program acceptance criteria was satisfied.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS
Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide
an indication of laboratory accuracy. The analysis of a duplicate
spiked aliquot provides a measurement of precision.

Spiked samples and spiked blanks were not extracted and analyzed with this group of samples. Due to this omission, it is impossible to evaluate the presence of matrix interferences that might bias measurements obtained from this group of samples. The PCB results reported from this group of samples have been qualified as estimations.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision, may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates were not included in this group of samples.

SUMMARY OF QUALIFIED DATA

SAMPLED 11/17/99		
	CALCULATE CRDL	100 µg/kg 120 µg/kg 100 µg/kg 90 µg/kg 90 µg/kg 100 µg/kg 100 µg/kg
	MS/MSD/LCS	ALL UJ ALL UJ ALL UJ ALL UJ ALL UJ ALL UJ ALL UJ
TURING SITE	CALIBRATE	ALL UU ALL UU ALL UU ALL UU ALL UU ALL UU ALL UU ALL UU
FORMER BROWN MANUFACTURING SITE		(32299001) (32299002) (32299003) (32299004) (32299006) (32299007) (32299008)
FORMER		TH110-1 1111-1 1111-3 1111-3

NYSDEC SAMPLE NO. T9-2

Leb Name: Upstate	Labs Inc.			Contract:	
Lab Code: 10170		Case No.:		SAS No.;	SDG No.: CH14
Matrix: So:	<u></u>			Lab Sample ID:	32299001
Sample wt.:	<u>30</u>	(g)		Lab File ID:	PA5386
% Moisture:	16	Decanted:	ЙО	Date Received:	11/17/99
Extraction:	shaker	,		Date Extracted:	11/22/99
Conc Extract Vol.:		1000 (OL)	173	Date Analyzed:	12/17/99
Injection Vol.:		<u>2</u> (uL)		Time Analyzed:	03:28AM
GPC Cleanup:	No	р	H;	Dilution Factor:	<u>50</u>
Instr. ID:	ULI 9.0			Sulfur Cleanup:	Yes

CAS NO.	COMPOUND	CONCENTRATION UNITS ug/Kg	Q
12674-11-2	Aroclor 1016	∠/00 ←10 \	
11104-28-2	Aroclor 1221	2100 -40	ľ
11141-16-5	Aroclor 1232	<100 € 10	1
53469-21-9	Aroclor 1242	4100 -10 } V)	1
12672-29-6	Aroclor 1248	2100 × 10	1
11097-69-1	Aroclor 1254	<100 < 10	J.
11096-82-5	Aroclor 1260	6100 anto 1	1

MB.

NYSDEC SAMPLE NO. T10-1

Lab Name: Upstate L	abs Inc.			Contract:	
Leb Code: 10170		Case No.:		SAS No.:	SDG No.: CH14
Matrix: soil				Lab Sample ID:	32299002
Sample wt.:	<u>30</u>	(9)		Lab File ID:	PA5386
% Molsture:	<u>31</u>	Decanted:	<u>NO</u>	Date Received:	11/17/99
Extraction:	shaker	face to		Date Extracted:	11/22/99
Conc Extract Vol.:		/0000 1000 (ul.)	260	Date Analyzed:	12/17/99
Injection Vol.:		<u>2</u> (uL)		Time Analyzed:	04:13AM
GPC Cleanup:	No		pH:	Dilution Factor:	<u>50</u>
Instr. ID:	<u>uri 9.0</u>			Sulfur Cleanup:	Yes

CAS NO.		CONCENTRATION UNITS		
	COMPOUND	ug/Kg	Q	
12674-11-2	Aroclor 1016	20 ←12 \</td <td></td>		
11104-28-2	Aroclor 1221	<120 4.12	į l	
11141-16-5	Aroclor 1232	<120 <-12	J	
63469-21-9	Aroclor 1242	< 120 <-12 } V)	J	
12672-29-6	Aroclor 1248	20 <-12</td <td>J</td>	J	
11097-69-1	Aroclor 1254	<120 <- 12	J	
11096-82-5	Aroclor 1260	<120<-12	J .	

19

NYSDEC SAMPLE NO. T10-2

Lab Name: Upstate Labs Inc. Contract: Lab Code: 10170 SAS No.: SDG No.: CH14 Case No.: Matrix: Lab Sample ID: 32299003 Soil Sample wt.: (g) Lab File ID: PA5386 <u>30</u> % Moisture: 23 Decanted: ЙО Date Received: 11/17/99 Extraction: Date Extracted: shaker 11/22/99 /0000 -<u>2000</u> (uL) Conc Extract Vol.: Date Analyzed: 12/17/99 Injection Vol.: 2 (uL) Time Analyzed: 04:57AM GPC Cleanup: pH: Dilution Factor: No 50 Instr. ID: Sulfur Cleanup: ULI 9.0 Yes

CAS NO.	CONCENTRATION UNITS				
	COMPOUND	ug/Kg	a		
12674-11-2	Aroclor 1016	00 ←.18 \</td <td>Ų</td>	Ų		
11104-28-2	Aroclor 1221	∠/00 €.10	ų.		
11141-16-5	Aroclor 1232	<100 €.10 ()	ψ		
53469-21-9	Aroclor 1242	<100 (10) V)	Ų.		
12672-29-6	Aroclor 1248	∠/00 < 10	ψ		
11097-69-1	Aroclor 1254	<100 <- 10 <- 10 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100 <- 100	ų –		
11096-82-5	Aroclor 1260	<100<-10-1	J		

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NYSDEC SAMPLE NO. T10-3

Contract: Lab Name: Upstate Labs Inc. SDG No.: CH14 Case No.: SAS No.: Lab Code: 10170 32299004 Lab Sample ID: Matrix: Soil PA5386 Lab File ID: Sample wt.: <u>30</u> (g) Date Received: 11/17/99 % Moisture: Decanted: NO 15 Date Extracted: 11/22/99 Extraction: shaker Date Analyzed: 12/17/99 Conc Extract Vol.: Time Analyzed: 05:42AM Injection Vol.: 2 (uL) Dilution Factor: <u>50</u> pH: GPC Cleanup: No Sulfur Cleanup: Yes Instr. ID: ULI 9.0

CAS NO.	COMPOUND	CONCENTRATION UNITS ug/Kg	Q
	Aroclor 1016	<90 <.00 \	Ψ
11104-28-2	Aroclor 1221	<9009	ψ
11141-16-5	Aroclor 1232	<90 <.00 ∫	ψ
53469-21-9	Aroclor 1242	<90 400 \ U	Ų
12672-29-6	Aroclor 1248	<90 <.00 (ψ
11097-69-1	Aroclor 1254	<90 < 09	ψ
11096-82-5	Aroclor 1260	<90 <-09 /	Ú

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NYSDEC SAMPLE NO. T11-1

Lab Name: <u>Upstate L</u>	abs Inc.			Contract:	:	
Lab Code: 10170		Case No.:		SAS	No.:	SDG No.: CH14
Matrix: soil	:				Lab Sample ID:	32299006
Sample wt.:	<u>30</u>	(g)			Lab File ID:	PA5386
% Molsture:	<u>18</u>	Decanted:	NO		Date Received:	11/17/99
Extraction:	shaker				Date Extracted:	11/22/99
Conc Extract Vol.:		1000 (uL)			Date Analyzed:	12/17/99
Injection Vol.:		<u>2</u> (uL)			Time Analyzed:	06:26AM
GPC Cleanup:	No	рН	k t		Dilution Factor:	<u>50</u>
Instr. ID:	ULI 9.0				Sulfur Cleanup:	Yes

CAS NO.	W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-		
	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	<90 ≤ 08 }	Ų į
11104-28-2	Aroclor 1221	<90 ←.00	ψ
11141-16-5	Aroclor 1232	<90 <.00	ψ
53,469-21-9	Aroclor 1242	<90 <00 >UJ	ψ
12672-29-6	Aroclor 1248	<904.00	Ų į
11097-69-1	Aroclor 1254	<90 <.09 \	ψ
11096-82-5	Araclor 1260	<90400	Ú

783

NYSDEC SAMPLE NO. T11-2

Sulfur Cleanup:

Contract: Lab Name: Upstate Labs Inc. SDG No.: CH14 Case No.: SAS No.: Leb Code: 10170 Lab Sample ID: 32299007 Matrix: Soil Lab File ID: PA5386 Sample wt.: 30 (g) % Moisture: 18 Decanted: NO Date Received: 11/17/99 Date Extracted: 11/22/99 Extraction: shaker /0000 1000 (uL) Date Analyzed: 12/17/99 Conc Extract Vol.: 2 (uL) Time Analyzed: 07:11AM Injection Vol.: pH: Dilution Factor: GPC Cleanup; 50 No

Instr. ID:

ULI 9.0

CAS NO.			
	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	00 <40 \</td <td>Ψ</td>	Ψ
11104-28-2	Aroclor 1221	L100 4-10	Ų
11141-16-5	Aroclor 1232	4/00 6-10	ψ
53469-21-9	Aroclor 1242	2/00 6.10 \ W	Ψ
12672-29-6	Aroclor 1248	<100 < .10	ψ
11097-69-1	Aroclor 1254	<100 <10	ψ
11096-82-5	Aroclor 1260	4100000	Ψ

245

Yes

1A PCB ANALYSIS DATA SHEET

NYSDEC SAMPLE NO. T11-3

Contract: Lab Name: Upstate Labs Inc. SDG No.: CH14 SAS No.: Lab Code: 10170 Case No.: Lab Sample ID: 32299008 Matrix: Soil Lab File ID: PA5386 Sample wt.: <u>30</u> (g) Date Received: 11/17/99 % Moisture: <u>21</u> Decanted: Extraction: Date Extracted: 11/22/99 shaker 10000 (UL) Conc Extract Vol.: Date Analyzed: 12/17/99 Injection Vol.; 2 (uL) Time Analyzed: 07:55AM GPC Cleanup: pH: Dilution Factor: <u>50</u> No Instr. ID: Sulfur Cleanup: Yes ULI 9.0

CARNO	COMPOUND	Ω	
CAS NO.	COMPOUND	ug/Kg	ū
12674-11-2	Aroclor 1016	00</td <td>Ψ</td>	Ψ
11104-28-2	Aroclor 1221	00 < 10</td <td>Ψ</td>	Ψ
11141-16-5	Aroclor 1232	2/00 4-10	ψ
58469-21-9	Aroclor 1242	4/00 4-10 \U)	ψ
12672-29-6	Aroclor 1248	200 < 10	ψ
11097-69-1	Aroclor 1254	<100 €.10	ψ
11096-82-5	Aroclor 1260	<100 se 10 l	ψ

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1A PCB ANALYSIS DATA SHEET

NYSDEC SAMPLE NO. T11-4

Lab Name: Upstate Labs Inc.			Contract:			
Lab Code: 10170		Case No.:		SAS	ło.:	SDG No.: CH14
Matrix: Soil	<u>:</u>				Lab Sample ID:	32299009
Sample wt.:	30	(9)			Lab File ID:	PA5386
% Moisture:	20	Decanted:	<u>NO</u>		Date Received:	11/17/99
Extraction:	shaker	de la des			Date Extracted:	11/22/99
Conc Extract Vol.:		10000 1000 (ul.)	283		Date Analyzed:	12/17/99
Injection Vol.:		<u>2</u> (uL)			Time Analyzed:	08:40AM
GPC Cleanup:	<u>No</u>		pH:		Dilution Factor:	<u>50</u>
Instr. ID:	ULI 9.0				Sulfur Cleanup:	Yes

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	ug/Kg	Q
12674-11-2	Aroclor 1016	<100 €10	Ψ
11104-28-2	Aroclor 1221	∠/00 <-10	Ψ
11141-16-5	Aroclor 1232	<100 K.10	Ψ
58469-21-9	Aroclor 1242	<100 10 > 1)	Ψ
12672-29-6	Aroclor 1248	<100 < .10	Ψ
11097-69-1	Aroclor 1254	<100 < .10	Ψ
11096-82-5	Aroclor 1260	00 <.10</td <td>Ψ</td>	Ψ

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DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES

431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG CH14 Sampled 11/17/99

SOIL SAMPLES for TPH

T9-2	(32299001)	T10-1	(32299002)	T10-2	(32299003)
T10-3	(32299004)	T11-E	(32299005)	T11-1	(32299006)
T11-2	(32299007)	T11-3	(32299008)	T11-4	(32299009)

DATA ASSESSMENT

A TPH data package containing analytical results for eight soil samples and one oil was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to NYS DOH Method 310.13, addressed determinations of gasoline, Fuel Oil #1, Fuel Oil #2, lube oil and unidentified hydrocarbons. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000, and the cited method.

The TPH results obtained from T11-E, T11-1 and T11-3 have been qualified as estimations due to low surrogate standard recoveries.

CORRECTNESS AND USABILITY

A petroleum fingerprint was present in the chromatography of T11-E and identified as an unknown hydrocarbon. A similar elution pattern was identified as lube oil in other program samples. Form 1 of T11-E has been edited to indicate the presence of lube oil.

In addition to lube oil, which was reported, the chromatography of T11-2, T11-3 and T11-4 indicated the presence of Fuel Oil #2. The fuel oil was identified as an unknown in T11-2 and T11-4. The Form 1 of T11-2, T11-3 and T11-4 has been edited.

Reported data should be considered technically defensible in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 1/31/02

SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included eight soil samples and one oil, was collected from the Former Brown Manufacturing site on 17Nov99. The entire group of samples was delivered to the laboratory, after hours, on the day of collection. The sample cooler arrived intact, properly chilled, with a custody seal in place. A cooler temperature of 6.9°C was recorded by the laboratory at the time of receipt.

Sample extractions were performed on 19Nov99 and 22Nov99. The analysis of each sample was completed by 14Dec99. Program holding time limitations were satisfied.

BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

Two method blanks were analyzed with this group of samples. The chromatography of both blanks was free of fingerprint patterns indicative of the targeted petroleum products.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The initial instrument calibration was performed on 28Jan99. Fuel oil concentrations of 10, 50, 100, 500 and 5000 mg/l were included. Although calibration performance was not summarized, an acceptable degree of instrument linearity was demonstrated. Correlation coefficients of 8%, 18% and 14% RSD were calculated for the three fuel oil peaks used for quantitation. Lube oil, kerosene and gasoline standards of 1000 mg/l were also analyzed to demonstrate their chromatographic fingerprint patterns.

Calibration verification standards were analyzed to bracket every

twelve hour period of instrument operation. These fuel oil standards demonstrated an acceptable level of instrument stability.

It is noted that the reported instrument calibrations allowed detection limits to be established. Beyond that, the targeted petroleum products were identified by their chromatographic fingerprints. When present in samples, targeted petroleum products were identified and reported as present. Quantitation was not attempted.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Each sample was spiked with 0.20 mg of dodecane. In most cases, this surrogate was recovered successfully. Low surrogate recoveries were reported from T11-E (65%), T11-1 (63%) and T11-3 (62%). Based on this performance, the TPH results reported from T11-E, T11-1 and T11-3 have been qualified as estimations.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

1000 mg/kg of fuel oil was added to two portions of T8-2, a site sample from a related delivery group (SDG CH13). The recovery of these additions demonstrated an acceptable level of measurement accuracy. Although not reported by the laboratory, this pair of measurements demonstrated poor precision (44% RPD). This performance alone does not necessitate data qualifications. Acceptable fuel oil recoveries were also obtained from two spiked blanks.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision, may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates were not included in this group of samples.

SUMMARY OF QUALIFIED DATA

FORMER BROWN MANUFACTURING SITE

SAMPLED 11/17/99

The second secon	
FUEL OIL#2	PRESENT PRESENT PRESENT
LUBE OIL	PRESENT
SURROGATES	ALL J/UJ ALL J/UJ ALL J/UJ
Property control and the state of the state	(32299001) (32299002) (32299003) (32299004) (32299005) (32299006) (32299007) (32299008)
	HHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH

1A TPH ANALYSIS DATA SHEET

T9~2

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: 10170

Case No.:

SDG No.;

CH14

Matrix:

SOIL

Lab Sample ID:

32299001

PA5385

Sample wt.:

Lab File ID:

30g

Decanted:

11/17/99

% Moisture:

16

Date Received:

Extraction:

shaker

Date Extracted:

11/22/99

Conc Extract Vol.:

10 (ML)

Date Analyzed:

12/13/99

Injection Vol.:

2 (uL)

Time Analyzed:

01:36PM

GPC Cleanup:

No

pH:

Dilution Factor:

Instr. ID:

53

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	Ū
_	FUEL OIL #1 (KEROSENE)	<3.9	U
4.	FUEL OIL #2 (DIESEL)	<3.9	U
	LUBE OIL	D	J
	UNIDENTIFIABLE HOCS.	ND	Ŭ
į	TOTAL HYDROCARBONS	D	J

TPH ANALYSIS DATA SHEET

T10-1

Lab Name: <u>Upstate Labs Inc.</u>

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH14

Matrix: SOIL

Lab Sample ID:

32299002

Sample wt.:

()

Lab File ID:

PA5385

% Moisture:

31

Decanted:

Date Received:

11/17/99

Extraction:

shaker

30g

Conc Extract Vol.:

Date Extracted: Date Analyzed:

11/22/99

Injection Vol.:

10 (ML) 2 (uL)

Time Analyzed:

12/13/99 02:52PM

GPC Cleanup:

pH:

Dilution Factor:

Instr. ID:

<u>53</u>

COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
GASOLINE	ND	U
FUEL OIL #1 (KEROSENE)	<4.8	U
FUEL OIL #2 (DIESEL)	<4.8	U
LUBE OIL	D	J
UNIDENTIFIABLE HOCS.	ND	U
TOTAL HYDROCARBONS	D	τ,

1A TPH ANALYSIS DATA SHEET

T10-3

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH14

Matrix: SOIL

Lab Sample ID:

32299004

Sample wt.:

()

Lab File ID:

PA5385

% Moisture:

15

Decanted:

Date Received:

11/17/99

Extraction:

shaker

<u>30g</u>

Date Extracted:

11/22/99

Conc Extract Vol.:

10 (ML)

Date Analyzed:

12/13/99

Injection Vol.:

2 (uL)

Time Analyzed:

05:13PM

GPC Cleanup:

:Hq

Dilution Factor:

Instr. ID:

53

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
	GASOLINE	ND	U
	FUEL OIL #1 (KEROSENE)	<3.8	Ü
15.	FUEL OIL #2 (DIESEL)	<3.8	Ü
	LUBE OIL	D	J
	UNIDENTIFIABLE HOCS.	ND	Ŭ
	TOTAL HYDROCARBONS	D	J

1A TPH ANALYSIS DATA SHEET

T11-E

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: <u>10170</u>

Case No.:

SDG No.:

CH-14

Matrix

OIL

Lab Sample ID: Lab File ID:

322-5

Sample wt.:

.05 G

PA5383

% Moisture: N/A

Decanted: NO

Date Received:

11/16/99

Extraction:

Date Extracted:

11/19/99

Conc Extract Vol.:

5 (ML)

Date Analyzed:

11/29/99

Injection Vol.:

2 (uL)

Time Analyzed:

17:14

GPC Cleanup: No

pH:

Dilution Factor:

N/A

Instr. ID:

53

Sulfur Cleanup:

N/A

CAS NO.	COMPOUND	CONCENTRATION UNITS mg/kg	Q
	GASOLINE	N.D.	ŧ٦
	FUEL OIL #1 (KEROSENE)	<1.000	T(.)
	FUEL OIL #2 (DIESEL)	<1000	179.
	LUBE OIL	N-B-D	تما
	UNIDENTIFIABLE HOCS.	D.N.D	707
	TOTAL HYDROCARBONS	D.	ا تر

1A TPH ANALYSIS DATA SHEET

T11-1

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH14

Matrix:

SOIL

Lab Sample ID:

Sample wt.:

32299006

30g

Lab File ID:

PA5385

% Moisture:

18

Decanted:

Date Received:

11/17/99

Extraction:

shaker

Date Extracted:

11/22/99

Conc Extract Vol.:

10 (ML)

Date Analyzed:

12/13/99

Injection Vol.:

2 (uL)

()

Time Analyzed:

06:23PM

GPC Cleanup:

No

pH:

Dilution Factor:

Instr. ID:

53

	COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER	
	GASOLINE	ND	<i>(</i>)	
	FUEL OIL #1 (KEROSENE)	<4.0	8	iΛ
4	FUEL OIL #2 (DIESEL)	<4.0	<i>ii</i> \	-
	LUBE OIL	D	I I	
	UNIDENTIFIABLE HOCS.	ND	ں سھار	1
	TOTAL HYDROCARBONS	D	. j. T	_

TPH ANALYSIS DATA SHEET

T11-2

Lab Name: <u>Upstate Labs Inc.</u>

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH14

Matrix: SOIL

Lab Sample ID:

32299007

Sample wt.:

()

Lab File ID:

PA5385

% Moisture:

18

Decanted:

Date Received:

11/17/99

Extraction: shaker

30g

Date Extracted:

11/22/99

Conc Extract Vol.:

<u>10</u> (ML)

Date Analyzed:

12/14/99

Injection Vol.:

2 (uL)

Time Analyzed:

10:51AM

GPC Cleanup:

No

pH:

Dilution Factor:

Instr. ID:

<u>53</u>

COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
GASOLINE	ND	ט
FUEL OIL #1 (KEROSENE)	<4.0	U
* FUEL OIL #2 (DIESEL)	~4.0 D	步丁
LUBE OIL	D	J
UNIDENTIFIABLE HOCS.	JA NO	JF U
TOTAL HYDROCARBONS	D	J

1A TPH ANALYSIS DATA SHEET

T11-3

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: 10170

Case No.:

SDG No.:

CH14

Matrix: .SOIL

Lab Sample ID:

32299008

Sample wt.:

30g () Lab File ID:

PA5385

% Moisture:

21

Decanted:

Date Received:

11/17/99

Extraction:

shaker

Date Extracted:

11/22/99

Conc Extract Vol.:

10 (ML)

Date Analyzed:

12/14/99

Injection Vol.:

2 (uL)

Time Analyzed:

11:52AM

GPC Cleanup:

No

:Hq

Dilution Factor:

Instr. ID:

<u>53</u>

COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
GASOLINE	ND	<i>₽</i>)
FUEL OIL #1 (KEROSENE)	<4.2	J \ U.
FUEL OIL #2 (DIESEL)	-4-2D	n de la Company
LUBE OIL	D	[الستد
UNIDENTIFIABLE HOCS.	ND	ルリ
TOTAL HYDROCARBONS	D	_a_

1A TPH ANALYSIS DATA SHEET

T11-4

Lab Name: Upstate Labs Inc.

