

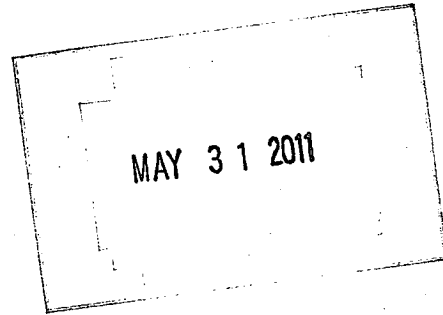


Groundwater & Environmental Services, Inc.

MINNESOTA OFFICE

May 20, 2011

Mr. Gary Zarling  
Remediation Division  
Unit 3  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194



**RE: Excavation Report Worksheet  
Former Sinclair Station #22020  
223 East Larpenteur Avenue  
Maplewood, Minnesota  
MPCA Leak #17952**

Dear Mr. Zarling:

On behalf of Sinclair Marketing, Inc., Groundwater & Environmental Services, Inc. (GES), is pleased to submit the enclosed Excavation Report Worksheet for the above-referenced site.

Three underground storage tanks and the associated product dispensers were removed at this site on November 10, 2010. In addition, 2 hydraulic hoists were also removed at the site. Based on a previous subsurface investigation conducted in April 2010, the site is an active Minnesota Pollution Control Agency (MPCA) Leak site, #17952. Therefore, a Limited Site Investigation is required for the site.

If you have any questions or comments, please feel free to contact me at (800) 735-1077, Extension 3182.

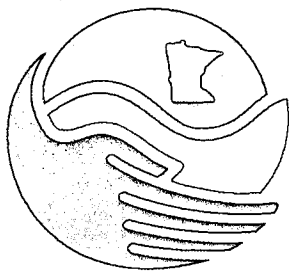
Respectfully,

**Groundwater & Environmental Services, Inc.**

Valerie Wood  
Project Environmental Scientist

Attachment

Cc: Paul Conrad, Sinclair Marketing Inc.



# Minnesota Pollution Control Agency

## General Excavation Report Worksheet

Guidance Document 3-02

Complete the worksheet below to document excavation and treatment of petroleum contaminated soil removed **prior to** a Site Investigation and/or during tank removals and/or upgrades. If soil is excavated as an MPCA-approved corrective action **after** a Site Investigation is conducted, complete Guidance Document 3-02a *Corrective Action Excavation Report Worksheet*. Conduct excavations in accordance with Guidance Document 3-01 *Excavation of Petroleum Contaminated Soil*. Please type or print clearly. Do not revise or delete text or questions from this report form.

The excavation worksheet 3-02 deadline is 10 months from the date of receipt of the MPCA "Petroleum Storage Tank Release Investigation and Corrective Action" letter. MPCA staff may establish a shorter deadline for high priority sites.

### PART I: BACKGROUND

A. Site: *Former Sinclair Station #22020*

MPCA Site ID#: **LEAK00017952**

Street: *223 East Larpenteur*  
City, Zip: *Maplewood*  
County: *Ramsey*

C. Excavating Contractor: *Pump and Meter Service, Inc.*

Contact: *Mike Haggstrom*  
Telephone: *952-933-4800*  
Tank Contractor Certification Number: *607*

B. Tank Owner/Operator: *Sinclair Marketing, Inc., c/o Paul Conrad*

Mailing Address:

Street/Box: *550 East South Temple*  
City, Zip: *Salt Lake City, Utah 84102*  
Telephone: *913-233-7325*

D. Consultant: *GES*

Contact: *Valerie Wood*  
Street/Box: *1285 Corporate Center Dr., Suite 120*  
City, Zip: *Eagan, 55121*  
Telephone: *800-735-1077*

E. Others on-site during site work (e.g., fire marshal, local officials, MPCA staff, etc.): *Assistant Fire Chief/Fire Marshall for city of Maplewood, Butch Gervais, phone: 651-249-2804*

F. Site Location Information: Attach Guidance Document 1-03a *Spatial Data Reporting Form* if it has not already been submitted or will not be submitted as part of Guidance Document 4-06 *Investigation Report Form*.

**Note:** If person other than tank owner and/or operator is conducting the cleanup, provide name, address, and relationship to site on a separate attached sheet.

**PART II: DATES**

A. Date release reported to MPCA: *4-14-2010*

B. Dates site work performed (tanks removed, piping removed, soil excavation, soil borings, etc.):

Work Performed	Date
<i>Subsurface investigation</i>	<i>04-14-2010</i>
<i>Tank removal</i>	<i>11-10-2010</i>
<i>Piping removal</i>	<i>11-10-2010</i>
<i>Dispenser removal</i>	<i>11-10-2010</i>
<i>Hydraulic lift removal</i>	<i>11-10-2010</i>

**PART III: SITE AND RELEASE INFORMATION**

A. Describe the land use and pertinent geographic features within 1,000 feet of the site.  
(i.e. residential property, industrial, wetlands, etc.)

*A commercial property is located to the north of the site. Larpenteur Avenue is located south of the site with undeveloped land further south. Highway 35E is located east of the site and residential properties are located west of the site. A pond is located northwest of the site.*

B. Provide the following information for all tanks removed and any remaining at the site:

**Table 1.**

Tank #	Tank ** Material	UST or AST	Capacity (gallons)	Contents (product type)	Year installed	Tank Status*	Condition of Tank
001	<i>Coated steel</i>	<i>UST</i>	<i>4,000</i>	<i>Gasoline</i>	<i>Unknown</i>	<i>Removed 7-10-90</i>	<i>Unknown</i>
002	<i>Coated steel</i>	<i>UST</i>	<i>6,000</i>	<i>Gasoline</i>	<i>Unknown</i>	<i>Removed 7-10-90</i>	<i>Unknown</i>
003	<i>Coated steel</i>	<i>UST</i>	<i>5,000</i>	<i>Alcohol Blend</i>	<i>Unknown</i>	<i>Removed 7-10-90</i>	<i>Unknown</i>
004	<i>Fiberglass</i>	<i>UST</i>	<i>8,000</i>	<i>Gasoline</i>	<i>Unknown</i>	<i>Removed 7-10-90</i>	<i>Unknown</i>
005	<i>Coated steel</i>	<i>UST</i>	<i>1,000</i>	<i>Fuel oil</i>	<i>Unknown</i>	<i>Removed 7-10-90</i>	<i>Unknown</i>
006	<i>Coated steel</i>	<i>UST</i>	<i>560</i>	<i>Waste oil</i>	<i>Unknown</i>	<i>Removed 7-10-90</i>	<i>Unknown</i>
007	<i>STI-P3</i>	<i>UST</i>	<i>10,000</i>	<i>Gasoline</i>	<i>1990</i>	<i>Removed 11-10-10</i>	<i>Good</i>
008	<i>STI-P3</i>	<i>UST</i>	<i>10,000</i>	<i>Gasoline</i>	<i>1990</i>	<i>Removed 11-10-10</i>	<i>Good</i>
009	<i>STI-P3</i>	<i>UST</i>	<i>10,000</i>	<i>Diesel</i>	<i>1990</i>	<i>Removed 11-10-10</i>	<i>Good</i>

