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PHASE II ENVIRONMENTAL SITE ASSESSMENT

COMMERCE SQUARE
CITY OF LOCKPORT
NIAGARA COUNTY, NEW YORK

DRAFT

Prepared for:

Niagara County
Niagara County Department of Economic development
Vantage Center-Suite One
6311 Inducon Corporate Drive
Sanborn, New York 14132

Prepared by:

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

June 2009

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1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction and Purpose

The Niagara County Department of Economic Development has contracted Panamerican Environmental, Inc. (PEI) to conduct a Limited Phase II Environmental Site Assessment (ESA) of the Commerce Square Site, formerly the Harrison Radiator facility (refer to Figure 1). PEI previously completed a Phase 1 Environmental Site Assessment of the Site *(Phase I Environmental Site Assessment Commerce Square, City of Niagara Falls, Niagara County, New York, Prepared by PEI for Niagara County, July 2006)*. Environmental concerns at the facility are associated with the past use of the property for the manufacturing of automobile parts including the existence of Underground Storage Tanks (USTs).

Information reviewed during the Phase I ESA included facility closure reports. The facility closure documentation (*Environmental Audit and Closure Evaluations, prepared by O'Brien & Gere for Harrison Radiator Division, May 1987 and Harrison Radiator Asbestos Removal - Phase I Buildings 1, 2, and 3 prepared by O'Brein & Gere for Harrison Radiator, April 12, 1988)* indicated that the complex was thoroughly cleaned when Harrison Radiator ended operation. Closure documentation identified a number of underground storage tanks (USTs) on the property (see attached Figure 2) including several USTs closed in place by filling with cement. Based on scope planning discussions with Niagara County, the focus of this Phase II ESA was directed at assessment of subsurface soils in the vicinity of the 12 USTs located on the property and identified in the closure report.

The first task of the Phase II program included the preparation and approval of a Site-Specific Brownfields Sampling, Analysis and Monitoring Plan (SAMP) which detailed the scope and procedures of the Phase II ESA.

The overall goals of the program were:

- Build upon the findings of the previous environmental reports completed for the property;
- Complete a soil assessment in the areas of the historic USTs; and
- Develop sufficient information to allow for subsequent additional investigations and/or development of remedial alternatives, if necessary, or property development.

1.2 Scope

The Phase II ESA included the installation of nine soil borings (refer to Figure 2) and

collection of boring soil samples in the general area occupied by the historic USTs described in Section 1.3-Background.

Field work was completed at the site on March 24, 2009. In general, all field activities were completed in accordance with the requirements of the approved SAMP. A summary of the field investigation methodology and findings is presented below in Section 2 (Soil Assessment). Photographs of the soil assessment field investigation activities are provided in Appendix C

1.3 Background

PEI completed the Phase I Environmental Site Assessment of the Commerce Square in July 2006. Environmental concerns at the facility were identified as being associated with the past use of the property for the manufacturing of automobile parts including use and storage of solvents, paints, petroleum, and other materials. Closure documentation indicates that most/all of this material was removed and areas cleaned, however, effects to the subsurface environment from 70 years of manufacturing are unknown. Chemical usage and waste generation was reportedly limited to drum quantities of degreasing solvents, glycol, acidic fluxes, and oils. Closure documents indicated that it was believed that there was never any on-site disposal of wastes. Wastes generated at the facility included scrap metal and metal shavings, waste oil, glycol and some hazardous wastes such as spent trichloroethylene (TCE), and naphtha used for degreasing, and metal-containing sludge. Twelve USTs were identified as located on the property. The closure report information identified that a total of twelve USTs were located on the property including:

- Two 10,000 -gallon tanks (identified as T1 on Figure 2) are shown located west of Building 2 possibly beneath Elm Street. These tanks reportedly contained Naphtha and were closed in 1960s by filling with water and later closed in 1986 by filling with concrete.

- Four 5,500-gallon tanks (T2) are shown located east of Building 4. These tanks contained gasoline/diesel and were closed and filled with water in 1960s and filled with concrete/removed in 1986.

- One 2,500-gallon tank (T3) was shown located west of Building 3 possibly beneath Elm Street. This tank contained liquid detergent and was closed in 1960s by filling with water and later closed in 1986 by filling with concrete.

- Three 20,000-gallon tanks (T4) were shown located adjacent to the storage yard and west of the boiler house. These tanks contained fuel oil and were reportedly removed in 1987.

- One 500-gallon tank (T5) was shown located north of Building 2 beneath the Walnut Street sidewalk. This tank was reportedly closed in 1960s by filling with water

and later closed in 1986 by filling with concrete.

- One 650-gallon tank (T6) was shown located north of Building 2 beneath the Walnut Street sidewalk. This tank was reportedly closed in 1960s by filling with water and later closed in 1986 by filling with concrete.

In 2005, NYSDEC Spill #9975547 indicated the removal of USTs in the Walnut Street right-of-way. This UST closure most likely involved the 500 and 650-gallon USTs identified above as well as a 1,000 gallon UST removed under the Walnut Street sidewalk adjacent to building 4.The spill was reported by the City of Lockport Sewer & Water Division when petroleum odors were noted by a worker repairing a fire hydrant. During UST closure activities the three USTs were removed, 145 tons of petroleum impacted soil was removed, 12,350-gallons of water were disposed and the spill was closed in 2005.

2.0 SOIL ASSESSMENT FIELD INVESTIGATION

The site soil assessment field investigation was completed on March 24, 2009. In general, all field activities were completed in accordance with the requirements of the approved SAMP. A summary of the field investigation methodology and findings is presented below. Photographs of the soil assessment field investigation activities are provided in Appendix C.

2.1 Subsurface Soils Investigation

The investigation consisted of advancing nine Geoprobe borings in the areas of the historic UST locations as shown on Figure 2. These were completed as follows:

- Borings 1-4 were advanced west of Building 3 in the T4 UST area.
- Borings 5-7 were advanced in the T2 and T1 UST areas between Buildings 2 and 4.
- Borings 8 and 9 were advanced along the north side of Building 2 in the T6 UST area.

Please note, due to the location of buried utilities, unknown location of the USTs and the fact that the areas investigated were road beds; the actual areas which were available to advance borings were limited. The field work was performed by PEI and Environmental Products and Services of Vermont (Geoprobe® operator). Borings were advanced to depths that ranged between 9 and 11 feet bgs (bedrock refusal) with the exception of borehole 1 with refusal at 1.5 feet bgs due to a concrete foundation. Borings were advanced using a fully equipped track-mounted Geoprobe® unit which employs direct push technology. Continuous soil sampling was performed using Macro Core soil samplers measuring 44 inches in length and

1½ inches in diameter with acetate liners. Each of the samplers used was fitted with a new acetate liner prior to use. Field screening of all soil core samples for total volatile organic compounds (VOCs) was performed using a photoionization detector (PID) RAE Systems MiniRAE 2000. Observations of contamination (i.e., stains, odors, etc.) and PID readings were recorded in a field log and documented on the boring logs (Appendix A). The following is a summary of PID readings and observations recorded for each bore hole:

- BH-01 - 0.0 ppm
- BH-02 - 12.3 - 24.3 ppm between 4 and 9 feet bgs, slight petroleum odor
- BH-03 – 7.4 – 14.6 ppm between 4 and 10.5 feet bgs, slight petroleum odor
- BH-04 – 0.9 ppm between 2 and 4 feet bgs, slight petroleum odor
- BH-05 – 87.2 – 147 ppm between 4 and 10.8 feet bgs, petroleum odor
- BH-06 – 26.1 – 49.3 ppm between 4 and 8 feet bgs, solvent type odor
- BH-07 – 35.6 – 1146 ppm between 2 and 10 feet bgs, strong petroleum odor
- BH-08 - 0.0 ppm
- BH-09 – 4.5 – 15.2 ppm between 2 and 8 feet bgs, slight petroleum odor

A total of four soil samples were collected for laboratory analysis from the borings based on location, field observations (i.e. stains, odors, etc.) and PID readings as follows:

- One sample (CS-BH-02) was collected between 8 and 9 feet below grade surface
  (bgs) from Boring 02.
- One sample (CS-BH-05) was collected between 3.5 and 7 feet bgs from Boring 05.
- One sample (CS-BH-07) was collected between 6 and 7 feet bgs from Boring 07.
- One sample (CS-BH-09) was collected between 4 and 6 feet bgs from Boring 09.

Dedicated equipment was used to collect each sample. Soil samples were submitted to Test America, a New York State approved laboratory, and analyzed for Target Compound List (TCL) Volatiles (VOCs) and Semi-Volatiles compounds (SVOCs), Target Analyte List (TAL) Metals and PCBs as specified in the approved SAMP. Analytical results are discussed in Section 2.2.

In general, fill material consisting of concrete and asphalt with coarse to fine gravel and medium to fine sand and traces of topsoil and silt was observed in most boreholes between 0-2.5 feet bgs. The soils from 2.5 feet to bedrock (9 - 11feet bgs) consists primarily of reddish brown, tight, silty clay with traces and intermitting layers of medium to fine sand and/or coarse to fine gravel. The sand and gravel layers were

moist to wet and appeared to be the source of petroleum odors and elevated PID readings. The groundwater table was not encountered in any of the borings. As noted, this area is basically a road bed with multiple utilities and re-worked soil/fill.

2.2 Soil Analytical Results

Soil samples were submitted to Test America, a New York State Certified Laboratory, and analyzed for TCL VOCs and SVOCs, PCBs, and TAL Metal compounds. A summary of the analytical results from the soil sampling program are provided in Table 1. Table 1 also compares the results to the New York State Brownfields Cleanup Program Soil Cleanup Objectives as presented in 6 NYCRR Part 375-6.8 regulations. The complete set of soil analytical data and the Data Usability Summary Report (DUSR) are provided in Attachment B. Analytical results are discussed further below.

Volatile Organic Compounds

A number of VOCs were detected in all four soil samples, however, at concentrations below NYSDEC Part 375 residential soil cleanup objectives.

Semi-Volatile Organic Compounds

A number of SVOCs consisting primarily of polynuclear aromatic hydrocarbons (PAHs) were detected in all four soil samples, however, at concentrations below NYSDEC Part 375 residential soil cleanup objectives.

PAHs are a group of chemicals that are formed during incomplete burning of wood, coal, gas, garbage or other organic substances and are widely distributed in the environment and particularly in older urban environments where coal, gas, and petroleum were burned for heat and other energy uses. PAH compounds are common constituents of fill material found in urban environments, and are typically associated with both fill material, coal tar and asphalt based materials or ash.

In general, PAHs along with metal compounds are not very mobile in soils, in that they have low solubilities with water (these compounds are practically insoluble in water) and tend to adsorb to the soil grains. These compounds do not readily breakdown in the environment and PAHs deposited from combustion of coal or other fuels years ago would most likely still be present today. Based on the low volatility and their association with soil, the primary concern for potential human exposure to PAHs include inhalation or ingestion of contaminated dust as well as dermal contact.

PCBs

PCBs were not detected in any of the four soil samples.

Metals

Various metal compounds were detected in all four soil samples, however, at concentrations below the NYSDEC Part 375 residential soil cleanup objectives.

Most metals occur in nature and their concentrations in fill and natural soil will exhibit considerable variability both stratigraphically and spatially. This variability is related to the variable composition of the fill, natural soils' stratigraphy, weathering processes that chemically and physically modify soil and groundwater interactions that modify the geochemistry.

Tentatively Identified Compounds (TICs)

As discussed in section 2.1 there were elevated PID readings (VOCs) recorded in seven of the nine borings along with the detection of petroleum odors. The degree of the elevated field PID readings does not correlate with the fairly low VOC concentrations detected in the laboratory soil samples. This suggests that the compounds in the impacted soil observed on field instruments are most likely associated with compounds which have degraded over time and are therefore not identifiable as specific known compounds using typical chemical analysis interpretation. To determine if there were degraded compounds in the soils the laboratory performed a Tentatively Identified Compounds (TICs) analysis from the existing VOC data files. This analysis suggests that a number of TICs were identified, many of which, appear to be petroleum derived compounds. The VOC related TICs have been totaled for each sample and presented in Table 1 and the complete TICs report is provided in Appendix B. The total TICs range from 15.9 ppm in sample CS-BH-02 to 118.2 ppm in sample CS-BH-05.

4.0 CONCLUSIONS

In general, fill material consisting of concrete and asphalt with coarse to fine gravel and medium to fine sand and traces of topsoil and silt was observed in most boreholes between 0-2.5 feet bgs. The soils from 2.5 feet to bedrock (9 - 11feet bgs) consists primarily of reddish brown, tight, silty clay with traces and intermitting layers of medium to fine sand and/or coarse to fine gravel. The sand and gravel layers were moist to wet. The groundwater table was not encountered in any of the borings.

During the installation of the borings petroleum odors were observed and elevated PID readings (VOCs) recorded in seven of the nine borings. The highest PID

readings recorded were in borehole 7 with a range of 35.6 to 1146 ppm.

The four soil sample collected and analyzed indicated the presents of a number of VOCs, SVOCs and metal compounds; however, there were no compound concentrations that exceeded the NYSDEC Part 375 residential soil cleanup objectives. In addition, PCBs were not detected in any of the four soil samples.

The elevated field PID readings and TICs, however, suggest that impacted soil exists at these locations. A number of TICs were identified, many of which, appear to be petroleum derived compounds. The TICs ranged from 15.9 ppm in sample CS-BH-02 to 118.2 ppm in sample CS-BH-05. Based on these results, the NYSDEC was contacted. New York State regulations require that any person with knowledge of a spill, leak or discharge of petroleum must report the incident to the New York State Department of Environmental Conservation (DEC) within two hours of discovery (similar requirements apply to hazardous waste). The results of any inventory record, test, or inspection which shows a facility is leaking must be reported (6 NYCRR 613.8). The reporting requirement includes any person with knowledge such as an owner, operator, or consultant.

Please note, NYSDEC regulations require that out-of-service USTs require proper closure in accordance with regulations.

In summary, the investigation represents a limited assessment of subsurface conditions to determine if previous historic activity pertaining to the USTs significantly impacted subsurface soils. The analytical results from the limited number of soil samples provided in Table 1 were compared to NYSDEC Part 375-6.8 Soil Cleanup Objective values for four levels of development (residential, restricted residential, commercial and Industrial) as outlined in the Part 375 regulations. NYSDEC Part 375 regulations have been applied as guidelines for re-development of Brownfield sites. None of the sample compound concentrations exceeded soil cleanup objective values for the four levels of development. However, field observations and TICs suggest a release to the environment. This analysis suggests that the soil is impacted in this area and that the compounds released into the environment have degraded. It should be noted that the actual UST locations were not confirmed and therefore, soil boring locations were selected in such a manner as to ensure a proper distance away from the assumed locations. In addition, the number of borings was limited due to utilities and refusal because of subsurface obstacles (roadbed and foundations). Therefore, the actual levels of compound in soil may be greater adjacent to the actual tank locations.

New York State petroleum regulations suggest that some remedial actions may be required and out-of-service USTs should be removed. Also, Part 375 guidelines suggest some form of remediation of the soils would most likely be required for re-development. Remedial efforts would likely include following NYSDEC spill and tank

closure requirements. Additionally, the development of a Site Management Plan (SMP) to include Engineering Controls (EC) and Institutional Controls (IC) for future development of the site may be necessary. The SMP may include excavation and removal of some soils and/or placement of a cover of certified clean soil and/or asphalt/cement. However, it should be noted, Part 375 guidelines would only strictly apply if the owner or future owner entered into a formal agreement under one of the NYSDEC programs such as an Environmental Restoration Program or Brownfields Cleanup Program.

In general, engineering controls under Part 375 for the four levels of development may include the following:

Residential/Restricted Residential Use– Placing a two-foot thick cover of clean soil over the site. The top six inches of soil would be of sufficient quality to support vegetation. Clean soil would constitute soil that meets the Division of Environmental Remediation's criteria for backfill (DER-10) or with Part 375 Section 6.7. Non-vegetated areas (buildings, roadways, parking lots, etc.) would be covered by a paving system or concrete at least 6 inches thick.

Commercial Use- Placing a one-foot thick cover of clean soil with the same details as residential use.

Industrial Use-No soil cover is required and the site is shovel ready in its current state.

Other requirements may include approaches to mitigate exposure of construction workers, site occupants and/or the public during future development activities where any disturbance to the site soil will be required. Institutional controls under Part 375 may require an environmental easement (EE) be imposed on the site or portion of the site to be developed. The EE may limit the use and type of development within the easement. Institutional controls may also require the property owner to complete and submit to the NYSDEC a periodic certification by an environmental professional that institutional and engineering controls are being followed and adhered too.

Additional investigation to include soil and groundwater assessment may be required beyond this limited scope. It should be noted that the limited Phase II assessment did not address groundwater. If future development plans require using groundwater, assessment of this media may be required to meet appropriate NYSDEC groundwater regulations.

5.0 WARRANTS AND LIMITATIONS

This report is based on information from a limited soil sampling investigation, organic

vapor screening, and visual observations of the subsurface soils, as described within this report. As such, it does not represent an exhaustive assessment of subsurface conditions. Subsurface impacts may be present in site locations not assessed during this investigation.

This report is intended exclusively for the purpose outlined herein at the site location and project indicated. The property and this site assessment are limited to the footprint of the lot and the areas assessed.

This report is intended for the sole use of the Niagara County, United States Environmental Protection Agency and City of Lockport. The scope of services performed in this assessment may not be appropriate to satisfy the needs of other users and any use or re-use of this document or the findings, conclusions, or recommendations presented, is at the sole risk of the user.

The conclusions set forth in this report are based upon, and limited by, the analytical data and other information available to PEI. It should be noted that all surface and subsurface environmental assessments are inherently limited in the sense that conclusions are drawn and recommendations developed from information obtained from limited data and site evaluation at a specific time. The passage of time may result in a change in environmental circumstances at this site and surrounding properties, or hazardous materials beneath the surface may be present but undetectable during this limited Phase II assessment.

Opinions and recommendations presented herein apply to the site conditions existing at the time of the subsurface assessment and those reasonably foreseeable. They cannot necessarily apply to site changes of which PEI is not aware and has not had the opportunity to evaluate.