Contract:

Lab Code: <u>10170</u>

Case No.:

SDG No.:

CH14

Matrix:

SOIL

Lab Sample ID:

32299009

Sample wt.:

Lab File ID:

PA5385

30g 20

Decanted:

Date Received:

11/17/99

% Moisture: Extraction:

shaker

Date Extracted:

11/22/99

Conc Extract Vol.:

10 (ML)

()

Date Analyzed:

12/14/99

Injection Vol.:

2 (uL)

Time Analyzed:

01:51PM

GPC Cleanup:

No

pH:

Dilution Factor:

Instr. ID:

53

COMPOUND	CONCENTRATION UNITS mg/Kg	QUALIFIER
GASOLINE	ND	U
FUEL OIL #1 (KEROSENE)	<4.1	Ū
FUEL OIL #2 (DIESEL)	44-± D	T or J
LUBE OIL	D	J
UNIDENTIFIABLE HOCS.	-Ð VD	. ت ت ا
TOTAL HYDROCARBONS	D	J

APPENDIX D PHASE IIB ANALYTICAL DATA

DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES

431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

FORMER BROWN MANUFACTURING SITE SDG BEA01 Sampled 05/15/01, 05/16/01, 05/17/01

SOILS SAMPLES for VOLATILE ORGANICS

T16-1	(13801065)	T16-2	(13801066)	T17-1	(13801067)
T18-1	(13801069)	T19-1	(13801071)	T20-1	(13801073)

DATA ASSESSMENT

A volatile organics data package containing analytical results for six soil samples was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8260, addressed Target Compound List analytes. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

When present in samples methylene chloride is assumed to represent a laboratory or program artifact. Methylene chloride should be considered undetected in each program sample. A detection limit equaling CRDL or the reported concentration, whichever is greater, should be assumed.

The acetone and chloroform concentrations detected in this group of samples have been qualified as estimations. Acetone and chloroform are also assumed to represent a program or laboratory artifact. The reported concentrations can not be completely ignored, however, because acetone and chloroform were not detected in associated blanks. The presence of these analytes should only be considered significant if consistent with site history.

The vinyl chloride result reported from each sample has been rejected due to poor calibration performance.

CORRECTNESS AND USABILITY

The identifications of ethylbenzene and xylene in T16-1, T17-1 and T19-1, and xylene in T18-1 and T20-1 could not be confirmed based on the reference mass spectra included in the raw data. Ethylbenzene and xylene should be considered undetected in the affected samples.

Library searches were performed to identify each reported Tentatively Identified Compound (TIC). When the supporting mass spectra failed to provide a conclusive identification, or when a more definitive identification was possible, Form 1E was edited. Every sample except T16-2 was affected.

Reported data should be considered technically usable in its present form. Reported concentrations that are felt to provide a

usable estimation of the conditions being measured have been flagged "J" or "UJ". Data that is felt to be unusable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

James B. Baldwin Date: 1/21/02

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SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved or are not analyzed within established holding times may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. VOA analyses must be completed within 14 days of receipt. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included six soil samples, was collected from the Former Brown Manufacturing site between 15May01 and 17May01. Three samples collected on 15MAy01, two collected on 16May01, and one collected on 17May01 were delivered to the laboratory, after hours, on the day of collection. Each cooler of samples arrived intact. The sample receipt log indicates that the sample coolers contained ice. It is noted that only one cooler temperature, 5.9°C, was documented in the receipt log.

The analysis of this group of samples was completed on 24May01. Program holding time limitations were satisfied.

BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank. Any sample concentration less than 5 times the level determined in a blank must be qualified. The qualification criteria is extended to ten times the concentration observed in blanks for common laboratory artifacts. These include acetone, methylene chloride and 2-butanone. Chloroform is also frequently present as a laboratory artifact.

Two method blanks were analyzed with this group of samples. One blank contained $6\mu g/l$ of methylene chloride and a Tentatively Identified Compound (TIC) identified as Freon 113. When present in samples, methylene chloride is assumed to represent a laboratory artifact. Methylene chloride should be interpreted as undetected in each program sample. A detection limit equaling CRDL or the reported concentration, whichever is greater, should be assumed. Freon 113 was not detected in this group of samples.

Acetone and chloroform were detected throughout this group of samples. Because these analytes frequently represent laboratory artifacts, the reported concentrations have been qualified as estimations. They have not been removed from Form 1 because they were not detected in the associated blanks. The presence of acetone and chloroform should only be considered significant if consistent with site history.

MS TUNING

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of BFB was analyzed prior to each analytical sequence and during every 12 hour period of instrument operation. An Instrument Performance Check Form is present for each BFB evaluation. The BFB tunes associated with this group of samples satisfied the program acceptance criteria.

CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The required levels of initial calibration were performed on 22May01 and 23May01. The 22May01 calibration incorporated a heated purge. Each sequence of calibration standards included analyte concentrations of 10, 20, 50, 100 and 200 $\mu g/l$. With one exception, each calibration demonstrated the required levels of instrument response and an acceptable degree of linearity for each targeted analyte. During the 22May01 calibration, an unacceptably low response was reported for the two lowest vinyl chloride standards. Based on this performance, it cannot be assumed that this analyte would be detected if present in samples. Because vinyl chloride was not detected, the negative result reported from each program sample has been rejected.

Continuing calibration verification standards were analyzed prior to each twelve hour period of instrument operation. These checks demonstrated an acceptable level of instrument stability.

SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Surrogate standard summary reports were properly prepared; the correct acceptance criteria applied. The surrogate standard recoveries reported from this group of samples satisfied the program acceptance criteria.

INTERNAL STANDARDS

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal

standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. The response and retention time of each internal standard that was added to this group of samples fell within the calculated limits of acceptance.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS
Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide
an indication of laboratory accuracy. The analysis of a duplicate
spiked aliquot provides a measurement of precision.

T18-1 was selected for matrix spiking. The recoveries reported for analyte additions to two portions of this sample demonstrated acceptable levels of analytical precision and accuracy. Acceptable recoveries were also reported from two spiked blanks.

DUPLICATES

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects or poor laboratory technique.

Field split duplicates were not included in this group of samples.

REPORTED ANALYTES

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts. Laboratory results have been adjusted to reflect sample size and moisture content. Reference mass spectra were provided to confirm the identification of each targeted analyte that was detected in this group of samples. It is noted that the identifications of ethylbenzene in T17-1 and T19-1, and xylene in T16-1, T17-1, T18-1, T19-1 and T20-1 could not be conclusively confirmed using the mass spectra references supplied by the laboratory. Ethylbenzene and xylene should be considered undetected in the affected samples.

Tentatively Identified Compounds (TIC) were reported from this group of samples. Frequently, these identifications were not soundly supported by the library searches contained in the raw data. Where appropriate, Form 1E has been corrected.

SUMMARY OF QUALIFIED DATA

FORMER BROWN MANUFACTURING SITE

SAMPLED 5/15/01 thru 5/17/01

SPECTRA ID	EDIT EDIT EDIT EDIT
SPECTRA ID TARGETS	ID1,2 830U ID1,2 420U ID2 400U ID1,2 530U ID2 340U
BLANKS CHLOROFORM	1200J 440J 140J 540J 690J 510J
BLANK ACETONE	2000J 910J 680J 670J 780J 500J
CALIBRATE VINYL CHLORIDE	REJECT REJECT REJECT REJECT REJECT REJECT
BLANKS METH CHLORIDE	1900U 670U 2200U 940U 1100U 820U
÷	(13801065) (13801066) (13801067) (13801069) (13801071)
	T166-1 T16-2 T17-1 T18-1 T19-1

ID1 = ethylbenzene
ID2 = xylene

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T-16-1 Lab Name: Contract: BEARDSLE **UPSTATE LABS INC** Lab Code: 10170 Case No.: 01 SAS No.: SDG No.: BEA01 Matrix: (soil/water) SOIL Lab Sample ID: 13801065 Sample wt/vol: 0.5 (g/ml) G Lab File ID: C8797.D Level: (low/med) LOW Date Received: 5/18/01 % Moisture: not dec. 88 Date Analyzed: 5/24/01 RTX-VO ID: 0.53 (mm) GC Column: Dilution Factor: 1.0 (uL) Soil Extract Volume: Soil Aliquot Volume:

CONCENTRATION UNITS:

~~~	0011ma111-	OOMOCIATION		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
74-87-3	Chloromethane	And the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	830	Tu
75-1-4	Vinyl Chloride		-830	<del></del> (
74-83-9	Bromomethane	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	830	Ü
75-00-3	Chloroethane		830	Ū
67-64-1	Acetone	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	2000	
75-35-4	1,1-Dichloroethe	ene	830	Ū
75-15-0	Carbon Disulfid	9	830	Ū
75-09-2	Methylene Chlo	ride	1900	PU
156-60-5	trans-1,2-Dichlo	roethene	830	Ü
75-34-33	1,1-Dichloroetha	ane	830	Ū
78-93-3	2-Butanone	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	830	Ū
156-59-2	cis-1,2-Dichloro	ethene	830	Ū
67-66-3	Chloroform	Mar Committee	1200	~~
71-55-6	1,1,1-Trichloroe	thane	830	
56-23-5	Carbon Tetrach	loride	830	Ū
71-43-2	Benzene	The same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the sa	830	Ū
107-06-2	1,2-Dichloroetha	ane	830	Ū
97-01-6	Trichloroethene		830	Ū
78-87-5	1,2-Dichloropro	oane	830	Ū
75-27-4	Bromodichlorom	rethane	830	Ū
108-10-1	4-Methyl-2-pent	anone	830	Ū
10061-1-5	cls-1,3-Dichloro	propene	830	Ū
108-88-3	Toluene		830	U
10061-2-6	trans-1,3-Dichio	ropropene	830	Ü
79-00-5	1,1,2-Trichloroe	thane	830	U
591-78-6	2-Hexanone		830	U
127-18-4	Tetrachloroethe		830	U
124-48-1	Dibromochloron	nethane	830	U
108-90-7	Chlorobenzene		830	U
100-41-4	Ethylbenzene		830	Ū
108-38-3	m,p-Xylene		830-110	J
95-47-6	o-Xylene		830-140-	(
100-42-5	Styrene		830	Ū
75-25-2	Bromoform	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	830	Ū
79-34-5	1,1,2,2-Tetrachl	oroethane	830	Ū

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# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T-16-2

Lab Name: UPSTATE LABS INC Contract: BEARDSLE Lab Code: 10170 Case No.: 01 SAS No.: SDG No.: BEA01 SOIL Matrix: (soil/water) Lab Sample ID: 13801066 Sample wt/vol: 0.5 (g/ml) G Lab File ID: C8798.D Level: (low/med) LOW Date Received: 5/18/01 % Moisture: not dec. 70 Date Analyzed: 5/24/01 GC Column: RTX-VO ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume: (uL) Soil Aliquot Volume:

# **CONCENTRATION UNITS:**

		CONCENTRATIO	N UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
74-87-3	Chloromethane	and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t	000	
75-1-4	Vinyl Chloride	of the first section of the section is a section to the section of the section of the section is a section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of t	330	U
74-83-9	Bromomethane	a distance reproductive and the second of seconds in second in an article of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the secon	<del>-330</del> -	S V K
75-00-3	Chloroethane	The second of the second of the second of the second of	330	<u>U</u>
67-64-1	Acetone	and depending the side of the same of the same same of the same of	330	U
75-35-4	1,1-Dichloroethe	ne	910	
75-15-0	Carbon Disulfide		330	
75-09-2	Methylene Chlor		330	U
156-60-5	trans-1,2-Dichlor	oethene	670	J.B.U
75-34-33	1,1-Dichloroetha	ne	330_	U
78-93-3	2-Butanone	A Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Comp	330	_ <u>U</u>
156-59-2	cis-1,2-Dichloroe	thene	330	U
67-66-3	Chloroform	ALL DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE	330	U
71-55-6	1,1,1-Trichloroetl	nane	440	
56-23-5	Carbon Tetrachio		330	U
71-43-2	Benzene		330	_
107-06-2	1,2-Dichloroethar	16	330	U
97-01-6	Trichloroethene	The state of the same property of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same	330	<u> </u>
78-87-5	1,2-Dichloropropa	ane	330	U
75-27-4	Bromodichlorome	thane	330	U
108-10-1	4-Methyl-2-pental	ione	330	U
10061-1-5	cis-1,3-Dichloropa	opene	330	U
108-88-3	Toluene	TEMPERATURE CONTRACTOR CONTRACTOR	330	U
10061-2-6	trans-1,3-Dichloro	propene	330	U
79-00-5	1,1,2-Trichloroeth	ane	330	<u>U</u>
591-78-6	2-Hexanone	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	330	- <u>-</u> - <u>U</u>
127-18-4	Tetrachloroethene	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	330	<u>U</u>
124-48-1	Dibromochlorome	thane	330	<u> </u>
108-90-7	Chlorobenzene	the same where the same states are same some some states and the same states are same states and the same states are same states and the same states are same states are same states and the same states are s	330	Ų
100-41-4	Ethylbenzene	and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and the same and t	330	<u>U</u>
108-38-3	m,p-Xylene		330	<u> </u>
95-47-6	o-Xylene		330	<u> </u>
100-42-5	Styrene	Street with the street was product to produce the street and	330	<u>U</u>
75-25-2	Bromoform	e tigo comunidade a se esta e e algado e a come a composições de laboración do come ac	330	<u>U</u>
79-34-5	1,1,2,2-Tetrachlord	ethane	330	U
	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		330	U

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:	UPSTA	TE LAB	SINC	Contract: E	BEARDSLE	1-17-1	
Lab Code:	10170		Case No.: 01	SAS No.:	SE	OG No.: BEA01	sh
Matrix: (soil/v	vater)	SOIL_		Lab S	Sample ID:	13801067	
Sample wt/vo	ol:	0.5	(g/ml) G	_ Lab F	File ID:	C8799.D	
Level: (low/n	ned)	LOW	er was a p	Date	Received:	5/18/01	
% Moisture: r	not dec.	76	-TT-14-45 French Joseph S. S. J.	Date	Analyzed:	5/24/01	
GC Column;	RTX-V	/O ID:	0.53 (mm)	Diluti	on Factor:	1.0	
Soil Extract V	/olume:	or Better a new se	(uL)	Soil A	Aliquot Volun	ne:	(uL)

# **CONCENTRATION UNITS:**

CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/KG         Q           74-87-3         Chloromethane         420         U           75-1-4         Vinyl Chloride         420         U           74-83-9         Bromomethane         420         U           75-00-3         Chloroethane         420         U           67-64-1         Acetone         680         √           75-35-4         1,1-Dichloroethene         420         U           75-15-0         Carbon Disulfide         420         U           75-09-2         Methylene Chloride         2200         BU           156-60-5         trans-1,2-Dichloroethene         420         U           78-93-3         1,1-Dichloroethane         420         U           78-93-3         2-Butanone         420         U           67-66-3         Chloroform         140         ✓           71-55-6         1,1,1-Trichloroethane         420         U           71-43-2         Benzene         420         U           107-06-2         1,2-Dichloroethane         420         U           78-87-5         1,2-Dichloroethane         420         U           75-27-			CONCENTRATIC	NOUNTS:		
76-1-4         Vinyl Chloride         420 Urange         Urange           74-83-9         Bromomethane         420 Urange         Urange           75-00-3         Chloroethane         420 Urange         Urange           67-64-1         Acetone         680 Urange         Urange           75-35-4         1,1-Dichloroethene         420 Urange         Urange           75-16-0         Carbon Disulfide         420 Urange         Urange           75-09-2         Methylene Chloride         2200 BUrange         BUrange           156-60-5         trans-1,2-Dichloroethene         420 Urange         Urange           78-93-3         1,1-Dichloroethane         420 Urange         Urange           78-93-3         2-Butanone         420 Urange         Urange           67-66-3         Chloroform         140 Jrange         Urange           71-55-6         1,1,1-Trichloroethane         420 Urange           71-43-2         Benzene         420 Urange           107-06-2         1,2-Dichloroethane         420 Urange           107-06-2         1,2-Dichloroethane         420 Urange           75-27-4         Bromodichloromethane         420 Urange           108-88-3         Toluene         420 Urange	CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q
75-1-4         Vinyl Chloride         420         U	74-87-3	Chloromethane	one of comments the comment of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of the comments of		420	-
74-83-9         Bromomethane         420         U           75-00-3         Chloroethane         420         U           67-64-1         Acetone         680         J           75-35-4         1,1-Dichloroethene         420         U           75-15-0         Carbon Disulfide         420         U           75-09-2         Methylene Chloride         2200         BU           156-60-5         trans-1,2-Dichloroethene         420         U           75-34-33         1,1-Dichloroethane         420         U           78-93-3         2-Butanone         420         U           156-59-2         cis-1,2-Dichloroethene         420         U           67-66-3         Chloroform         140         J           71-55-6         1,1,1-Trichloroethane         420         U           56-23-5         Carbon Tetrachloride         420         U           71-43-2         Benzene         420         U           107-06-2         1,2-Dichloroethane         420         U           78-87-5         1,2-Dichloroethane         420         U           75-27-4         Bromodichloromethane         420         U           108-10-1 <td>75-1-4</td> <td>Vinyl Chloride</td> <td>The state of the s</td> <td></td> <td></td> <td></td>	75-1-4	Vinyl Chloride	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			
75-00-3         Chloroethane         420         U           67-64-1         Acetone         680         √           75-35-4         1,1-Dichloroethene         420         U           75-15-0         Carbon Disulfide         420         U           75-09-2         Methylene Chloride         2200         BU           156-60-5         trans-1,2-Dichloroethene         420         U           75-34-33         1,1-Dichloroethane         420         U           78-93-3         2-Butanone         420         U           156-59-2         cis-1,2-Dichloroethene         420         U           67-66-3         Chloroform         140         よう           71-55-6         1,1,1-Trichloroethane         420         U           71-43-2         Benzene         420         U           107-06-2         1,2-Dichloroethane         420         U           78-87-5         1,2-Dichloropropane         420         U           75-27-4         Bromodichloromethane         420         U           108-10-1         4-Methyl-2-pentanone         420         U           108-88-3         Toluene         420         U           10061-2-6 <td>74-83-9</td> <td>Bromomethane</td> <td>if the principles arrange proper and advantaged extensions and a 1 specialistic field to \$1.5.5.</td> <td></td> <td></td> <td></td>	74-83-9	Bromomethane	if the principles arrange proper and advantaged extensions and a 1 specialistic field to \$1.5.5.			
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75-09-2         Methylene Chloride         2200         8U           156-60-5         trans-1,2-Dichloroethene         420         U           75-34-33         1,1-Dichloroethane         420         U           78-93-3         2-Butanone         420         U           156-59-2         cis-1,2-Dichloroethene         420         U           67-66-3         Chloroform         140         J           71-55-6         1,1,1-Trichloroethane         420         U           56-23-5         Carbon Tetrachloride         420         U           71-43-2         Benzene         420         U           107-06-2         1,2-Dichloroethane         420         U           78-87-5         1,2-Dichloropropane         420         U           75-27-4         Bromodichloromethane         420         U           108-10-1         4-Methyl-2-pentanone         420         U           108-88-3         Toluene         420         U           1061-2-6         trans-1,3-Dichloropropene         420         U           79-00-5         1,1,2-Trichloroethane         420         U	75-15-0	Carbon Disulfide				
156-60-5       trans-1,2-Dichloroethene       420       U         75-34-33       1,1-Dichloroethane       420       U         78-93-3       2-Butanone       420       U         156-59-2       cis-1,2-Dichloroethene       420       U         67-66-3       Chloroform       140       よつ         71-55-6       1,1,1-Trichloroethane       420       U         56-23-5       Carbon Tetrachloride       420       U         71-43-2       Benzene       420       U         107-06-2       1,2-Dichloroethane       420       U         97-01-6       Trichloroethene       420       U         78-87-5       1,2-Dichloropropane       420       U         75-27-4       Bromodichloromethane       420       U         108-10-1       4-Methyl-2-pentanone       420       U         108-88-3       Toluene       420       U         10061-2-6       trans-1,3-Dichloropropene       420       U         79-00-5       1,1,2-Trichloroethane       420       U	75-09-2	Methylene Chlor	ide			
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71-43-2         Benzene         420         U           107-06-2         1,2-Dichloroethane         420         U           97-01-6         Trichloroethene         420         U           78-87-5         1,2-Dichloropropane         420         U           75-27-4         Bromodichloromethane         420         U           108-10-1         4-Methyl-2-pentanone         420         U           10061-1-5         cis-1,3-Dichloropropene         420         U           108-88-3         Toluene         420         U           10061-2-6         trans-1,3-Dichloropropene         420         U           79-00-5         1,1,2-Trichloroethane         420         U	56-23-5					
107-06-2       1,2-Dichloroethane       420       U         97-01-6       Trichloroethene       420       U         78-87-5       1,2-Dichloropropane       420       U         75-27-4       Bromodichloromethane       420       U         108-10-1       4-Methyl-2-pentanone       420       U         10061-1-5       cis-1,3-Dichloropropene       420       U         108-88-3       Toluene       420       U         10061-2-6       trans-1,3-Dichloropropene       420       U         79-00-5       1,1,2-Trichloroethane       420       U	71-43-2					
97-01-6         Trichloroethene         420         U           78-87-5         1,2-Dichloropropane         420         U           75-27-4         Bromodichloromethane         420         U           108-10-1         4-Methyl-2-pentanone         420         U           10061-1-5         cis-1,3-Dichloropropene         420         U           108-88-3         Toluene         420         U           10061-2-6         trans-1,3-Dichloropropene         420         U           79-00-5         1,1,2-Trichloroethane         420         U	107-06-2	1,2-Dichloroetha	ne			
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75-27-4         Bromodichloromethane         420         U           108-10-1         4-Methyl-2-pentanone         420         U           10061-1-5         cis-1,3-Dichloropropene         420         U           108-88-3         Toluene         420         U           10061-2-6         trans-1,3-Dichloropropene         420         U           79-00-5         1,1,2-Trichloroethane         420         U	78-87-5	1,2-Dichloroprop	ane			
108-10-1	75-27-4					
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108-88-3         Toluene         420         U           10061-2-6         trans-1,3-Dichloropropene         420         U           79-00-5         1,1,2-Trichloroethane         420         U	10061-1-5	cis-1,3-Dichlorop	ropene			
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127-18-4 Tetrachloroethene 420 U	127-18-4		e			
124-48-1 Dibromochloromethane 420 U	124-48-1					
108-90-7 Chlorobenzene 420 U	108-90-7		the first of the commence of the control of the state of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the contr			The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
100-41-4 Ethylbenzene 420 +20 ナリ	100-41-4	Ethylbenzene		420	· · · · · · · · · · · · · · · · · · ·	- <del>-</del> 0
7017	108-38-3		were the transfer of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state			
	95-47-6		and the same and management of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the c			ヹ゚゚゙゙゙゙゙゙゚
100-42-5 Styrene 420 U			er anna mener mener for ann ann a spiriter i de a anno 18 a anno 18 a ann air a spirite a said	700		الاسد
75-25-2 Bromoform 420 II	75-25-2		To be of more ready, the most over the commonweal		* ** *** **** ****	
79-34-5 1,1,2,2-Tetrachloroethane 420 U	79-34-5		roethane		an an is married a real residen	

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# VOLATILE ORGANICS ANALYSIS DATA SHEET

1A

EPA SAMPLE NO.

T-18-1

Lab Name:	UPSTA	TE LAB	S INC	Contract: BEAR	DSLE	•
Lab Code:	10170		Case No.: 01	SAS No.:	SDG No.: BEA	.01
Matrix: (soil/v	vater)	SOIL	one carries — ;	Lab Samp		THE R. P. S. LEWIS CO., LANSING PRINCIPLE ST. VICE
Sample wt/vo	ol;	0.5	(g/ml) G	Lab File IC	): C8800.D	and the property of the state of
Level: (low/n	ned)	LOW		Date Rece	ived: 5/18/01	Francisco No.
% Moisture: i	not dec.	75	th the country series in series in	Date Analy	/zed: 5/24/01	. Audin y
GC Column:	RTX-\	<u>/O</u> ID:	0.53 (mm)	Dilution Fa	otor: 1.0	forces on
Soil Extract V	/olume:		(uL)	Soil Aliquo	t Volume:	(uL

# CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
74-87-3	Chloromethane	400	Ū