\*Indicate: removed (date), abandoned in place (date), or currently used, upgraded tank, installation of new tank. \*\* F for fiberglass or S for Steel

Notes:

Piping Material (check all that apply):  Steel,  Fiberglass,  Flexible Plastic,  Copper,  Other

C. Describe the location and status of the other components of the tank system(s) (i.e., transfer locations, valves, piping and dispensers) for those tanks listed above.

*The dispensers and piping were located to the west of the tank basin; most of the piping was directly above the tanks. The dispensers were removed before GES personnel arrived on site. The tanks were contained in one tank basin and were removed while GES personnel were on site.*

- D. Identify the source(s) of the release or contamination encountered. Only check those options that were verified, if source is unknown check Other and describe:

Piping,  Tank,  Dispenser,  Pump/Turbine,  Delivery Problem,  Other

*The site has been identified as former MPCA Leak site #2643. Previous leak investigations for Leak #2643 identified impacts beneath the former piping which was in the proximate location of the new piping. Previous piping may have leaked; however, there was no evidence that the new piping exhibited any leaks. Additionally, contamination was identified in an area under a former hydraulic lift.*

- E. Identify the cause of the release (tank and/or piping).

Check all that apply:  Corrosion,  Install Problem,  Spill,  Unknown,  
 Mechanical or Physical Damage,  Other

- F. Identify the method the release was detected.

Check all that apply:  Removal,  Line Leak Detection,  Tank Leak Detection,  
 Visual/Olfactory,  Site Assessment,  Other

- G. Identify any surface soil contamination.

*No surface soil contamination was observed during the tank removal activities*

- H. What was the volume of the release? (if known): *Unknown* gallons

- I. Historic contamination present (unknown origin?).  Yes,  No

- J. When did the release occur? (if known): *Leak #2643 was reported on May 31, 1990 and closed on May 12, 2000. Leak #17952 was reported on April 14, 2010.*

- K. Describe source of on-site drinking water. *Municipal*

- L. Has the site ever, at any point had an E-85 tank?  Yes,  No

#### **PART IV: EXCAVATION INFORMATION**

- A. Dimensions of excavation(s): Length *50'* Width *40'* Depth *14'*

- B. Original tank backfill material (sand, gravel, etc.), if applicable: *Sand*

- C. Native soil type (clay, sand, etc.): *Silty sand*

- D. Quantity of contaminated soil removed for treatment (cubic yards): *None*  
(Indicate on the site map where the petroleum contaminated soil was excavated)

How many cubic yards of the removed soil was petroleum saturated? *None*  
(Indicate on the site map where the petroleum saturated soil was excavated)

[**Note:** If the volume removed is more than allowed in Guidance Document 3-01 *Excavation of Petroleum Contaminated Soil*, please document MPCA staff approval.]

- E. Were new tanks and/or piping and dispensers installed? (yes/no) If yes, what volume of contaminated soil was excavated to accommodate the installation of the new tanks and piping?

*No new tanks or piping were installed at this site.*

- F. If contaminated soil was removed to accommodate the installation of new tanks and/or piping, show your calculations for the amount of soil removal allowed using Table 3 in Guidance Document 3-01 *Excavation of Petroleum Contaminated Soil*.

*No contaminated soil was removed from the site.*

- G. Was ground water encountered or a suspected perched water layer or was there evidence of a seasonally high ground water table (i.e. mottling)? (yes/no) At what depth?

*No groundwater or evidence of a fluctuating water table was observed during the excavation.*

- H. If ground water was not encountered during the excavation, what is the expected depth of ground water?

*Previous work at the site indicates water is approximately 15 to 19 feet below ground surface.*

- I. Additional investigation to determine the need for a Limited Site Investigation is necessary at sites with sandy or silty sandy soil, a water table within 25 feet of the ground surface, and visual or other evidence of soil remaining contamination. See Table 2 in Guidance Document 3-01 *Excavation of Petroleum Contaminated Soil*. If a soil boring is necessary, describe the soil screening and analytical results. Attach the boring logs and laboratory results to this report.

- J. If no soil boring was performed, explain.

*A Limited Site Investigation is necessary at the site.*

- K. If ground water was encountered or if a soil boring was conducted, was there evidence of ground water contamination? (yes/no) Describe this evidence of contamination, e.g., free product (specify thickness), product sheen, ground water in contact with petroleum contaminated soil, water analytical results, etc. **Note:** If you observe free product, contact MPCA staff immediately, as outlined in Guidance Document 2-02 *Free Product: Evaluation and Recovery*.

*Groundwater was not encountered during tank removal activities.*

- L. Was bedrock encountered in the excavation? (yes/ no) At what depth?

- M. Were other unique conditions associated with this site? (yes/ no) If so, explain.