6.0 REFERENCES

1. Phase I Environmental Site Assessment Commerce Square, City of Niagara Falls, Niagara County, New York, Prepared by PEI for Niagara County, July 2006.

2. Site-Specific Brownfields Sampling, Analysis and Monitoring Plan (SAMP) Revision 3, December 2008 for Commerce Square under Niagara County, New York Brownfields Assessment Demonstration Pilot Cooperative Agreement No. BP99290801-6.

3. Generic Brownfields Quality Assurance project plan (QAPP) Brownfields Pilot Cooperative Agreement Program (No. BP99290801-6), Commerce Square, Niagara County, New York.

4. New York State Department of Environmental Conservation (NYSDEC)-6 NYCRR Part 375 Environmental Remediation Program-Subparts 375-1 to 375-4 & 356-6, Effective December 14, 2006.

5. Environmental Audit and Closure Evaluations. Prepared by O'Brien & Gere for Harrison Radiator Division, May 1987 and Harrison Radiator Asbestos Removal - Phase I Buildings 1, 2, and 3 prepared by O'Brein & Gere for Harrison Radiator, April 12, 1988.

TABLE 1 - Commerce Square Soil Boring Analtical Results								
Sample Number	**CS-BH-02**	**CS-BH-05**	**CS-BH-07**	**CS-BH-09**	**NYSDEC**	**NYSDEC**	**NYSDEC**	**NYSDEC**
Sample Date	**3/24/2009**	**3/24/2009**	**3/24/2009**	**3/24/2009**	**PART 375**	**PART 375**	**PART 375**	**PART 375**
Sample Depth	**8' - 9'**	**3.5' - 7'**	**6' - 7'**	**4' - 6'**	**Residential**	**Restricted-Residential**	**Commercial**	**Industrial**
Compounds	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
Metals								
Aluminum	6410 J	10200 J	11000 J	10200 J	N/A	N/A	N/A	N/A
Arsenic	2.2 J	2.8	3.5	U	16	16	16	16
Barium	73.3 B	96.3 B	98.8 B	U	350	400	400	10,000
Beryllium	0.304 B	0.47 B	0.527 B	U	14	72	590	2,700
Cadmium	0.156 J	U	U	U	2.5	4.3	9.3	60
Calcium	44700 D08	53600 D08	54100 D08	56000 D08	N/A	N/A	N/A	N/A
Chromium	9.3	15.4	16.1	15.1	22	110	400	800
Cobalt	5.3 J	8.03 J	11.8 J	10.2 J	N/A	N/A	N/A	N/A
Copper	16.5	18.9	12.5	11.9	270	270	270	10,000
Iron	11500 J	18900 J	17500 J	19900 J	N/A	N/A	N/A	N/A
Lead	16.7	6.4	4.3	4.3	400	400	1,000	3,900
Magnesium	14100	10400	10500	9260	N/A	N/A	N/A	N/A
Manganese	535	439	646	627	2000	2000	10,000	10,000
Mercury	0.0287	U	U	U	0.81	0.81	2.8	5.7
Nickel	12.3	19.1	25.6	22.7	140	310	310	10,000
Selenium	U	U	U	1.0 J	36			
Potassium	1200	1690	1730	1650	N/A	180	1500	6800
Sodium	211	442	519	1260	N/A	N/A	N/A	N/A
Thallium	U	U	U	0.6 J	N/A	N/A	N/A	N/A
Vanadium	12.6	21.8	20.5	19.3	N/A	N/A	N/A	N/A
Zinc	180 J	43.9 J	51.2 J	47.6 J	2200	10000	10,000	10,000
Semi-Volitile Organics								
Acenaphthene	0.26 D02J	U	U	U	100	100	500	1,000
Anthracene	0.23 D02J	0.12 D02J	U	0.010 J	100	100	500	1,000
Benzo(a)anthracene	0.21 D02J	0.22 D02J	0.093 D02J	0.03 J	1	1	5.6	11
Benzo(a)pyrene	0.11 D02J	0.10 D02J	U	0.22 J	1	1	1	1.1
Benzo(b)fluoranthene	0.21 D02,ID4J	0.18 D02J	U	0.032 J	1	1	5.6	11
Benzo(g,h,I)perylene	U	U	U	0.014 J	100	100	500	1,000
Benzo(k)fluoranthene	U	U	U	0.014 J	1	3.9	56	110
Chrysene	0.14 D02J	0.20 D02J	U	0.031 J	1	3.9	56	110
Di-n-butyl phthalate	U	U	U	0.190 J	N/A	N/A	N/A	N/A
Fluoranthene	0.50 D02J	0.42 D02J	0.10 D02J	0.054 J	100	100	500	1,000
Flourene	0.32 D02J	0.190 D02J	U	0.025 J	100	100	500	1,000
Indeno(1,2,3-cd)pyrene	U	U	U	0.012 J	0.5	0.5	5.6	11
2-methylnaphthalene	U	U	1.10 D02J	U	N/A	N/A	N/A	N/A
Naphthalene	U	U	0.94 D02J	U	100	100	500	1,000
Phenanthrene	0.91 D02J	0.54 D02J	0.18 D02J	0.050 J	100	100	500	1,000
Pyrene	0.55 D02J	0.43 D02J	0.21 D02J	0.050 J	100	100	500	1,000
Volitile Organics								
1,2-Dichloroethene, Total	U	0.96	U	0.0041 J	N/A	N/A	N/A	N/A
Benzene	U	0.0044 J	U	U	2.9	4.8	44	89
cis-1,2-Dichloroethene	U	0.94	U	0.0041 J	59	100	500	1000
Isopropylbenzene	U	0.0068	0.60 D02	U	N/A	N/A	N/A	N/A
Toluene	U	0.015	U	U	100	100	500	1000
Trans-1,2Dichloroethene	U	0.021	U	U	100	100	500	1000
Vinyl chloride	U	0.11	U	U	0.21	0.9	13	27
Cyclohexane	0.0022 J	U	U	U	N/A	N/A	N/A	N/A
Ethylbenzene	0.0031 J	0.0085	U	U	30	41	390	780
Methylcyclohexane	0.0065	U	0.16 D02	0.005	N/A	N/A	N/A	N/A
Xylenes, Total	0.0017 J	0.018	0.93 D02	U	100	100	500	1000
Acetone	U	U	U	U	100	100	500	1,000
TICs Total	**15.9**	**118.2**	**79.9**	**27.51**				

N/A - Not Applicable U - Not Detected
bgs - below ground surface
Shading - Results above NYSDEC Residential Cleanuop Objectives
B - Analyte was detected in the associated Method Blank.
D02 - Dilution required due to sample matrix effects
D08 - Dilution required due to high concentration of target analyte(s)
ID4 - Benzo(b)fluoranthene coelutes with Benzo(k)fluoranthene. The reported result is a summation of the isomers and the concentration is based on the response factor of Benzo(b)fluoranthene
J - Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.

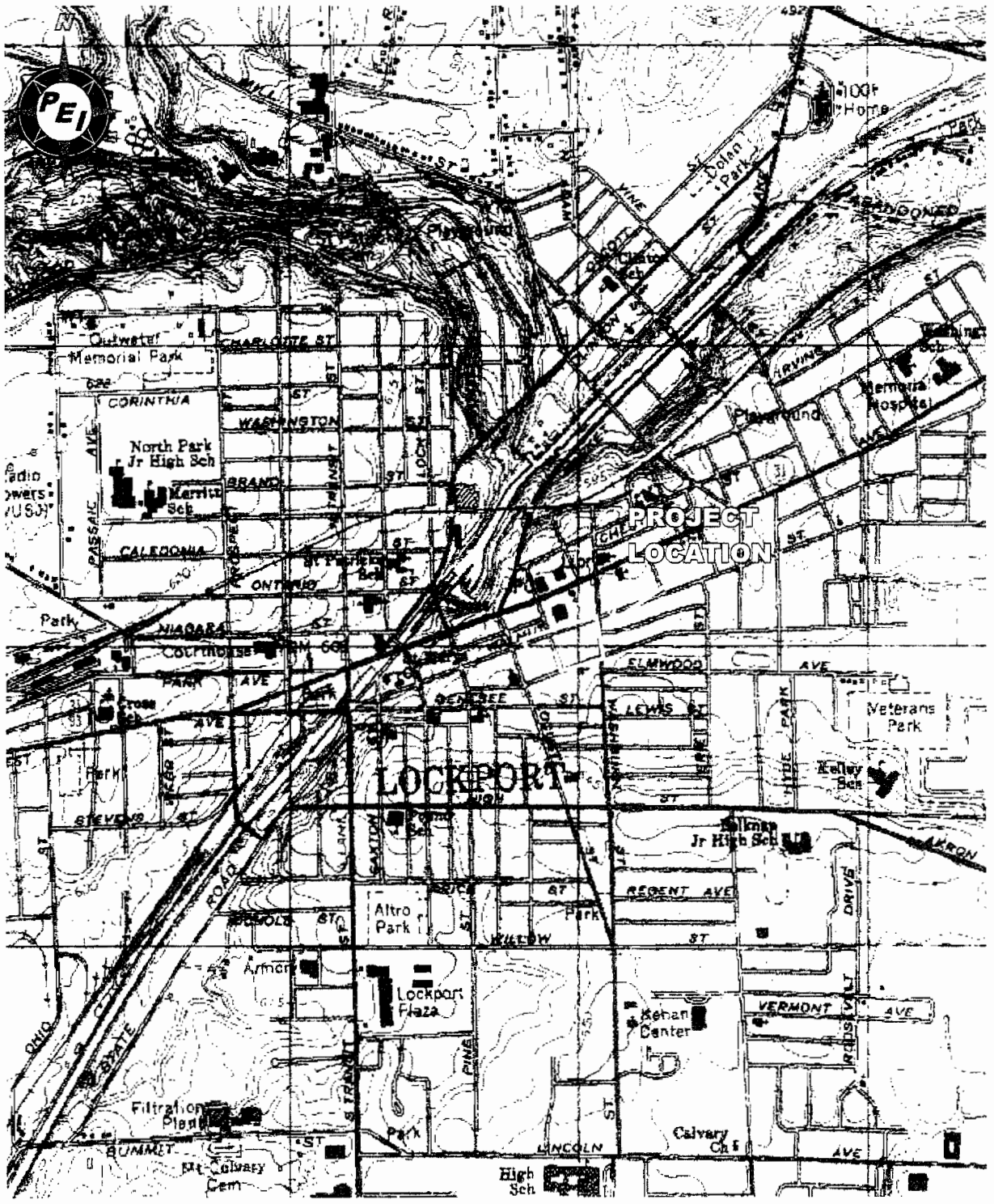


Figure 1. Project area location in City of Lockport, Niagara County, New York *(USGS 7.5' Quadrangle, Lockport, NY).*

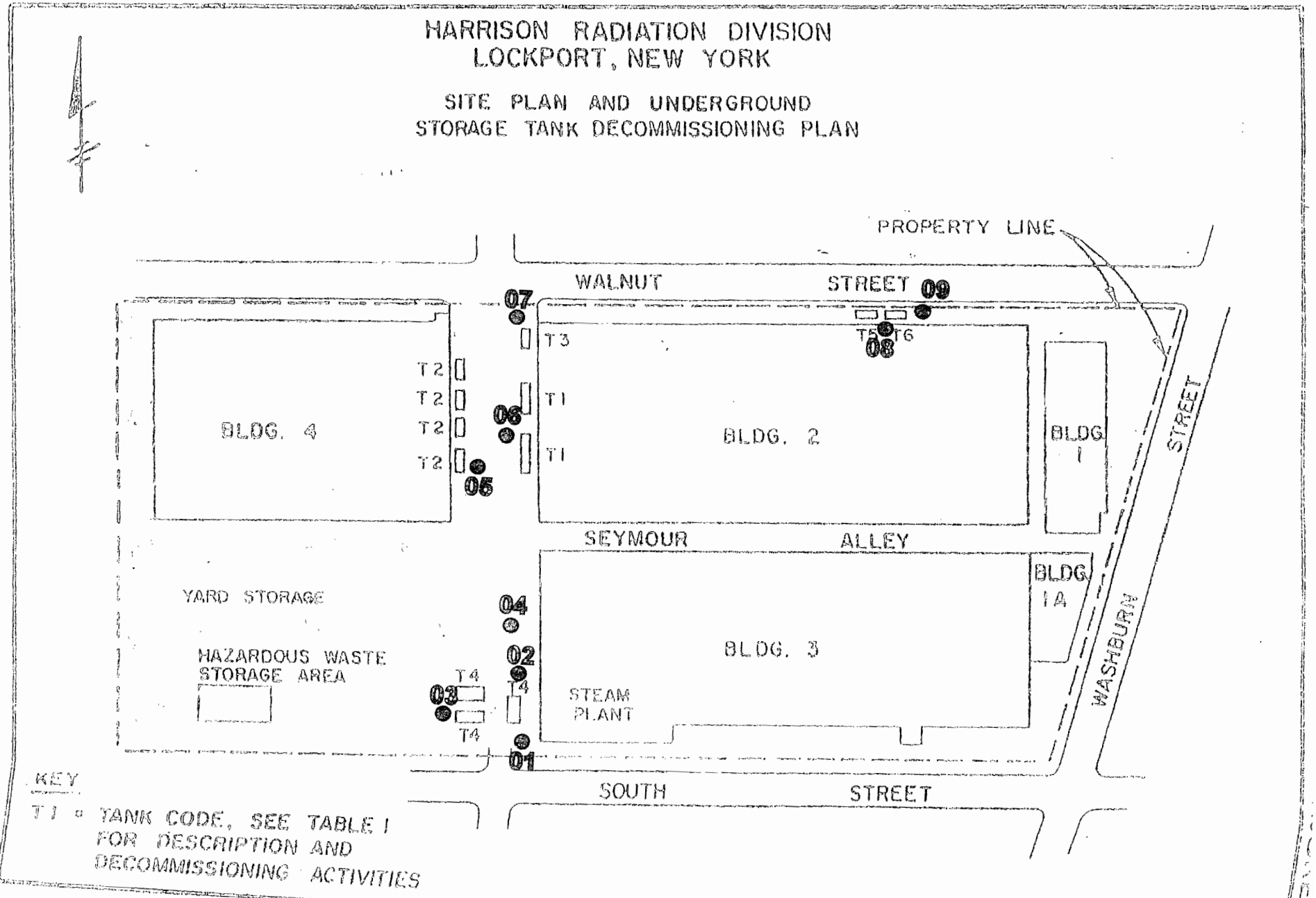


Figure 2. Approximate boring locations on site sketch

● - **Approximate Soil Boring Locations**

APPENDIX A

Boring Logs

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-01

PROJECT: Commerce Square - City of Lockport
SHEET: 1 OF 1
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Near South Street
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
1					18/48	Black and Grey	Gravelly	Black and grey, concrete with traces of C-F (coarse to fine) gravel and M-F (medium to fine) sand		0.0 ppm Readings on Photoionization Detector
2								Refusal of boring at 1.5 feet bgs		
3										
4										
5										
6										
7										
8										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: CS-BH-01

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-02

PROJECT: Commerce Square - City of Lockport
SHEET: 1 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Near South Street
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				
				* POCKET PENETROMETER READING				

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
1					30/48	Black and Reddish Brown	Gravelly	Black and grey, concrete and asphalt with C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of topsoil and silt		0.0 ppm Readings on Photoionization Detector
2										
3					30/48					0.0 ppm Readings on Photoionization Detector
4										
5										12.3 ppm Readings on Photoionization Detector
6						Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel. Layer was damp to wet, also had a slight odor of petroleum.		
7					50/48					18.6 ppm Readings on Photoionization Detector
8										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 96-108 inches below surface for TAI Metals,TCL Semi-Volatiles and TCL Volaitiles.

PROJECT NO.:
BORING NO.: CS-BH-02

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-02

PROJECT: Commerce Square - City of Lockport
SHEET: 2 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Near South Street
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
9					50/48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel. Layer was damp to wet, also had a slight odor of petroleum.		24.3 ppm Readings on Photoionization Detector
10								Refusal of boring at 9.1 feet bgs (Appeared to be limestone)		
11										
12										
13										
14										
15										
16										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 96-108 inches below surface for TAL Metals,TCL Semi-Volatiles and TCL Volaitiles.

PROJECT NO.:
BORING NO.: CS-BH-02

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-03

PROJECT: Commerce Square - City of Lockport
SHEET: 1 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Near South Street
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				
				* POCKET PENETROMETER READING				

DEPTH FEET	STRATA	SAMPLE 'S' NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
1					40/48	Black and Reddish Brown	Gravelly	Black and grey, concrete and asphalt with C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of topsoil and silt		0.0 ppm Readings on Photoionization Detector
2										
3						Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel. Layer had a slight odor of petroleum.		0.0 ppm Readings on Photoionization Detector
4										
5					45/48					7.4 ppm Readings on Photoionization Detector
6						Reddish Brown	Tight	Reddish brown, tight, silty clay with traces of M-F sand and C-F gravel. Layer was moist, also had a slight odor of petroleum.		
7										14.6 ppm Readings on Photoionization Detector
8					40/48	Reddish Brown	Tight	Reddish brown, tight, sandy clay with traces of silt and C-F gravel. Layer was damp to wet, also had a slight odor of petroleum.		