75-1-4	Vinyl Chloride	400	Ŭγ
74-83-9	Bromomethane	400	U
75-00-3	Chloroethane	400	Ü
67-64-1	Acetone	670	- A
75-35-4	1,1-Dichloroethene	400	U
75-15-0	Carbon Disulfide	400	Ū
75-09-2	Methylene Chloride	940	JB U
156-60-5	trans-1,2-Dichloroethene	400	U
75-34-33	1,1-Dichloroethane	400	Ü
78-93-3	2-Butanone	400	U
156-59-2	cis-1,2-Dichloroethene	400	Ü
67-66-3	Chloroform	540	~~~
71-55-6	1,1,1-Trichloroethane	400	U
56-23-5	Carbon Tetrachloride	400	Ü
71-43-2	Benzene	400	Ü
107-06-2	1,2-Dichloroethane	400	Ū
97-01-6	Trichloroethene	400	Ü
78-87-5	1,2-Dichloropropane	400	<u>-</u>
75-27-4	Bromodichloromethane	400	Ū
108-10-1	4-Methyl-2-pentanone	400	Ü
10061-1-5	cis-1,3-Dichloropropene	400	Ū
108-88-3	Toluene	400	Ü
10061-2-6	trans-1,3-Dichloropropene	400	Ŭ
79-00-5	1,1,2-Trichloroethane	400	Ü
591-78-6	2-Hexanone	400	Ū
127-18-4	Tetrachloroethene	400	Ŭ
124-48-1	Dibromochloromethane	400	Ü
108-90-7	Chlorobenzene	400	Ü
100-41-4	Ethylbenzene	400	Ü
108-38-3	m,p-Xylene	400 -53	-30
95-47-6	o-Xylene	400	U
100-42-5	Styrene	400	Ü
75-25-2	Bromoform	400	Ü
79-34-5	1,1,2,2-Tetrachloroethane	400	. ŭ 1

# 1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T-19-1

Lab Name:	UPSTAT	E LABS	INC	Contract: BEARDSLI	
Lab Code:	10170		Case No.: 01	SAS No.:	SDG No.: BEA01
Matrix: (soil/w	/ater)	SOIL	okiwanie w	Lab Sample ID	13801071
Sample wt/vo	ol:	0.5	(g/ml) G	Lab File ID:	C8801.D
Level: (low/n	ned)	LOW	1001001	Date Received	5/18/01
% Moisture: r	not dec.	81	ONE TO SEE SECTION AS	Date Analyzed	5/24/01
GC Column:	RTX-V	O ID:	0.53 (mm)	Dilution Factor	1.0
Soil Extract V	/olume:		(uL)	Soil Allquot Vo	ume: (uL

#### **CONCENTRATION UNITS:**

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
74-87-3	Chloromethane	530	Ū
75-1-4	Vinyl Chloride	~530	
74-83-9	Bromomethane	530	U
75-00-3	Chloroethane	530	U_
67-64-1	Acetone	780	J
75-35-4	1,1-Dichloroethene	530	Ū
75-15-0	Carbon Disulfide	530	Ü
75-09-2	Methylene Chloride	1100	BU.
156-60-5	trans-1,2-Dichloroethene	530	Ū
75-34-33	1,1-Dichloroethane	530	U
78-93-3	2-Butanone	530	U
156-59-2	cis-1,2-Dichloroethene	530	7
67-66-3	Chloroform	690	7
71-55-6	1,1,1-Trichloroethane	530	Ŭ"
56-23-5	Carbon Tetrachloride	530	U
71-43-2	Benzene	530	U
107-06-2	1,2-Dichloroethane	530	U
97-01-6	Trichloroethene	530	U
78-87-5	1,2-Dichloropropane	530	U
75-27-4	Bromodichloromethane	530	U
108-10-1	4-Methyl-2-pentanone	530	U
10061-1-5	cis-1,3-Dichloropropene	530	U
108-88-3	Toluene	530	U
10061-2-6	trans-1,3-Dichloropropene	530	U
79-00-5	1,1,2-Trichloroethane	530	U
591-78-6	2-Hexanone	530	<u> </u>
127-18-4	Tetrachloroethene	530	U
124-48-1	Dibromochloromethane	530	U
108-90-7	Chlorobenzene	530	U
100-41-4	Ethylbenzene	<u> </u>	JU
108-38-3	m,p-Xylene	530 450	<del> ,</del> U
95-47-6	o-Xylene	100	J
100-42-5	Styrene	530	U
75-25-2	Bromoform	530	U
79-34-5	1,1,2,2-Tetrachloroethane	530	U

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#### 1A

# **VOLATILE ORGANICS ANALYSIS DATA SHEET**

EPA SAMPLE NO.

T-20-1

Lab Name: UPSTAT		E LABS INC	Contract: BEARDSLE	
Lab Code:	10170	Case No.: <u>01</u>	SAS No.: S	DG No.: BEA01
Matrix: (soil/w	rater)	SOIL	Lab Sample ID:	13801073
Sample wt/vo	d:	0.5 (g/ml) G	Lab File ID:	C8802.D
Level: (low/m	ned)	LOW	Date Received:	5/18/01
% Moisture: r	not dec.	71	Date Analyzed:	5/24/01
GC Column:	RTX-V	O ID: 0.53 (mm)	Dilution Factor:	1,0
Soil Extract V	/olume:	(uL)	Soil Aliquot Volu	ıme: (uL

#### **CONCENTRATION UNITS:**

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
74-87-3	Chloromethane		340	U
75-1-4	Vinyl Chloride		<del>-340</del> -	
74-83-9	Bromomethane	***	340	. U [
75-00-3	Chloroethane		340	U
67-64-1	Acetone		500	1
75-35-4	1,1-Dichloroether	ne	340	U
75-15-0	Carbon Disulfide		340	U
75-09-2	Methylene Chlori	de	820	80
156-60-5	trans-1,2-Dichlore	pethene	340	U
75-34-33	1,1-Dichloroethar	1e	340	U
78-93-3	2-Butanone		340	U
156-59-2	cis-1,2-Dichloroe	thene	340	J U
67-66-3	Chloroform		510	7
71-55-6	1,1,1-Trichloroeth	nane	340	Ū
56-23-5	Carbon Tetrachic	oride	340	U
71-43-2	Benzene		340	U
107-06-2	1,2-Dichloroethai	ne	340	U
97-01-6	Trichloroethene		340	U
78-87-5	1,2-Dichloroprop	ane	340	U
75-27-4	Bromodichlorome	ethane	340	U
108-10-1	4-Methyl-2-penta	none	340	U
10061-1-5	cis-1,3-Dlchlorop	ropene	340	U
108-88-3	Toluene		340	U
10061-2-6	trans-1,3-Dichlor	opropene	340	Ų
79-00-5	1,1,2-Trichloroet	nane	340	U
591-78-6	2-Hexanone		340	U
127-18-4	Tetrachloroether	e	340	U
124-48-1	Dibromochlorom	ethane	340	U
108-90-7	Chlorobenzene		340	U
100-41-4	Ethylbenzene		340	U
108-38-3	m,p-Xylene		340 <del>190</del>	- J U
95-47-6	o-Xylene		110	J
100-42-5	Styrene		340	U
75-25-2	Bromoform		340	U
79-34-5	1,1,2,2-Tetrachic	proethane	340	U

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#### DATA USABILITY SUMMARY REPORT

for

## BEARDSLEY DESIGN ASSOCIATES

431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

# FORMER BROWN MANUFACTURING SITE SDG BEA01 Sampled 05/15/01, 05/16/01, 05/17/01

#### SOILS SAMPLES for SEMIVOLATILE ORGANICS

T16-1	(13801065)	T16-2	(13801066)	T17-1	(13801067)
T17-2	(13801068)	T18-1	(13801069)	T18-2	(13801070)
T19-1	(13801071)	T19-2	(13801072)	T20-1	(13801073)
T20-2	(13801074)	T21-1	(13801075)	T21-2	(13801076)
T22-1	(13801077)				

#### DATA ASSESSMENT

A semivolatile organics data package containing analytical results for thirteen soil samples, was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8270, addressed Target Compound List analytes. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. When ASP protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

Traces of phthalates were detected in T16-1, T17-1, T18-2, T19-2, T21-1, T21-2 and T22-1. When present, phthalates are assumed to represent laboratory artifacts. As such, all phthalates should be interpreted as undetected in program samples.

Aldol Condensation products and "unidentified" TIC's were present in the method blank associated with this group of samples. When present in samples, these artifacts have been removed from Form 1F.

The results reported from T16-1 and T16-2 have been qualified as estimations due to poor surrogate standard recoveries.

A poor instrument response was reported for the additions of IS#4, IS#5 and IS#6 to T16-1. Every internal standard added to T16-2, T17-1, T18-1, T19-1, T20-1 and 20-2 also produced a low response. Analytes dependant upon the response of these internal standards have been qualified as estimations in the affected samples.

The pentachlorophenol result reported from each program sample has been rejected due to poor calibration performance.

#### CORRECTNESS AND USABILITY

The identifications of fluorene, anthracene, pyrene, bis(2-ethylhexyl)phthalate, naphthalene, acenaphthene and dibenzofuran from T16-1, T17-1, T18-1, T19-1, T20-1 and/or T20-2 were not conclusive, based on the mass spectra references provided by the laboratory. Where affected, these analytes should be considered undetected.

The Tentatively Identified Compounds (TIC) reported from every sample included identifications that were not conclusively supported by the library searches supplied by the laboratory. The

affected identifications have been edited on Form 1F.

Reported data should be considered technically defensible in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J" or "UJ". Data that is felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

ames B. Baldwin

Date: 1/21/12

#### SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included thirteen soil samples, was collected from the Former Brown Manufacturing site between 15May01 and 17May01. Three samples collected on 15May01, five collected on 16May01, and five collected on 17May01 were delivered to the laboratory, after hours, on the day of collection. Each cooler of samples arrived intact. The sample receipt log indicated that the sample coolers contained ice. It is noted that only one cooler temperature, 5.9°C, was documented in the sample receipt log.

Sample extractions were performed on 24May01. Analyses, including reruns, were completed by 14Jun01. Program holding time limitations were satisfied.

Dilutions of T16-1, T16-2, T17-1, T18-1, T19-1, T20-1 and T20-2 were also included in the raw data. However, none of these samples contained analyte concentrations exceeding the range of calibration. The results obtained from diluted samples should not be included in data tables.

#### BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank. Any sample concentration less than 5 times the level determined in a blank must be qualified. The qualification criteria is extended to ten times the concentration observed in blanks for common laboratory artifacts. These include phthalate esters.

One method blank was analyzed with this group of samples. This blank contained a trace of bis(2-ethylhexyl)phthalate. When present in samples, similar artifacts have been qualified. Phthalates should be considered undetected in program samples. Detection limits equaling CRDL or the reported concentration, whichever is greater, should be assumed.

An Aldol Condensation product, 4-hydroxy-4-methyl-2-pentanone, and a large number of unidentified TIC's were also present in blanks.

When present in samples, they have been removed from Form 1F.

#### MS TUNING

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of DFTPP was analyzed prior to each analytical sequence and during every 12 hour period of instrument operation. An Instrument Performance Check Form is present for each DFTPP evaluation. The DFTPP tunes associated with this group of samples satisfied the program acceptance criteria.

#### CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The required levels of initial calibration were performed on 30Apr01. Standards of 20, 50, 80, 120 and 160 ng were included. With the exception of pentachlorophenol, the calibration curve for each analyte demonstrated the required levels of instrument response and an acceptable degree of linearity. Pentachlorophenol standards demonstrated poor linearity. Each calibration standard did, however, generate the minimum required level of instrument response. Although errors might be expected in the calculation of pentachlorophenol concentrations, it may be assumed that this analyte would be detected if present in samples. Because pentachlorophenol was not detected, data has been left unqualified.

A continuing calibration verification was completed prior to each twelve hour period of instrument operation. During each of these checks, pentachlorophenol failed to produce the required minimum level of instrument response. Based on this performance, the pentachlorophenol result reported from each program sample has been rejected.

During the 14Jun01 calibration check, an unacceptably large shift was also observed in the signal produced by 2,4-dinitrotoluene. In this case, however, the required level of response was achieved. 2,4-Dinitrotoluene results have been left unqualified.

#### SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

The acceptance criteria applied to surrogate standard recoveries required correction. These changes, however, had no affect on the interpretation of reported data. Unacceptably low recoveries were reported for the surrogate standard additions to T16-1 and T16-2. Based on this performance, data reported from this pair of samples has been qualified as an estimation.

Low surrogate recoveries were also reported from seven diluted samples. Because the samples were diluted following the addition of surrogates, the reported recoveries are not considered significant.

#### INTERNAL STANDARDS

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

Internal standard summary forms were prepared incorrectly on pages 362, 363 and 364. On pages 362 and 363, the tenth sample is actually a calibration verification standard that should have been used to prepare another Form 8B. When the response of this standard is considered, the associated samples demonstrate acceptable internal standard response. They do require qualification, as indicated by he laboratory.

Although page 364 was also prepared incorrectly, the only affected samples were dilutions. As previously noted, data from diluted samples should not be included in data tabes.

At least one internal standard addition to every program sample produced an unacceptable response. T17-2, T18-2, T19-2, T21-1, T21-2 and T22-1 were reanalyzed. Each repeated analysis produced acceptable internal standard performance. Results obtained from the repeated analysis of these samples should be included in data tables.

T16-1, T16-2, T17-1, T18-1, T19-1, T20-1 and T20-2 were reanalyzed following a dilution. The analyte concentrations present in these samples did not necessitate dilutions. The qualified results reported from the initial analysis of these samples should be included in data tables.

Unacceptable internal standard performance is tabulated below.

SAMPLE	AFFECTED INTERNAL STANDARDS
T16-1	phenanthrene-d10, chrysene-d12, perylene-d12
T16-2	1,4-dichlorobenzene-d4, naphthalene-d8, acenaphthene-d10
	phenanthrene-d10, chrysene-d12, perylene-d12

SAMPLE	AFFECTED INTERNAL STANDARDS
T17-1	1,4-dichlorobenzene-d4, naphthalene-d8, acenaphthene-d10
	phenanthrene-d10, chrysene-d12, perylene-d12
T18-1	1,4-dichlorobenzene-d4, naphthalene-d8, acenaphthene-d10
	phenanthrene-d10, chrysene-d12, perylene-d12
T19-1	1,4-dichlorobenzene-d4, naphthalene-d8, acenaphthene-d10
	phenanthrene-d10, chrysene-d12, perylene-d12
T20-1	1.4-dichlorobenzene-d4, naphthalene-d8, acenaphthene-d10
	phenanthrene-d10, chrysene-d12, perylene-d12
T20-2	1,4-dichlorobenzene-d4, naphthalene-d8, acenaphthene-d10
	phenanthrene-d10, chrysene-d12, perylene-d12

Analytes dependant upon the response of each affected internal standard have been qualified as estimations.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

Sample T18-1 was selected for matrix spiking. The analyte additions to two portions of this sample were recovered successfully. It is noted that the duplicate measurements of 4-nitrophenol demonstrated poor measurement precision (72% RPD). This performance alone, does not warrant data qualifications.

Spike recoveries were also reported for diluted aliquots of T18-1MS and T18-1MSD. These dilutions were performed after the sample was spiked. The low recoveries reported from this MS/MSD pair should be ignored.

#### **DUPLICATES**

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. Results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision, may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates were not included in this group of samples.

#### SAMPLE INFORMATION

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts.

Sample chromatograms were properly attenuated. Mass spectra references were provided to confirm the identification of each reported analyte. When the laboratory generated references failed to provide a conclusive identification, Form 1 was edited to indicate a negative result. Questionable identifications are tabulated below.

SAMPLE	QUESTIONABLE IDENTIFICATIONS
T16-1	fluorene, anthracene, pyrene, bis(2-ethylhexyl)phthalate
T17-1	naphthalene, fluorene, pyrene
T18-1	acenaphthene, dibenzofuran, fluorene, anthracene, pyrene
T19-1	naphthalene, fluorene, pyrene
T20-1	fluorene, bis(2-ethylhexyl)phthalate
T20-2	fluorene

In several cases, TIC identifications were not conclusively supported by the library searches included in the raw data. In such cases, Form 1F has been edited to indicate an appropriate identification. The Form 1F of every sample has been corrected.

# SUMMARY OF QUALIFIED DATA

FORMER BROWN MANUFACTURING SITE

SAMPLED 11/15/99 thru 11/18/99

CLSPHENOL	REJECT	REJECT	REJECT	REJECT	REJECT	REJECT	REJECT	REJECT	REJECT	REJECT	REJECT	REJECT	REJECT	
SURROGATES		ALL J/UJ												
SPECTRA ID TIC	EDIT	EDIT	EDIT	EDIT	EDIT	EDIT	EDIT	EDIT	EDIT	EDIT	EDIT	EDIT	EDIT	
SPECTRA ID TARGETS	n		U QI		ID U		n ar		n qi	D CI				
INTERNAL STD	rn/r si	ALL UJ	ALL J/UJ		ALL J/UJ		ALL J/UJ			ALL J/UJ				
BLANK PHTHALATE	38011	i ) )		530U		1300U/430U		1200U/430U			420U	420U	460U	
BLANK TIC	REMOVE.	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE	
	(13801065)	(13801066)	(13801067)	(13801068)	(13801069)	(13801070)	(13801071)	(13801072)	(13801073)	(13801074)	(13801075)	(13801076)	(13801077)	
	#14-1	416-2	717-1	T17-2	T18-1	T18-2	T-6-1	, ,,,,	T20-1	T20-2	T21-1	T21-2	T22-1	

pentachlorophenol, phenanthrene, anthracene, di-n-butylphthalate, carbazole, Fluoranthene pyrene, butylbenzylhthalate, 3,3'dichlorobenzidine, benzo[a]anthracene, chrysene, bis(2-ethylhexyl)phthalate, di-n-octylphthalae, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno[1,2,3-cd]pyrene, dibenz[a,h]anthracene, benzo[g,h,i]perylene IS = 4,6-dinitro-2-methylphenol, n-nitrosodiphenylamine, 4-bromophenylphenylether, hexachlorobenzene,

ID = questionable identifications are tabulated on page 8

Lab Name:	Upstate	Laborator	ies, Inc	Co	ontract; Beard	sley	T-16-1	
Lab Code:	10170	C	ase No.:	SAS No.:		SI	SDG No.: BEA01	
Matrix: (soil/\	water)	SOIL	***		Lab Samp	le ID:	13801065,sa2848,b	
Sample wt/v	ol:	30	(g/ml) G		Lab File I	):	B12755.D	
Level: (low/r	med)	LOW			Date Rece	eived:	5/18/01	