**PART V: SAMPLING INFORMATION**

- A. Briefly describe the field screening methods used to distinguish contaminated from uncontaminated soil:

*Soil samples were screened for the presence of organic vapors using a photoionization detector (PID) with a 10.6 eV lamp. The PID was calibrated prior to the field activities to an isobutylene standard for readings in ppm benzene on a volume/volume basis. For each sample, a clean polyethylene bag was half-filled with soil and immediately sealed. The bag was shaken for approximately 15 seconds. The sample was then stored for a minimum of 10 minutes at a temperature of at least 70°F. After headspace development, the bag was shaken for another 15 seconds. The PID probe was inserted through a small opening in the bag. Within approximately 2 seconds after insertion, the highest PID reading was recorded for each sample.*

- B. List soil vapor headspace analysis results collected during excavation of tanks, lines and dispensers, valves, and transfer locations. (i.e., soils left in place when excavation is complete). Code the samples with sampling depths in parentheses as follows: sidewall samples S-1 (8 feet), S-2 (4 feet), etc.; bottom samples B-1 (13 feet), B-2 (14 feet), removed soil R-1 (4 feet), R-1 (8 feet), etc.; stockpile samples SP-1, etc; line samples L-1, L2, etc.; transfer locations T-1 (4 feet), T-1 (8 feet), etc.; dispensers D-1 (4 feet), etc. **Be sure the sample codes correspond with the site map in part VI, below.**

Sample Code	Soil Type	Reading ppm	Sample Code	Soil Type	Reading ppm
S1 (8ft)	Silty sand	0.0	S4 (9ft)	Silty sand	0.0
B1 (14 ft)	Silty sand	0.0	D1 (4ft)	Silty sand	48
B2 (1 4ft)	Silty sand	0.0	D2 (4ft)	Silty sand	7.4
S2 (9ft)	Silty sand	2.9	D3 (4ft)	Silty sand	1.4
B3 (14 ft)	Silty sand	0.0	D4 (4ft)	Silty sand	3.2
B4 (14 ft)	Silty sand	2.4	HH1 (8ft)	Silty sand	2.2
R1 (4 ft)	Silty sand	0.0	HH2 (8ft)	Silty sand	687
R2 (6 ft)	Silty sand	0.0			
S3 (9 ft)	Silty sand	0.9			
B5 (14 ft)	Silty sand	0.3			
B6 (14 ft)	Silty sand	0.0			
S5 (10 ft)	Silty sand	0.0			

- C. Was the "removed soil" placed back into the excavation basin? (yes/ no)  
If no, please complete Part VIII: Soil Treatment Information section. If yes, a Limited Site Investigation is necessary (see Guidance Document 4-01 *Soil and Ground Water Assessments Performed during Site Investigations*).

- D. Briefly describe the soil analytical sampling and handling procedures used:

*Soil samples were placed in laboratory-supplied sampling containers, labeled, stored on ice, and shipped with chain-of-custody to Pace Analytical, Inc. located in Minneapolis, Minnesota. Soil samples were analyzed for benzene, toluene, ethylbenzene, xylene (BTEX) and methyl tert-butyl ether*

(MTBE) by EPA Method 8260, gasoline range organics (GRO) and diesel range organics (DRO) by Wisconsin Department of Natural Resources (WDNR) Modified Methodology. In addition, soil samples collected beneath the removed hydraulic hoists were analyzed for volatile organic compounds (VOCs) by EPA Method 8260 and DRO by the previously referenced method.

- E. List below all soil sample analytical results from bottom and side wall samples collected after excavation of tanks, lines and dispensers, valves, and transfer locations (i.e., soils left in place when excavation is complete). Code the samples with sampling depths in parentheses as follows: sidewall samples S-1 (8 feet), S-2 (4 feet), etc.; bottom samples B-1 (13 feet), B-2 (14 feet), removed soil R-1 (4 feet), R-1 (8 feet), etc.; stockpile samples SP-1, etc.; line samples L-1, L2, etc.; transfer locations T-1 (4 feet), T-1 (8 feet), etc.; dispensers D-1 (4 feet), etc.; **Be sure the sample codes correspond to the site map required in part VI.**

Sample Code	GRO mg/kg	Benzene mg/kg	Ethylbenzene mg/kg	Toluene mg/kg	Xylene mg/kg	MTBE mg/kg	DRO mg/kg
B1 (14 ft)	NA	<0.056	<0.056	<0.056	<0.17	<0.28	<8.3
B2 (14 ft)	NA	<0.057	<0.057	<0.057	<0.17	<0.28	<9.6
B3 (14 ft)	<5.0	<0.050	<0.050	<0.050	<0.15	<0.25	NA
B4 (14 ft)	<6.1	<0.061	<0.061	<0.061	<0.18	<0.31	NA
B5 (14 ft)	<6.0	<0.060	<0.060	<0.060	<0.18	<0.30	NA
B6 (14 ft)	<6.1	<0.061	<0.061	<0.061	<0.18	<0.30	NA
D1 (4 ft)	<5.3	<0.053	<0.053	<0.053	<0.16	<0.27	<9.1
D2 (4 ft)	<5.7	<0.057	<0.057	<0.057	<0.17	<0.28	<9.9
D3 (4 ft)	<5.7	<0.057	<0.057	<0.057	<0.17	<0.29	<7.8
D4 (4ft)	<5.9	<0.059	<0.059	<0.059	<0.18	<0.29	<9.0
HH1 (8 ft)	NA	<0.0233	<0.0583	<0.0583	<0.175	<0.0583	<8.5
HH2 (8 ft)	NA	<0.108	0.432	<0.271	2.14	<0.271	1,930

**Note:** Attach copies of laboratory reports and chain of custody forms.

NA = Not analyzed for that parameter.

## PART VI: FIGURES

Attach the following figures to this report:

1. Site location map.
2. Site map(s) drawn to scale illustrating the following:
  - a. Location of all present and former tanks, piping, and dispensers;
  - b. Location of surface soil contamination
  - c. Location of other structures (buildings, canopies, etc.);
  - d. Adjacent city, township, or county roadways;
  - e. Dimensions of excavation(s), including contour lines (maximum 2-foot contour intervals) to represent the depths of the final excavation(s);
  - f. Location of soil screening samples (e.g. R-1), soil analytical samples (e.g., S-1 or B-1), and any soil borings (e.g., SB-1). Also, attach all boring logs.
  - g. North arrow, bar scale and map legend.
  - h. Provide location of any on-site water wells. If on-site water wells exist, please provide well logs and/or construction diagrams.
  - i. Locations of new tanks, piping and dispensers, if installed.

## PART VII: CONCLUSIONS AND RECOMMENDATIONS

Recommendation for site:

site closure

additional investigation

Justify the recommendations for the site. If no further action is necessary, the MPCA staff will review this report following notification of soil treatment.