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: CS-BH-03

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-03

PROJECT: Commerce Square - City of Lockport
SHEET: 2 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Near South Street
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
9					40/48	Reddish Brown	Tight	Reddish brown, tight, sandy clay with traces of silt and C-F gravel. Layer was damp to wet, also had a slight odor of petroleum.		7.5 ppm Readings on Photoionization Detector
10								Refusal of boring at 10.5 feet bgs (Appeared to be limestone)		
11										
12										
13										
14										
15										
16										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: CS-BH-03

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-04

PROJECT: Commerce Square - City of Lockport
SHEET: 1 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Near South Street
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE 'S' NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	CLASS USCS	REMARKS
0						Black and Reddish Brown	Gravelly	Black and grey, concrete and asphalt with C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of topsoil and silt		0.0 ppm Readings on Photoionization Detector
1					35/48					
2						Reddish Brown	Tight	Reddish brown, tight, silty clay with traces of M-F sand and C-F gravel. Layer was moist to wet, also had a slight odor of petroleum.		0.9 ppm Readings on Photoionization Detector
3										
4										0.0 ppm Readings on Photoionization Detector
5					45/48					
6						Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel.		0.0 ppm Readings on Photoionization Detector
7					40/48					
8										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: CS-BH-04

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-04

PROJECT: Commerce Square - City of Lockport
SHEET: 2 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Near South Street
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
9						Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel.		0.0 ppm Readings on Photoionization Detector
10								Refusal of boring at 10.0 feet bgs (Appeared to be limestone)		
11										
12										
13										
14										
15										
16										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: CS-BH-04

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-05

PROJECT: Commerce Square - City of Lockport
SHEET: 1 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Building 4 Area
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				
				* POCKET PENETROMETER READING				

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
1					42/48	Black and Reddish Brown	Gravelly	Black and grey, concrete and asphalt with C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of topsoil and silt		0.0 ppm Readings on Photoionization Detector
2										
3										0.0 ppm Readings on Photoionization Detector
4										
5					47/48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel. Layer had an odor of petroleum.		87.2 ppm Readings on Photoionization Detector
6										
7										147 ppm Readings on Photoionization Detector
8					41/48	Reddish Brown	Soft	Reddish brown, soft, silty clay with traces of M-F sand and C-F gravel. Layer was damp to wet, also had an odor of petroleum.		

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 42-89 inches below surface for TAL Metals, TCL Semi-Volatiles and TCL Volatiles

PROJECT NO.:
BORING NO.: CS-BH-05

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-05

PROJECT: Commerce Square - City of Lockport
SHEET: 2 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Building 4 Area
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE				
DIA.				
WT.				
FALL				

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
9					41/48	Reddish Brown	Soft	Reddish brown, soft, silty clay with traces of M-F sand and C-F gravel. Layer was damp to wet, also had an odor of petroleum.		18.3 ppm Readings on Photoionization Detector
10										
11								Refusal of boring at 10.8 feet bgs (Appeared to be limestone)		
12										
13										
14										
15										
16										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 96-108 inches below surface for TAL Metals, TCL Semi-Volatiles and TCL Volatiles.

PROJECT NO.:
BORING NO.: CS-BH-05

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-06

PROJECT: Commerce Square - City of Lockport
SHEET: 1 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Building 2 Area
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE 'S' NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY / RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
1					40/48	Black and Reddish Brown	Gravelly	- Black and grey, concrete and asphalt with C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of topsoil and silt		0.0 ppm Readings on Photoionization Detector
2										
3										0.9 ppm Readings on Photoionization Detector
4										
5					40/48	Reddish Brown	Tight	- Reddish brown, tight, silty clay with traces of M-F sand and C-F gravel. Layer was moist to wet, also had a solvent-type odor.		49.3 ppm Readings on Photoionization Detector
6										
7					46/48					26.1 ppm Readings on Photoionization Detector
8										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000

PROJECT NO.:
BORING NO.: CS-BH-06

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-06

PROJECT: Commerce Square - City of Lockport
SHEET: 2 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Near South Street
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS. TYPE	CAS. DIA.	SAMPLER TYPE	SAMPLER DIA.	CORE TYPE	CORE DIA.	TUBE TYPE	TUBE DIA.
				TYPE								
				DIA.								
				WT.								
				FALL								
				* POCKET PENETROMETER READING								

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
9					46/48	Reddish Brown	Tight	Reddish brown, tight, silty clay with traces of M-F sand and C-F gravel. Layer was moist to wet, also had a solvent-type odor.		0.0 ppm Readings on Photoionization Detector
10										
11								Refusal of boring at 10.5 feet bgs (Appeared to be limestone)		
12										
13										
14										
15										
16										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: CS-BH-06

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-07

PROJECT: Commerce Square - City of Lockport
SHEET: 1 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Building 2 Area
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				
				* POCKET PENETROMETER READING				

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY / RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	CLASS USCS	REMARKS
1					40/48	Black and Reddish Brown	Gravelly	Black and grey, concrete and asphalt with C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of topsoil and silt		0.0 ppm Readings on Photoionization Detector
2										
3										35.6 ppm Readings on Photoionization Detector
4										
5					41/48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel. Layer had a strong odor of petroleum.		128 ppm Readings on Photoionization Detector
6										
7					44/48					1146 ppm Readings on Photoionization Detector
8										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 72-84 inches below surface for TAL Metals, TCL Semi-Volatiles and TCL Volatiles.

PROJECT NO.:
BORING NO.: CS-BH-07

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-07

PROJECT: Commerce Square - City of Lockport
SHEET: 2 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Building 2 Area
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
9					41/48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel. Layer had a strong odor of petroleum.		632 ppm Readings on Photoionization Detector
10								Refusal of boring at 10.4 feet bgs (Appeared to be limestone)		
11										
12										
13										
14										
15										
16										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 72-84 inches below surface for TAL Metals, TCL Semi-Volatiles and TCL Volatiles.

PROJECT NO.:
BORING NO.: CS-BH-07

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-08

PROJECT: Commerce Square - City of Lockport
SHEET: 1 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Front Building Area
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				
				* POCKET PENETROMETER READING				

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY ROD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	CLASS USCS	REMARKS
0						Black and Reddish Brown	Gravelly	Black and grey, concrete with C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of topsoil and silt		0.0 ppm Readings on Photoionization Detector
1					35/48	Grey and Black	Soft	Grey and black, soft, silty clay with C-F gravel and traces of M-F sand. Layer was moist.		
2										0.0 ppm Readings on Photoionization Detector
3										
4										0.0 ppm Readings on Photoionization Detector
5					46/48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel. Layer was moist.		
6										0.0 ppm Readings on Photoionization Detector
7					44/48					
8										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: CS-BH-08

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-08

PROJECT: Commerce Square - City of Lockport
SHEET: 2 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Front Building Area
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				
				* POCKET PENETROMETER READING				

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
9					44/48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel. Layer was moist.		0.0 ppm Readings on Photoionization Detector
10								Refusal of boring at 10.3 feet bgs (Appeared to be limestone)		
11										
12										
13										
14										
15										
16										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000.

PROJECT NO.:
BORING NO.: CS-BH-08

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-09

PROJECT: Commerce Square - City of Lockport
SHEET: 1 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Front Building Area
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				
				* POCKET PENETROMETER READING				

DEPTH FEET	STRATA	SAMPLE 'S' NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	CLASS USCS	REMARKS
0						Black and Reddish Brown	Gravelly	Black and grey, concrete with C-F (coarse to fine) gravel and M-F (medium to fine) sand with traces of topsoil and silt		0.0 ppm Readings on Photoionization Detector
1					35/48					
2						Reddish Brown	Soft	Reddish brown, soft, silty clay with traces of M-F sand and C-F gravel. Layer was damp.		6.8 ppm Readings on Photoionization Detector
3										
4										
5					45/48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel. Layer had a slight odor of petroleum.		15.2 ppm Readings on Photoionization Detector
6										
7					45/48					4.5 ppm Readings on Photoionization Detector
8										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 48-72 inches below surface for TAL Metals, TCL Semi-Volatiles and TCL Volatiles.

PROJECT NO.:
BORING NO.: CS-BH-09

Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

GEOPROBE LOG

BORING NO.: CS-BH-09

PROJECT: Commerce Square - City of Lockport
SHEET: 2 OF 2
CLIENT: Niagara County Department of Development
JOB NO.: N/A
BORING CONTRACTOR: Environmental Services of Vermont
BORING LOCATION: Front Building Area
GROUNDWATER: Not Observed
GROUND ELEVATION: NA
DATE STARTED: March 24, 2009
DATE FINISHED: March 24, 2009
DRILLER: A. Morse
GEOLOGIST: J. Ryszkiewicz
REVIEWED BY: N/A

DATE	TIME	LEVEL	TYPE		CAS.	SAMPLER	CORE	TUBE
				TYPE				
				DIA.				
				WT.				
				FALL				
				* POCKET PENETROMETER READING				

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE CORE NO.	SAMPLE BLOWS PER 6"	SAMPLE RECOVERY RQD%	DESCRIPTION COLOR	DESCRIPTION CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	DESCRIPTION CLASS USCS	REMARKS
9					45/48	Reddish Brown	Very Tight	Reddish brown, very tight, silty clay with traces of M-F sand and C-F gravel.		0.9 ppm Readings on Photoionization Detector
10	*									
								Refusal of boring at 10.3 feet bgs (Appeared to be limestone)		
11										
12										
13										
14										
15										
16										

COMMENTS: Photoionization readings were taken with a Mini-Rae 2000. A subsurface soil sample was taken from 48-72 inches below surface for TAL Metals, TCL Semi-Volatiles and TCL Volatiles.

PROJECT NO.:
BORING NO.: CS-BH-09

APPENDIX B

Analytical Data Usability Summary Report
&
Tentatively Identified Compounds (TICs) Report

CW CHEMWORLD ENVIRONMENTAL, INC.
Environmental Consulting Services

June 4, 2009

Mr. John Berry
Panamerican Environmental, Inc.
2390 Clinton Street
Buffalo, New York 14227

RE: Data Usability Summary Report (DUSR)
Commerce Square Project
Test America (Buffalo), Amherst, NY
Lab Work Order No. RSC0813
Soil / Solid Samples
Analyses for Volatile Organics, Semi-Volatile Organics (Base/Neutral and Acid Extractables), Polychlorinated Biphenyls (PCBs) and Inorganics (Metals)

Dear Mr. Berry:

Data Usability Summary Report (DUSR) technical services were performed by ChemWorld Environmental, Inc. for the Commerce Square Project for the soil / solid sampling event of March 24, 2009. The DUSR review was performed in accordance with United States Environmental Protection Agency (USEPA) Region II data validation guidelines and New York State Department of Environmental Conservation (NYSDEC) Analytical Service Protocols (ASP) requirements, where applicable.

The analytical data from Lab Work Order No. RSC0813 was reviewed (screened) for the parameters noted. The data screening consisted of a review of the Quality Control (QC) Summary Forms and a brief review of various chromatograms and quantitation reports. The QC Forms were reviewed to determine whether any data required qualification based upon QC deviations noted on the Forms. The associated Analytical Data Result Forms are included as Attachment A. These Forms include data qualifiers as described within this letter report. Unless otherwise noted, all results included on the Forms are considered usable, based upon the DUSR review items noted below. Attachment B includes copies of the associated Case Narratives and the Chain-of-Custody forms.

The DUSR review items include the following, as method appropriate:

- Completeness of Data Package
- Chain-of-Custody Review
- Holding Times from Collection
- Surrogate Recovery
- GC/MS Instrument Performance Check
- Initial and Continuing Calibration
- Matrix Spike / Matrix Spike Duplicates (MS/MSD)
- Matrix Spike Blanks (MSB)
- Internal Standards
- Method and Field Blanks
- CRDL Standards for ICP
- Laboratory Duplicate Samples
- Laboratory Control Samples (LCS)
- ICP Interference Check
- ICP Serial Dilution

The QC Summary Forms included various deviations based upon the acceptable limits for quality control. The following should be noted regarding qualification of the data set for the review items above.

14 Orchard Way North, Rockville, Maryland 20854, Tel. 301-294-6144, Fax 301-~~309-6640~~ 294-6144

Volatiles – Soil / Solid, Lab Work Order No. RSC0813

Continuing Calibration: Three continuing calibrations analyzed on 03/26/09 at 11:04, 03/30/09 at 19:46 and 04/06/09 at 10:24 generated Percent Difference (%D's) of greater than the 25% limit for various Volatile compounds in the range of 26.9% to 68.1%. The compounds included Chloroethane, Dichlorodifluoromethane, Methyl Acetate, Vinyl Acetate, 1,2-Dibromo-3-chloropropane, Bromoform, Carbon Disulfide, Chlorodibromomethane, Methyl-t-butyl ether and Methylene Chloride. The associated samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for these compounds.

Method Blanks: Three soil method blanks were analyzed for the associated samples. Acetone and Toluene were detected in 1 of the 3 Method Blanks. Acetone was detected at 6.0 ug/Kg and Toluene was detected at 1.0 ug/Kg. A limit of ten times these results were used for review and qualification of the associated soil samples. Sample results found to be less than the Method Blank limit and reported at less than the Contract Required Quantitation Limit (CRQL), were qualified as 'U', not detected, at the CRQL. Sample results reported over the CRQL but less than the Method Blank limit were qualified as 'U', not detected. Sample results that exceed the respective blank limit do not require qualification.

Semi-Volatiles – Soil / Solid, Lab Work Order No. RSC0813

Continuing Calibration: One continuing calibration analyzed on 04/02/09 at 14:21 generated a %D of 28.0% for 2,4-Dinitrophenol (Limit 25%). The associated samples were qualified as 'UJ', estimated, for the non-detectable results for 2,4-Dinitrophenol. Positive results were not detected for this compound.

PCBs – Soil / Solid, Lab Work Order No. RSC0813

Qualification of the data set for PCB's was not required. The associated quality control information was found to be generated within acceptable limits.

Inorganics – Soil / Solid, Lab Work Order No. RSC0813

Matrix Spike (MS): One set of site-specific MS and MS Duplicate samples for CS-BH-07 were analyzed for the soil samples. Low spike recovery for was generated for Antimony at 35% and 29% (Limit 75-125). The soil samples were qualified as 'UJ', estimated, for the non-detectable results for Antimony. Positive results were not detected.

Laboratory Control Sample (LCS): One LCS (Standard Reference) was analyzed with the soil / solid samples. Low recovery was generated for Aluminum, Antimony and Iron in the range of 68% to 78% (Limit 80-120). The soil samples were qualified as 'J', estimated, for the positive results and 'UJ', estimated, for the non-detectable results for these Inorganics.

ICP Serial Dilution: The following inorganics generated %D's of greater than 10% for Serial Dilution for CS-BH-07:

Arsenic	50%
Cobalt	12%
Zinc	14%

The associated sample results for the inorganics noted above were qualified as 'J', estimated, for the positive results, where the sample result exceeds 50 times the respective Instrument Detection Limit (IDL).

Please contact me by telephone or Fax at 301-294-6144, should you require additional information or clarification regarding this Letter Report.

Sincerely,

Andrea P. Schuessler

Andrea P. Schuessler, CHMM
ChemWorld Environmental, Inc.

c: PA-2009.3 file

ORGANIC DATA QUALIFIERS

U - Indicates that the compound was analyzed for, but not detected at or above the Contract Required Quantitation Limit (CRQL), or the compound is not detected due to qualification through the method or field blank.

J - The associated numerical value is an estimated quantity.

JN - Tentatively identified with approximated concentrations (Volatile and Semi-Volatile Organics). Presumptively present at an approximated quantity (Pesticides/PCBs).

UJ - The compound was analyzed for, but not detected. The sample quantitation limit is an estimated quantity due to variance from quality control limits.

C - Applies to Pesticide results where the identification has been confirmed by GC/MS.

E - Reported value is estimated due to quantitation above the calibration range.

D - Reported result taken from diluted sample analysis.

A - Aldol condensation product.

R - Reported value is unusable and rejected due to variance from quality control limits.

NA - Not Analyzed.

INORGANIC DATA QUALIFIERS

U - Indicates analyte not detected at or above the Contract Required Detection Limit (CRDL), or the compound is not detected due to qualification through the method or field blank.

B - Indicates analyte result is between Instrument Detection Limit (IDL) and CRDL.

J - The reported value is estimated due to variance from quality control limits.

UJ - The element was analyzed for, but not detected. The sample quantitation limit is an estimate due to variance from quality control limits.

E - Reported value is estimated because of the presence of interference.

R - Reported value is unusable and rejected due to variance from quality control limits.

NA - Not analyzed.