% Moisture:	12	de	ecanted:(Y/N)	N	Date Extra	cted:	5/24/01	
Concentrate	d Extract	Volume:	1000 (uL)		Date Analy	yzed:	6/4/01	
Injection Vol	ume: 2	.0 (uL)			Dilution Fa	actor:	1.0	
GPC Cleanu	ıp: (Y/N)	N	pH:					

CAS NO.	COMPOUND (L	ıg/L or ug/Kg)	UG/KG	Q
111-44-4	bis(2-Chloroethyl)ether		380	T U
108-95-2	j Phenol		380	Ū
95-57-8	2-Chlorophenol		380	U
541-73-1	1,3-Dichlorobenzene		380	U
106-46-7	1,4-Dichlorobenzene		380	Ū
95-50-1	1,2-Dichlorobenzene		380	U
108-60-1	bis(2-Chloroisopropyl)ether		380	Ū
95-48-7	2-Methylphenol		380	U
67-72-1	Hexachloroethane	to the former or in particular property of any or or of any	380	Ü
621-64-7	N-Nitroso-di-n-propylamine		380	i Ü
106-44-5	4-Methylphenol	· · · · · · · · · · · · · · · · · · ·	380	Ü
98-95-3	Nitrobenzene		380	Ü
78-59-1	Isophorone	*************************	380	Ū
88-75-5	2-Nitrophenol		380	Ŭ
105-67-9	2,4-Dimethylphenol		380	Ū
111-91-1	bis(2-Chloroethoxy)methane		380	Ū
120-83-2	2,4-Dichlorophenol		380	Ū
120-82-1	1,2,4-Trichlorobenzene		380	Ū
91-20-3	Naphthalene		380	Ū
106-47-8	4-Chloroaniline		380	Ū
87-68-3	Hexachlorobutadiene		380	Ū
59-50-7	4-Chloro-3-methylphenol	The second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of th	380	Ū
91-57-6	, 2-Methylnaphthalene		380	Ū
77-47-4	Hexachlorocyclopentadiene	Physical Process of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the Community of the	380	Ū
88-06-2	2,4,6-Trichlorophenol	The second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the sect	380	Ū
95-95-4	2,4,5-Trichlorophenol		950	Ü
91-58-7	2-Chloronaphthalene		380	Ū
88-74-4	2-Nitroaniline	- The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the	950	Ū
208-96-8	Acenaphthylene		380	Ū
131-11-3	Dimethyl phthalate		380	Ū
606-20-2	2,6-Dinitrotoluene	!	380	Ü
83-32-9	Acenaphthene	amendment of the contract of t	380	Ū
99-09-2	3-Nitroaniline		950	Ū
51-28-5	2,4-Dinitrophenol	general and make property and an end of the	950	U
132-64-9	Dibenzofuran	THE THE CONTRACT OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY O	380	Ŭ
121-14-2	2,4-Dinitrotoluene	*	380	<u>U</u> 0000368
100-02-7	4-Nitrophenol		950	0.00036

MIMUILLI	T-16-1
t: Beardsley	1-10-1

_ab Name:	Upstate	Laborato	ories, inc	(	contract:	Beardsley		
_ab Code:	10170	(	Case No.:		SAS No	o.: S	DG No.: BEA01	
Matrix: (soil/v	vater)	SOIL	rows MAINE		La	b Sample ID:	13801065,sa2848	<u>d,6</u>
Sample wt/vo	ol:	30	(g/ml) <u>G</u>	, manusi manusina manusina (m.). Tapo (ferro )	La	b File ID:	B12755.D	
Level: (low/r	med)	LOW	MM1 =		Da	ite Received:	5/18/01	
% Moisture:	12		decanted:(Y/N	) <u>N</u>	Da	ate Extracted:	5/24/01	
Concentrate	d Extract	Volume:	1000 (ul	_)	Da	ate Analyzed:	6/4/01	
Injection Vol	ume: 2	0(uL	)		Di	lution Factor:	1.0	
GPC Cleanu	.p: (Y/N)	N	pH:					

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND (u	ıg/L or ug/Kg) <u>UG/KG</u>	Q
86-73-7	Fluorene	380 91	
7005-72-3	4-Chlorophenyl phenyl ether	380	U
84-66-2	Diethyl phthalate	380	U
100-01-6	4-Nitroaniline	950	<u> </u>
534-52-1	4,6-Dinitro-2-methylphenol	950	47
86-30-6	n-Nitrosodiphenylamine	. 380	41
101-55-3	4-Bromophenyl phenyl ether	380	4 2 0 7
118-74-1	Hexachlorobenzene	380	
87-86-5	Pentachlorophenol	950-	
85-01-8	Phenanthrene	740	11/
120-12-7	Anthracene	380 <del>-200</del>	<del></del>
84-74-2	DI-n-butyl phthalate	380	
86-74-8	Carbazole	380	ψ <b>)</b> υ ¬ J
206-44-0	Fluoranthene	380	<u> </u>
129-00-0	Pyrene	380 -750	- 01
85-68-7	Butyl benzyl phthalate	380	y .
91-94-1	3,3'-Dichlorobenzidine	380	1 707
56-55-3	Benzo[a]anthracene	380	1
218-01-9	Chrysene	2000	
117-81-7	bis(2-Ethylhexyl)phthalate	380 110	<u> </u>
117-84-0	Di-n-octyl phthalate	380	P\
205-99-2	Benzo[b]fluoranthene	380	41
207-08-9	Benzo[k]fluoranthene	380	- 4 1
50-32-8	Benzo[a]pyrene	380	<u> </u>
193-39-5	Indeno[1,2,3-cd]pyrene	380	4517
53-70-3	Dibenz[a,h]anthracene	380	4/92
191-24-2	Benzo(g,h,i)perylene	380	manage and descriptions of the same flow in the
100-51-6	Benzyl alcohol	380	
65-85-0	Benzolc acid	1900	У'

JII

Lab Name:	Upstate	Labora	tories, Inc	Contra	ict:	Beardsley	T-16-2
Lab Code:	10170	hinga era manina ay	Case No.: BEA01	SAS	No.		DG No.:
Matrix: (soil/	water)	SOIL	**************************************		Lab	***************************************	13801066,sa2848,b
Sample wt/v	ol:	30	(g/ml) G	****		File ID:	B12756,D
Level: (low/i	med)	LOW	900 1 to 1,000		Dat	e Received:	5/18/01
% Moisture:	30	district of waters	decanted:(Y/N)	N	Dat	e Extracted:	5/24/01
Concentrate	d Extract	Volume	1000 (uL)		Dat	e Analyzed:	6/4/01
Injection Vol	ume: 2	.0 (ul	.)		Dllu	tion Factor:	1.0
GPC Cleanu	ip: (Y/N)	N	nH·				

CON	CENT	RATIC	MILLA	uro.
マシハ		JII MA	21VL E 18	W 1 × .

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
111-44-4	bis(2-Chloroethyl)ether		480		'H
108-95-2	Phenol		480	<u> </u>	-
95-57-8	2-Chlorophenol			Ψ. <b>\</b> .	.:
541-73-1	1,3-Dichlorobenzene		480	<del></del>	1 1
106-46-7	1,4-Dichlorobenzene		480	<del>-</del>	1
95-50-1	1,2-Dichlorobenzene		480		
108-60-1	bis(2-Chloroisopropyl)ether	#	480		Ì
95-48-7	2-Methylphenol		480		<u> </u>
67-72-1	Hexachloroethane		480		!
621-64-7	N-Nitroso-di-n-propylamine		480 480		
106-44-5	4-Methylphenol		480	Ψ	
98-95-3	Nitrobenzene		480		
78-59-1	Isophorone		480 480		
88-75-5	2-Nitrophenol		480	¥-1-	
105-67-9	2,4-Dimethylphenol		480		
111-91-1	bis(2-Chloroethoxy)methan	e	480		
120-83-2	2,4-Dichlorophenol		480	Y	
120-82-1	1,2,4-Trichlorobenzene		480	<del></del>	
91-20-3	Naphthalene		480	- 4 \	v1
106-47-8	4-Chloroaniline		480	4/-	V -5
87-68-3	Hexachlorobutadiene	or and stated to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be seen to be se	480		
59-50-7	4-Chloro-3-methylphenol		480		
91-57-6	2-Methylnaphthalene		A THE OWNER OF STREET ASSESSMENT ASSESSMENT OF PROPERTY OF THE PARTY O		
77-47-4	Hexachlorocyclopentadiene		480		
88-06-2	2,4,6-Trichlorophenol		480	-4-1:	
95-95-4	2,4,5-Trichtorophenol		1200		
91-58-7	2-Chloronaphthalene				
88-74-4	2-Nitroaniline		480 1200		
208-96-8	Acenaphthylene		480		
131-11-3	Dimethyl phthalate				
606-20-2	2,6-Dinitrotoluene	- The second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of	480 480		
83-32-9	Acenaphthene				
99-09-2	3-Nitroaniline		480	-4-11	
51-28-5	2,4-Dinitrophenol		1200		
132-64-9	Dibenzofuran		1200		
121-14-2	2,4-Dinitrotoluene		480	<u> </u>	
100-02-7	4-Nitrophenol		480		0000
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T-16-2 Upstate Laboratories, Inc Contract: Beardsley Lab Name: SAS No.: ____ SDG No.: Case No.: BEA01 Lab Code: 10170

Lab Sample ID: 13801066,sa2848,b SOIL Matrix: (soil/water)

30 (g/ml) G Lab File ID: B12756.D Sample wt/vol:

Date Received: 5/18/01 LOW Level: (low/med)

Date Extracted: 5/24/01 decanted:(Y/N) N % Moisture: 30

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/01

Dilution Factor: 1.0 Injection Volume: 2.0 (uL) GPC Cleanup: (Y/N) N pH:

#### **CONCENTRATION UNITS:**

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
86-73-7	Fluorene		480	ųχ	Ĵ
7005-72-3	4-Chlorophenyl phenyl ethe	er	480	Ψ.)	
84-66-2	Diethyl phthalate		480	Ψ'	
100-01-6	4-Nitroaniline		1200	<u> </u>	
534-52-1	4,6-Dinitro-2-methylphenol		1200	<u> </u>	
86-30-6	n-Nitrosodiphenylamine		480	<u> </u>	
101-55-3	4-Bromophenyl phenyl ethe	er .	480	Ψ	li .
118-74-1	Hexachlorobenzene		480	<b>)</b>	
87-86-5	Pentachlorophenol		<u>~1200</u>		-R
85-01-8	Phenanthrene	;	480	<u> </u>	<u> </u>
120-12-7	Anthracene		480	<u> </u>	l.i
84-74-2	Di-n-butyl phthalate		480	Ü	; -:
86-74-8	Carbazole		480	Ų	
206-44-0	Fluoranthene		480	Ψ.	
129-00-0	Pyrene		480	ψ '	1
85-68-7	Butyl benzyl phthalate		480	Ψ	) U J
91-94-1	3,3'-Dichlorobenzidine		480	Ψ	[i
56-55-3	Benzo[a]anthracene		480	<u> </u>	[]
218-01-9	Chrysene		480	Ψ./	_[
117-81-7	bis(2-Ethylhexyl)phthalate		480	<u> </u>	
117-84-0	Di-n-octyl phthalate		480	Ψ.[	
205-99-2	Benzo[b]fluoranthene		480	Ψ.	1
207-08-9	Benzo[k]fluoranthene		480	Ψ.	
50-32-8	Benzo[a]pyrene		480		
193-39-5	Indeno[1,2,3-cd]pyrene		480	<u> </u>	_
53-70-3	Dibenz[a,h]anthracene		480		
191-24-2	Benzo(g,h,i)perylene		480	U L	
100-51-6	Benzyl alcohol		480	1	
65-85-0	Benzoic acid		2400	W /	:

1B

EPA SAMPLE NO.

Lab Name:	Upstate	Laboratories, Inc	Contract:	Beardsley	T-17-1
Lab Code:	10170	Case No.:	SAS No	o.: St	DG No.: BEA01
Matrix: (soil/w	vater)	SOIL	La	b Sample ID:	13801067,sa2848,b
Sample wt/vo	ıl;	30 (g/ml) <u>G</u>	La	b File ID:	B12757.D
Level: (low/m	ned)	LOW	Da	te Received:	5/18/01
% Moisture:	24	decanted:(Y/N)	N Da	te Extracted:	5/24/01
Concentrated	i Extract	Volume: 1000 (uL)	Da	te Analyzed:	6/4/01
Injection Volu	me: 2	.0 (uL)	DII	ution Factor:	1,0
GPC Cleanup	o: (Y/N)	N pH:	•••		THE PROPERTY OF THE COMMENT AND ADDRESS OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE

		CONCENTRAT	ION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	. Q		
111-44-4	bis(2-Chloroethyl)ether		440	N/	<del>-</del> -j	
108-95-2	Phenol		440	<b>!</b> - <b>f</b> - <b>t</b>	-	
95-57-8	2-Chlorophenol		440	\		
541-73-1	1,3-Dichlorobenzene	THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE P	440	- T	<b> </b>	
106-46-7	1,4-Dichlorobenzene		440	- T	H	
95-50-1	1,2-Dichlorobenzene		440	T F	Ħ	
108-60-1	bis(2-Chloroisopropyl)eth	ner	440	- T	1	
95-48-7	2-Methylphenol		440		† ·	
67-72-1	Hexachloroethane		440	· · · · · · · · · · · · · · · · · · ·	H	
621-64-7	N-Nitroso-di-n-propylami	ne	440	Ti-		
106-44-5	4-Methylphenol		440	l)	(1)	
98-95-3	Nitrobenzene		440	67	7-0-	
78-59-1	Isophorone		440		mj .	
88-75-5	2-Nitrophenol		440	i t		
105-67-9	2,4-Dimethylphenol		440	T I		
111-91-1	bis(2-Chloroethoxy)meth	ane	440		-	
120-83-2	2,4-Dichlorophenol		440	T.	!	
120-82-1	1,2,4-Trichlorobenzene		440	T/	!	
91-20-3	Naphthalene	4	40 450		<b>ブ</b> コー	
106-47-8	4-Chloroaniline	there we write the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of	440	ΨV	<u></u>	
87-68-3	Hexachlorobutadiene		440	1	<b>V</b>	
59-50-7	4-Chloro-3-methylphenol		440	<del> </del>		
91-57-6	2-Methylnaphthalene	** ***********************************	620	"រ		
77-47-4	Hexachlorocyclopentadie	ne	440	W,		
88-06-2	2,4,6-Trichlorophenol		440	T		
95-95-4	2,4,5-Trichlorophenol	A	1100	<del>-</del>	-	
91-58-7	2-Chloronaphthalene		440	1		•
88-74-4	2-Nitroaniline		1100		-	
208-96-8	Acenaphthylene	F	440	<b>i</b> i-t	-	
131-11-3	Dimethyl phthalate		440		· ·	<b>.</b>
606-20-2	2,6-Dinitrotoluene		440	<del>-      </del>	153	19
83-32-9	Acenaphthene		440			///
99-09-2	3-Nitroaniline		1100	·	. !	
51-28-5	2,4-Dinitrophenol		1100			
132-64-9	Dibenzofuran	the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence of the commence o	440		1	
121-14-2	2,4-Dinitrotoluene		440			
100-02-7	4-Nitrophenol		1100	1 1	.;	

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Lab Name:	Upstate	Laboratories, Inc	(	Contract:	Beardsley		<u> </u>		
Lab Code:	10170	Case No.:	A		),;	:		BEA01	
Matrix: (soil/	water)	SOIL		Lal	b Sample II	D: <u>1</u>	38010	37,sa2848	3,b
Sample wt/v		30 (g/ml) G	ance - constitutions of	La	b File ID:	<u> </u>	312757	<u>.D</u>	
Level: (low/		LOW		Da	ite Receive	d: 5	/18/01	and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t	
% Moisture:		decanted:(Y/N	4) N	Da	ate Extracte	ed: [	5/24/01		
Concentrate	// · · · · · · · · · · · · · · · · · ·			Da	ate Analyze	d. (	3/4/01	الدينسيونية نب درور دينها	
Injection Vo				Di	lution Facto	or: [	1.0		
GPC Clean									
				CONC	CENTRATIO	J NC	INITS:		
CAS N	Ο,	COMPOUND		(ug/L	or ug/Kg)	UG	/KG	Q	
86-7	2.7	Fluorene			4	40	480		Q.
	-72-3	4-Chlorophenyl	phenyl e	ether			440	¥.	<b>3</b>
84-6		Diethyl phthalat					440	<u> </u>	-1
100-		4-Nitroaniline	ومدر دونت د انتخاره وراهوست		:		1100	<del></del>	

1100 4.6-Dinitro-2-methylphenol 534-52-1 440 n-Nitrosodiphenylamine 86-30-6 440 4-Bromophenyl phenyl ether 101-55-3 440 Hexachlorobenzene 118-74-1 1100 Pentachlorophenol 87-86-5 1600 Phenanthrene 85-01-8 440 Anthracene 120-12-7 440 Di-n-butyl phthalate 84-74-2 440 Carbazole 86-74-8 440 Fluoranthene 206-44-0 <del>-090</del> Pyrene 129-00-0 440 Butyl benzyl phthalate 85-68**-**7 440 3,3'-Dichlorobenzidine 91-94-1 440 Benzo[a]anthracene 56-55-3 440 Chrysene 218-01-9 bis(2-Ethylhexyl)phthalate 440 117-81-7 440 Di-n-octyl phthalate 117-84-0 440 Benzo[b]fluoranthene 205-99-2 440 Benzo[k]fluoranthene 207-08-9 440 Benzo[a]pyrene 50-32-8 440 Indeno[1,2,3-cd]pyrene 193-39-5 440 Dibenz[a,h]anthracene 53-70-3 440 Benzo[g,h,i]perylene 191-24-2 440 Benzyl alcohol 100-51-6 2200 Benzoic acid 65-85-0

T-17-2 RE

.ab Name:	Upstate	Laborato	ries, Inc	Contract	: Beardsley		
_ab Code:	10170	(	Case No.:	SAS	Vo.:	SDG No.:	BEA01
Matrix: (soil/v	water)	SOIL		L	ab Sample ID	: 1380106	58,sa2848,b
Sample wt/vo		30	(g/ml) <u>G</u>	L.	.ab File ID:	-B12758	D 612819
Level: (low/r		LOW		Ü	Date Received	: 5/18/01	apina aya ya an aha <del>aranasa</del> Fra NP P
% Moisture:	37	(	decanted:(Y/N)	N [	Date Extracted	: 5/24/01	
Concentrate	d Extract	Volume:	1000 (uL)	ī	Date Analyzed	: <del>-6/4/0</del> 1	6/14/01
Injection Vol			)		Dilution Factor		
GPC Cleanu							

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
111-44-4	bis(2-Chloroethyl)ethe	r	530	Ų
108-95-2	Phenol		530	Ŭ
95-57-8	2-Chlorophenol		530	U
541-73-1	1,3-Dichlorobenzene		530	U
106-46-7	1,4-Dichlorobenzene		530	U
95-50-1	1,2-Dichlorobenzene		530	U
108-60-1	bis(2-Chloroisopropyl	ether	530	U
95-48-7	2-Methylphenol		530	U
67-72-1	Hexachloroethane		530	<u>U</u> i
621-64-7	N-Nitroso-di-n-propyla	amine	530	U
106-44-5	4-Methylphenol		530	U
98-95-3	Nitrobenzene		530	U
78-59-1	Isophorone		530	Ų
88-75-5	2-Nitrophenol		530	U
105-67-9	2,4-Dimethylphenol		530	U
111-91-1	bis(2-Chloroethoxy)m	ethane	530	U
120-83-2	2,4-Dichlorophenol		530	Ų
120-82-1	1,2,4-Trichlorobenzer	ne	530	<u>U</u>
91-20-3	Naphthalene		530	U
106-47-8	4-Chloroaniline		530	U
87-68-3	Hexachlorobutadiene		530	U (
59-50-7	4-Chloro-3-methylphe	enol	530	U
91-57-6	2-Methylnaphthalene		530	U
77-47-4	Hexachlorocyclopent	adiene	530	Ų
88-06-2	2,4,6-Trichlorophenol		530	<u> </u>
95-95-4	2,4,5-Trichloropheno	3	1300	Ų
91-58-7	2-Chloronaphthalene		530	<u> </u>
88-74-4	2-Nitroaniline		1300	U
208-96-8	Acenaphthylene	· · · · · · · · · · · · · · · · · · ·	530	<u> </u>
131-11-3	Dimethyl phthalate		530	<u> </u>
606-20-2	2,6-Dinitrotoluene		530	U
83-32-9	Acenaphthene		530	U
99-09-2	3-Nitroaniline		1300	<u>U</u>
51-28-5	2,4-Dinitrophenol	; 	1300	U
132-64-9	Dibenzofuran		530	<u> </u>
121-14-2	2,4-Dinitrotoluene	or proving the case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a case of a c	530	Ų
100-02-7	4-Nitrophenol		1300	U

#### EPA SAMPLE NO.

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

T-17-2 PE Upstate Laboratories, Inc Contract: Beardsley Lab Name: Case No.: SAS No.: SDG No.: BEA01 10170 Lab Code: SOIL Lab Sample ID: 13801068,sa2848,b Matrix: (soil/water) B12758.D 12819 30 (g/ml) G Lab File ID: Sample wt/vol: LOW Date Received: 5/18/01 Level: (low/med) % Moisture: 37 decanted:(Y/N) N Date Extracted: 5/24/01 Date Analyzed: 6/4/01 6/14/01 Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0 Injection Volume: 2.0 (uL) GPC Cleanup: (Y/N) N pH:

#### **CONCENTRATION UNITS:**

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
86-73-7	Fluorene		530	U	
7005-72-3	4-Chlorophenyl phenyl ethe	r	530	U	
84-66-2	Diethyl phthalate		530	U	
100-01-6	4-Nitroaniline		1300	U	
534-52-1	4,6-Dinitro-2-methylphenol		1300	Ú	
86-30-6	n-Nitrosodiphenylamine		530	U	i
101-55-3	4-Bromophenyl phenyl ethe	ľ	530	U	
118-74-1	Hexachlorobenzene		530	U	_
87-86-5	Pentachlorophenol	į	<del>-4300 - i</del>		R
85-01-8	Phenanthrene		530	U	
120-12-7	Anthracene		530	Ü	i
84-74-2	Di-n-butyl phthalate		530	U	
86-74-8	Carbazole		530	U	
206-44-0	Fluoranthene		530	Ų	
129-00-0	Pyrene		530	U	
85-68-7	Butyl benzyl phthalate		530	U	
91-94-1	3,3'-Dichlorobenzidine	1	530	U	
56-55-3	Benzo[a]anthracene		530	U	
218-01-9	Chrysene		530	U	
117-81-7	bis(2-Ethylhexyl)phthalate		530 <del>-81</del>	U	
117-84-0	Di-n-octyl phthalate		530	U	
205-99-2	; Benzo[b]fluoranthene		530	U	
207-08-9	Benzo[k]fluoranthene		530	U	!
50-32-8	Benzo[a]pyrene		530	U	
193-39-5	Indeno[1,2,3-cd]pyrene		530	U	
53-70-3	Dibenz[a,h]anthracene		530	U	į
191-24-2	Benzo(g,h,i)perylene		530	U	: 1
100-51-6	Benzyl alcohol		530	U	
65-85-0	Benzoic acid		2600	U	

N

#### 18

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

F	PΑ	SA	M	PI	F	NO.
No.	<i>(</i> )	W/1	ŧνι			110

Lab Name:	Upstate	Laborato	ries, Inc	Co	ontract; E	3eardsley	
Lab Code:	10170	C	ase No.:	****	SAS No.:	SI	DG No.: BEA01
Matrix: (soil/w	vater)	SOIL	, a plantiti		Lab	Sample ID:	13801069,sa2848,i
Sample wt/vo	ol:	30	(g/ml) <u>G</u>		Lab I	File ID:	B12759.D
Level: (low/n	ned)	LOW	·····		Date	Received:	5/18/01
% Moisture:	25		lecanted:(Y/N)	N	Date	Extracted:	5/24/01
Concentrated	d Extract	Volume:	1000 (uL.)		Date	Analyzed:	6/4/01
Injection Volu	ume: 2	.0 (uL)			Dilut	tion.Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH:				

#### **CONCENTRATION UNITS:**

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
111-44-4	bis(2-Chloroethyl)ether		440	<b>U</b>
108-95-2	Phenol		440	U
95-57-8	2-Chlorophenol		440	U
541-73-1	1,3-Dichlorobenzene		440	U
106-46-7	1,4-Dichlorobenzene		440	UT
95-50-1	1,2-Dichlorobenzene		440	U
108-60-1	bis(2-Chloroisopropyl)ether		440	U
95-48-7	2-Methylphenol		440	U
67-72-1	Hexachloroethane		440	U
621-64-7	N-Nitroso-di-n-propylamine		440	
106-44-5	4-Methylphenol		440	1/03
98-95-3	Nitrobenzene		440	U /
78-59-1	Isophorone		440	
88-75-5	2-Nitrophenol		440	U