*The release for Leak #17952 was reported in April 2010 and was based on soil results from a subsurface investigation. A Limited Site Investigation (LSI) is necessary at the site for Leak #17952.*

*The soil samples collected during UST and hydraulic hoist removal activities were taken beneath the 3 tanks and hydraulic hoists as well as under the 4 dispensers on site. Laboratory results indicate no concentrations above method detection limits with the exception of 1 soil sample collected beneath the hydraulic hoists (HH2) which indicated a concentration of xylenes and DRO above the detection limits.*

*Since the site is an active leak site, based on the April 2010 subsurface investigation, a LSI is required for the site.*

## PART VIII: SOIL TREATMENT INFORMATION

- A. Soil treatment method used (thermal, land application, composting, other). If you choose "other" specify treatment method:
- B. Location of treatment site/facility:
- C. Date MPCA approved soil treatment (if thermal treatment was used, indicate date that the MPCA-permitted thermal treatment facility agreed to accept soil):
- D. Identify the location of stockpiled contaminated soil:



**PART IX: CONSULTANT (OR OTHER) PREPARING THIS REPORT**

*By signing this document, I/we acknowledge that we are submitting this document on behalf of and as agents of the responsible person or volunteer for this leak site. I/we acknowledge that if information in this document is inaccurate or incomplete, it will delay the completion of remediation and may harm the environment and may result in reduction of reimbursement awards. In addition, I/we acknowledge on behalf of the responsible person or volunteer for this leak site that if this document is determined to contain a false material statement, representation, or certification, or if it omits material information, the responsible person or volunteer may be found to be in violation of Minn. Stat. § 115.075 (1994) or Minn. 7000.0300 (Duty of Candor), and that the responsible person or volunteer may be liable for civil penalties.*

**MPCA staff are instructed to reject unsigned excavation reports or if the report form has been altered.**

Name and Title:

Signature:


Date signed:

*Tim Morrell  
Associate Geologist*



*5/20/2011*

*Valerie L. Wood  
Project Environmental Scientist*



*5/20/2011*

Company and mailing address:

*Groundwater & Environmental Services, Inc.  
1285 Corporate Center Drive, Suite 120  
Eagan, Minnesota 55121*

Telephone

*800-735-1077*

Fax: *651-405-1036*

If additional investigation is not necessary, please mail this form and all necessary attachments to the MPCA project manager. If additional investigation is necessary, include this form as an appendix to Guidance Document 4-06 *Investigation Report Form*. **MPCA staff will not review excavation reports indicating a limited site investigation is necessary unless the limited site investigation has been completed.**

***Web pages and phone numbers***

MPCA staff	<a href="http://pca.state.mn.us/pca/staff/index.cfm">http://pca.state.mn.us/pca/staff/index.cfm</a>
MPCA toll free	<b>1-800-657-3864</b>
Petroleum Remediation Program web page	<a href="http://www.pca.state.mn.us/programs/lust_p.html">http://www.pca.state.mn.us/programs/lust_p.html</a>
MPCA Infor. Request	<a href="http://www.pca.state.mn.us/about/inforequest.html">http://www.pca.state.mn.us/about/inforequest.html</a>
MPCA Petroleum Brownfields Program	<a href="http://www.pca.state.mn.us/programs/vpic_p.html">http://www.pca.state.mn.us/programs/vpic_p.html</a>
PetroFund Web Page	<a href="http://www.state.mn.us/cgi-bin/portal/mn/jsp/content.do?id=-536881377&amp;agency=Commerce">http://www.state.mn.us/cgi-bin/portal/mn/jsp/content.do?id=-536881377&amp;agency=Commerce</a>
PetroFund Phone	<b>651-297-1119, or 1-800-638-0418</b>
State Duty Officer	<b>651-649-5451 or 1-800-422-0798</b>

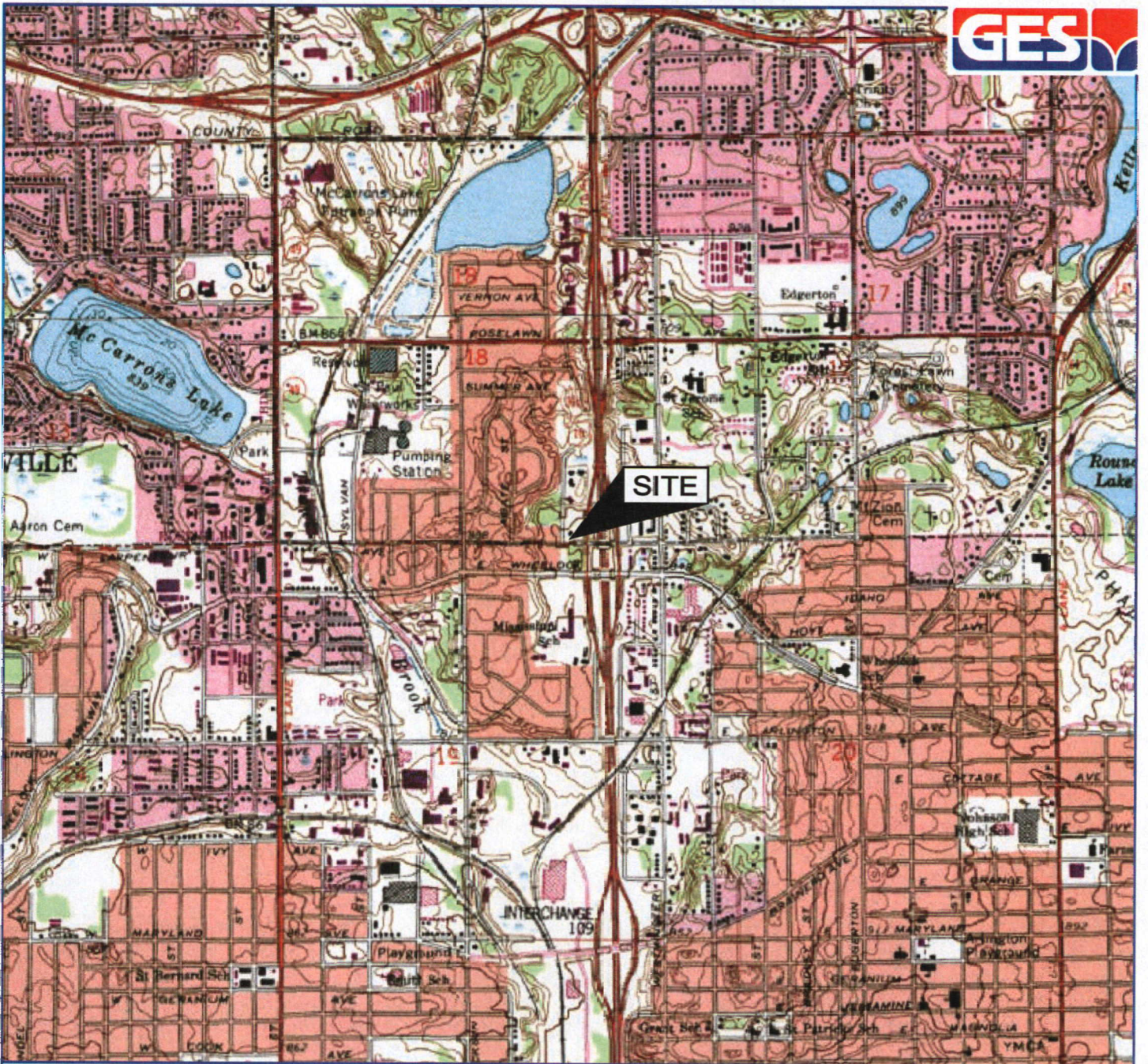
Upon request, this document can be made available in other formats, including Braille, large print and audio tape. TTY users call 651/282-5332 or 1-800-657-3864 (voice/TTY).