ATTACHMENT A

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-02

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-01 File ID: F7714.D

Sampled: 03/24/09 10:15 Prepared: 03/26/09 08:43 Analyzed: 03/26/09 12:38

Solids: 86.40 Preparation: 5030B MS Initial/Final: 8.26 g / 5 mL

Batch: 9C26011 Sequence: RC92607 Calibration: R9C1304 Instrument: HP5973F

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-55-6	1,1,1-Trichloroethane	1	3.5	UD
79-34-5	1,1,2,2-Tetrachloroethane	1	3.5	UD
79-00-5	1,1,2-Trichloroethane	1	3.5	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	1	3.5	UD
75-34-3	1,1-Dichloroethane	1	3.5	UD
75-35-4	1,1-Dichloroethene	1	3.5	UD
120-82-1	1,2,4-Trichlorobenzene	1	3.5	UD
96-12-8	1,2-Dibromo-3-chloropropane	1	3.5	UD
106-93-4	1,2-Dibromoethane (EDB)	1	3.5	UD
95-50-1	1,2-Dichlorobenzene	1	3.5	UD
107-06-2	1,2-Dichloroethane	1	3.5	UD
540-59-0	1,2-Dichloroethene, Total	1	7.0	UD
78-87-5	1,2-Dichloropropane	1	3.5	UD
541-73-1	1,3-Dichlorobenzene	1	3.5	UD
106-46-7	1,4-Dichlorobenzene	1	3.5	UD
78-93-3	2-Butanone (MEK)	1	18	UD
591-78-6	2-Hexanone	1	18	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	1	18	UD
67-64-1	Acetone	1	~~15~~ (18 u)	~~JD~~
71-43-2	Benzene	1	3.5	UD
75-27-4	Bromodichloromethane	1	3.5	UD
75-25-2	Bromoform	1	3.5	UD
74-83-9	Bromomethane	1	7.0	UD
75-15-0	Carbon disulfide	1	3.5	UD
56-23-5	Carbon Tetrachloride	1	3.5	UD
108-90-7	Chlorobenzene	1	3.5	UD
124-48-1	Chlorodibromomethane	1	3.5	UD
75-00-3	Chloroethane	1	7.0	(UD J)
67-66-3	Chloroform	1	3.5	UD
74-87-3	Chloromethane	1	7.0	UD
156-59-2	cis-1,2-Dichloroethene	1	3.5	UD
10061-01-5	cis-1,3-Dichloropropene	1	3.5	UD
110-82-7	Cyclohexane	1	2.2	JD
75-71-8	Dichlorodifluoromethane	1	3.5	(UD J)
100-41-4	Ethylbenzene	1	3.1	JD
98-82-8	Isopropylbenzene	1	3.5	UD
79-20-9	Methyl Acetate	1	3.5	(UD J)
1634-04-4	Methyl tert-Butyl Ether	1	3.5	UD
108-87-2	Methylcyclohexane	1	6.5	D

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

CS-BH-02

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-01 File ID: F7714.D

Sampled: 03/24/09 10:15 Prepared: 03/26/09 08:43 Analyzed: 03/26/09 12:38

Solids: 86.40 Preparation: 5030B MS Initial/Final: 8.26 g / 5 mL

Batch: 9C26011 Sequence: RC92607 Calibration: R9C1304 Instrument: HP5973F

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
75-09-2	Methylene Chloride	1	3.5	UD
100-42-5	Styrene	1	3.5	UD
127-18-4	Tetrachloroethene	1	3.5	UD
108-88-3	Toluene	1	3.5	UD
156-60-5	trans-1,2-Dichloroethene	1	3.5	UD
10061-02-6	trans-1,3-Dichloropropene	1	3.5	UD
79-01-6	Trichloroethene	1	3.5	UD
75-69-4	Trichlorofluoromethane	1	3.5	UD
108-05-4	Vinyl acetate	1	18	UD J
75-01-4	Vinyl chloride	1	7.0	UD
1330-20-7	Xylenes, total	1	1.7	JD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	52.9	106	64 - 126	
4-Bromofluorobenzene	50.0	53.2	106	72 - 126	
Toluene-d8	50.0	56.5	113	71 - 125	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	374768	9.41	566225	9.41	
1,4-Difluorobenzene	902638	4.35	1359773	4.35	
Chlorobenzene-d5	405843	6.96	596038	6.96	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-05

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02 File ID: F7715.D

Sampled: 03/24/09 12:00 Prepared: 03/26/09 08:43 Analyzed: 03/26/09 13:04

Solids: 86.20 Preparation: 5030B MS Initial/Final: 6.41 g / 5 mL

Batch: 9C26011 Sequence: RC92607 Calibration: R9C1304 Instrument: HP5973F

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-55-6	1,1,1-Trichloroethane	1	4.5	UD
79-34-5	1,1,2,2-Tetrachloroethane	1	4.5	UD
79-00-5	1,1,2-Trichloroethane	1	4.5	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	1	4.5	UD
75-34-3	1,1-Dichloroethane	1	4.5	UD
75-35-4	1,1-Dichloroethene	1	4.5	UD
120-82-1	1,2,4-Trichlorobenzene	1	4.5	UD
96-12-8	1,2-Dibromo-3-chloropropane	1	4.5	UD
106-93-4	1,2-Dibromoethane (EDB)	1	4.5	UD
95-50-1	1,2-Dichlorobenzene	1	4.5	UD
107-06-2	1,2-Dichloroethane	1	4.5	UD
540-59-0	1,2-Dichloroethene, Total	1	960	DE
78-87-5	1,2-Dichloropropane	1	4.5	UD
541-73-1	1,3-Dichlorobenzene	1	4.5	UD
106-46-7	1,4-Dichlorobenzene	1	4.5	UD
78-93-3	2-Butanone (MEK)	1	23	UD
591-78-6	2-Hexanone	1	23	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	1	23	UD
67-64-1	Acetone	1	29 U	~~D~~
71-43-2	Benzene	1	4.4	JD
75-27-4	Bromodichloromethane	1	4.5	UD
75-25-2	Bromoform	1	4.5	UD
74-83-9	Bromomethane	1	9.0	UD
75-15-0	Carbon disulfide	1	4.5	UD
56-23-5	Carbon Tetrachloride	1	4.5	UD
108-90-7	Chlorobenzene	1	4.5	UD
124-48-1	Chlorodibromomethane	1	4.5	UD
75-00-3	Chloroethane	1	9.0	UDJ
67-66-3	Chloroform	1	4.5	UD
74-87-3	Chloromethane	1	9.0	UD
156-59-2	cis-1,2-Dichloroethene	1	940	DE
10061-01-5	cis-1,3-Dichloropropene	1	4.5	UD
110-82-7	Cyclohexane	1	4.5	UD
75-71-8	Dichlorodifluoromethane	1	4.5	UDJ
100-41-4	Ethylbenzene	1	8.5	D
98-82-8	Isopropylbenzene	1	6.8	D
79-20-9	Methyl Acetate	1	4.5	UDJ
1634-04-4	Methyl tert-Butyl Ether	1	4.5	UD
108-87-2	Methylcyclohexane	1	4.5	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-05

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02 File ID: F7715.D

Sampled: 03/24/09 12:00 Prepared: 03/26/09 08:43 Analyzed: 03/26/09 13:04

Solids: 86.20 Preparation: 5030B MS Initial/Final: 6.41 g / 5 mL

Batch: 9C26011 Sequence: RC92607 Calibration: R9C1304 Instrument: HP5973F

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
75-09-2	Methylene Chloride	1	4.5	UD
100-42-5	Styrene	1	4.5	UD
127-18-4	Tetrachloroethene	1	4.5	UD
108-88-3	Toluene	1	15	D
156-60-5	trans-1,2-Dichloroethene	1	21	D
10061-02-6	trans-1,3-Dichloropropene	1	4.5	UD
79-01-6	Trichloroethene	1	4.5	UD
75-69-4	Trichlorofluoromethane	1	4.5	UD
108-05-4	Vinyl acetate	1	23	UDJ
75-01-4	Vinyl chloride	1	110	D
1330-20-7	Xylenes, total	1	18	D

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	52.7	105	64 - 126	
4-Bromofluorobenzene	50.0	48.8	98	72 - 126	
Toluene-d8	50.0	59.2	118	71 - 125	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	524345	9.41	566225	9.41	
1,4-Difluorobenzene	1338968	4.35	1359773	4.35	
Chlorobenzene-d5	620713	6.96	596038	6.96	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-05

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02RE1 File ID: G9586.D

Sampled: 03/24/09 12:00 Prepared: 04/06/09 10:00 Analyzed: 04/06/09 17:48

Solids: 86.20 Preparation: Methanol Prep Initial/Final: 6.43 g / 250 mL

Batch: 9D06045 Sequence: RD90608 Calibration: R9D0214 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-55-6	1,1,1-Trichloroethane	4	45	UD
79-34-5	1,1,2,2-Tetrachloroethane	4	45	UD
79-00-5	1,1,2-Trichloroethane	4	45	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	4	45	UD
75-34-3	1,1-Dichloroethane	4	45	UD
75-35-4	1,1-Dichloroethene	4	45	UD
120-82-1	1,2,4-Trichlorobenzene	4	45	UD
96-12-8	1,2-Dibromo-3-chloropropane	4	45	UD
106-93-4	1,2-Dibromoethane (EDB)	4	45	UD
95-50-1	1,2-Dichlorobenzene	4	45	UD
107-06-2	1,2-Dichloroethane	4	45	UD
540-59-0	1,2-Dichloroethene, Total	4	2400	D
78-87-5	1,2-Dichloropropane	4	45	UD
541-73-1	1,3-Dichlorobenzene	4	45	UD
106-46-7	1,4-Dichlorobenzene	4	45	UD
78-93-3	2-Butanone (MEK)	4	230	UD
591-78-6	2-Hexanone	4	230	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	4	230	UD
67-64-1	Acetone	4	230	UD
71-43-2	Benzene	4	45	UD
75-27-4	Bromodichloromethane	4	45	UD
75-25-2	Bromoform	4	45	UD
74-83-9	Bromomethane	4	45	UD
75-15-0	Carbon disulfide	4	45	UD
56-23-5	Carbon Tetrachloride	4	45	UD
108-90-7	Chlorobenzene	4	45	UD
124-48-1	Chlorodibromomethane	4	45	UD
75-00-3	Chloroethane	4	45	UD
67-66-3	Chloroform	4	45	UD
74-87-3	Chloromethane	4	45	UD
156-59-2	cis-1,2-Dichloroethene	4	2400	D
10061-01-5	cis-1,3-Dichloropropene	4	45	UD
110-82-7	Cyclohexane	4	45	UD
75-71-8	Dichlorodifluoromethane	4	45	UD
100-41-4	Ethylbenzene	4	45	UD
98-82-8	Isopropylbenzene	4	45	UD
79-20-9	Methyl Acetate	4	45	UD
1634-04-4	Methyl tert-Butyl Ether	4	45	UD
108-87-2	Methylcyclohexane	4	45	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-05

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02RE1 File ID: G9586.D

Sampled: 03/24/09 12:00 Prepared: 04/06/09 10:00 Analyzed: 04/06/09 17:48

Solids: 86.20 Preparation: Methanol Prep Initial/Final: 6.43 g / 250 mL

Batch: 9D06045 Sequence: RD90608 Calibration: R9D0214 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
75-09-2	Methylene Chloride	4	45	UD
100-42-5	Styrene	4	45	UD
127-18-4	Tetrachloroethene	4	45	UD
108-88-3	Toluene	4	45	UD
156-60-5	trans-1,2-Dichloroethene	4	45	UD
10061-02-6	trans-1,3-Dichloropropene	4	45	UD
79-01-6	Trichloroethene	4	45	UD
75-69-4	Trichlorofluoromethane	4	45	UD
108-05-4	Vinyl acetate	4	230	UD
75-01-4	Vinyl chloride	4	90	UD
1330-20-7	Xylenes, total	4	90	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.6	98	10 - 190	
4-Bromofluorobenzene	25.0	23.7	95	10 - 190	
Toluene-d8	25.0	23.9	96	10 - 190	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	112520	10.74	112268	10.74	
1,4-Difluorobenzene	328023	5.48	315955	5.48	
Chlorobenzene-d5	149011	8.35	138296	8.35	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-05D

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03 File ID: F7716.D

Sampled: 03/24/09 12:00 Prepared: 03/26/09 08:43 Analyzed: 03/26/09 13:29

Solids: 86.80 Preparation: 5030B MS Initial/Final: 7.22 g / 5 mL

Batch: 9C26011 Sequence: RC92607 Calibration: R9C1304 Instrument: HP5973F

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-55-6	1,1,1-Trichloroethane	1	4.0	UD
79-34-5	1,1,2,2-Tetrachloroethane	1	4.0	UD
79-00-5	1,1,2-Trichloroethane	1	4.0	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	1	4.0	UD
75-34-3	1,1-Dichloroethane	1	4.0	UD
75-35-4	1,1-Dichloroethene	1	1.3	JD
120-82-1	1,2,4-Trichlorobenzene	1	4.0	UD
96-12-8	1,2-Dibromo-3-chloropropane	1	4.0	UD
106-93-4	1,2-Dibromoethane (EDB)	1	4.0	UD
95-50-1	1,2-Dichlorobenzene	1	4.0	UD
107-06-2	1,2-Dichloroethane	1	4.0	UD
540-59-0	1,2-Dichloroethene, Total	1	830	DE
78-87-5	1,2-Dichloropropane	1	4.0	UD
541-73-1	1,3-Dichlorobenzene	1	4.0	UD
106-46-7	1,4-Dichlorobenzene	1	4.0	UD
78-93-3	2-Butanone (MEK)	1	20	UD
591-78-6	2-Hexanone	1	20	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	1	20	UD
67-64-1	Acetone	1	24 U	~~D~~
71-43-2	Benzene	1	4.8	D
75-27-4	Bromodichloromethane	1	4.0	UD
75-25-2	Bromoform	1	4.0	UD
74-83-9	Bromomethane	1	8.0	UD
75-15-0	Carbon disulfide	1	4.0	UD
56-23-5	Carbon Tetrachloride	1	4.0	UD
108-90-7	Chlorobenzene	1	4.0	UD
124-48-1	Chlorodibromomethane	1	4.0	UD
75-00-3	Chloroethane	1	2.5	JD
67-66-3	Chloroform	1	4.0	UD
74-87-3	Chloromethane	1	8.0	UD
156-59-2	cis-1,2-Dichloroethene	1	810	DE
10061-01-5	cis-1,3-Dichloropropene	1	4.0	UD
110-82-7	Cyclohexane	1	4.0	UD
75-71-8	Dichlorodifluoromethane	1	4.0	UDJ
100-41-4	Ethylbenzene	1	18	D
98-82-8	Isopropylbenzene	1	18	D
79-20-9	Methyl Acetate	1	4.0	UDJ
1634-04-4	Methyl tert-Butyl Ether	1	4.0	UD
108-87-2	Methylcyclohexane	1	4.0	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-05D

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03 File ID: F7716.D

Sampled: 03/24/09 12:00 Prepared: 03/26/09 08:43 Analyzed: 03/26/09 13:29

Solids: 86.80 Preparation: 5030B MS Initial/Final: 7.22 g / 5 mL

Batch: 9C26011 Sequence: RC92607 Calibration: R9C1304 Instrument: HP5973F

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
75-09-2	Methylene Chloride	1	4.0	UD
100-42-5	Styrene	1	4.0	UD
127-18-4	Tetrachloroethene	1	4.0	UD
108-88-3	Toluene	1	27	D
156-60-5	trans-1,2-Dichloroethene	1	19	D
10061-02-6	trans-1,3-Dichloropropene	1	4.0	UD
79-01-6	Trichloroethene	1	2.0	JD
75-69-4	Trichlorofluoromethane	1	4.0	UD
108-05-4	Vinyl acetate	1	20	UDJ
75-01-4	Vinyl chloride	1	53	D
1330-20-7	Xylenes, total	1	37	D

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	50.8	102	64 - 126	
4-Bromofluorobenzene	50.0	52.1	104	72 - 126	
Toluene-d8	50.0	76.0	152	71 - 125	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	416737	9.41	566225	9.41	
1,4-Difluorobenzene	1372254	4.35	1359773	4.35	
Chlorobenzene-d5	546843	6.96	596038	6.96	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-05D

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03RE1 File ID: G9587.D

Sampled: 03/24/09 12:00 Prepared: 04/06/09 10:00 Analyzed: 04/06/09 18:10

Solids: 86.80 Preparation: Methanol Prep Initial/Final: 6.83 g / 250 mL

Batch: 9D06045 Sequence: RD90608 Calibration: R9D0214 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-55-6	1,1,1-Trichloroethane	4	42	UD
79-34-5	1,1,2,2-Tetrachloroethane	4	42	UD
79-00-5	1,1,2-Trichloroethane	4	42	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	4	42	UD
75-34-3	1,1-Dichloroethane	4	42	UD
75-35-4	1,1-Dichloroethene	4	42	UD
120-82-1	1,2,4-Trichlorobenzene	4	42	UD
96-12-8	1,2-Dibromo-3-chloropropane	4	42	UD
106-93-4	1,2-Dibromoethane (EDB)	4	42	UD
95-50-1	1,2-Dichlorobenzene	4	42	UD
107-06-2	1,2-Dichloroethane	4	42	UD
540-59-0	1,2-Dichloroethene, Total	4	2400	D
78-87-5	1,2-Dichloropropane	4	42	UD
541-73-1	1,3-Dichlorobenzene	4	42	UD
106-46-7	1,4-Dichlorobenzene	4	42	UD
78-93-3	2-Butanone (MEK)	4	210	UD
591-78-6	2-Hexanone	4	210	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	4	210	UD
67-64-1	Acetone	4	210	UD
71-43-2	Benzene	4	42	UD
75-27-4	Bromodichloromethane	4	42	UD
75-25-2	Bromoform	4	42	UD
74-83-9	Bromomethane	4	42	UD
75-15-0	Carbon disulfide	4	42	UD
56-23-5	Carbon Tetrachloride	4	42	UD
108-90-7	Chlorobenzene	4	42	UD
124-48-1	Chlorodibromomethane	4	42	UD
75-00-3	Chloroethane	4	42	UD
67-66-3	Chloroform	4	42	UD
74-87-3	Chloromethane	4	42	UD
156-59-2	cis-1,2-Dichloroethene	4	2400	D
10061-01-5	cis-1,3-Dichloropropene	4	42	UD
110-82-7	Cyclohexane	4	42	UD
75-71-8	Dichlorodifluoromethane	4	42	UD
100-41-4	Ethylbenzene	4	42	UD
98-82-8	Isopropylbenzene	4	42	UD
79-20-9	Methyl Acetate	4	42	UD J
1634-04-4	Methyl tert-Butyl Ether	4	42	UD
108-87-2	Methylcyclohexane	4	42	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-05D

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03RE1 File ID: G9587.D

Sampled: 03/24/09 12:00 Prepared: 04/06/09 10:00 Analyzed: 04/06/09 18:10

Solids: 86.80 Preparation: Methanol Prep Initial/Final: 6.83 g / 250 mL

Batch: 9D06045 Sequence: RD90608 Calibration: R9D0214 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
75-09-2	Methylene Chloride	4	42	UD
100-42-5	Styrene	4	42	UD
127-18-4	Tetrachloroethene	4	42	UD
108-88-3	Toluene	4	42	UD
156-60-5	trans-1,2-Dichloroethene	4	42	UD
10061-02-6	trans-1,3-Dichloropropene	4	42	UD
79-01-6	Trichloroethene	4	42	UD
75-69-4	Trichlorofluoromethane	4	42	UD
108-05-4	Vinyl acetate	4	210	UD
75-01-4	Vinyl chloride	4	84	UD
1330-20-7	Xylenes, total	4	84	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.8	95	10 - 190	
4-Bromofluorobenzene	25.0	23.4	94	10 - 190	
Toluene-d8	25.0	23.3	93	10 - 190	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	113723	10.74	112268	10.74	
1,4-Difluorobenzene	316198	5.48	315955	5.48	
Chlorobenzene-d5	146454	8.35	138296	8.35	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-07