105-67-9	2,4-Dimethylphenol		440	41
111-91-1	bis(2-Chloroethoxy)methan	e	440	U I
120-83-2	2,4-Dichlorophenol		440	U
120-82-1	1,2,4-Trichlorobenzene		440	U I
91-20-3	Naphthalene		220	451-
106-47-8	4-Chloroaniline		440	Ψ\
87-68-3	Hexachlorobutadiene		440	4 > 0 )
59-50-7	4-Chloro-3-methylphenol		440	U/
91-57-6	2-Methylnaphthalene		830	
77-47-4	Hexachlorocyclopentadien	3	440	4
88-06-2	2,4,6-Trichlorophenol		440	<u> </u>
95-95-4	2,4,5-Trichlorophenol		1100	¥_
91-58-7	2-Chloronaphthalene		440	44,
88-74-4	2-Nitroaniline		1100	$\sqrt{V}$
208-96-8	Acenaphthylene		440	<u> </u>
131-11-3	Dimethyl phthalate		440	Ψ)
606-20-2	2,6-Dinitrotoluene	3	440	0/
83-32-9	Acenaphthene	4	140 72	- J U]
99-09-2	3-Nitroaniline	:	1100	<u> </u>
51-28-5	2,4-Dinitrophenol		1100	4 (7)
132-64-9	Dibenzofuran		440 75	<u> </u>
121-14-2	2,4-Dinitrotoluene	and it is an experience of the second second second second second second second	440	44.5
100-02-7	4-Nitrophenol		1100	درر

749

#### EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

T-18-1

Contract: Beardsley	
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a printer and a second and a second	G No.: BEA01
Lab Sample ID:	13801069,sa2848,b
Lab File ID:	B12759.D
Data Pecaived	5/18/01
	No. of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state o
N Date Extracted:	5/24/01
Date Analyzed:	6/4/01
Dilution Factor:	1.0
	Lab Sample ID: Lab File ID: Date Received: N Date Extracted: Date Analyzed:

CAS NO.	COMPOUND (ug/L	or ug/Kg) <u>UG/KG</u>	Q
86-73-7	Fluorene	440 -220	ナレコ
7005-72-3	4-Chlorophenyl phenyl ether	440	<u>Ψ</u>
84-66-2	Diethyl phthalate	440	
100-01-6	4-Nitroaniline	1100	<u> </u>
534-52-1	4,6-Dinitro-2-methylphenol	1100	
86-30-6	n-Nitrosodiphenylamine	440	<u> </u>
101-55-3	4-Bromophenyl phenyl ether	440	
118-74-1	Hexachlorobenzene	440	
87-86-5	Pentachlorophenol	-4100	
85-01-8	Phenanthrene	1700	
120-12-7	Anthracene	440 -280	<u> </u>
84-74-2	Di-n-butyl phthalate	440	
86-74-8	Carbazole	440	<u> </u>
206-44-0	Fluoranthene	440	<u> </u>
129-00-0	Pyrene	440 240	
85-68-7	Butyl benzyl phthalate	440	
91-94-1	3,3'-Dichlorobenzidine	440	41
56-55-3	Benzo[a]anthracene	440	¥ -
218-01-9	Chrysene	440	
117-81-7	bis(2-Ethylhexyl)phthalate	440	
117-84-0	Di-n-octyl phthalate	440	
205-99-2	Benzo[b]fluoranthene	440	\frac{1-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac
207-08-9	Benzo[k]fluoranthene	440	
50-32-8	Benzo[a]pyrene	440	
193-39-5	Indeno[1,2,3-cd]pyrene	440	
53-70-3	Dibenz[a,h]anthracene	440	<del>- 4-1-</del>
191-24-2	Benzo[q,h,l]perylene	440	<u> </u>
100-51-6	Benzyl alcohol	440	4-1-1
65-85-0	Benzoic acid	2200	<u></u>

T-18-2 RE

Lab Name: Upstate Laboratorles, Inc			Contract:	Beardsley			
Lab Code:	10170	Case	No.:	SAS No	o.:	SDG No.:	BEA01
Matrix: (sol/	/water)	SOIL		La	b Sample ID	: 138010	70,sa2848,b
Sample wt/v	vol:	30	(g/ml) G	La	ab File ID:	B12760	D B12820
Level: (low/	/med)	LOW		Da	ate Received	: <u>5/18/01</u>	or assert travel is by which depends or over
% Moisture:	: 23	deca	inted:(Y/N)	N Da	ate Extracted	5/24/01	de a mar vande <del>annamentation</del> e (del'editioname)
Concentrate	ed Extract	Volume: 10	000 (uL)	Da	ate Analyzed	: -6/4/01-	4/14/01
Injection Va	olume: 2	2.0 (uL)		Di	ilution Factor	: 1.0	white water that the party of
GPC Clean	up: (Y/N)	N	pH:	na an			

795

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
111-44-4	bis(2-Chloroethyl)ethe	r	430	U
108-95-2	Phenol		430	<u>U</u>
95-57-8	2-Chlorophenol		430	U
541-73-1	1,3-Dichlorobenzene		430	U
106-46-7	1.4-Dichlorobenzene		430	<u>U</u>
95-50-1	1,2-Dichlorobenzene		430	U
108-60-1	bis(2-Chloroisopropyl)	ether	430	U
95-48-7	2-Methylphenol		430	U.
67-72-1	Hexachloroethane		430	<u>U</u>
621-64-7	N-Nitroso-di-n-propyla	mine	430	U
106-44-5	4-Methylphenol		430	U
98-95-3	Nitrobenzene		430	U
78-59-1	Isophorone		430	U
88-75-5	2-Nitrophenol		430	U
105-67-9	2,4-Dimethylphenol		430	<u> </u>
111-91-1	bis(2-Chloroethoxy)m	ethane	430	U
120-83-2	2,4-Dichlorophenol		430	U
120-82-1	1,2,4-Trichlorobenzen	e	430	<u>U</u>
91-20-3	Naphthalene		430	U
106-47-8	4-Chloroanlline		430	U
87-68-3	Hexachlorobutadiene		430	U
59-50-7	4-Chloro-3-methylphe	<u>nol</u>	430	<u>U</u>
91-57-6	2-Methylnaphthalene	1	430	<u>U</u>
77-47-4	Hexachlorocyclopenta	adlene	430 ;	<u> </u>
88-06-2	2,4,6-Trichlorophenol		430	U
95-95-4	2,4,5-Trichlorophenol	ALL LABORATORISMOSTORISMOST SAME STATEMENT SPORTS AND AND AND AND AND AND AND AND AND AND	1100	U
91-58-7	2-Chloronaphthalene		430	U
88-74-4	2-Nitroaniline		1100	<u>U</u>
208-96-8	; Acenaphthylene		430	U
131-11-3	Dimethyl phthalate		430	U
606-20-2	2,6-Dinitrotoluene	And the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t	430	<u>U</u> !
83-32-9	Acenaphthene		430	<u> </u>
99-09-2	3-Nitroaniline		1100	<u> </u>
51-28-5	2,4-Dinitrophenol	. Name of the state  1100	Ų.,	
132-64-9	: Dibenzofuran		430	U
121-14-2	2,4-Dinitrotoluene	name and an annual representation and the second property of the contract of the contract of the second property of	430	U
100-02-7	4-Nitrophenol		1100	<u> </u>

GPC Cleanup: (Y/N) N pH:

#### EPA SAMPLE NO.

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

T-18-2 RE Lab Name: Upstate Laboratories, Inc Contract: Beardsley SAS No.: SDG No.: BEA01 Case No.: Lab Code: 10170 Lab Sample ID: 13801070,sa2848,b Matrix: (soil/water) SOIL B12760-D B/2820 30 (g/ml) <u>G</u> Lab File ID: Sample wt/vol: Date Received: 5/18/01 LOW Level: (low/med) decanted:(Y/N) N 23 Date Extracted: 5/24/01 % Moisture: Date Analyzed: -6/4/01 C//4/01 Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0 Injection Volume: 2.0 (uL)

#### **CONCENTRATION UNITS:**

CAS NO.	COMPOUND (ug/L or t	ug/Kg) <u>UG/KG</u>	Q
86-73-7	Fluorene	430	U
7005-72-3	4-Chlorophenyl phenyl ether	430	U
84-66-2	Diethyl phthalate	430	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	<u>U</u>
86-30-6	n-Nitrosodiphenylamine	430	U
101-55-3	4-Bromophenyl phenyl ether	430	<u> </u>
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	<del>-4100</del>	-U- 1
85-01-8	Phenanthrene	430	U
120-12-7	Anthracene	430	U
84-74-2	Di-n-butyl phthalate	430	U
86-74-8	Carbazole	430	<u>U</u>
206-44-0	Fluoranthene	430	<u> </u>
129-00-0	Pyrene	430	U
85-68-7	Butyl benzyl phthalate	430-260	<i>→</i> U <i>→</i>
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo[a]anthracene	430	U
218-01-9	Chrysene	430	U
117-81-7	bis(2-Ethylhexyl)phthalate	1300	8U -
117-84-0	Di-n-octyl phthalate	430 450	ال المد
205-99-2	Benzo[b]fluoranthene	430	U
207-08-9	Benzo[k]fluoranthene	430	U
50-32-8	Benzo(a)pyrene	430	U
193-39-5	Indeno[1,2,3-cd]pyrene	430	U
53-70-3	Dibenz[a,h]anthracene	430	U
191-24-2	Benzo[g,h,i]perylene	430	<u> </u>
100-51-6	Benzyl alcohol	430	U
65-85-0	Benzoic acid	2200	U

25/5

EPA SAMPLE NO.

T-19-1

Lab Name: Upstate Laboratories, Inc		es. Inc		Contract:	Beardsley	,				
Lab Code:	10170		ise No.:	A PLANE TO A PLANE	SAS No	·.:	SD	G No.:	BEA01	
Matrix: (soil/\		SOIL	AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND THE PROPERTY AND TH		Lal	b Sample I	D: 1	380107	1,sa28	48,b
Sample wt/ve		30	(g/ml) <u>G</u>		Lal	b File ID:	E	312763.	D	
Level: (low/r		LOW			Da	ite Receive	d: <u>5</u>	/18/01		
% Moisture:	19	d€	 ecanted:(Y/N	)	1 Da	ite Extracte	ed: 5	3/24/01		
Concentrate			1000 (uL	.)	Da	ite Analyze	d: 🤅	8/5/01		
Injection Vol	lume: 2	.0 (uL)			DII	lution Facto	or:	1.0		<b></b>
GPC Cleanu	up: (Y/N)	N	рН:	grani i inggarene e						
					CONC	ENTRATIO	U NC	NITS:		
CAR N	$\cap$	COM	POHND		(ua/L c	or ua/Ka)	UG	KG	С	}

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
111-44-4	bis(2-Chloroethyi)ether		410	υN	; ;
108-95-2	Phenol		410	υN	
95-57-8	2-Chlorophenol		410	Ų	
541-73-1	1,3-Dichlorobenzene		410	<u> </u>	
106-46-7	1,4-Dichlorobenzene		410		4
95-50-1	1,2-Dichlorobenzene		410	U	_
108-60-1	bis(2-Chloroisopropyl)eth	er	410	U	
95-48-7	2-Methylphenol		410	U	_
67-72-1	Hexachloroethane		410	<u> </u>	_[
621-64-7	N-Nitroso-di-n-propylamir	ne	410	U I	
106-44-5	4-Methylphenol		410	<u> </u>	101
98-95-3	Nitrobenzene		410	<u> </u>	
78-59-1	Isophorone		410	Ų	
88-75-5	2-Nitrophenol		410	Ų	
105-67-9	2,4-Dimethylphenol		410	Ψ	
111-91-1	bis(2-Chloroethoxy)meth	ane	410	Ψ	
120-83-2	2,4-Dichlorophenol		410	V	
120-82-1	1,2,4-Trichlorobenzene		410	U '	
91-20-3	Naphthalene		410-210	<del></del>	¥1
106-47-8	4-Chloroaniline		410	<u> </u>	
87-68-3	Hexachlorobutadiene		410	Ψ>	V]
59-50-7	4-Chloro-3-methylphenol		410	y'	
91-57-6	2-Methylnaphthalene		680		
77-47-4	Hexachlorocyclopentadie	ene	410	<u> </u>	i
88-06-2	2,4,6-Trichlorophenol		410	<u> </u>	_
95-95-4	2,4,5-Trichlorophenol		1000	Ψ \	
91-58-7	2-Chloronaphthalene		410	Ψ.	
88-74-4	2-Nitroanlline		1000	Ų.	
208-96-8	Acenaphthylene		410	Ψ.	
131-11-3	Dimethyl phthalate		410	ψ \	לטא
606-20-2	2,6-Dinitrotoluene		410	Ψ_1	100
83-32-9	Acenaphthene		410	Ψ	
99-09-2	3-Nitroaniline		1000	4 1	
51-28-5	2,4-Dinitrophenol		1000	Ψ.	
132-64-9	Dibenzofuran		410	<u> </u>	
121-14-2	2,4-Dinitrotoluene		410	Ψ	
100-02-7	4-Nitrophenol		1000	<b>U</b>	

713

EPA SAMPLE NO.

T-19-1

Lab Name:	Upstate	_aborator	ies, Inc	_ Contract:	Beardsley	
Lab Code:	10170		ase No.:	SAS No	-	DG No.: BEA01
Matrix: (soil/v	vater)	SOIL		La	b Sample ID:	13801071,sa2848,b
Sample wt/vo		30	(g/ml) G	La	b File ID:	B12763.D
-		LOW		Da	ate Received:	5/18/01
Level: (low/r			ecanted:(Y/N)	N D	ate Extracted:	5/24/01
% Moisture:			1000 (uL)	D	ate Analyzed:	6/5/01
Concentrate			1000 (434)		ilution Factor:	1.0
Injection Vol		.0 (uL)	1.1.	_		a ngalandada a dispositi a saga fanga ya Manjanda i sada ngapisan anna sama sana sa
GPC Cleanu	(V/Y) :qt	<u>N</u>	pH:	*		

		001101111111111111		_	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	,
86-73-7	Fluorene		10 -290	<u> </u>	
7005-72-3	4-Chlorophenyl phenyl eth	<u>er</u>	410	<u> </u>	
84-66-2	Diethyl phthalate		410		
100-01-6	4-Nitroaniline		1000	Y	
534-52-1	4,6-Dinitro-2-methylpheno		1000	- <del>1 &gt; 0</del>	7
86-30-6	n-Nitrosodiphenylamine		410		
101-55-3	4-Bromophenyl phenyl eth	<u>ier</u>	410		
118-74-1	Hexachlorobenzene		410		P
87-86-5	Pentachlorophenol		-1000		''>
85-01-8	Phenanthrene		2500	ا ال	
120-12-7	Anthracene		470		
84-74-2	Di-n-butyl phthalate		410	<u> </u>	_
86-74-8	Carbazole		410		ل
206-44-0	Fluoranthene		410	Ψ'	
129-00-0	Pyrene	6	//O <del>-3400</del>		IJ
85-68-7	Butyl benzyl phthalate		410	- F	
91-94-1	3,3'-Dichlorobenzidine		410	¥_	
56-55-3	Benzo[a]anthracene		410	¥ ()	
218-01-9	Chrysene	P-4-3-1	410		
117-81-7	bis(2-Ethylhexyl)phthalate	e	410		
117-84-0	Di-n-octyl phthalate		410	4	
205-99-2	Benzo[b]fluoranthene		410		4
207-08-9	Benzo[k]fluoranthene		410	4 /	/1
50-32-8	Benzo[a]pyrene		410	4/	
193-39-5	Indeno[1,2,3-cd]pyrene		410	41	
53-70-3	Dibenz[a,h]anthracene		410	1 4	
191-24-2	Benzo[g,h,i]perylene		410	4	
100-51-6	Benzyl alcohol		410	4	
65-85-0	Benzoic acid		2100	l U	į

T-19-2 RE

_ab Name:	Upstate	Laboratori	es, Inc	Co	ontract: Beardsle	<u>y</u> L	
_ab Code:	10170	Ca	ase No.:	oyus papusas a suu-	SAS No.:	SDG No.:	BEA01
Matrix: (soil/	water)	SOIL	×		Lab Sample	ID: 138010	72,sa2848,b
Sample wt/v	ol:	30	(g/ml) <u>G</u>	nerre of december 14.	Lab File ID:	<del>B1276</del> 4	D B12821
Level: (low/i	med)	LOW			Date Receiv	ed: <u>5/18/01</u>	
% Moisture:	22	de	ecanted:(Y/N)	N	Date Extract	ed: 5/24/01	ding 1 de land kind dan a sa para magana
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyz	ed: <del>6/5/01</del>	6/14/01
Injection Vol	lume: 2	.0 (uL)			Dilution Fact	tor: 1.0	anad agos da district from the district
GPC Clean	(N/Y) :at	N	pH:				

119

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
111-44-4	bis(2-Chloroethyl)ether	· · · · · · · · · · · · · · · · · · ·	430	U
108-95-2	Phenol		430	U
95-57-8	2-Chlorophenol		430	<u>U</u>
541-73-1	1,3-Dichlorobenzene		430	U
106-46-7	1,4-Dichlorobenzene	1	430	U
95-50-1	1,2-Dichlorobenzene		430	Ų
108-60-1	bis(2-Chloroisopropyl)ethe	er	430	U
95-48-7	2-Methylphenol		430	<u>U</u>
67-72-1	Hexachloroethane		430	U
621-64-7	N-Nitroso-di-n-propylamin	e	430	U
106-44-5	4-Methylphenol		430	<u>U</u>
98-95-3	Nitrobenzene		430	<u> </u>
78-59-1	Isophorone		430	U
88-75-5	2-Nitrophenol		430	U
105-67-9	2,4-Dimethylphenol	·····	430	U
111-91-1	bis(2-Chloroethoxy)metha	ine	430	Ų
120-83-2	2,4-Dichlorophenol		430	U
120-82-1	1,2,4-Trichlorobenzene	[	430	Ų
91-20-3	Naphthalene		430	U
106-47-8	4-Chloroaniline		430	U
87-68-3	Hexachlorobutadiene		430	<u>U</u>
59-50-7	4-Chloro-3-methylphenol		430	U
91-57-6	2-Methylnaphthalene		430	U
77-47-4	Hexachlorocyclopentadie	ne	430	<u> </u>
88-06-2	2,4,6-Trichlorophenol		430	U
95-95-4	2,4,5-Trichlorophenol		1100	<u>U</u>
91-58-7	2-Chloronaphthalene		430	<u> </u>
88-74-4	2-Nitroaniline		1100	U
208-96-8	Acenaphthylene		430	U
131-11-3	Dimethyl phthalate		430	<u>U</u>
606-20-2	2,6-Dinitrotoluene		430	<u> </u>
83-32-9	Acenaphthene		430	U
99-09-2	3-Nitroaniline	CONTRACTOR OF STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET,	1100	Ŭ.
51-28-5	2,4-Dinitrophenol	tion of the second section of the second section of the second section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section section	1100	<u> </u>
132-64-9	Dibenzofuran		430	<u>U</u>
121-14-2	2,4-Dinitrotoluene	: - 1814-1-1914 - 1814 - 1814 - 1814 - 1814 - 1814 - 1814 - 1814 - 1814 - 1814 - 1814 - 1814 - 1814 - 1814 - 181	430	U
100-02-7	4-Nitrophenol		1100	U

#### EPA SAMPLE NO.

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

T-19-2 RE

Lab Name: Upstate Laboratories, Inc			(	Contract:	: <u>B</u>	leardsley			
Lab Code:	10170	C	ase No.:		SAS N	lo.:	S	DG No.:	BEA01
Matrix: (soil/	water)	SOIL	· · · ·		ا	ab S	Sample ID:	1380107	72,sa2848,b
Sample wt/v	ol:	30	(g/ml) G		L	.ab F	File ID:	<del>B12764.</del>	D 012821
Level: (low/	med)	LOW			D	Date	Received:	5/18/01	-
% Moisture:	22	d	ecanted:(Y/N)	Ν	D	Date	Extracted:	5/24/01	mer a an namanana codi bibah. Jihi d
Concentrate	d Extract	Volume:	1000 (uL)			Date	Analyzed:	· <del>6/5/0</del> 1	6/14/01
Injection Vol	lume: 2	.0 (uL)			C	Diluti	on Factor:	1.0	
GPC Cleanu	ap: (Y/N)	N	pH:						

#### **CONCENTRATION UNITS:**

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
86-73-7	Fluorene		430	U	<u> </u>
7005-72-3	4-Chlorophenyl phenyl	ether .	430	U	
84-66-2	Diethyl phthalate		430	. U . U	ì
100-01-6	4-Nitroaniline		1100	U	
534-52-1	4,6-Dinitro-2-methylphe	enol	1100	U	
86-30-6	n-Nitrosodiphenylamine	9	430	U	
101-55-3	4-Bromophenyl phenyl	ether	430	Ų	
118-74-1	Hexachlorobenzene		430	U	$\sim$
87-86-5	Pentachlorophenol		<del>- 1100</del>	U	14
85-01-8	Phenanthrene		430	U	
120-12-7	i Anthracene		430	U	
84-74-2	Di-n-butyl phthalate		430	U	
86-74-8	Carbazole		430	U	
206-44-0	Fluoranthene		430	Ú	
129-00-0	Pyrene		430	U	i
85-68-7	: Butyl benzyl phthalate		430 <del>210</del>	~ U	~
91-94-1	3,3'-Dichlorobenzidine		430	U	
56-55-3	Benzo[a]anthracene		430	U	:
218-01-9	Chrysene		430	U	
117-81-7	bis(2-Ethylhexyl)phthal	ate	1200	BU	/
117-84-0	Di-n-octyl phthalate		430 110	ر) بلیہ	/
205-99-2	Benzo[b]fluoranthene		430	U	
207-08-9	Benzo[k]fluoranthene		430	U	
50-32-8	Benzo[a]pyrene		430	U	
193-39-5	Indeno[1,2,3-cd]pyrene		430	U	
53-70-3	Dibenz[a,h]anthracene		430	U	
191-24-2	Benzo[g,h,i]perylene		430	Ü	ì
100-51-6	Benzyl alcohol	The second second to the second to the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	430	U	
65-85-0	Benzoic acid		2100	U	·

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#### 1B

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:	Upstate	Laborato	ories, Inc	Co	ntract:	Beardsley	
Lab Code:	10170		Case No.:		SAS No	o.: S	DG No.: BEA01
Matrix: (soil/v	vater)	SOIL.	****		La	b Sample ID:	13801073,sa2848,b
Sample wt/vo	ol;	30	(g/ml) G	and the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of th	La	ıb File ID:	B12765.D
Level: (low/n	ned)	LOW			Da	ate Received:	5/18/01
% Moisture:	29		decanted:(Y/N)	N	Da	ate Extracted:	5/24/01
Concentrated	d Extract	Volume:	1000 (uL)		Da	ate Analyzed:	6/5/01
Injection Volu	ume: 2	.0 (uL	)		Di	lution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH:	444			

#### **CONCENTRATION UNITS:**

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
111-44-4	bis(2-Chloroethyl)ethe	r	470	ΨN	"
108-95-2	Phenol		470	Ų \	
95-57-8	2-Chlorophenol		470	U \	
541-73-1	1,3-Dichlorobenzene		470	Ų	i i
106-46-7	1,4-Dichlorobenzene		470	Ų	
95-50-1	1,2-Dichlorobenzene		470	Ų	
108-60-1	bis(2-Chloroisopropyi)	ether	470	Ψ	
95-48-7	2-Methylphenol		470	Ų	
67-72-1	Hexachloroethane		470	Ų	
621-64-7	N-Nitroso-di-n-propyla	ımine	470	Ų	
106-44-5	4-Methylphenol		470	U	ľ
98-95-3	Nitrobenzene	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	470	Ū	
78-59-1	Isophorone	, a hard and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	470	V	<b>[</b> .
88-75-5	2-Nitrophenol		470	Ú	
105-67-9	2,4-Dimethylphenol	and the man and another order of the court of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same	470	U	
111-91-1	bis(2-Chloroethoxy)m	ethane	470	U	
120-83-2	2,4-Dichlorophenol		470	U	
120-82-1	1,2,4-Trichlorobenzen	е	470	V	
91-20-3	Naphthalene		470	Ų	107
106-47-8	4-Chloroaniline		470	Ų	
87-68-3	Hexachlorobutadiene		470	V	
59-50-7	4-Chloro-3-methylphe	nol	470	Ų į	'   
91-57-6	2-Methylnaphthalene		470	<b>V</b> (	
77-47-4	Hexachlorocyclopenta	adiene	470	Ų	 J
88-06-2	2,4,6-Trichlorophenol		470	Ų	1
95-95-4	2,4,5-Trichlorophenol		1200	Ų	
91-58-7	2-Chloronaphthalene		470	U	1
88-74-4	2-Nitroaniline		1200	U	!
208-96-8	Acenaphthylene		470	Ų	
131-11-3	Dimethyl phthalate		470	Ú	