## **FIGURES**

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SOURCE: USGS 7.5 MINUTE SERIES  
 TOPOGRAPHIC QUADRANGLE 1993  
 ST. PAUL EAST, MINNESOTA  
 CONTOUR INTERVAL = 10'



QUADRANGLE LOCATION

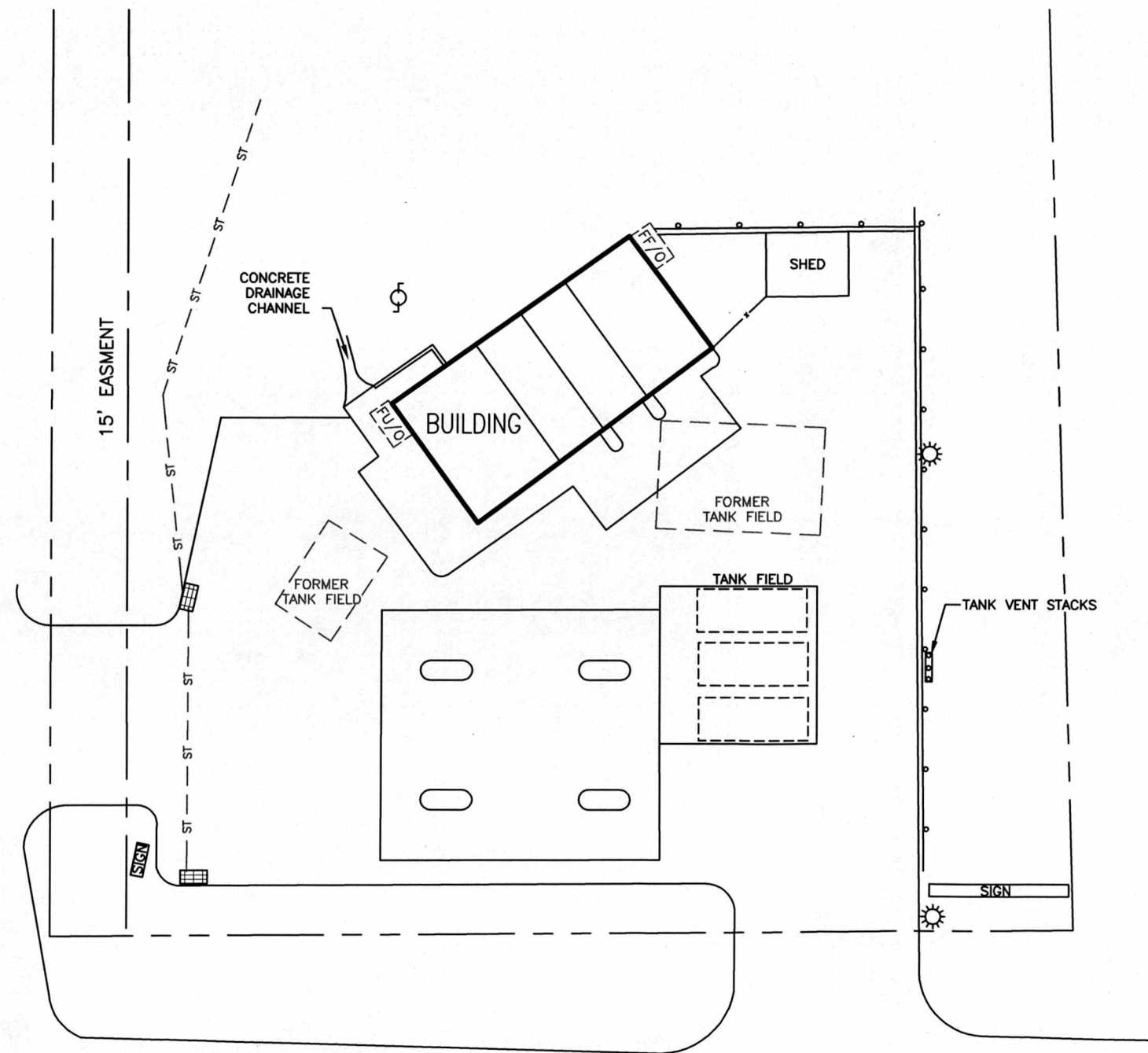
DRAFTED BY: W.G.S. (N.J.)	<b>SITE LOCATION MAP</b>	
CHECKED BY:		
REVIEWED BY:	<b>SINCLAIR MARKETING INC. 223 EAST LARPENTAUR AVENUE MAPLEWOOD, MINNESOTA</b>	
NORTH 	<b>Groundwater &amp; Environmental Services, Inc.</b> 1285 CORPORATE CENTER DRIVE, SUITE 120, EAGAN, MN 55121	
	SCALE IN FEET  0 2000	DATE 12-20-10