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-04 File ID: G9588.D

Sampled: 03/24/09 14:00 Prepared: 04/06/09 10:00 Analyzed: 04/06/09 18:33

Solids: 83.71 Preparation: Methanol Prep Initial/Final: 7.78 g / 250 mL

Batch: 9D06045 Sequence: RD90608 Calibration: R9D0214 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-55-6	1,1,1-Trichloroethane	4	38	UD
79-34-5	1,1,2,2-Tetrachloroethane	4	38	UD
79-00-5	1,1,2-Trichloroethane	4	38	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	4	38	UD
75-34-3	1,1-Dichloroethane	4	38	UD
75-35-4	1,1-Dichloroethene	4	38	UD
120-82-1	1,2,4-Trichlorobenzene	4	38	UD
96-12-8	1,2-Dibromo-3-chloropropane	4	38	UD
106-93-4	1,2-Dibromoethane (EDB)	4	38	UD
95-50-1	1,2-Dichlorobenzene	4	38	UD
107-06-2	1,2-Dichloroethane	4	38	UD
540-59-0	1,2-Dichloroethene, Total	4	77	UD
78-87-5	1,2-Dichloropropane	4	38	UD
541-73-1	1,3-Dichlorobenzene	4	38	UD
106-46-7	1,4-Dichlorobenzene	4	38	UD
78-93-3	2-Butanone (MEK)	4	190	UD
591-78-6	2-Hexanone	4	190	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	4	190	UD
67-64-1	Acetone	4	190	UD
71-43-2	Benzene	4	38	UD
75-27-4	Bromodichloromethane	4	38	UD
75-25-2	Bromoform	4	38	UD
74-83-9	Bromomethane	4	38	UD
75-15-0	Carbon disulfide	4	38	UD
56-23-5	Carbon Tetrachloride	4	38	UD
108-90-7	Chlorobenzene	4	38	UD
124-48-1	Chlorodibromomethane	4	38	UD
75-00-3	Chloroethane	4	38	UD
67-66-3	Chloroform	4	38	UD
74-87-3	Chloromethane	4	38	UD
156-59-2	cis-1,2-Dichloroethene	4	38	UD
10061-01-5	cis-1,3-Dichloropropene	4	38	UD
110-82-7	Cyclohexane	4	38	UD
75-71-8	Dichlorodifluoromethane	4	38	UD
100-41-4	Ethylbenzene	4	38	UD
98-82-8	Isopropylbenzene	4	600	D
79-20-9	Methyl Acetate	4	38	UD
1634-04-4	Methyl tert-Butyl Ether	4	38	UD
108-87-2	Methylcyclohexane	4	160	D

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-07

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-04 File ID: G9588.D

Sampled: 03/24/09 14:00 Prepared: 04/06/09 10:00 Analyzed: 04/06/09 18:33

Solids: 83.71 Preparation: Methanol Prep Initial/Final: 7.78 g / 250 mL

Batch: 9D06045 Sequence: RD90608 Calibration: R9D0214 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
75-09-2	Methylene Chloride	4	38	UD
100-42-5	Styrene	4	38	UD
127-18-4	Tetrachloroethene	4	38	UD
108-88-3	Toluene	4	38	UD
156-60-5	trans-1,2-Dichloroethene	4	38	UD
10061-02-6	trans-1,3-Dichloropropene	4	38	UD
79-01-6	Trichloroethene	4	38	UD
75-69-4	Trichlorofluoromethane	4	38	UD
108-05-4	Vinyl acetate	4	190	UDJ
75-01-4	Vinyl chloride	4	77	UD
1330-20-7	Xylenes, total	4	930	D

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.9	96	10 - 190	
4-Bromofluorobenzene	25.0	20.8	83	10 - 190	
Toluene-d8	25.0	21.2	85	10 - 190	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	113083	10.74	112268	10.74	
1,4-Difluorobenzene	324919	5.48	315955	5.48	
Chlorobenzene-d5	167445	8.35	138296	8.35	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-09

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-07 File ID: F7767.D

Sampled: 03/24/09 15:00 Prepared: 03/30/09 18:25 Analyzed: 03/31/09 00:26

Solids: 82.99 Preparation: 5035A MS Initial/Final: 6.65 g / 5 mL

Batch: 9C30060 Sequence: RC93030 Calibration: R9C1304 Instrument: HP5973F

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
71-55-6	1,1,1-Trichloroethane	1	4.5	UD
79-34-5	1,1,2,2-Tetrachloroethane	1	4.5	UD
79-00-5	1,1,2-Trichloroethane	1	4.5	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	1	4.5	UD
75-34-3	1,1-Dichloroethane	1	4.5	UD
75-35-4	1,1-Dichloroethene	1	4.5	UD
120-82-1	1,2,4-Trichlorobenzene	1	4.5	UD
96-12-8	1,2-Dibromo-3-chloropropane	1	4.5	UD J
106-93-4	1,2-Dibromoethane (EDB)	1	4.5	UD
95-50-1	1,2-Dichlorobenzene	1	4.5	UD
107-06-2	1,2-Dichloroethane	1	4.5	UD
540-59-0	1,2-Dichloroethene, Total	1	4.1	JD
78-87-5	1,2-Dichloropropane	1	4.5	UD
541-73-1	1,3-Dichlorobenzene	1	4.5	UD
106-46-7	1,4-Dichlorobenzene	1	4.5	UD
78-93-3	2-Butanone (MEK)	1	23	UD
591-78-6	2-Hexanone	1	23	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	1	23	UD
67-64-1	Acetone	1	~~12~~ 23 U	~~JBD~~
71-43-2	Benzene	1	4.5	UD
75-27-4	Bromodichloromethane	1	4.5	UD
75-25-2	Bromoform	1	4.5	UD J
74-83-9	Bromomethane	1	9.1	UD
75-15-0	Carbon disulfide	1	4.5	UD J
56-23-5	Carbon Tetrachloride	1	4.5	UD
108-90-7	Chlorobenzene	1	4.5	UD
124-48-1	Chlorodibromomethane	1	4.5	UD J
75-00-3	Chloroethane	1	9.1	UD J
67-66-3	Chloroform	1	4.5	UD
74-87-3	Chloromethane	1	9.1	UD
156-59-2	cis-1,2-Dichloroethene	1	4.1	JD
10061-01-5	cis-1,3-Dichloropropene	1	4.5	UD
110-82-7	Cyclohexane	1	4.5	UD
75-71-8	Dichlorodifluoromethane	1	4.5	UD
100-41-4	Ethylbenzene	1	4.5	UD
98-82-8	Isopropylbenzene	1	4.5	UD
79-20-9	Methyl Acetate	1	4.5	UD J
1634-04-4	Methyl tert-Butyl Ether	1	4.5	UD J
108-87-2	Methylcyclohexane	1	5.0	D

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

CS-BH-09

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-07 File ID: F7767.D

Sampled: 03/24/09 15:00 Prepared: 03/30/09 18:25 Analyzed: 03/31/09 00:26

Solids: 82.99 Preparation: 5035A MS Initial/Final: 6.65 g / 5 mL

Batch: 9C30060 Sequence: RC93030 Calibration: R9C1304 Instrument: HP5973F

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
75-09-2	Methylene Chloride	1	4.5	UD J
100-42-5	Styrene	1	4.5	UD
127-18-4	Tetrachloroethene	1	4.5	UD
108-88-3	Toluene	1	4.5	UD
156-60-5	trans-1,2-Dichloroethene	1	4.5	UD
10061-02-6	trans-1,3-Dichloropropene	1	4.5	UD
79-01-6	Trichloroethene	1	4.5	UD
75-69-4	Trichlorofluoromethane	1	4.5	UD
108-05-4	Vinyl acetate	1	23	UD J
75-01-4	Vinyl chloride	1	9.1	UD
1330-20-7	Xylenes, total	1	9.1	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	48.2	96	64 - 126	
4-Bromofluorobenzene	50.0	54.3	109	72 - 126	
Toluene-d8	50.0	57.1	114	71 - 125	
INTERNAL STANDARD	**AREA**	**RT**	**REF AREA**	**REF RT**	**Q**
1,4-Dichlorobenzene-d4	514650	9.41	593311	9.4	
1,4-Difluorobenzene	1222991	4.34	1374141	4.35	
Chlorobenzene-d5	530179	6.96	594559	6.96	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8270C

CS-BH-02

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-01 File ID: U1833.D

Sampled: 03/24/09 10:15 Prepared: 03/27/09 08:30 Analyzed: 04/02/09 00:29

Solids: 86.40 Preparation: 3550B MB Initial/Final: 30.42 g / 1 mL

Batch: 9C26088 Sequence: RD90123 Calibration: R9D0106 Instrument: HP5973U

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
95-95-4	2,4,5-Trichlorophenol	10	1900	UD
88-06-2	2,4,6-Trichlorophenol	10	1900	UD
120-83-2	2,4-Dichlorophenol	10	1900	UD
105-67-9	2,4-Dimethylphenol	10	1900	UD
51-28-5	2,4-Dinitrophenol	10	3800	UD J
121-14-2	2,4-Dinitrotoluene	10	1900	UD
606-20-2	2,6-Dinitrotoluene	10	1900	UD
91-58-7	2-Chloronaphthalene	10	1900	UD
95-57-8	2-Chlorophenol	10	1900	UD
91-57-6	2-Methylnaphthalene	10	1900	UD
95-48-7	2-Methylphenol	10	1900	UD
88-74-4	2-Nitroaniline	10	3800	UD
88-75-5	2-Nitrophenol	10	1900	UD
15831-10-4	3 & 4 Methylphenol	10	3800	UD
91-94-1	3,3'-Dichlorobenzidine	10	1900	UD
99-09-2	3-Nitroaniline	10	3800	UD
534-52-1	4,6-Dinitro-2-methylphenol	10	3800	UD
101-55-3	4-Bromophenyl phenyl ether	10	1900	UD
59-50-7	4-Chloro-3-methylphenol	10	1900	UD
106-47-8	4-Chloroaniline	10	1900	UD
7005-72-3	4-Chlorophenyl phenyl ether	10	1900	UD
100-01-6	4-Nitroaniline	10	3800	UD
100-02-7	4-Nitrophenol	10	3800	UD
83-32-9	Acenaphthene	10	260	JD
208-96-8	Acenaphthylene	10	1900	UD
98-86-2	Acetophenone	10	1900	UD
120-12-7	Anthracene	10	230	JD
1912-24-9	Atrazine	10	1900	UD
100-52-7	Benzaldehyde	10	1900	UD
56-55-3	Benzo[a]anthracene	10	210	JD
50-32-8	Benzo[a]pyrene	10	110	JD
205-99-2	Benzo[b]fluoranthene	10	210	JD
191-24-2	Benzo[g,h,i]perylene	10	1900	UD
207-08-9	Benzo[k]fluoranthene	10	1900	UD
92-52-4	Biphenyl	10	1900	UD
111-91-1	Bis(2-chloroethoxy)methane	10	1900	UD
111-44-4	Bis(2-chloroethyl)ether	10	1900	UD
108-60-1	Bis(2-chloroisopropyl) ether	10	1900	UD
117-81-7	Bis(2-ethylhexyl) phthalate	10	1900	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8270C

CS-BH-02

Laboratory:	TestAmerica Buffalo		SDG:		
Client:	Panamerican Environmental Inc.		Project:	Commerce Square	
Matrix:	Solid	Laboratory ID:	RSC0813-01	File ID:	U1833.D
Sampled:	03/24/09 10:15	Prepared:	03/27/09 08:30	Analyzed:	04/02/09 00:29
Solids:	86.40	Preparation:	3550B MB	Initial/Final:	30.42 g / 1 mL
Batch:	9C26088	Sequence:	RD90123	Calibration:	R9D0106
Instrument:	HP5973U				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
85-68-7	Butyl benzyl phthalate	10	1900	UD
105-60-2	Caprolactam	10	1900	UD
86-74-8	Carbazole	10	1900	UD
218-01-9	Chrysene	10	140	JD
53-70-3	Dibenz[a,h]anthracene	10	1900	UD
132-64-9	Dibenzofuran	10	1900	UD
84-66-2	Diethyl phthalate	10	1900	UD
131-11-3	Dimethyl phthalate	10	1900	UD
84-74-2	Di-n-butyl phthalate	10	1900	UD
117-84-0	Di-n-octyl phthalate	10	1900	UD
206-44-0	Fluoranthene	10	500	JD
86-73-7	Fluorene	10	320	JD
118-74-1	Hexachlorobenzene	10	1900	UD
87-68-3	Hexachlorobutadiene	10	1900	UD
77-47-4	Hexachlorocyclopentadiene	10	1900	UD
67-72-1	Hexachloroethane	10	1900	UD
193-39-5	Indeno[1,2,3-cd]pyrene	10	1900	UD
78-59-1	Isophorone	10	1900	UD
91-20-3	Naphthalene	10	1900	UD
98-95-3	Nitrobenzene	10	1900	UD
621-64-7	N-Nitrosodi-n-propylamine	10	1900	UD
86-30-6	N-Nitrosodiphenylamine	10	1900	UD
87-86-5	Pentachlorophenol	10	3800	UD
85-01-8	Phenanthrene	10	910	JD
108-95-2	Phenol	10	1900	UD
129-00-0	Pyrene	10	550	JD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	5710	4660	82	39 - 146	
2-Fluorobiphenyl	3800	3760	99	37 - 120	
2-Fluorophenol	5710	3900	68	18 - 120	
Nitrobenzene-d5	3800	2970	78	34 - 132	
Phenol-d5	5710	4380	77	11 - 120	
p-Terphenyl-d14	3800	3670	96	58 - 147	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	127141	6.04	181664	6.04	
Acenaphthene-d10	296684	9.97	432184	9.97	
Chrysene-d12	652425	14.12	918440	14.13	
Naphthalene-d8	448392	7.72	655068	7.72	
Perylene-d12	596654	15.46	764213	15.47	

Form 1

ORGANIC ANALYSIS DATA SHEET

8270C

CS-BH-05

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02 File ID: U1834.D

Sampled: 03/24/09 12:00 Prepared: 03/27/09 08:30 Analyzed: 04/02/09 00:52

Solids: 86.20 Preparation: 3550B MB Initial/Final: 30.29 g / 1 mL

Batch: 9C26088 Sequence: RD90123 Calibration: R9D0106 Instrument: HP5973U

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
95-95-4	2,4,5-Trichlorophenol	10	2000	UD
88-06-2	2,4,6-Trichlorophenol	10	2000	UD
120-83-2	2,4-Dichlorophenol	10	2000	UD
105-67-9	2,4-Dimethylphenol	10	2000	UD
51-28-5	2,4-Dinitrophenol	10	3800	UDJ
121-14-2	2,4-Dinitrotoluene	10	2000	UD
606-20-2	2,6-Dinitrotoluene	10	2000	UD
91-58-7	2-Chloronaphthalene	10	2000	UD
95-57-8	2-Chlorophenol	10	2000	UD
91-57-6	2-Methylnaphthalene	10	2000	UD
95-48-7	2-Methylphenol	10	2000	UD
88-74-4	2-Nitroaniline	10	3800	UD
88-75-5	2-Nitrophenol	10	2000	UD
15831-10-4	3 & 4 Methylphenol	10	3800	UD
91-94-1	3,3'-Dichlorobenzidine	10	2000	UD
99-09-2	3-Nitroaniline	10	3800	UD
534-52-1	4,6-Dinitro-2-methylphenol	10	3800	UD
101-55-3	4-Bromophenyl phenyl ether	10	2000	UD
59-50-7	4-Chloro-3-methylphenol	10	2000	UD
106-47-8	4-Chloroaniline	10	2000	UD
7005-72-3	4-Chlorophenyl phenyl ether	10	2000	UD
100-01-6	4-Nitroaniline	10	3800	UD
100-02-7	4-Nitrophenol	10	3800	UD
83-32-9	Acenaphthene	10	2000	UD
208-96-8	Acenaphthylene	10	2000	UD
98-86-2	Acetophenone	10	2000	UD
120-12-7	Anthracene	10	120	JD
1912-24-9	Atrazine	10	2000	UD
100-52-7	Benzaldehyde	10	2000	UD
56-55-3	Benzo[a]anthracene	10	220	JD
50-32-8	Benzo[a]pyrene	10	100	JD
205-99-2	Benzo[b]fluoranthene	10	180	JD
191-24-2	Benzo[g,h,i]perylene	10	2000	UD
207-08-9	Benzo[k]fluoranthene	10	2000	UD
92-52-4	Biphenyl	10	2000	UD
111-91-1	Bis(2-chloroethoxy)methane	10	2000	UD
111-44-4	Bis(2-chloroethyl)ether	10	2000	UD
108-60-1	Bis(2-chloroisopropyl) ether	10	2000	UD
117-81-7	Bis(2-ethylhexyl) phthalate	10	2000	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8270C

CS-BH-05

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02 File ID: U1834.D

Sampled: 03/24/09 12:00 Prepared: 03/27/09 08:30 Analyzed: 04/02/09 00:52

Solids: 86.20 Preparation: 3550B MB Initial/Final: 30.29 g / 1 mL

Batch: 9C26088 Sequence: RD90123 Calibration: R9D0106 Instrument: HP5973U

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
85-68-7	Butyl benzyl phthalate	10	2000	UD
105-60-2	Caprolactam	10	2000	UD
86-74-8	Carbazole	10	2000	UD
218-01-9	Chrysene	10	200	JD
53-70-3	Dibenz[a,h]anthracene	10	2000	UD
132-64-9	Dibenzofuran	10	2000	UD
84-66-2	Diethyl phthalate	10	2000	UD
131-11-3	Dimethyl phthalate	10	2000	UD
84-74-2	Di-n-butyl phthalate	10	2000	UD
117-84-0	Di-n-octyl phthalate	10	2000	UD
206-44-0	Fluoranthene	10	420	JD
86-73-7	Fluorene	10	190	JD
118-74-1	Hexachlorobenzene	10	2000	UD
87-68-3	Hexachlorobutadiene	10	2000	UD
77-47-4	Hexachlorocyclopentadiene	10	2000	UD
67-72-1	Hexachloroethane	10	2000	UD
193-39-5	Indeno[1,2,3-cd]pyrene	10	2000	UD
78-59-1	Isophorone	10	2000	UD
91-20-3	Naphthalene	10	2000	UD
98-95-3	Nitrobenzene	10	2000	UD
621-64-7	N-Nitrosodi-n-propylamine	10	2000	UD
86-30-6	N-Nitrosodiphenylamine	10	2000	UD
87-86-5	Pentachlorophenol	10	3800	UD
85-01-8	Phenanthrene	10	540	JD
108-95-2	Phenol	10	2000	UD
129-00-0	Pyrene	10	430	JD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	5740	4870	85	39 - 146	
2-Fluorobiphenyl	3830	3920	102	37 - 120	
2-Fluorophenol	5740	4210	73	18 - 120	
Nitrobenzene-d5	3830	3220	84	34 - 132	
Phenol-d5	5740	4700	82	11 - 120	
p-Terphenyl-d14	3830	3540	92	58 - 147	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	137714	6.04	181664	6.04	
Acenaphthene-d10	304744	9.97	432184	9.97	
Chrysene-d12	708598	14.12	918440	14.13	
Naphthalene-d8	476978	7.72	655068	7.72	
Perylene-d12	628339	15.46	764213	15.47	