606-20-2	2,6-Dinitrotoluene		470	U	
83-32-9	Acenaphthene		470		_
99-09-2	3-Nitroaniline		1200	U	
51-28-5	2,4-Dinitrophenol		1200	U	
132-64-9	Dibenzofuran		470	U.T	· 1
121-14-2	2,4-Dinitrotoluene	- Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Comp	470	υI	
100-02-7	4-Nitrophenol		1200	U F	 i

JY!

EPA SAMPLE NO.

T-20-1

ah Name	Linstate	Laboratories, Inc	Contract: Beards	sley	
		Case No.:		SDG No.: BE	A01
	.,,,,		the search	le ID: 13801073,s	
Matrix: (soil/	water)	SOIL			70120
Sample wt/v	ol:	30 (g/ml) <u>G</u>	Lab File IC	D: <u>B12765.D</u>	and and after the tensor to
Level: (low/		LOW	Date Rece	elved: 5/18/01	
,		decanted:(Y/N)	N Date Extra	acted: 5/24/01	
% Moisture:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	**** 7.115		yzed: 6/5/01	
Concentrate	ed Extract	Volume: 1000 (uL)			
Injection Vo	lume: 2	.0 (uL)	Dilution F	actor: 1.0	A
GPC Clean	up: (Y/N)	N pH:			
	, , ,	A Paragraph of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of t	CONCENTE	ATION UNITS:	
					Q
CAS N	10.	COMPOUND	(ug/L or ug/K	y) <u>UGING</u>	G.
	0 7	Fluorene		470 -74	ーナレゴ
86-7		4-Chlorophenyl pher	vl ether	470	43
	5-72-3	Diethyl phthalate	The same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the sa	470	41
84-6		4-Nitroaniline		1200	<u> </u>
	01-6 -52-1	4,6-Dinitro-2-methyli	henol	1200	4 11
		**************************************		470	¥ ( , , ,
*****	55.3	4-Bromophenyl pher	vi ether	470	4 \
	-55-3 74.1			470	4
	-74-1	Pentachlorophenol	,	-1200	
87-8	)1-8			560	1
	-12-7			470	<u> </u>
	A was been all a second	Di-n-butyl phthalate		470	417
84-7	74-2 74-8			470	رمحرا
	-44-0	Fluoranthene	And the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of th	470	<u> </u>
	-00-0	Pyrene		520	1
	-00-0 68-7	Butvi benzvi phthala	ite	470	PJ
	94-1	3,3'-Dichlorobenzidi		470	1600
14 -7 -6	55-3	Benzo[a]anthracene	1	4/0	FTTY"
	-01-9	· · · · · · · · · · · · · · · · ·	a special are made to protect the committee of the second dispectation and the second special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special special	470	U
	2-81-7		halate	470 4100	B 01
	'-84-0	Di-n-octyl phthalate		470	1
	5-99-2	Benzo[b]fluoranther	16	470	
	7-08-9	Benzolkliluoranther		470	<u> </u>
	32-8	Benzo[a]pyrene		470	1
	3-39-5	Indeno[1,2,3-cd]pyr	ene	470	4747
	70-3	Dibenz[a,h]anthrac		470	41-
	1-24-2	Benzo[g,h,l]perylen		470	41
,	0-51-6	Benzyl alcohol	No. 24 to 1989, or 1981 to 1981 to 1984 to 1981, many operations and the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set	470	1 4 1
	-85-0	Benzoic acid	recovery principle distinguish case determined copingle relative holds by its case and second up to be a con-	2300	

EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

T-20-2

.ab Name:	Upstate	Laborate	ories, Inc	Contract:	Beardsley	
ab Code:	10170		Case No.:	SAS No	o.: S	DG No.: BEA01
Matrix: (soil/v	water)	SOIL		La	b Sample ID:	13801074,sa2848,b
Sample wt/vo	ol:	30	(g/ml) <u>G</u>	La	ıb File ID:	B12766.D
Level: (low/r	med)	LOW	MATERIA PARAMETER NA SER .	Da	ate Received:	5/18/01
% Moisture:	26	er e 1 1385e	decanted:(Y/N)	N Da	ate Extracted:	5/24/01
Concentrate	d Extract	Volume:	1000 (uL)	Da	ate Analyzed:	6/5/01
Injection Vol	ume: 2	.0 (uL	.)	Di	lution Factor:	1.0
GPC Cleanu	ıp: (Y/N)	N	pH:			

#### CONCENTRATION UNITS:

		CONOCIALIA	OH OHITO.		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
111-44-4	bis(2-Chloroethyl)ether		450	ΨΛ	
108-95-2	Phenol		450	ψ	
95-57-8	2-Chlorophenol		450	Ψ	
541-73-1	1,3-Dichlorobenzene		450	Ψ	
106-46-7	1,4-Dichlorobenzene		450	Ψ	
95-50-1	1,2-Dichlorobenzene	)	450	Ψ	
108-60-1	bis(2-Chloroisopropyl)eth	ner !	450	Ψ	
95-48-7	2-Methylphenol		450	Ψ	
67-72-1	Hexachloroethane		450	Ψ	L
621-64-7	N-Nitroso-di-n-propylami	ne	450	Ψ	
106-44-5	4-Methylphenol		450	Ψ_	
98-95-3	Nitrobenzene		450	Ψ	
78-59-1	Isophorone	!	450	Ψ	
88-75-5	2-Nitrophenol		450	Ų	
105-67-9	2,4-Dimethylphenol		450	Щ	
111-91-1	bis(2-Chloroethoxy)meth	ane	450	Ψ	
120-83-2	2,4-Dichlorophenol		450	ψ	
120-82-1	1,2,4-Trichlorobenzene	and would for all to the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same	450	Ψ	101
91-20-3	Naphthalene		450	Ψ	( )
106-47-8	4-Chloroanlline		450	Ψ	
87-68-3	Hexachlorobutadiene		450	ψ	
59-50-7	4-Chloro-3-methylpheпо		450	ф	
91-57-6	2-Methylnaphthalene		450	Ψ_	
77-47-4	Hexachlorocyclopentadi	ene	450	Ψ	
88-06-2	2,4,6-Trichlorophenol		450	Ψ_	
95-95-4	2,4,5-Trichlorophenol	,	1100	Ψ	
91-58-7	2-Chioronaphthalene		450	Ψ	
88-74-4	2-Nitroaniline		1100	Ψ	1
208-96-8	Acenaphthylene		450	Ψ	1.
131-11-3	: Dimethyl phthalate	and time to the same to the sa	450	Ψ	$L_{i}$
606-20-2	2,6-Dinitrotoluene		450	Ψ	
83-32-9	Acenaphthene		450	Ψ	: 1
99-09-2	3-Nitroaniline		1100	Ψ	
51-28-5	2,4-Dinitrophenol		1100	Ψ	
132-64-9	Dibenzofuran	L. Commence of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of t	450	<u> </u>	L
121-14-2	2,4-Dinitrotoluene		450	_Ψ/	
100-02-7	4-Nitrophenol		1100	Ψ.	

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#### EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

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T-20-2

Lab Name:	Upstate	Laborato	rles, Inc	C	ontract:	Beardsley		
Lab Code:	10170	~~.	ase No.:		SAS No	.: S	DG No.: BEA01	
Matrix: (soil/	water)	SOIL			La	b Sample ID:	13801074,sa2848,t	<u>)</u>
Sample wt/v		30	(g/ml) G		La	b File ID:	B12766,D	
Level: (low/		LOW			Da	ite Received:	5/18/01	
% Moisture:			lecanted:(Y/N)	N	Da	ite Extracted:	5/24/01	
Concentrate	ed Extract	Volume:	1000 (uL)		Da	ite Analyzed:	6/5/01	
Injection Vo	lume: 2	2.0 (uL)	•		Di	lution Factor:	1.0	
GPC Clean	up: (Y/N)	N	pH:					
							LIBUTO	

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Lab Name:	Upstate	Labora	tories, Inc	Contract:	Beardsley	1-21-1 (C
Lab Code:	10170		Case No.:	SAS No	o.: S	DG No.: BEA01
Matrix: (soil/	water)	SOIL		La	b Sample ID:	13801075,sa2848,b
Sample wt/v	ol:	30	(g/ml) G	La	b File ID:	·B12767.D 6/2822
Level: (low/	med)	LOW	•	Da	ate Received:	5/18/01
% Moisture:	21		decanted:(Y/N)	N Da	ate Extracted:	5/24/01
Concentrate	ed Extract	Volume	e: 1000 (uL)	Da	ate Analyzed:	6/5/04 6/14/01

Injection Volume: 2.0 (uL)

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

Dilution Factor: 1.0

		OONOLIVATI		_
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
111-44-4	bis(2-Chloroethyl)ether		420	U
108-95-2	Phenol		420	U
95-57-8	2-Chlorophenol		420	U
541-73-1	1,3-Dichlorobenzene		420	U
106-46-7	1.4-Dichlorobenzene		420	U
95-50-1	1.2-Dichlorobenzene		420	U
108-60-1	bis(2-Chloroisopropyl)e	ther	420	Ų
95-48-7	2-Methylphenol		420	U
67-72-1	Hexachloroethane	;	420	U
621-64-7	N-Nitroso-di-n-propylar	nine	420	Ų
106-44-5	4-Methylphenol		420	U
98-95-3	Nitrobenzene		420	U
78-59-1	Isophorone		420	U
88-75-5	2-Nitrophenol		420	U
105-67-9	2,4-Dimethylphenol		420	U
111-91-1	bis(2-Chloroethoxy)me	thane	420	U
120-83-2	2,4-Dichlorophenol		420	U
120-82-1	1,2,4-Trichlorobenzene		420	U
91-20-3	Naphthalene		420	U
106-47-8	4-Chloroaniline		420	U
87-68-3	Hexachlorobutadiene		420	U
59-50-7	4-Chloro-3-methylphen	ol	420	U
91-57-6	2-Methylnaphthalene		420	Ü
77-47-4	Hexachlorocyclopentac	diene	420	U
88-06-2	2,4,6-Trichlorophenol	,	420	U
95-95-4	2,4,5-Trichlorophenol		1100	U
91-58-7	2-Chloronaphthalene		420	U
88-74-4	2-Nitroaniline		1100	U
208-96-8	Acenaphthylene		420	U
131-11-3	Dimethyl phthalate		420	U
606-20-2	2,6-Dinitrotoluene		420	U
83-32-9	Acenaphthene		420	U
99-09-2	3-Nitroaniline		1100	Ų
51-28-5	2,4-Dinitrophenol		1100	U
132-64-9	Dibenzofuran		420	U
121-14-2	2,4-Dinitrotoluene	1	420	U
100-02-7	i 4-Nitrophenol		1100	U

ATILE ORGANICS ANALYSIS DATA SHEET

atories, Inc. Contract: Beardslev

Lab Name:	Upstate	Laboratories, Inc	Contra	act: Beardsle	ey L	
Lab Code:	10170	Case No.:	SAS	S No.:	SDG No.: BEA01	
Matrix: (soil/	water)	SOIL		Lab Sample	ID: 13801075,sa2848,b	
Sample wt/v	ol:	30 (g/ml) <u>G</u>	and a little for the feet person	Lab File ID:	-B12707.D 6/2822	•
Level: (low/	med)	LOW		Date Receiv	red: 5/18/01	
% Moisture:	21	decanted:(Y/N)	N	Date Extrac	ted: 5/24/01	
Concentrate	d Extract	Volume: 1000 (uL)		Date Analyz	ed: -6/5/01 C/14/01	$\sim$ $\sim$ $\sim$ $\sim$
Injection Vol	lume: 2	!.0 (uL)		Dilution Fac	tor; 1,0	/ /
GPC Claani	in: /V/N)	N nH:				

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
86-73-7	Fluorene		420	U	
7005-72-3	4-Chlorophenyl phenyl ethe	er	420	<u>U</u>	
84-66-2	Diethyl phthalate		420	U	
100-01-6	4-Nitroaniline		1100	U	
534-52-1	4,6-Dinitro-2-methylphenol		1100	U	
86-30-6	n-Nitrosodiphenylamine		420	U	
101-55-3	4-Bromophenyl phenyl ethe	er	420	U	
118-74-1	Hexachlorobenzene		420	U	
87-86-5	Pentachiorophenol		-1100		<b>√</b> ₹
85-01-8	Phenanthrene		420	Ų	
120-12-7	Anthracene		420	U	
84-74-2	Di-n-butyl phthalate		420	U	
86-74-8	Carbazole		420	U	
206-44-0	Fluoranthene		420	U	
129-00-0	Pyrene		420	U	
85-68-7	Butyl benzyl phthalate		420	U	
91-94-1	3,3'-Dichlorobenzidine	.,,	420	U	
56-55-3	Benzo(a)anthracene		420	U	_
218-01-9	Chrysene	ika	420	U	. ` `
117-81-7	bis(2-Ethylhexyl)phthalate	-70	7.XU 140	<u> </u>	Spectra procurt in T-21-1 RE
117-84-0	Di-n-octyl phthalate	g gardag yaya - Banga () aga kaya kaji iji ilah kata ka ya ya ka ka ka ka ka ya ka ka ka ka ka ka ka ka ya ka	420	U	Spectra acscut
205-99-2	Benzo[b]fluoranthene		420	U	
207-08-9	Benzo[k]fluoranthene		420	U	10 7-21-126
50-32-8	Benzo[a]pyrene		420	U	
193-39-5	Indeno[1,2,3-cd]pyrene		420	U	233
53-70-3	Dibenz[a,h]anthracene		420	U	]
191-24-2	Benzo[g,h,i]perylene		420	Ü	4
100-51-6	Benzyl alcohol		420	U	-
65-85-0	Benzoic acid		2100	Ū	·

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# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T-21-2 RE

Lab Name: Ups	tate Laborato	les, Inc	Contract:	Beardsley		
Lab Code: 101	70 C	ase No.:	SAS No	o.: S	DG No.: BEA01	
Matrix: (soil/water	r) SOIL		La	b Sample ID:	13801076,sa2848,b	
Sample wt/vol:	30	(g/ml) G	La	b File ID:	-B12768-D B12823	
Level: (low/med)	LOW		Da	ate Received:	5/18/01	
% Moisture:	21 0	ecanted:(Y/N)	N Da	ate Extracted:	5/24/01	1
Concentrated Ex	tract Volume:	1000 (uL)	Da	ate Analyzed:	615101 G/14/01	()
Injection Volume:	: 2.0 (uL)		Di	ilution Factor:	1.0	
GPC Cleanup: (Y	(/N) N	pH:				

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
111-44-4	bis(2-Chloroethyl)ether	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	420	U
108-95-2	Phenol	1	420	<u>U</u> ;
95-57-8	2-Chlorophenol		420	U
541-73-1	1,3-Dichlorobenzene	and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t	420	U
106-46-7	1.4-Dichlorobenzene	The same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the sa	420	U
95-50-1	1,2-Dichlorobenzene		420	U
108-60-1	bis(2-Chloroisopropyl)et	her	420	U
95-48-7	2-Methylphenol		420	U
67-72-1	Hexachloroethane		420	U
621-64-7	N-Nitroso-di-n-propylam	ine	420	Ų
106-44-5	4-Methylphenol		420	U
98-95-3	Nitrobenzene		420	U
78-59-1	Isophorone		420	U
88-75-5	2-Nitrophenol	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	420	U
105-67-9	2,4-Dimethylphenol		420	U
111-91-1	bis(2-Chloroethoxy)meth	nane	420	U
120-83-2	2,4-Dichlorophenol		420	U
120-82-1	1,2,4-Trichlorobenzene		420	U
91-20-3	Naphthalene		420	U
106-47-8	4-Chloroaniline		420	U
87-68-3	Hexachlorobutadiene		420	U
59-50-7	4-Chloro-3-methylpheno	ol .	420	U
91-57-6	2-Methylnaphthalene		420	<u>U</u>
77-47-4	Hexachlorocyclopentad	ene	420	U
88-06-2	2,4,6-Trichlorophenol		420	<u>U !</u>
95-95-4	2,4,5-Trichlorophenol	1	1100	<u>U</u>
91-58-7	2-Chloronaphthalene		420	U
88-74-4	2-Nitroaniline		1100	<u>U</u> !
208-96-8	Acenaphthylene		420	U
131-11-3	Dimethyl phthalate	į	420	U
606-20-2	2,6-Dinitrotoluene		420	U
83-32-9	Acenaphthene		420	U
99-09-2	3-Nitroaniline		1100	U
51-28-5	2,4-Dinitrophenol		1100	<u> </u>
132-64-9	Dibenzofuran		420	<u> </u>
121-14-2	2,4-Dinitrotoluene	and which the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication of the supplication	420	Ų
100-02-7	, 4-Nitrophenol	T	1100	<u>U</u> ;

#### 10

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T-21-2 RE Lab Name: Upstate Laboratories, Inc Contract: Beardsley Case No.: SAS No.: SDG No.: BEA01 Lab Code: 10170 SOIL Lab Sample ID: 13801076,sa2848,b Matrix: (soil/water) -B12768-D J以82了 30 (g/mi) G Sample wt/vol: Lab File ID: Date Received: 5/18/01 Level: (low/med) LOW 21 decanted:(Y/N) N Date Extracted: 5/24/01 % Moisture: Concentrated Extract Volume: 1000 (uL) Date Analyzed: -6/5/Q1 Injection Volume: 2.0 (uL) Dilution Factor: 1.0 GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
86-73-7	Fluorene		420	U	,
7005-72-3	4-Chlorophenyl phenyl ethe	Pr	420	Ŭ	
84-66-2	Diethyl phthalate		420	Ū	
100-01-6	4-Nitroaniline		1100	Ū	
534-52-1	4,6-Dinitro-2-methylphenol		1100	Ū	
86-30-6	n-Nitrosodiphenylamine		420	Ū	
101-55-3	4-Bromophenyl phenyl ethe	r	420	Ū	
118-74-1	Hexachlorobenzene		420	U	
87-86-5	Pentachlorophenol		<del>- 1100 -</del>		2
85-01-8	Phenanthrene	and the state of the state of the state of the state of	420	<u> </u>	
120-12-7	Anthracene	1	420	U	ł
84-74-2	Di-n-butyl phthalate		420	Ū	
86-74-8	Carbazole		420	Ū	
206-44-0	Fluoranthene		420	Ū	
129-00-0	Pyrene		420	U	
85-68-7	Butyl benzyl phthalate		420	U	
91-94-1	3,3'-Dichlorobenzidine		420	U	
56-55-3	Benzo[a]anthracene		420	U	
218-01-9	Chrysene		420	U	
117-81-7	bis(2-Ethylhexyl)phthalate		420100	U 48-	1-21-2RE
117-84-0	Di-n-octyl phthalate		420	Ū	1 21 2 125
205-99-2	Benzo[b]fluoranthene		420	Ü	1-di-da
207-08-9	Benzo[k]fluoranthene		420	U	253
50-32-8	Benzo[a]pyrene		420	U	0 ,
193-39-5	Indeno[1,2,3-cd]pyrene		420	U	
53-70-3	Dibenz[a,h]anthracene		420	U	
191-24-2	Benzo[g,h,i]perylene		420	U	
100-51-6	Benzyl alcohol		420	U	
65-85-0	Benzoic acid		2100	U	

#### 1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T-22-1 RE

ab Name: Upstate L	aboratories Inc	Contract: Beardsley	1-2.	~- i # C
		SAS No.:	SDG No.: BE	-A01
	Case No.:	The same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the sa	D: 13801077,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Matrix: (soil/water)	30IL	·		
Sample wt/vol:	30 (g/ml) G	Lab File ID:	B12769-D	<u> 3128</u> 24
Level: (low/med)		Date Received	d: <u>5/18/01</u>	al annual remarks of the
	decanted:(Y/N)	N Date Extracte	d: 5/24/01	
		Date Analyze	d: <del>=6/5/0</del> 1 <b>G/</b> /	14/01
	/olume: 1000 (uL)	Dilution Facto		
Injection Volume: 2.0	<u>)</u> (uL)	Dilution racto	1. 1.0	
GPC Cleanup: (Y/N)	N pH:			
	••••••••••••••••••••••••••••••••••••••	CONCENTRATIO	N UNITS:	
		·		Q
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/NG	<b>S</b>
111-44-4	bis(2-Chloroethyl)eth	er	430	U
108-95-2	! Di 1		430	U
95-57-8	0.011		430	<u> </u>
541-73-1	1,3-Dichlorobenzene		430	<u>U</u>
106-46-7	1,4-Dichlorobenzene		430	<u> </u>
95-50-1	1,2-Dichlorobenzene		430	<u>U</u>
108-60-1	bis(2-Chloroisopropy		430	U
95-48-7			430	U
67-72-1	Hexachloroethane		430	U
621-64-7	N-Nitroso-di-n-propy	lamine	430	U
106-44-5	4-Methylphenol		430	Ų
98-95-3	Nitrobenzene		430	U
78-59-1	Isophorone	Note that I will be the supplicated and another interest of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplications of the supplica	430	<u> </u>
88-75-5	2-Nitrophenol		430	<u> </u>
105-67-9	2,4-Dimethylphenol		430	<u>U</u>
111-91-1	bis(2-Chloroethoxy)r	<u>nethane</u>	430	<u>U</u>
120-83-2	2,4-Dichlorophenol		430	<u>U</u>
120-82-1	1,2,4-Trichlorobenze	ne	430	U
91-20-3	Naphthalene		430	
106-47-8	4-Chloroaniline		430	<u> </u>
87-68-3	Hexachlorobutadien		430	<u>U</u>
59-50-7	4-Chloro-3-methylph		430	U
91-57-6	2-Methylnaphthalene		430 430	Ü
77-47-4	Hexachlorocyclopen		430	U
88-06-2	2,4,6-Trichloropheno		1100	L U
95-95-4	2,4,5-Trichloropheno		430	U
91-58-7	2-Chloronaphthalen	<u>e</u>	1100	: <u> </u>
88-74-4	2-Nitroaniline	2004 A TO THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE OF THE RESIDENCE	430	U
208-96-8	Acenaphthylene		430	Ü
131-11-3	Dimethyl phthalate		430	Ü
606-20-2	2,6-Dinitrotoluene	The state of the state of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the sales of the s	430	Ū
83-32-9	Acenaphthene	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	1100	Ü
99-09-2	3-Nitroaniline	where $\alpha$ is a constant point $\alpha$ , $\beta$ is a constant point of $\alpha$ . In the constant $\alpha$	1100	Ü
51-28-5	2,4-Dinitrophenol Dibenzofuran	MANAGER IN DES ME 199 A - ELIZA DE SEL ESTADORISMO EL SER SEL ESTADORISMO EN SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO EL SER SEL ESTADORISMO.	430	Ü
132-64-9	2,4-Dinitrotoluene	the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	430	Ü
121-14-2	4-Nitrophenol	The distance play there are an experience assessment of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	1100	Ū
100-02-7	4-MINDPLICITOR			

#### 1C

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T-22-1 RE

Lab Name: Upstate L	aboratories, Inc	Contract: Beards	sley		
Lab Code: <u>10170</u>	Case No.:	SAS No.:	SDG No.: E	EA01	<del>-</del>
Matrix: (soil/water)	SOIL		e ID: <u>13801077</u>	Carles and Comments	-
Sample wt/vol:	30 (g/mi) G	Lab File ID	: <del>-B12769:D</del>	B/282	4
Level: (low/med)	LOW	Date Rece	ived: 5/18/01		
% Moisture: 23	decanted:(Y/N)	N Date Extra	cted: 5/24/01		all
Concentrated Extract \	/olume: 1000 (uL)	Date Analy	/zed:6/5/04 C/	14/01	1981
Injection Volume: 2.0	)(uL)		otor: 1.0	•	
GPC Cleanup: (Y/N)	N pH:			a	
		CONCENTRA	TION UNITS:		
CAS NO.	COMPOUND	(ug/L or ug/Kg		Q	
86-73-7	Fluorene	- N	430	U	
7005-72-3		ether	430	Ū	
84-66-2				Ū	
100-01-6	4-Nitroaniline		1100	U	