**LEGEND**

- PROPERTY BOUNDARY
- FORMER FUEL OIL TANK
- FORMER WASTE OIL TANK
- GUARD RAIL
- CATCH BASIN
- LIGHT POLE
- UTILITY POLE
- DISPENSER ISLAND
- ST - UNDERGROUND STORM SEWER LINE

ADOLPHUS STREET



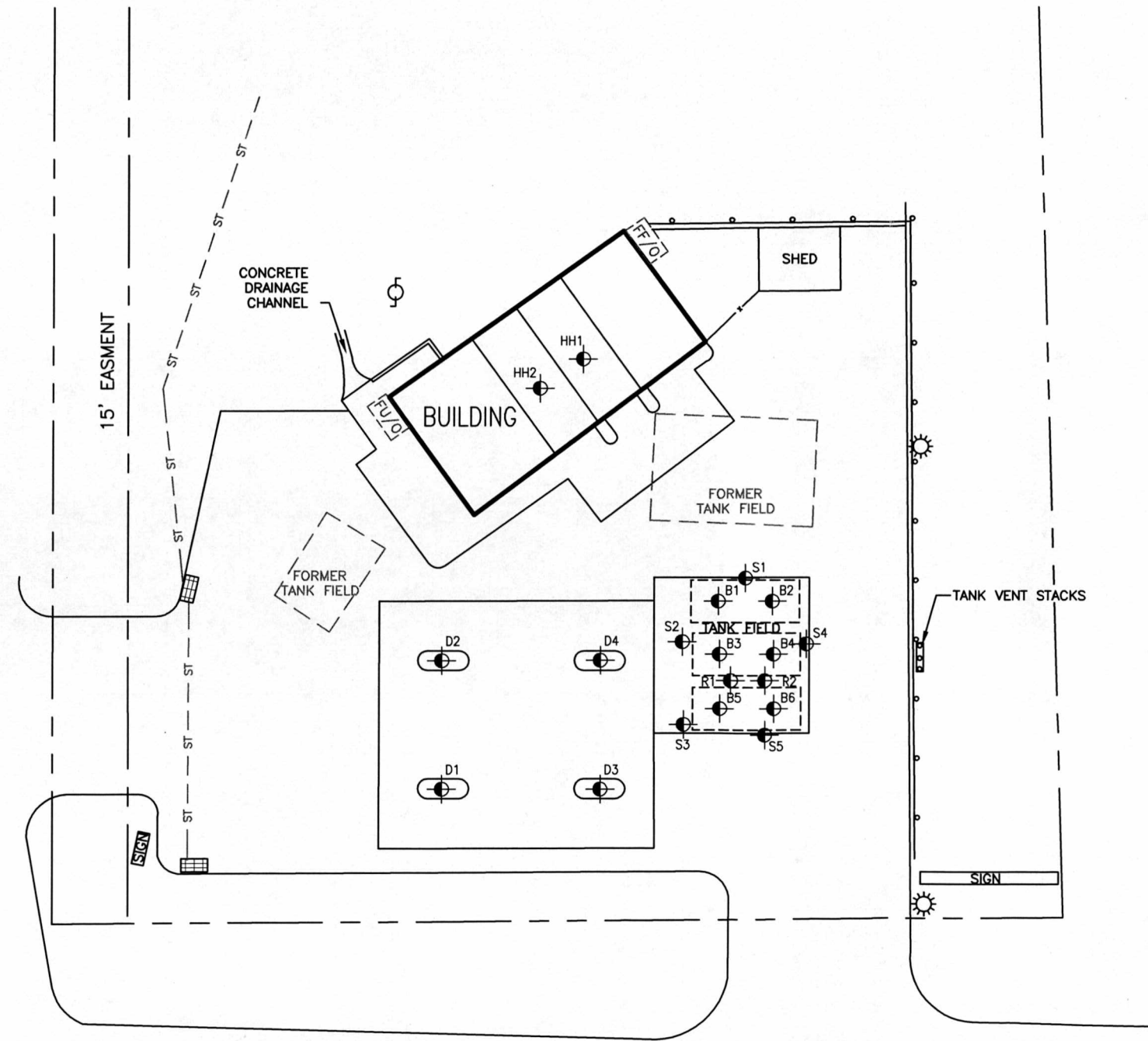
LARPENTEUR AVENUE

DRAFTED BY: W.G.S. (N.J.)	<b>SITE MAP</b>	
CHECKED BY:	<b>SINCLAIR MARKETING INC. 223 EAST LARPENTAUR AVENUE MAPLEWOOD, MINNESOTA</b>	
REVIEWED BY:	<b>Groundwater &amp; Environmental Services, Inc. 1285 CORPORATE CENTER DRIVE, SUITE 120, EAGAN, MN 55121</b>	
NORTH 	SCALE IN FEET  0 APPROXIMATE 30	DATE 12-20-10
		FIGURE

**LEGEND**

- PROPERTY BOUNDARY
- FF/O FORMER FUEL OIL TANK
- FU/O FORMER WASTE OIL TANK
- GUARD RAIL
- ▢ CATCH BASIN
- ☼ LIGHT POLE
- ⊕ UTILITY POLE
- DISPENSER ISLAND
- ST— UNDERGROUND STORM SEWER LINE
- ⊕ SOIL BORING

ADOLPHUS STREET



LARPENTEUR AVENUE

DRAFTED BY: W.G.S. (N.J.)	<b>SOIL SAMPLE LOCATION MAP</b>	
CHECKED BY:	<b>SINCLAIR MARKETING INC. 223 EAST LARPENTAUR AVENUE MAPLEWOOD, MINNESOTA</b>	
REVIEWED BY:	<b>Groundwater &amp; Environmental Services, Inc. 1285 CORPORATE CENTER DRIVE, SUITE 120, EAGAN, MN 55121</b>	
NORTH 	SCALE IN FEET 	DATE 12-20-10
	0 APPROXIMATE 30	FIGURE



**ATTACHMENT A**

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**SPATIAL DATA REPORTING FORM (1-03a)**



**Petroleum Remediation Program**  
Minnesota Pollution Control Agency

[http://www.pca.state.mn.us/programs/lust\\_p.html](http://www.pca.state.mn.us/programs/lust_p.html)

**Spatial Data Reporting Form**

Guidance Document 1-03a

(For complete instructions, see Guidance Document 1-03.)