Form 1
ORGANIC ANALYSIS DATA SHEET
8270C

CS-BH-05D

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03 File ID: U1835.D

Sampled: 03/24/09 12:00 Prepared: 03/27/09 08:30 Analyzed: 04/02/09 01:16

Solids: 86.80 Preparation: 3550B MB Initial/Final: 30.62 g / 1 mL

Batch: 9C26088 Sequence: RD90123 Calibration: R9D0106 Instrument: HP5973U

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
95-95-4	2,4,5-Trichlorophenol	10	1900	UD
88-06-2	2,4,6-Trichlorophenol	10	1900	UD
120-83-2	2,4-Dichlorophenol	10	1900	UD
105-67-9	2,4-Dimethylphenol	10	1900	UD
51-28-5	2,4-Dinitrophenol	10	3700	UD J
121-14-2	2,4-Dinitrotoluene	10	1900	UD
606-20-2	2,6-Dinitrotoluene	10	1900	UD
91-58-7	2-Chloronaphthalene	10	1900	UD
95-57-8	2-Chlorophenol	10	1900	UD
91-57-6	2-Methylnaphthalene	10	1900	UD
95-48-7	2-Methylphenol	10	1900	UD
88-74-4	2-Nitroaniline	10	3700	UD
88-75-5	2-Nitrophenol	10	1900	UD
15831-10-4	3 & 4 Methylphenol	10	3700	UD
91-94-1	3,3'-Dichlorobenzidine	10	1900	UD
99-09-2	3-Nitroaniline	10	3700	UD
534-52-1	4,6-Dinitro-2-methylphenol	10	3700	UD
101-55-3	4-Bromophenyl phenyl ether	10	1900	UD
59-50-7	4-Chloro-3-methylphenol	10	1900	UD
106-47-8	4-Chloroaniline	10	1900	UD
7005-72-3	4-Chlorophenyl phenyl ether	10	1900	UD
100-01-6	4-Nitroaniline	10	3700	UD
100-02-7	4-Nitrophenol	10	3700	UD
83-32-9	Acenaphthene	10	1900	UD
208-96-8	Acenaphthylene	10	1900	UD
98-86-2	Acetophenone	10	1900	UD
120-12-7	Anthracene	10	150	JD
1912-24-9	Atrazine	10	1900	UD
100-52-7	Benzaldehyde	10	1900	UD
56-55-3	Benzo[a]anthracene	10	190	JD
50-32-8	Benzo[a]pyrene	10	94	JD
205-99-2	Benzo[b]fluoranthene	10	170	JD
191-24-2	Benzo[g,h,i]perylene	10	1900	UD
207-08-9	Benzo[k]fluoranthene	10	1900	UD
92-52-4	Biphenyl	10	1900	UD
111-91-1	Bis(2-chloroethoxy)methane	10	1900	UD
111-44-4	Bis(2-chloroethyl)ether	10	1900	UD
108-60-1	Bis(2-chloroisopropyl) ether	10	1900	UD
117-81-7	Bis(2-ethylhexyl) phthalate	10	1900	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8270C

CS-BH-05D

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03 File ID: U1835.D

Sampled: 03/24/09 12:00 Prepared: 03/27/09 08:30 Analyzed: 04/02/09 01:16

Solids: 86.80 Preparation: 3550B MB Initial/Final: 30.62 g / 1 mL

Batch: 9C26088 Sequence: RD90123 Calibration: R9D0106 Instrument: HP5973U

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
85-68-7	Butyl benzyl phthalate	10	1900	UD
105-60-2	Caprolactam	10	1900	UD
86-74-8	Carbazole	10	1900	UD
218-01-9	Chrysene	10	150	JD
53-70-3	Dibenz[a,h]anthracene	10	1900	UD
132-64-9	Dibenzofuran	10	1900	UD
84-66-2	Diethyl phthalate	10	1900	UD
131-11-3	Dimethyl phthalate	10	1900	UD
84-74-2	Di-n-butyl phthalate	10	1900	UD
117-84-0	Di-n-octyl phthalate	10	1900	UD
206-44-0	Fluoranthene	10	440	JD
86-73-7	Fluorene	10	230	JD
118-74-1	Hexachlorobenzene	10	1900	UD
87-68-3	Hexachlorobutadiene	10	1900	UD
77-47-4	Hexachlorocyclopentadiene	10	1900	UD
67-72-1	Hexachloroethane	10	1900	UD
193-39-5	Indeno[1,2,3-cd]pyrene	10	1900	UD
78-59-1	Isophorone	10	1900	UD
91-20-3	Naphthalene	10	1900	UD
98-95-3	Nitrobenzene	10	1900	UD
621-64-7	N-Nitrosodi-n-propylamine	10	1900	UD
86-30-6	N-Nitrosodiphenylamine	10	1900	UD
87-86-5	Pentachlorophenol	10	3700	UD
85-01-8	Phenanthrene	10	570	JD
108-95-2	Phenol	10	1900	UD
129-00-0	Pyrene	10	440	JD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	5640	5020	89	39 - 146	
2-Fluorobiphenyl	3760	3950	105	37 - 120	
2-Fluorophenol	5640	4390	78	18 - 120	
Nitrobenzene-d5	3760	3510	93	34 - 132	
Phenol-d5	5640	4910	87	11 - 120	
p-Terphenyl-d14	3760	3650	97	58 - 147	
INTERNAL STANDARD	**AREA**	**RT**	**REF AREA**	**REF RT**	**Q**
1,4-Dichlorobenzene-d4	134525	6.04	181664	6.04	
Acenaphthene-d10	309392	9.97	432184	9.97	
Chrysene-d12	701260	14.12	918440	14.13	
Naphthalene-d8	479818	7.72	655068	7.72	
Perylene-d12	621339	15.46	764213	15.47	

Form 1

ORGANIC ANALYSIS DATA SHEET

8270C

CS-BH-07

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-04 File ID: U1836.D

Sampled: 03/24/09 14:00 Prepared: 03/27/09 08:30 Analyzed: 04/02/09 01:39

Solids: 83.71 Preparation: 3550B MB Initial/Final: 30.74 g / 1 mL

Batch: 9C26088 Sequence: RD90123 Calibration: R9D0106 Instrument: HP5973U

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
95-95-4	2,4,5-Trichlorophenol	10	2000	UD
88-06-2	2,4,6-Trichlorophenol	10	2000	UD
120-83-2	2,4-Dichlorophenol	10	2000	UD
105-67-9	2,4-Dimethylphenol	10	2000	UD
51-28-5	2,4-Dinitrophenol	10	3800	UD J
121-14-2	2,4-Dinitrotoluene	10	2000	UD
606-20-2	2,6-Dinitrotoluene	10	2000	UD
91-58-7	2-Chloronaphthalene	10	2000	UD
95-57-8	2-Chlorophenol	10	2000	UD
91-57-6	2-Methylnaphthalene	10	1100	JD
95-48-7	2-Methylphenol	10	2000	UD
88-74-4	2-Nitroaniline	10	3800	UD
88-75-5	2-Nitrophenol	10	2000	UD
15831-10-4	3 & 4 Methylphenol	10	3800	UD
91-94-1	3,3'-Dichlorobenzidine	10	2000	UD
99-09-2	3-Nitroaniline	10	3800	UD
534-52-1	4,6-Dinitro-2-methylphenol	10	3800	UD
101-55-3	4-Bromophenyl phenyl ether	10	2000	UD
59-50-7	4-Chloro-3-methylphenol	10	2000	UD
106-47-8	4-Chloroaniline	10	2000	UD
7005-72-3	4-Chlorophenyl phenyl ether	10	2000	UD
100-01-6	4-Nitroaniline	10	3800	UD
100-02-7	4-Nitrophenol	10	3800	UD
83-32-9	Acenaphthene	10	2000	UD
208-96-8	Acenaphthylene	10	2000	UD
98-86-2	Acetophenone	10	2000	UD
120-12-7	Anthracene	10	2000	UD
1912-24-9	Atrazine	10	2000	UD
100-52-7	Benzaldehyde	10	2000	UD
56-55-3	Benzo[a]anthracene	10	93	JD
50-32-8	Benzo[a]pyrene	10	2000	UD
205-99-2	Benzo[b]fluoranthene	10	2000	UD
191-24-2	Benzo[g,h,i]perylene	10	2000	UD
207-08-9	Benzo[k]fluoranthene	10	2000	UD
92-52-4	Biphenyl	10	2000	UD
111-91-1	Bis(2-chloroethoxy)methane	10	2000	UD
111-44-4	Bis(2-chloroethyl)ether	10	2000	UD
108-60-1	Bis(2-chloroisopropyl) ether	10	2000	UD
117-81-7	Bis(2-ethylhexyl) phthalate	10	2000	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

CS-BH-07

8270C

Laboratory:	TestAmerica Buffalo		SDG:		
Client:	Panamerican Environmental Inc.		Project:	Commerce Square	
Matrix:	Solid	Laboratory ID:	RSC0813-04	File ID:	U1836.D
Sampled:	03/24/09 14:00	Prepared:	03/27/09 08:30	Analyzed:	04/02/09 01:39
Solids:	83.71	Preparation:	3550B MB	Initial/Final:	30.74 g / 1 mL
Batch:	9C26088	Sequence:	RD90123	Calibration:	R9D0106
Instrument:	HP5973U				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
85-68-7	Butyl benzyl phthalate	10	2000	UD
105-60-2	Caprolactam	10	2000	UD
86-74-8	Carbazole	10	2000	UD
218-01-9	Chrysene	10	2000	UD
53-70-3	Dibenz[a,h]anthracene	10	2000	UD
132-64-9	Dibenzofuran	10	2000	UD
84-66-2	Diethyl phthalate	10	2000	UD
131-11-3	Dimethyl phthalate	10	2000	UD
84-74-2	Di-n-butyl phthalate	10	2000	UD
117-84-0	Di-n-octyl phthalate	10	2000	UD
206-44-0	Fluoranthene	10	100	JD
86-73-7	Fluorene	10	2000	UD
118-74-1	Hexachlorobenzene	10	2000	UD
87-68-3	Hexachlorobutadiene	10	2000	UD
77-47-4	Hexachlorocyclopentadiene	10	2000	UD
67-72-1	Hexachloroethane	10	2000	UD
193-39-5	Indeno[1,2,3-cd]pyrene	10	2000	UD
78-59-1	Isophorone	10	2000	UD
91-20-3	Naphthalene	10	940	JD
98-95-3	Nitrobenzene	10	2000	UD
621-64-7	N-Nitrosodi-n-propylamine	10	2000	UD
86-30-6	N-Nitrosodiphenylamine	10	2000	UD
87-86-5	Pentachlorophenol	10	3800	UD
85-01-8	Phenanthrene	10	180	JD
108-95-2	Phenol	10	2000	UD
129-00-0	Pyrene	10	210	JD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	5830	4280	73	39 - 146	
2-Fluorobiphenyl	3890	3410	88	37 - 120	
2-Fluorophenol	5830	3700	64	18 - 120	
Nitrobenzene-d5	3890	3410	88	34 - 132	
Phenol-d5	5830	4270	73	11 - 120	
p-Terphenyl-d14	3890	3160	81	58 - 147	
INTERNAL STANDARD	**AREA**	**RT**	**REF AREA**	**REF RT**	**Q**
1,4-Dichlorobenzene-d4	140749	6.04	181664	6.04	
Acenaphthene-d10	331634	9.97	432184	9.97	
Chrysene-d12	705997	14.12	918440	14.13	
Naphthalene-d8	500849	7.72	655068	7.72	
Perylene-d12	651298	15.46	764213	15.47	

Form 1

ORGANIC ANALYSIS DATA SHEET

8270C

CS-BH-09

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-07 File ID: U1842.D

Sampled: 03/24/09 15:00 Prepared: 03/27/09 08:30 Analyzed: 04/02/09 15:37

Solids: 82.99 Preparation: 3550B MB Initial/Final: 30.23 g / 1 mL

Batch: 9C26088 Sequence: RD90224 Calibration: R9D0106 Instrument: HP5973U

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
95-95-4	2,4,5-Trichlorophenol	1	200	UD
88-06-2	2,4,6-Trichlorophenol	1	200	UD
120-83-2	2,4-Dichlorophenol	1	200	UD
105-67-9	2,4-Dimethylphenol	1	200	UD
51-28-5	2,4-Dinitrophenol	1	390	UD J
121-14-2	2,4-Dinitrotoluene	1	200	UD
606-20-2	2,6-Dinitrotoluene	1	200	UD
91-58-7	2-Chloronaphthalene	1	200	UD
95-57-8	2-Chlorophenol	1	200	UD
91-57-6	2-Methylnaphthalene	1	200	UD
95-48-7	2-Methylphenol	1	200	UD
88-74-4	2-Nitroaniline	1	390	UD
88-75-5	2-Nitrophenol	1	200	UD
15831-10-4	3 & 4 Methylphenol	1	390	UD
91-94-1	3,3'-Dichlorobenzidine	1	200	UD
99-09-2	3-Nitroaniline	1	390	UD
534-52-1	4,6-Dinitro-2-methylphenol	1	390	UD
101-55-3	4-Bromophenyl phenyl ether	1	200	UD
59-50-7	4-Chloro-3-methylphenol	1	200	UD
106-47-8	4-Chloroaniline	1	200	UD
7005-72-3	4-Chlorophenyl phenyl ether	1	200	UD
100-01-6	4-Nitroaniline	1	390	UD
100-02-7	4-Nitrophenol	1	390	UD
83-32-9	Acenaphthene	1	200	UD
208-96-8	Acenaphthylene	1	200	UD
98-86-2	Acetophenone	1	200	UD
120-12-7	Anthracene	1	10	JD
1912-24-9	Atrazine	1	200	UD
100-52-7	Benzaldehyde	1	200	UD
56-55-3	Benzo[a]anthracene	1	30	JD
50-32-8	Benzo[a]pyrene	1	22	JD
205-99-2	Benzo[b]fluoranthene	1	32	JD
191-24-2	Benzo[g,h,i]perylene	1	14	JD
207-08-9	Benzo[k]fluoranthene	1	14	JD
92-52-4	Biphenyl	1	200	UD
111-91-1	Bis(2-chloroethoxy)methane	1	200	UD
111-44-4	Bis(2-chloroethyl)ether	1	200	UD
108-60-1	Bis(2-chloroisopropyl) ether	1	200	UD
117-81-7	Bis(2-ethylhexyl) phthalate	1	200	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8270C

CS-BH-09

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-07 File ID: U1842.D

Sampled: 03/24/09 15:00 Prepared: 03/27/09 08:30 Analyzed: 04/02/09 15:37

Solids: 82.99 Preparation: 3550B MB Initial/Final: 30.23 g / 1 mL

Batch: 9C26088 Sequence: RD90224 Calibration: R9D0106 Instrument: HP5973U

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
85-68-7	Butyl benzyl phthalate	1	200	UD
105-60-2	Caprolactam	1	200	UD
86-74-8	Carbazole	1	200	UD
218-01-9	Chrysene	1	31	JD
53-70-3	Dibenz[a,h]anthracene	1	200	UD
132-64-9	Dibenzofuran	1	200	UD
84-66-2	Diethyl phthalate	1	200	UD
131-11-3	Dimethyl phthalate	1	200	UD
84-74-2	Di-n-butyl phthalate	1	190	JD
117-84-0	Di-n-octyl phthalate	1	200	UD
206-44-0	Fluoranthene	1	54	JD
86-73-7	Fluorene	1	25	JD
118-74-1	Hexachlorobenzene	1	200	UD
87-68-3	Hexachlorobutadiene	1	200	UD
77-47-4	Hexachlorocyclopentadiene	1	200	UD
67-72-1	Hexachloroethane	1	200	UD
193-39-5	Indeno[1,2,3-cd]pyrene	1	12	JD
78-59-1	Isophorone	1	200	UD
91-20-3	Naphthalene	1	200	UD
98-95-3	Nitrobenzene	1	200	UD
621-64-7	N-Nitrosodi-n-propylamine	1	200	UD
86-30-6	N-Nitrosodiphenylamine	1	200	UD
87-86-5	Pentachlorophenol	1	390	UD
85-01-8	Phenanthrene	1	50	JD
108-95-2	Phenol	1	200	UD
129-00-0	Pyrene	1	50	JD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	5980	6060	101	39 - 146	
2-Fluorobiphenyl	3990	3740	94	37 - 120	
2-Fluorophenol	5980	4450	74	18 - 120	
Nitrobenzene-d5	3990	3490	88	34 - 132	
Phenol-d5	5980	4750	79	11 - 120	
p-Terphenyl-d14	3990	3590	90	58 - 147	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	153220	6.04	219759	6.04	
Acenaphthene-d10	356513	9.96	508053	9.96	
Chrysene-d12	793380	14.12	1089567	14.12	
Naphthalene-d8	544104	7.71	776628	7.71	
Perylene-d12	709892	15.46	956868	15.46	