534-52-1	4,6-Dinitro-2-methylphe	enol	1100	U	
86-30-6	n-Nitrosodiphenylamin		430	U	
101-55-3	4-Bromophenyl phenyl	ether	430	U	
118-74-1	Hexachlorobenzene		430	U	_
87-86-5	Pentachlorophenol		<del>-1100</del>	U	R
85-01-8	Phenanthrene		430	U	`
120-12-7	Anthracene		430	U	
84-74-2	Di-n-butyl phthalate		430	U	
86-74-8	Carbazole		430	U	
206-44-0	Fluoranthene		430	U	
129-00-0	Pyrene		430	U	
85-68-7			430	U	
91-94-1	3,3'-Dichlorobenzidine		430	U	
56-55-3	Benzo[a]anthracene	RESIDENCE OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE P	430	<u> </u>	
218-01-9	Chrysene		430	U	
117-81-7	bis(2-Ethylhexyl)phthal	ate	460	28 U	- Spection
117-84-0	Di-n-octyl phthalate		430	U	In T-22-1 1
205-99-2	Benzo[b]fluoranthene		430	U	
207-08-9	Benzo[k]fluoranthene		430	U	
50-32-8	Benzo[a]pyrene	 	430	U	
193-39-5	Indeno[1,2,3-cd]pyrene		430	<u>U</u>	
53-70-3	<u>Dibenz(a,h)anthracene</u>	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	430	U	
191-24-2	Benzo[g,h,i]perylene		430	<u>U</u>	
100-51-6	Benzyl alcohol		<u>430</u> ;	<u>U</u>	
65-85-0	Benzoic acid		2200	U	

#### DATA USABILITY SUMMARY REPORT

for

BEARDSLEY DESIGN ASSOCIATES

431 EAST FAYETTE STREET

EAST SYRACUSE, NY 13202

# FORMER BROWN MANUFACTURING SITE SDG BEA01 Sampled 05/15/01, 05/16/01, 05/17/01

#### SOIL SAMPLES for PCB

T17-2 T19-1	(13801065) (13801068) (13801071) (13801074)	T16-2 T18-1 T19-2 T21-1	(13801066) (13801069) (13801072) (13801075)	T17-1 T18-2 T20-1 T21-2	(13801067) (13801070) (13801073) (13801076)
T22-1	(13801077)				

#### DATA ASSESSMENT

A PCB data package containing analytical results for thirteen soil samples, was received from Beardsley Design Associates on 16Nov01. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Former Brown Manufacturing site, were identified by Chain of Custody documents and trackable through the work of Upstate Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8082, addressed determinations of PCB. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 6/2000. protocol was not followed, the current EPA Region II Functional Guidelines (SPO NO. HW-6, Rev. #8, Jan. 1992, CLP Organics Data Review and Preliminary Review), was used as a technical reference.

The results reported from T19-1 have been qualified as estimations due to low surrogate standard recoveries.

The low recoveries reported for matrix spikes to T18-1 require the qualification of all data reported from this group of samples. observed performance appears to be caused by an interfering sample matrix.

#### CORRECTNESS AND USABILITY

It is noted that although analyses were requested by SW-846 Method 8082, this group of samples were actually analyzed by Method 8080. This substitution is felt to have no impact on reported data. negative PCB results reported from each sample appear to be well supported.

Reported data should be considered technically defensible in its present form. Reported concentrations that are felt to provide a usable estimation of the conditions being measured have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

James B. Baldwin Date: 1/2/62

#### SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved, or are not analyzed within established holding times, may no longer be considered representative. Holding times are calculated from the time of sample collection. Samples must remain chilled to 4°C from the time of collection. Aqueous samples must be extracted within 7 days. The extraction of soil samples must begin within 14 days of collection. Analyses must be completed within 40 days of extraction. Each sample delivery group, containing up to 20 samples, should include a field duplicate, a matrix spike, matrix spike duplicate, and a rinsate blank.

This sample delivery group, which included thirteen soil samples, was collected from the Former Brown Manufacturing site between 15May01 and 17May01. Three samples collected on 15May01, five collected on 16May01, and five collected on 17May01 were delivered to the laboratory, after hours, on the day of collection. Each cooler of samples arrived intact. The sample receipt log indicated that the sample coolers contained ice. It is noted that only one cooler temperature, 5.9°C, was documented in the sample receipt log.

Sample extractions were performed on 25May01. Analyses were completed by 13Jun01. Program holding time limitations were satisfied.

#### BLANKS

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

One method blank was analyzed with this group of samples. This blank was free of PCB contamination.

#### CALIBRATION

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration standards verify instrument stability.

The requested method, SW-846 8082, requires a 3-5 point calibration for Aroclors 1016 and 1260. This calibration was not performed. The initial calibration included five levels of calibration for the single component pesticides of Method 8080. These standards demonstrated an acceptable degree of detector linearity. The initial calibration also included a 100  $\mu \rm g/l$  standard of each individual Aroclor. The standards were analyzed on two different chromatography columns. Although grossly over attenuated, these standards demonstrated that Aroclor concentrations equaling CRDL

would be detected if present in samples. Because Aroclors were not detected in program samples, data has been left unqualified.

A continuing calibration verification was completed prior to and following the analysis of this group of samples. These checks produced acceptable recoveries of AR1016 and AR1260.

#### SURROGATES

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Two surrogates, TCX and DCB were added to each sample. In most cases, these additions were recovered successfully. Low recoveries were reported for the TCX additions to T16-1, T16-2, T18-2 and T19-1. Poor performance was also produced by the DCB addition to T19-1. Only T19-1 produced a low recovery of both surrogates. Based on this performance, the negative PCB results reported from T19-1 have been qualified as estimations.

MATRIX SPIKES / MATRIX SPIKE DUPLICATES / MATRIX SPIKED BLANKS Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

Sample T18-1 was selected for matrix spiking. Aroclor 1248 was added to two portions of this sample. Both additions produced recoveries of 61%. A spiked blank was also digested and analyzed with this group of samples. The spiked blank produced an AR1248 recovery of 94%. These results indicate that the results reported from this group of samples might be affected by a significant negative bias. The negative PCB results reported from each program sample have been qualified as estimations.

SAMPLED 11/15/99 thru 11/18/99

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SITE
MANUFACTURING
BROWN
FORMER

MS/MSD	ALL J/UJ ALL J/UJ
SURROGATES	ALL UJ
	(13801065) (13801066) (13801067) (13801068) (13801070) (13801071) (13801072) (13801073) (13801075) (13801075)
	T166-1 T176-2 T177-1 T186-2 T188-2 T199-1 T200-1 T210-2

NYSDEC SAMPLE NO. 7-16-1

Lab Name: Upstate Labs Inc.

Contract: BEARDS/RY

Lab Code: 10170 Case No.:

SAS No.:

SDG No .: BEA-01

Matrix: Soic

Lab Sample ID: /38-65

Sample wt.: 30 (6)

% Moisture: 12 Decanted: NO

Extraction: Solakork

Conc Extract Vol.: 10000 (uL)

Injection Vol.: (uL)

GPC Cleanup: No

: Hq

Instr. ID: ULI 65

Lab File ID: GAO 743

Date Received: 5/18/0

Date Extracted: 5/25/01

Date Analyzed : 6/12/01

Time Analyzed: 749

Dilution Factor: /

Sulfur Cleanup: Yes

Pa Batch: \$46898

		CONCENTRATION UNITS		
CAS NO.	COMPOUND	uglka	۵	
12674-11-2	Araclor 1016	38	2.8	7
11104-28-2	Aroclor 1221	354	4	1
11141-16-5	Aroclor 1232	38	11	1
53469-21-9	Aroclor 1242	38	7/	> U)
12672-29-6	Aroclar 1248	38	17	
11097-69-1	Aroclor 1254	252	11	
11096-82-5	Araclor 1260	33	À	)

NYSDEC SAMPLE NO. T-16-2

Lab Name: <u>Upstate Labs Inc.</u>

Contract: Beniebs 164

Lab Code: 10170

Case No.:

SAS No.:

SDG NO. : BEA-01

Matrix: Soil

Lab Sample ID: 138-44

Sample wt.: 30 (6)

Lab File ID: 610743

% Moisture: 30 Decanted: NO

Date Received: 5/18/01

Date Extracted: 5/25/0(

Extraction: SHAKER

Conc Extract Vol.: 19000 (uL)

Date Analyzed: 6/12/01

Injection Vol.: / (uL)

Time Analyzed: 8 25pm

GPC Cleanup: No

Dilution Factor: 1

pH:

Sulfur Cleanup: Yes

Instr. ID: ULI 65

		CONCENTRATION UNITS	_	
CAS NO.	COMPOUND	V91K3	Q	
12674-11-2	Aroclar 1016	43	417	
11104-28-2	Aroclor 1221	43	<u> </u>	
11141-16-5	Aroclor 1232	43		
53469-21-9	Aroclor 1242	4/3	<u>4 </u> }	( U
12672-29-6	Aroclor 1248	43		
11097-69-1	Aroclor 1254	4/3		
11096-82-5	Aroclor 1260	43	<u> </u>	)

NYSDEC SAMPLE NO. T-17-01

Lab Name: <u>Uostate Labs Inc.</u>

Contract: Beared sley

Lab Code: 10170

Case No.:

SAS No.:

SDG NO .: 15579-01

Matrix: Soi

Sample wt.: 30 (G)

% Moisture: 24 Decanted: NO

Extraction: 8HAKOK

Conc Extract Vol.: /0000 (uL)

Injection Vol.: / (uL)

GPC Cleanup: No

pH:

Instr. ID: WLI CS

Lab Sample ID: /38.47

Lab File ID: GA0743

Date Received: 5/18/01

Date Extracted: 5/25/2

Date Analyzed: 4/12/4

Time Analyzed: 9 00

Dilution Factor: /

Sulfur Cleanup: Yes

			CONCENTRATION UNITS		
CAS NO.	COMPOUND	)	13/150	Q	
12674-11-2	Aroclor 1	016	2/3/	1/3	
11104-28-2	Aroclar 1	221	44	ė.	
11141-16-5	Aroclor 1	1232	2/4/	u l	
53469-21-9	Aroclor 2	1242	4141	cl_S	. 11
12672-29-6	Aroclor	1248	4/4	4	٠
11097-69-1	Aroclor ]	1254	44	L	
11096-82-5	Aroclar	1260	44	t ( )	

NYSDEC SAMPLE NO. T-17-2

Lab Name: <u>Upstate Labs Inc.</u>

Contract: Bandsley

Lab Code: <u>10170</u>

Case No.:

SAS No.:

SDG NO. BEA. 01

Matrix: 3012

Lab File ID: GAO 743

Lab Sample ID:/38.68

Sample wt.: 30 (C)

Date Received: 5/18/0/

% Moisture: 37 Decanted: NO

Date Extracted: 5/25/01

Extraction: SHAKOK Conc Extract Vol.: /0000 (uL)

Date Analyzed: 6/12/0/

Injection Vol.:

1 (uL)

Time Analyzed: 934pm Dilution Factor: /

GPC Cleanup: No

pH:

Sulfur Cleanup: Yes

Instr. ID: ULI 65

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	V9/K3	<u> </u>
12674-11-2	Aroclor 1016	50	41
11104-28-2	Aroclor 1221	520	
11141-16-5	Aroclor 1232	520	4
53469-21-9	Aroclor 1242	50	4\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
12672-29-6	Aroclor 1248	50	<u></u>
11097-69-1	Aroclor 1254	50	
11096-82-5	Aroclor 1260	\$70	

NYSDEC SAMPLE NO. T.18.1

Lab Name: <u>Upstate Labs Inc.</u>

Contract: Beneasley

Lab Code: 10170

Case No.:

SAS No.:

SDG No .: BEA-01

Matrix: 501

Sample wt.: 30 (6)

Lab File ID: 6A0743

Lab Sample ID: 138-69

% Moisture: 25 Decanted: NO

Date Received: 5/18/0

Extraction: SHAKE

Date Extracted: 5/25/01

Conc Extract Vol.: /0000 (uL)

Date Analyzed: 6/12/0

Injection Vol.: (uL)

Time Analyzed: 101 pm

GPC Cleanup: No

: Hq

Dilution Factor: /

Instr. ID: ULI 65

Sulfur Cleanup: Yes

			CONCENTRATION UNITS		
CAS NO.	COMPOUN	D	U31/G	Q.	
12674-11-2	Aroclor	1016	44	4( )	١
11104-28-2	Aroclor	1221	44	И	}
11141-16-5	Aroclor	1232	44	41	1.1
53469-21-9	Aroclor	1242	44	Ш	707
12672-29-6	Araclar	1248	44	4	ı
11097-69-1	Aroclar	1254	44	4	
11096-82-5	Aroclor	1260	44	ik !	

NYSDEC SAMPLE NO. T- 18.2

Lab Sample ID: /38-70

Lab File ID: 640743

Date Received: 5/18/01

Date Extracted: 5/05/01

Date Analyzed: 6/63/01

Time Analyzed: //58pm

Lab Name: Upstate Labs Inc.

Contract: BEARDS/LY

Lab Code: 10170

Case No.:

SAS No.:

SDG No. BOM-01

Matrix: Soil

Sample wt.: 30

(C)

* Moisture: 23

Decanted: NO

Extraction:

3 HAKOK

Conc Extract Vol.: /000 (uL)

Injection Vol.: (uL)

GPC Cleanup: No

pH:

Instr. ID: ULI 65

Dilution Factor: /

Sulfur Cleanup: Yes

		CONCENTRATION UNITS	_
CAS NO.	COMPOUND	V31K3	Q ,
12674-11-2	Aroclor 1016	43	
11104-28-2	Aroclor 1221	43	41
11141-16-5	Aroclor 1232	43	4(-1
53469-21-9	Aroclor 1242	43	4(_)V)
12672-29-6	Aroclor 1248	43	41. (
11097-69-1	Aroclor 1254	43	41,
11096-82-5	Araclor 1260	43	4(

NYSDEC SAMPLE NO. 7-19-1

Lab Name: Upstate Labs Inc.

Contract: Benesley

Lab Code: 10170

Casa No.:

SAS No.:

SDG No. : BEA-01

Matrix: SoiC

Lab File ID: BR0743

Sample wt.: 80 (C)

% Moisture: /9 Decanted: NO

Date Received: 5/18/01

Lab Sample ID: /38-7/

Extraction: 3 HAKBK

Date Extracted: 5/35/01

Conc Extract Vol.: 10000 (uL)

Date Analyzed: 0/13/0/

Injection Vol.: / (uL)

Time Analyzed: 1233AM

GPC Cleanup: No

pH:

Dilution Factor: /

Instr. ID: ULI 65

Sulfur Cleanup: Yes

			CONCENTRATION UNITS	_	
CAS NO.	COMPOUN	D	V31/60	Q	
12674-11-2	Aroclor	1016	41	41	
11104-28-2	Aroclor	1221	41		
11141-16-5	Aroclor	1232	4(	11[	1
53469-21-9	Araclor	1242	41		F-0 (
12672-29-6	Aroclor	1248	271	L L	
11097-69-1	Aroclor	1254	4/	<u>(-{(</u>	
11096-82-5	Arocior	1260	41	<u> </u>	

NYSDEC SAMPLE NO. T.19-2

Lab Name: Upstate Labs Inc.

Contract: BOARDS/RY

Lab Code: 10170

Case No.:

SAS No.:

SDG No.: BEA-OL

Matrix: 50/2

Sample wt.: 30 (6)

% Moisture: 22 Decanted: NO

Extraction: SMARES

Conc Extract Vol.: /0000 (uL)

Injection Vol.: / (uL)

GPC Cleanup: No

pH:

Instr. ID: ULI 65

Lab Sample ID: 138.72

Lab File ID: BAO743

Date Received: 5/18/01

Date Extracted: 5/25/01

Date Analyzed: 6/13/0/

Time Analyzed: 108 Am

Dilution Factor: (

Sulfur Cleanup: Yes

		CONCENTRATION UNITS	
CAS NO.	COMPOUND	101169	
12674-11-2	Araclar 1016	43	4
11104-28-2	Aroclor 1221	43	
11141-16-5	Aroclor 1232	43	
53469-21-9	Aroclor 1242	43	
12672-29-6	Aroclor 1248	43	
11097-69-1	Aroclor 1254	4/3	41.11
11096-82-5	Aroclor 1260	43	4()

NYSDEC SAMPLE NO. 7.20-1

Lab Name: Upstate Labs Inc.

Contract: BOAKDS/LY

Lab Code: <u>10170</u>

Case No.:

SAS No.:

SDG No.: B& 1-01

Matrix: 5012

Sample wt.: 30 (6)

% Moisture: 29 Decanted: NO

Extraction: SHAKER

Conc Extract Vol.: 10000 (uL)

Injection Vol.: / (uL)

GPC Cleanup: No

pH:

Instr. ID: ULI 65

Lab Sample ID: /38-23

Lab File ID: 640743

Date Received: 5/18/9

Date Extracted: 5/05/01

Date Analyzed: 6/13/01

Time Analyzed: / 4///

Dilution Factor: /

Sulfur Cleanup: Yes

			CONCENTRATION UNITS		
CAS NO.	COMPOUND		13119	Q	
12674-11-2	Aroclor 1	016	47	p(_	)
11104-28-2	Aroclor 1	221	41	4	
11141-16-5	Araclor 1	232	47	Ц	امر ا
53469-21-9	Araclor 1	242	47	4	} V J
12672-29-6	Araclor 1	248	47	41	(
11097-69-1	Aroclar 1	254	47	41	
11096-82-5	Aroclor 1	260	47		1

NYSDEC SAMPLE NO. T-20-2

Lab Name: <u>Upstate Labs Inc.</u>

Contract: BOARDS/24

Lab Code: 10170

Case No. :

SDG No. : BEN-01

Matrix: So/C

Sample wt.: 86 (G)

% Moisture: 76 Decanted: NO

Extraction: 5 Marie

Conc Extract Vol.: 10000 (uL)

Injection Vol.: / (uL)

Gro Cleamup: No

: Hq

Instr. ID: ULI & S

SAS No.:

Lab Sample ID: 138-74

Lab File ID: 610743

Date Received: 5/18/0

Date Extracted: 6/25/0/

Date Analyzed: 6/13/01

Time Analyzed: 219

Dilution Factor: /

Sulfur Cleanup: Yes

		CONCENTRATION UNITS	Ω	
CAS NO.	COMPOUND	us/Kg	u	
12674-11-2	Aroclor 1016	45		1
11104-28-2	Aroclor 1221	45	<u>`</u>	
11141-16-5	Aroclor 1232	45	<u> </u>	╢.╭
53469-21-9	Aroclor 1242	4/5		トロー
12672-29-6	Aroclor 1248	45	<u> </u>	-{
11097-69-1	Aroclor 1254	45		4
11096-82-5	Aroclor 1260	2/5	CI(	J.

NYSDEC SAMPLE NO. T-21-1

Lab Name: Upstate Labs Inc.

Contract: Bennesky

Lab Code: 10170 Case No.:

SAS No.:

SDG No. Bond. 01

Matrix: 20 soil

sample wt.: 30 (6)

Lab Sample ID: /38.75

% Moisture: 2/ Decanted: NO

Lab File ID: GAO'743

Date Received: 5/18/1/

Extraction: SHAKOK

Date Extracted: 5/25/01

Conc Extract Vol.: /3000 (uL)

Date Analyzed: 6/13/00

Injection Vol.: (uL)

Time Analyzed: 25 5 Anu

GPC Cleanup: No

pH:

Dilution Factor: /

Sulfur Cleanup: Yes

Instr. ID: ULI 65

		CONCENTRATION UNITS	0
CAS NO.	COMPOUND	usiks	
12674-11-2	Aroclor 1016	42	
11104-28-2	Aroclor 1221	42	4
11141-16-5	Aroclor 1232	42	
53469-21-9	Aroclor 1242	42	4
12672-29-6	Aroclor 1248	42	4
11097-69-1	Aroclor 1254	212	4
11096-82-5	Arocior 1260	42	4()

NYSDEC SAMPLE NO. T-21-2

Lab Name: Upstate Labs Inc.

Contract: BENLDS/CY

Lab Code: <u>10170</u>

Case No.:

SAS No.:

SDG NO .: 1868.01

Lab Sample ID: /38-76

Matrix: 30/C

Sample wt.: 30 ( & )

% Moisture: 2/ Decanted: NO

Extraction: SHAKOK

Conc Extract Vol.: 1000 (uL)

Injection Vol.: (uL)

GPC Cleanup: No

pH:

Instr. ID: ULI 65

Lab File ID: CAUT43 Date Received: 5/18/01

Date Extracted: 5/25/6/

Date Analyzed: 6/13/0/

Time Analyzed: 3 30

' Dilution Factor: )

Sulfur Cleanup: Yes

Pa Batch: Pal898

		CONCENTRATION UNITS	a	
CAS NO.	COMPOUND	US/KB		
12674-11-2	Aroclor 1016	4/2	<del>( </del>  - )	
11104-28-2	Aroclor 1221	42		
11141-16-5	Aroclor 1232	42		1
53469-21-9	Aroclor 1242	42		<i>U</i>
12672-29-6	Aroclor 1248	42		
11097-69-1	Aroclor 1254	42		
11096-82-5	Aroclor 1260	42	C ₁ (	

NYSDEC SAMPLE NO T- 22-1

Lab Name: <u>Uostate Labs Inc.</u>

Contract:

Lab Code: 10170

Case No.:

SAS No.:

SDG No. : 864.01

Matrix: 50/2

Sample wt.: 30 (4)

Lab File ID: GAO 743

Lab Sample ID: /33.77

% Moisture: 33 Decanted: NO

Date Received: 5//8/01

Date Extracted:5/25/01

Extraction: Shallot

Conc Extract Vol.: 10000 (uL)

Date Analyzed: 6/13/0/

Injection Vol.: (uL)

Time Analyzed: 4 Am

GPC Cleanup: No

pH:

Dilution Factor: /

Instr. ID: ULI 65

Sulfur Cleanup: Yes

CAS NO.	COMPOUND		CONCENTRATION UNITS		
			v91Kg	Q	
12674-11-2	Aroclor	1016	43		
11104-28-2	Arocior	1221	4/3	111	
11141-16-5	Aroclor	1232	4/3	441	1
53469-21-9	Arocior	1242	43	(K) V	/ )
12672-29-6	Araclor	1248	43	41	
11097-69-1	Araclor	1254	43	<u> </u>	
11096-82-5	Araclar	1260	43	LK J'	