**Part 1. Background**

Has a site location data point been submitted for this site (circle/highlight)? YES or NO  
*If yes, you do not need to complete Part 2 of this form but should complete Part 3 if there are additional site features to report. This form can be submitted electronically if desired (e.g., as an e-mail attachment to the project manager).*

MPCA Site ID: LEAK00017952

Site Name: *Former Sinclair Station #22020*

Data Collection Date: *December 6, 2010*

Name of Person Who Collected Data: *Tim Morrell*

Organization Name: *Groundwater & Environmental Services, Inc.*

Organization Type: *Consultant*

**Part 2. Site Location (use one of the three spatial data reporting formats provided)**

Point Description: *Center of Site*

Collection Method: *interpolation*

Datum (circle/highlight): WGS84 NAD83

1) Longitude (dd mm ss.ss):

Latitude (dd mm ss.ss):

2) Longitude (dd.dddddd):

Latitude (dd.dddddd):

3) UTM - X (Easting): *-93.0907*

UTM - Y (Northing): *44.9921*

UTM Zone:

**Part 3. Other Site Features**

Point Description:

Collection Method:

Datum (circle/highlight): WGS84 NAD83

1) Longitude (dd mm ss.ss): Latitude (dd mm ss.ss):

2) Longitude (dd.dddddd): Latitude (dd.dddddd):

3) UTM - X (Easting): UTM - Y (Northing):

UTM Zone:

Point Description:

Collection Method:

Datum (circle/highlight): WGS84 NAD83

1) Longitude (dd mm ss.ss): Latitude (dd mm ss.ss):

2) Longitude (dd.dddddd): Latitude (dd.dddddd):

3) UTM - X (Easting): UTM - Y (Northing):

UTM Zone:

Point Description:

Collection Method:

Datum (circle/highlight): WGS84 NAD83

1) Longitude (dd mm ss.ss): Latitude (dd mm ss.ss):

2) Longitude (dd.dddddd): Latitude (dd.dddddd):

3) UTM - X (Easting): UTM - Y (Northing):

UTM Zone:

Point Description:

Collection Method:

Datum (circle/highlight): WGS84 NAD83

1) Longitude (dd mm ss.ss): Latitude (dd mm ss.ss):

2) Longitude (dd.dddddd): Latitude (dd.dddddd):

3) UTM - X (Easting): UTM - Y (Northing):

UTM Zone:



Point Description:

Collection Method:

Datum (circle/highlight): WGS84 NAD83

1) Longitude (dd mm ss.ss):

Latitude (dd mm ss.ss):

2) Longitude (dd.ddddd):

Latitude (dd.ddddd):

3) UTM - X (Easting):

UTM - Y (Northing):

UTM Zone:



**ATTACHMENT B**

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**LABORATORY REPORTS**

November 19, 2010

Valerie Wood  
Groundwater Environmental Services, Inc.  
1285 Corporate Center Drive  
Suite 120  
Eagan, MN 55121

RE: Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Dear Valerie Wood:

Enclosed are the analytical results for sample(s) received by the laboratory on November 11, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carol Davy

carol.davy@pacelabs.com  
Project Manager

Enclosures

**REPORT OF LABORATORY ANALYSIS**

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## CERTIFICATIONS

Project: 3500919 Sinclair Station 22020

Pace Project No.: 10143006

### Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

Alaska Certification #: UST-078

Alaska Certification #MN00064

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

EPA Region 8 Certification #: Pace

Florida/NELAP Certification #: E87605

Georgia Certification #: 959

Idaho Certification #: MN00064

Illinois Certification #: 200011

Iowa Certification #: 368

Kansas Certification #: E-10167

Louisiana Certification #: 03086

Louisiana Certification #: LA080009

Maine Certification #: 2007029

Maryland Certification #: 322

Michigan DEQ Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT CERT0092

Nevada Certification #: MN\_00064

Nebraska Certification #: Pace

New Jersey Certification #: MN-002

New Mexico Certification #: Pace

New York Certification #: 11647

North Carolina Certification #: 530

North Dakota Certification #: R-036

North Dakota Certification #: R-036A

Ohio VAP Certification #: CL101

Okahoma Certification #: D9921

Okahoma Certification #: 9507

Oregon Certification #: MN200001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Tennessee Certification #: 02818

Texas Certification #: T104704192

Washington Certification #: C754

Wisconsin Certification #: 999407970

## REPORT OF LABORATORY ANALYSIS

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**SAMPLE SUMMARY**

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10143006001	B1 14	Solid	11/10/10 09:40	11/11/10 15:49
10143006002	B2 14	Solid	11/10/10 09:45	11/11/10 15:49
10143006003	B3 14	Solid	11/10/10 11:05	11/11/10 15:49
10143006004	B4 14	Solid	11/10/10 11:10	11/11/10 15:49
10143006005	B5 14	Solid	11/10/10 11:30	11/11/10 15:49
10143006006	B6 14	Solid	11/10/10 11:35	11/11/10 15:49
10143006007	D1 4	Solid	11/11/10 13:15	11/11/10 15:49
10143006008	D2 4	Solid	11/11/10 13:25	11/11/10 15:49
10143006009	D3 4	Solid	11/11/10 13:35	11/11/10 15:49
10143006010	D4 4	Solid	11/11/10 13:45	11/11/10 15:49
10143006011	HH1 8	Solid	11/11/10 14:00	11/11/10 15:49
10143006012	HH2 8	Solid	11/11/10 14:15	11/11/10 15:49

**REPORT OF LABORATORY ANALYSIS**

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**SAMPLE ANALYTE COUNT**

Project: 3500919 Sinclair Station 22020

Pace Project No.: 10143006

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10143006001	B1 14	WI MOD DRO	KL1	2
		WI MOD GRO	MJH	6
		% Moisture	JDL	1
10143006002	B2 14	WI MOD DRO	KL1	2
		WI MOD GRO	MJH	6
		% Moisture	JDL	1
10143006003	B3 14	WI MOD GRO	MJH	7
		% Moisture	JDL	1
10143006004	B4 14	WI MOD GRO	MJH	7
		% Moisture	JDL	1
10143006005	B5 14	WI MOD GRO	MJH	7
		% Moisture	JDL	1
10143006006	B6 14	WI MOD GRO	MJH	7
		% Moisture	JDL	1
10143006007	D1 4	WI MOD DRO	KL1	2
		WI MOD GRO	MJH	7
		% Moisture	JDL	1
10143006008	D2 4	WI MOD DRO	KL1	2
		WI MOD GRO	MJH	7
		% Moisture	JDL	1
10143006009	D3 4	WI MOD DRO	KL1	2
		WI MOD GRO	MJH	7
		% Moisture	JDL	1
10143006010	D4 4	WI MOD DRO	KL1	2
		WI MOD GRO	MJH	7
		% Moisture	JDL	1
10143006011	HH1 8	WI MOD DRO	KL1	2
		% Moisture	JDL	1
		EPA 8260	MJH	71
10143006012	HH2 8	WI MOD DRO	KL1	2
		% Moisture	JDL	1
		EPA 8260	MJH	71