Form 1

ORGANIC ANALYSIS DATA SHEET

8082

CS-BH-02

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-01 File ID: 19B65256

Sampled: 03/24/09 10:15 Prepared: 03/27/09 08:30 Analyzed: 03/30/09 19:28

Solids: 86.40 Preparation: 3550B GC Initial/Final: 30.56 g / 10 mL

Batch: 9C26091 Sequence: RD90313 Calibration: R9B2502 Instrument: HP5890-19

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	19	UD
11104-28-2	Aroclor 1221	1	19	UD
11141-16-5	Aroclor 1232	1	19	UD
53469-21-9	Aroclor 1242	1	19	UD
12672-29-6	Aroclor 1248	1	19	UD
11097-69-1	Aroclor 1254	1	19	UD
11096-82-5	Aroclor 1260	1	19	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	7.57	7.71	102	34 - 148	
Tetrachloro-m-xylene	7.57	4.52	60	35 - 134	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8082

CS-BH-05

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02 File ID: 19B65257

Sampled: 03/24/09 12:00 Prepared: 03/27/09 08:30 Analyzed: 03/30/09 19:42

Solids: 86.20 Preparation: 3550B GC Initial/Final: 30.11 g / 10 mL

Batch: 9C26091 Sequence: RD90313 Calibration: R9B2502 Instrument: HP5890-19

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	19	UD
11104-28-2	Aroclor 1221	1	19	UD
11141-16-5	Aroclor 1232	1	19	UD
53469-21-9	Aroclor 1242	1	19	UD
12672-29-6	Aroclor 1248	1	19	UD
11097-69-1	Aroclor 1254	1	19	UD
11096-82-5	Aroclor 1260	1	19	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	7.71	7.08	92	34 - 148	
Tetrachloro-m-xylene	7.71	4.66	60	35 - 134	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8082

CS-BH-05D

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03 File ID: 19B65258

Sampled: 03/24/09 12:00 Prepared: 03/27/09 08:30 Analyzed: 03/30/09 19:57

Solids: 86.80 Preparation: 3550B GC Initial/Final: 30.24 g / 10 mL

Batch: 9C26091 Sequence: RD90313 Calibration: R9B2502 Instrument: HP5890-19

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	19	UD
11104-28-2	Aroclor 1221	1	19	UD
11141-16-5	Aroclor 1232	1	19	UD
53469-21-9	Aroclor 1242	1	19	UD
12672-29-6	Aroclor 1248	1	19	UD
11097-69-1	Aroclor 1254	1	19	UD
11096-82-5	Aroclor 1260	1	19	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	7.62	7.22	95	34 - 148	
Tetrachloro-m-xylene	7.62	4.81	63	35 - 134	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8082

CS-BH-07

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-04 File ID: 19B65259

Sampled: 03/24/09 14:00 Prepared: 03/27/09 08:30 Analyzed: 03/30/09 20:11

Solids: 83.71 Preparation: 3550B GC Initial/Final: 14.51 g / 10 mL

Batch: 9C26091 Sequence: RD90313 Calibration: R9B2502 Instrument: HP5890-19

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	41	UD
11104-28-2	Aroclor 1221	1	41	UD
11141-16-5	Aroclor 1232	1	41	UD
53469-21-9	Aroclor 1242	1	41	UD
12672-29-6	Aroclor 1248	1	41	UD
11097-69-1	Aroclor 1254	1	41	UD
11096-82-5	Aroclor 1260	1	41	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	16.5	17.7	108	34 - 148	
Tetrachloro-m-xylene	16.5	14.2	86	35 - 134	

* Values outside of QC limits

Form 1

ORGANIC ANALYSIS DATA SHEET

8082

CS-BH-09

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-07 File ID: 19B65260

Sampled: 03/24/09 15:00 Prepared: 03/27/09 08:30 Analyzed: 03/30/09 20:26

Solids: 82.99 Preparation: 3550B GC Initial/Final: 30.32 g / 10 mL

Batch: 9C26091 Sequence: RD90313 Calibration: R9B2502 Instrument: HP5890-19

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	20	UD
11104-28-2	Aroclor 1221	1	20	UD
11141-16-5	Aroclor 1232	1	20	UD
53469-21-9	Aroclor 1242	1	20	UD
12672-29-6	Aroclor 1248	1	20	UD
11097-69-1	Aroclor 1254	1	20	UD
11096-82-5	Aroclor 1260	1	20	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	7.95	7.83	99	34 - 148	
Tetrachloro-m-xylene	7.95	5.91	74	35 - 134	

* Values outside of QC limits

Form 1

800/1092

CS-BH-02

INORGANIC ANALYSIS DATA SHEET

7471A

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-01 File ID: H03309S1-6

Sampled: 03/24/09 10:15 Prepared: 03/30/09 15:00 Analyzed: 03/30/09 17:08

Solids: 86.40 Preparation: 7471A Initial/Final: 0.575 g / 50 mL

Batch: 9C24028 Sequence: RC93029 Calibration: R9C3011 Instrument: Leeman 2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.0287	1		7471A

Form 1

801/1092

CS-BH-05

INORGANIC ANALYSIS DATA SHEET

7471A

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02 File ID: H03309S1-7

Sampled: 03/24/09 12:00 Prepared: 03/30/09 15:00 Analyzed: 03/30/09 17:10

Solids: 86.20 Preparation: 7471A Initial/Final: 0.6294 g / 50 mL

Batch: 9C24028 Sequence: RC93029 Calibration: R9C3011 Instrument: Leeman 2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.0221	1	U	7471A

Form 1

802/1092

CS-BH-05D

INORGANIC ANALYSIS DATA SHEET

7471A

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03 File ID: H03309S1-8

Sampled: 03/24/09 12:00 Prepared: 03/30/09 15:00 Analyzed: 03/30/09 17:11

Solids: 86.80 Preparation: 7471A Initial/Final: 0.6099 g / 50 mL

Batch: 9C24028 Sequence: RC93029 Calibration: R9C3011 Instrument: Leeman 2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.0227	1	U	7471A

Form 1

803/1092

CS-BH-07

INORGANIC ANALYSIS DATA SHEET

7471A

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-04 File ID: H03309S1-9

Sampled: 03/24/09 14:00 Prepared: 03/30/09 15:00 Analyzed: 03/30/09 17:13

Solids: 83.71 Preparation: 7471A Initial/Final: 0.5719 g / 50 mL

Batch: 9C24028 Sequence: RC93029 Calibration: R9C3011 Instrument: Leeman 2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.0251	1	U	7471A

Form 1

817/1092

CS-BH-02

INORGANIC ANALYSIS DATA SHEET

6010B

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-01 File ID: 1032609-038

Sampled: 03/24/09 10:15 Prepared: 03/25/09 11:00 Analyzed: 03/26/09 16:39

Solids: 86.40 Preparation: 3050B Initial/Final: 0.5214 g / 50 mL

Batch: 9C24054 Sequence: RD90126 Calibration: R9D0108 Instrument: Trace 1

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7429-90-5	Aluminum	6410	1	J	6010B
7440-36-0	Antimony	16.6	1	UJ	6010B
7440-38-2	Arsenic	2.2	1		6010B
7440-39-3	Barium	73.3	1		6010B
7440-41-7	Beryllium	0.304	1		6010B
7440-43-9	Cadmium	0.156	1		6010B
7440-47-3	Chromium	9.30	1		6010B
7440-48-4	Cobalt	5.30	1	J	6010B
7440-50-8	Copper	16.5	1		6010B
7439-89-6	Iron	11500	1	J	6010B
7439-92-1	Lead	16.7	1		6010B
7439-95-4	Magnesium	14100	1		6010B
7439-96-5	Manganese	535	1		6010B
7440-02-0	Nickel	12.3	1		6010B
7440-09-7	Potassium	1200	1		6010B
7782-49-2	Selenium	4.4	1	U	6010B
7440-22-4	Silver	0.555	1	U	6010B
7440-23-5	Sodium	211	1		6010B
7440-28-0	Thallium	6.7	1	U	6010B
7440-62-2	Vanadium	12.6	1		6010B
7440-66-6	Zinc	180	1	J	6010B

Form 1

INORGANIC ANALYSIS DATA SHEET

6010B

CS-BH-02

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-01 File ID: A032709-167

Sampled: 03/24/09 10:15 Prepared: 03/25/09 11:00 Analyzed: 03/28/09 01:44

Solids: 86.40 Preparation: 3050B Initial/Final: 0.5214 g / 50 mL

Batch: 9C24054 Sequence: RD90129 Calibration: R9D0109 Instrument: Trace 2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-70-2	Calcium	44700	5	D	6010B

Form 1

819/1092

CS-BH-05

INORGANIC ANALYSIS DATA SHEET

6010B

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02 File ID: 1032609-039

Sampled: 03/24/09 12:00 Prepared: 03/25/09 11:00 Analyzed: 03/26/09 16:44

Solids: 86.20 Preparation: 3050B Initial/Final: 0.5437 g / 50 mL

Batch: 9C24054 Sequence: RD90126 Calibration: R9D0108 Instrument: Trace 1

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7429-90-5	Aluminum	10200	1	J	6010B
7440-36-0	Antimony	16.0	1	UJ	6010B
7440-38-2	Arsenic	2.8	1		6010B
7440-39-3	Barium	96.3	1		6010B
7440-41-7	Beryllium	0.470	1		6010B
7440-43-9	Cadmium	0.213	1	U	6010B
7440-47-3	Chromium	15.4	1		6010B
7440-48-4	Cobalt	8.03	1	J	6010B
7440-50-8	Copper	18.9	1		6010B
7439-89-6	Iron	18900	1	J	6010B
7439-92-1	Lead	6.4	1		6010B
7439-95-4	Magnesium	10400	1		6010B
7439-96-5	Manganese	439	1		6010B
7440-02-0	Nickel	19.1	1		6010B
7440-09-7	Potassium	1690	1		6010B
7782-49-2	Selenium	4.3	1	U	6010B
7440-22-4	Silver	0.533	1	U	6010B
7440-23-5	Sodium	442	1		6010B
7440-28-0	Thallium	6.4	1	U	6010B
7440-62-2	Vanadium	21.8	1		6010B
7440-66-6	Zinc	43.9	1	J	6010B

Form 1

820/1092

CS-BH-05

INORGANIC ANALYSIS DATA SHEET

6010B

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-02 File ID: A032709-168

Sampled: 03/24/09 12:00 Prepared: 03/25/09 11:00 Analyzed: 03/28/09 01:49

Solids: 86.20 Preparation: 3050B Initial/Final: 0.5437 g / 50 mL

Batch: 9C24054 Sequence: RD90129 Calibration: R9D0109 Instrument: Trace 2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-70-2	Calcium	53600	5	D	6010B

Form 1

821/1092

CS-BH-05D

INORGANIC ANALYSIS DATA SHEET

6010B

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03 File ID: 1032609-040

Sampled: 03/24/09 12:00 Prepared: 03/25/09 11:00 Analyzed: 03/26/09 16:49

Solids: 86.80 Preparation: 3050B Initial/Final: 0.4984 g / 50 mL

Batch: 9C24054 Sequence: RD90126 Calibration: R9D0108 Instrument: Trace 1

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7429-90-5	Aluminum	9920	1	J	6010B
7440-36-0	Antimony	17.3	1	UJ	6010B
7440-38-2	Arsenic	6.2	1		6010B
7440-39-3	Barium	98.2	1		6010B
7440-41-7	Beryllium	0.509	1		6010B
7440-43-9	Cadmium	0.231	1	U	6010B
7440-47-3	Chromium	15.3	1		6010B
7440-48-4	Cobalt	8.59	1	J	6010B
7440-50-8	Copper	19.9	1		6010B
7439-89-6	Iron	18700	1	J	6010B
7439-92-1	Lead	7.9	1		6010B
7439-95-4	Magnesium	10500	1		6010B
7439-96-5	Manganese	409	1		6010B
7440-02-0	Nickel	18.6	1		6010B
7440-09-7	Potassium	1590	1		6010B
7782-49-2	Selenium	4.6	1	U	6010B
7440-22-4	Silver	0.578	1	U	6010B
7440-23-5	Sodium	459	1		6010B
7440-28-0	Thallium	6.9	1	U	6010B
7440-62-2	Vanadium	22.7	1		6010B
7440-66-6	Zinc	42.7	1	J	6010B

Form 1

822/1092

CS-BH-05D

INORGANIC ANALYSIS DATA SHEET

6010B

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-03 File ID: A032709-169

Sampled: 03/24/09 12:00 Prepared: 03/25/09 11:00 Analyzed: 03/28/09 01:54

Solids: 86.80 Preparation: 3050B Initial/Final: 0.4984 g / 50 mL

Batch: 9C24054 Sequence: RD90129 Calibration: R9D0109 Instrument: Trace 2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-70-2	Calcium	47400	5	D	6010B

Form 1

823/1092

CS-BH-07

INORGANIC ANALYSIS DATA SHEET

6010B

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-04 File ID: 1032609-041

Sampled: 03/24/09 14:00 Prepared: 03/25/09 11:00 Analyzed: 03/26/09 16:54

Solids: 83.71 Preparation: 3050B Initial/Final: 0.5 g / 50 mL

Batch: 9C24054 Sequence: RD90126 Calibration: R9D0108 Instrument: Trace 1

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7429-90-5	Aluminum	11000	1	J	6010B
7440-36-0	Antimony	17.9	1	UJ	6010B
7440-38-2	Arsenic	3.5	1		6010B
7440-39-3	Barium	98.8	1		6010B
7440-41-7	Beryllium	0.527	1		6010B
7440-43-9	Cadmium	0.239	1	U	6010B
7440-47-3	Chromium	16.1	1		6010B
7440-48-4	Cobalt	11.8	1	J	6010B
7440-50-8	Copper	12.5	1		6010B
7439-89-6	Iron	17500	1	J	6010B
7439-92-1	Lead	4.3	1		6010B
7439-95-4	Magnesium	10500	1		6010B
7439-96-5	Manganese	646	1		6010B
7440-02-0	Nickel	25.6	1		6010B
7440-09-7	Potassium	1730	1		6010B
7782-49-2	Selenium	4.8	1	U	6010B
7440-22-4	Silver	0.597	1	U	6010B
7440-23-5	Sodium	519	1		6010B
7440-28-0	Thallium	7.2	1	U	6010B
7440-62-2	Vanadium	20.5	1		6010B
7440-66-6	Zinc	51.2	1	J	6010B

Form 1

824/1092

CS-BH-07

INORGANIC ANALYSIS DATA SHEET

6010B

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-04 File ID: A032709-170

Sampled: 03/24/09 14:00 Prepared: 03/25/09 11:00 Analyzed: 03/28/09 01:59

Solids: 83.71 Preparation: 3050B Initial/Final: 0.5 g / 50 mL

Batch: 9C24054 Sequence: RD90129 Calibration: R9D0109 Instrument: Trace 2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-70-2	Calcium	54100	5	D	6010B

Form 1

825/1092

CS-BH-09

INORGANIC ANALYSIS DATA SHEET

6010B

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-07 File ID: 1032609-046

Sampled: 03/24/09 15:00 Prepared: 03/25/09 11:00 Analyzed: 03/26/09 17:19

Solids: 82.99 Preparation: 3050B Initial/Final: 0.504 g / 50 mL

Batch: 9C24054 Sequence: RD90126 Calibration: R9D0108 Instrument: Trace 1

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7429-90-5	Aluminum	10200	1	J	6010B
7440-36-0	Antimony	17.9	1	UJ	6010B
7440-38-2	Arsenic	4.4	1		6010B
7440-39-3	Barium	152	1		6010B
7440-41-7	Beryllium	0.525	1		6010B
7440-43-9	Cadmium	0.239	1	U	6010B
7440-47-3	Chromium	15.1	1		6010B
7440-48-4	Cobalt	10.2	1	J	6010B
7440-50-8	Copper	11.9	1		6010B
7439-89-6	Iron	19900	1	J	6010B
7439-92-1	Lead	4.3	1		6010B
7439-95-4	Magnesium	9260	1		6010B
7439-96-5	Manganese	627	1		6010B
7440-02-0	Nickel	22.7	1		6010B
7440-09-7	Potassium	1650	1		6010B
7782-49-2	Selenium	1.0	1		6010B
7440-22-4	Silver	0.598	1	U	6010B
7440-23-5	Sodium	1260	1		6010B
7440-28-0	Thallium	0.6	1		6010B
7440-62-2	Vanadium	19.3	1		6010B
7440-66-6	Zinc	47.6	1	J	6010B

Form 1

826/1092

CS-BH-09

INORGANIC ANALYSIS DATA SHEET

6010B

Laboratory: TestAmerica Buffalo SDG:

Client: Panamerican Environmental Inc. Project: Commerce Square

Matrix: Solid Laboratory ID: RSC0813-07 File ID: A032709-177

Sampled: 03/24/09 15:00 Prepared: 03/25/09 11:00 Analyzed: 03/28/09 02:35

Solids: 82.99 Preparation: 3050B Initial/Final: 0.504 g / 50 mL

Batch: 9C24054 Sequence: RD90129 Calibration: R9D0109 Instrument: Trace 2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	Method
7440-70-2	Calcium	56000	5	D	6010B

ATTACHMENT B

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Panamerican Environmental Inc.	Work Order: RSC0813	Received: 03/24/09
2390 Clinton Ave.		Reported: 04/27/09 14:35
Buffalo, NY 14227-1735	Project: Commerce Square	
	Project Number: 48000724	

Case Narrative

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Panamerican Environmental Inc.	Work Order: RSC0813	Received: 03/24/09
2390 Clinton Ave.		Reported: 04/27/09 14:35
Buffalo, NY 14227-1735	Project: Commerce Square	
	Project Number: 48000724	

LABORATORY (DATA QUALIFIERS AND DEFINITIONS)

B	Analyte was detected in the associated Method Blank.
D02	Dilution required due to sample matrix effects
D08	Dilution required due to high concentration of target analyte(s)
ID4	Benzo(b)fluoranthene coelutes with Benzo(k)fluoranthene. The reported result is a summation of the isomers and the concentration is based on the response factor of Benzo(b)fluoranthene
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
L	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
L1	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above acceptance limits.
M1	The MS and/or MSD were outside the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
M11	The MS and/or MSD were above the acceptance limits.
MHA	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
MPS	The Post spike and/or serial dilution were outside the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
QSU	Sulfur (EPA 3660) clean-up performed on extract.
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
Z5	Due to sample matrix effects, the surrogate recovery was outside acceptance limits. Secondary surrogate recovery was within the acceptance limits.

ADDITIONAL COMMENTS

Results are reported on a wet weight basis unless otherwise noted.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: J Rzeminski	Lab PM: Paul Morrow	Carrier Tracking No(s):	COC No: 1
Client Contact: Peter Gorton	Phone: (716) 445-7970	E-Mail: Paul.Morrow@testamericainc.com		Page: 1
Company: Panamerican Environmental Inc.				Job #:
Address: 2390 Clinton Ave.	Due Date Requested: 3/27/2009 16:00			
City: Buffalo	TAT Requested (days): 30 CD			
State, Zip: NY, 14227-1735	PO #:			
Phone: (716) 822.1658	WO #: RSC0666			
Email: PGORTON@PANAMCONSULTANTS.COM	Project #:			
Project Name: Commerce Square	SSOW#:			
Site: LOCKPORT, N.Y.				

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082::8270C::8011B	8260B	Total Number of containers	Special Instructions/Note:
			Preservation Code:				1	1		
CS-BH-02 (RSC0666-01)	03/24/09	1015	G	S			1	3	4	
CS-BH-05 (RSC0666-02)	"	1200	G	"			1	3		
CS-BH-05D (RSC0666-03)	"	1200	G	"			1	3		
CS-BH-07 (RSC0666-04)	"	1400	G	"			1	3		
CS-BH-07-MS (RSC0666-05)	"	1400	G	"			1	3		
CS-BH-07-MS/MSD (RSC0666-06)	"	1400	G	"			1	3		
CS-BH-09 (RSC0666-07)	"	1500	G	"			1	3		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Justin Rzeminski	03/24/09 - 1600			3/24/09 1620	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 6.0 C

6.0

57/1092

TestAmerica

TICs

Analytical Report

Work Order: RSC0813

Project Description
Commerce Square

For:

Peter Gorton
Panamerican Environmental Inc.
2390 Clinton Ave.
Buffalo, NY 14227-1735

Paul K Morrow

Paul Morrow
Project Manager
Paul.Morrow@testamericainc.com

Thursday, May 21, 2009

Panamerican Environmental Inc.
2390 Clinton Ave.
Buffalo, NY 14227-1735

Work Order: RSC0813

Project: Commerce Square
Project Number: 48000724

Received: 03/24/09
Reported: 05/21/09 07:59

Sample Summary

SAMPLE IDENTIFICATION	LAB NUMBER	Client Matrix	Date/Time Sampled	Date/Time Received
CS-BH-02	RSC0813-01	Solid	03/24/09 10:15	03/24/09 16:20
CS-BH-05	RSC0813-02	Solid	03/24/09 12:00	03/24/09 16:20
CS-BH-07	RSC0813-04	Solid	03/24/09 14:00	03/24/09 16:20
CS-BH-09	RSC0813-07	Solid	03/24/09 15:00	03/24/09 16:20

Panamerican Environmental Inc.
2390 Clinton Ave.
Buffalo, NY 14227-1735

Work Order: RSC0813

Project: Commerce Square
Project Number: 48000724

Received: 03/24/09
Reported: 05/21/09 07:59

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSC0813-01 (CS-BH-02 - Solid)						**Sampled: 03/24/09 10:15**		**Recvd: 03/24/09 16:20**		
Semivolatile Organics TICs by GC/MS										
Nonadecane	**2100**	T7	Ret Time:	11.99	ug/kg dry	10.0	04/02/09 00:29	JLG	9C26088	8270C
Unknown1 Alkane derivative	**7300**	T7	Ret Time:	2.144	ug/kg dry	10.0	04/02/09 00:29	JLG	9C26088	8270C
Unknown2 Naphthalene derivative	**2300**	T7	Ret Time:	10.227	ug/kg dry	10.0	04/02/09 00:29	JLG	9C26088	8270C
Unknown3 Naphthalene derivative	**2100**	T7	Ret Time:	10.275	ug/kg dry	10.0	04/02/09 00:29	JLG	9C26088	8270C
Unknown4 Alkane derivative	**2100**	T7	Ret Time:	11.557	ug/kg dry	10.0	04/02/09 00:29	JLG	9C26088	8270C
Tenatively Identified Compounds by EPA 8260B										
1H-Indene, 2,3-dihydro-4,7-dimethyl-	**71**	T7	Ret Time:	11.719	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B
1-Phenyl-1-butene	**83**	T7	Ret Time:	10.903	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B
Benzene, 1-ethenyl-4-ethyl-	**82**	T7	Ret Time:	10.234	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B
Benzocycloheptatriene	**59**	T7	Ret Time:	12.449	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B
Naphthalene, decahydro-	**59**	T7	Ret Time:	9.772	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B
Undecane, 2,6-dimethyl-	**65**	T7	Ret Time:	11.007	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B
Unknown1	**67**	T7	Ret Time:	11.037	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B
Unknown2	**88**	T7	Ret Time:	11.481	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B
Unknown3	**55**	T7	Ret Time:	11.573	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B
Unknown4	**51**	T7	Ret Time:	12.017	ug/kg dry	1.00	03/26/09 12:38	PQ	9C26011	8260B

Panamerican Environmental Inc.
2390 Clinton Ave.
Buffalo, NY 14227-1735

Work Order: RSC0813

Project: Commerce Square
Project Number: 48000724

Received: 03/24/09
Reported: 05/21/09 07:59

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSC0813-02 (CS-BH-05 - Solid)						**Sampled: 03/24/09 12:00**		**Recvd: 03/24/09 16:20**		
Semivolatile Organics TICs by GC/MS										
Cyclohexane, undecyl-	**3400**	T7	Ret Time:	11.434	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Heptadecane, 8-methyl-	**3700**	T7	Ret Time:	11.947	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Hexadecane	**7500**	T7	Ret Time:	10.547	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Pentadecane, 2,6,10,14-tetramethyl-	**15000**	T7	Ret Time:	11.103	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Pentadecane, 2,6,10-trimethyl-	**14000**	T7	Ret Time:	10.804	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
tetradecane	**5000**	T7	Ret Time:	9.27	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
TIC:Unknown1 Alkane derivative4	**4600**	T7	Ret Time:	12.39	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
TIC:Unknown13 Alkane derivative	**2800**	T7	Ret Time:	11.3	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Tridecane	**5000**	T7	Ret Time:	8.544	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown1	**7000**	T7, B	Ret Time:	2.144	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown10 Alkane derivative	**3800**	T7	Ret Time:	11.557	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown11 Alkane derivative	**9900**	T7	Ret Time:	11.594	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown12 Alkane derivative	**5500**	T7	Ret Time:	12.15	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown2 Alkane derivative	**3700**	T7	Ret Time:	8.325	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown3	**4900**	T7	Ret Time:	9.666	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown4 Alkane derivative	**5400**	T7	Ret Time:	9.687	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown5 Alkane derivative	**4300**	T7	Ret Time:	10.227	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown6 Alkane derivative	**3000**	T7	Ret Time:	10.269	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown7 Alkane derivative	**5800**	T7	Ret Time:	10.334	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Unknown9 Alkane derivative	**3900**	T7	Ret Time:	11.081	ug/kg dry	10.0	04/02/09 00:52	JLG	9C26088	8270C
Tenatively Identified Compounds by EPA 8260B										
Decane	**230**	T7	Ret Time:	8.653	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B
Dodecane	**97**	T7	Ret Time:	10.879	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B
Hexane, 2,5-dimethyl-	**110**	T7	Ret Time:	4.723	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B
Pentane, 2,3,4-trimethyl-	**530**	T7	Ret Time:	5.088	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B
Undecane	**150**	T7	Ret Time:	9.906	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B
unknown5	**410**	T7	Ret Time:	4.145	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B
Unknown6	**770**	T7	Ret Time:	5.197	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B
Unknown7	**280**	T7	Ret Time:	5.514	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B
Unknown8	**120**	T7	Ret Time:	9.018	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B
unknown9	**130**	T7	Ret Time:	9.279	ug/kg dry	1.00	03/26/09 13:04	PQ	9C26011	8260B

Panamerican Environmental Inc.
2390 Clinton Ave.
Buffalo, NY 14227-1735

Work Order: RSC0813

Project: Commerce Square
Project Number: 48000724

Received: 03/24/09
Reported: 05/21/09 07:59

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSC0813-02RE1 (CS-BH-05 - Solid)						**Sampled: 03/24/09 12:00**		**Recvd: 03/24/09 16:20**		
Tenatively Identified Compounds by EPA 8260B										
Decane	**3700**	D08, T7	Ret Time:	9.981	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B
Hexane, 2,5-dimethyl-	**2600**	D08, T7	Ret Time:	5.83	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B
Pentane, 2,3,3-trimethyl-	**23000**	D08, T7	Ret Time:	6.342	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B
Pentane, 2,3,4-trimethyl-	**19000**	D08, T7	Ret Time:	6.226	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B
Undecane	**2400**	D08, T7	Ret Time:	11.128	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B
Unknown1	**2100**	D08, T7	Ret Time:	5.885	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B
Unknown2	**8300**	D08, T7	Ret Time:	6.72	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B
Unknown3	**1800**	D08, T7	Ret Time:	8.262	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B
Unknown4	**4400**	D08, T7	Ret Time:	9.524	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B
unknown5	**2200**	D08, T7	Ret Time:	9.731	ug/kg dry	4.00	04/06/09 17:48	RJ	9D06045	8260B

Panamerican Environmental Inc.
2390 Clinton Ave.
Buffalo, NY 14227-1735

Work Order: RSC0813

Project: Commerce Square
Project Number: 48000724

Received: 03/24/09
Reported: 05/21/09 07:59

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSC0813-04 (CS-BH-07 - Solid)						**Sampled: 03/24/09 14:00**		**Recvd: 03/24/09 16:20**		
Semivolatile Organics TICs by GC/MS										
Decane, 2-methyl-	4300	T7	Ret Time:	6.53	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Decane, 5-methyl-	2900	T7	Ret Time:	6.455	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
TIC:Unknown17 Benzene derivative	2400	T7	Ret Time:	7.45	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Undecane, 2,6-dimethyl-	3800	T7	Ret Time:	7.86	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown1	6600	B, T7	Ret Time:	2.144	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown10 Benzene derivative	5800	T7	Ret Time:	6.487	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown11	3200	T7	Ret Time:	6.578	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown12 Alkane derivative	4200	T7	Ret Time:	7.117	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown12 Benzene derivative	3000	T7	Ret Time:	6.925	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown13 Alkane derivative	4900	T7	Ret Time:	7.262	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown15 Benzene derivative	5300	T7	Ret Time:	7.401	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown16 Alkane derivative	3200	T7	Ret Time:	7.507	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown2 Alkane derivative	4800	T7	Ret Time:	5.109	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown3 Alkane derivative	2800	T7	Ret Time:	5.349	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown4 Alkane derivative	3300	T7	Ret Time:	5.467	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown5 Alkane derivative	3400	T7	Ret Time:	5.734	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown6 Benzene derivative	3000	T7	Ret Time:	5.83	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown7 Alkane derivative	6800	T7	Ret Time:	6.102	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown8 Alkane derivative	2300	T7	Ret Time:	6.263	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Unknown9 Benzene derivative	3900	T7	Ret Time:	6.423	ug/kg dry	10.0	04/02/09 01:39	JLG	9C26088	8270C
Tenatively Identified Compounds by EPA 8260B										
Benzene, 1,2,3-trimethyl-	9100	D04, T7	Ret Time:	10.384	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B
Benzene, 1-methyl-3-(1-methylethyl)-	6300	D04, T7	Ret Time:	11.305	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B
Benzene, 4-ethyl-1,2-dimethyl-	5900	D04, T7	Ret Time:	11.049	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B
Decane, 4-methyl-	7100	D04, T7	Ret Time:	10.274	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B
Octane, 2,6-dimethyl-	8400	D04, T7	Ret Time:	9.098	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B
UNKNOWN10	7600	D04, T7	Ret Time:	10.573	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B
Unknown6	5600	D04, T7	Ret Time:	8.037	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B
Unknown7	15000	D04, T7	Ret Time:	9.244	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B
Unknown8	13000	D04, T7	Ret Time:	9.488	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B
unknown9	10000	D04, T7	Ret Time:	9.939	ug/kg dry	4.00	04/06/09 18:33	RJ	9D06045	8260B

Panamerican Environmental Inc.
2390 Clinton Ave.
Buffalo, NY 14227-1735

Work Order: RSC0813

Project: Commerce Square
Project Number: 48000724

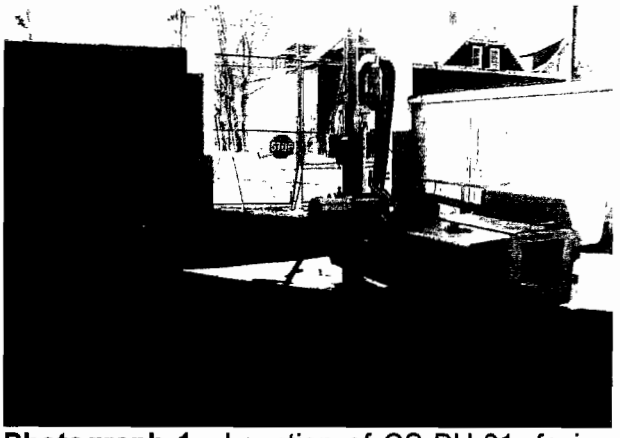
Received: 03/24/09
Reported: 05/21/09 07:59

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSC0813-07 (CS-BH-09 - Solid)						**Sampled: 03/24/09 15:00**		**Recvd: 03/24/09 16:20**		
Semivolatile Organics TICs by GC/MS										
Dodecane, 2-methyl-	610	T7	Ret Time:	11.941	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Eicosane	940	T7	Ret Time:	12.38	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Hexadecane	640	T7	Ret Time:	10.542	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Hexadecane, 2,6,10,14-tetramethyl-	1500	T7	Ret Time:	11.589	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Pentadecane, 7-methyl-	820	T7	Ret Time:	10.221	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
TIC:Unknown14 Alkane derivative	840	T7	Ret Time:	9.59	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
TIC:Unknown15 Alkane derivative	1400	T7	Ret Time:	9.68	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
TIC:Unknown16 Alkane derivative	680	T7	Ret Time:	11.29	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown1	6800	B, T7	Ret Time:	2.122	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown10 Alkane derivative	2200	T7	Ret Time:	11.097	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown11 Alkane derivative	1100	T7	Ret Time:	11.551	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown12	710	T7	Ret Time:	11.845	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown13 Alkane derivative	1200	T7	Ret Time:	12.737	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown2 Alkane derivative	670	T7	Ret Time:	8.319	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown3	710	T7	Ret Time:	9.276	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown4 Alkane derivative	700	T7	Ret Time:	9.66	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown6 Alkane derivative	600	T7	Ret Time:	10.264	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown6 Alkane derivatvie	1100	T7	Ret Time:	10.328	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown7 Alkane derivative	2800	T7	Ret Time:	10.798	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Unknown9 Alkane derivative	1500	T7	Ret Time:	11.076	ug/kg dry	1.00	04/02/09 15:37	JLG	9C26088	8270C
Tenatively Identified Compounds by EPA 8260B										
Benzene, 1,2,4,5-tetramethyl-	36	T7	Ret Time:	10.49	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B
Dodecane, 6-methyl-	37	T7	Ret Time:	11.001	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimeth	48	T7	Ret Time:	12.266	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B
Naphthalene, decahydro-	38	T7	Ret Time:	9.766	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B
Octane, 3,6-dimethyl-	84	T7	Ret Time:	11.481	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B
trans-Decalin, 2-methyl-	59	T7	Ret Time:	10.374	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B
Unknown1	32	T7	Ret Time:	10.064	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B
Unknown2	39	T7	Ret Time:	10.563	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B
Unknown3	41	T7	Ret Time:	10.903	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B
Unknown4	96	T7	Ret Time:	11.037	ug/kg dry	1.00	03/31/09 00:26	CDC	9C30060	8260B

APPENDIX C

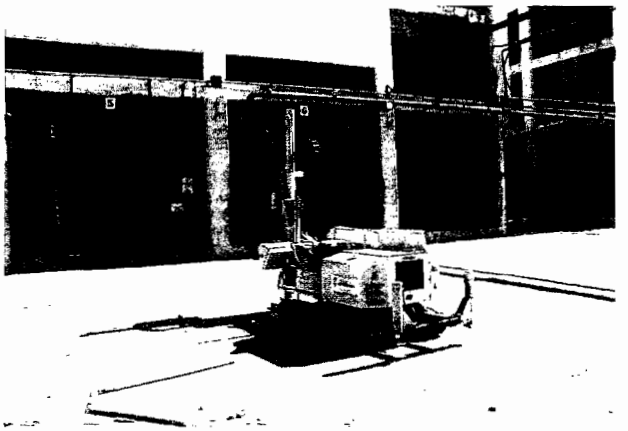
Photographs



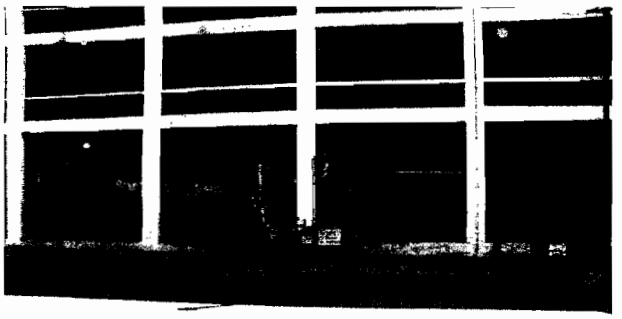
Photograph 1. Location of CS-BH-01, facing south

Photograph 2. Facing south and location of CS-BH-03

Photograph 3. Location of CS-BH-05, facing west and Building #4



Photograph 4. Facing east, Building #2 and location of CS-BH-06



Photograph 5. Location of CS-BH-08, facing south across Walnut Street at Building #2