**REPORT OF LABORATORY ANALYSIS**

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### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: B1 14 Lab ID: 10143006001 Collected: 11/10/10 09:40 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO						
Diesel Range Organics	ND mg/kg		8.3	1	11/15/10 06:55	11/16/10 00:17		
n-Triacontane (S)	90 %		50-150	1	11/15/10 06:55	11/16/10 00:17		
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND mg/kg		0.056	1	11/12/10 11:45	11/13/10 11:33	71-43-2	
Ethylbenzene	ND mg/kg		0.056	1	11/12/10 11:45	11/13/10 11:33	100-41-4	
Methyl-tert-butyl ether	ND mg/kg		0.28	1	11/12/10 11:45	11/13/10 11:33	1634-04-4	
Toluene	ND mg/kg		0.056	1	11/12/10 11:45	11/13/10 11:33	108-88-3	
Xylene (Total)	ND mg/kg		0.17	1	11/12/10 11:45	11/13/10 11:33	1330-20-7	
a,a,a-Trifluorotoluene (S)	103 %		80-125	1	11/12/10 11:45	11/13/10 11:33	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	12.2 %		0.10	1		11/17/10 00:00		

### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: B2 14 Lab ID: 10143006002 Collected: 11/10/10 09:45 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO						
Diesel Range Organics	ND mg/kg		9.6	1	11/15/10 06:55	11/16/10 00:03		
n-Triacontane (S)	88 %		50-150	1	11/15/10 06:55	11/16/10 00:03		
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND mg/kg		0.057	1	11/12/10 11:45	11/13/10 11:57	71-43-2	
Ethylbenzene	ND mg/kg		0.057	1	11/12/10 11:45	11/13/10 11:57	100-41-4	
Methyl-tert-butyl ether	ND mg/kg		0.28	1	11/12/10 11:45	11/13/10 11:57	1634-04-4	
Toluene	ND mg/kg		0.057	1	11/12/10 11:45	11/13/10 11:57	108-88-3	
Xylene (Total)	ND mg/kg		0.17	1	11/12/10 11:45	11/13/10 11:57	1330-20-7	
a,a,a-Trifluorotoluene (S)	101 %		80-125	1	11/12/10 11:45	11/13/10 11:57	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	15.8 %		0.10	1		11/17/10 00:00		



### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: B3 14 Lab ID: 10143006003 Collected: 11/10/10 11:05 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND	mg/kg	0.050	1	11/12/10 11:45	11/13/10 12:21	71-43-2	
Ethylbenzene	ND	mg/kg	0.050	1	11/12/10 11:45	11/13/10 12:21	100-41-4	
Gasoline Range Organics	ND	mg/kg	5.0	1	11/12/10 11:45	11/13/10 12:21		
Methyl-tert-butyl ether	ND	mg/kg	0.25	1	11/12/10 11:45	11/13/10 12:21	1634-04-4	
Toluene	ND	mg/kg	0.050	1	11/12/10 11:45	11/13/10 12:21	108-88-3	
Xylene (Total)	ND	mg/kg	0.15	1	11/12/10 11:45	11/13/10 12:21	1330-20-7	
a,a,a-Trifluorotoluene (S)	104	%	80-125	1	11/12/10 11:45	11/13/10 12:21	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	3.4	%	0.10	1		11/17/10 00:00		

### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020

Pace Project No.: 10143006

Sample: B4 14 Lab ID: 10143006004 Collected: 11/10/10 11:10 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND	mg/kg	0.061	1	11/12/10 11:45	11/13/10 12:45	71-43-2	
Ethylbenzene	ND	mg/kg	0.061	1	11/12/10 11:45	11/13/10 12:45	100-41-4	
Gasoline Range Organics	ND	mg/kg	6.1	1	11/12/10 11:45	11/13/10 12:45		
Methyl-tert-butyl ether	ND	mg/kg	0.31	1	11/12/10 11:45	11/13/10 12:45	1834-04-4	
Toluene	ND	mg/kg	0.061	1	11/12/10 11:45	11/13/10 12:45	108-88-3	
Xylene (Total)	ND	mg/kg	0.18	1	11/12/10 11:45	11/13/10 12:45	1330-20-7	
a,a,a-Trifluorotoluene (S)	101	%	80-125	1	11/12/10 11:45	11/13/10 12:45	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	19.2	%	0.10	1		11/17/10 00:00		

### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: B5 14      Lab ID: 10143006005      Collected: 11/10/10 11:30      Received: 11/11/10 15:49      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO    Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND	mg/kg	0.060	1	11/12/10 11:45	11/13/10 13:09	71-43-2	
Ethylbenzene	ND	mg/kg	0.060	1	11/12/10 11:45	11/13/10 13:09	100-41-4	
Gasoline Range Organics	ND	mg/kg	6.0	1	11/12/10 11:45	11/13/10 13:09		
Methyl-tert-butyl ether	ND	mg/kg	0.30	1	11/12/10 11:45	11/13/10 13:09	1634-04-4	
Toluene	ND	mg/kg	0.060	1	11/12/10 11:45	11/13/10 13:09	108-88-3	
Xylene (Total)	ND	mg/kg	0.18	1	11/12/10 11:45	11/13/10 13:09	1330-20-7	
a,a,a-Trifluorotoluene (S)	104	%	80-125	1	11/12/10 11:45	11/13/10 13:09	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	19.2	%	0.10	1		11/17/10 00:00		

### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020

Pace Project No.: 10143006

Sample: B6 14      Lab ID: 10143006006      Collected: 11/10/10 11:35      Received: 11/11/10 15:49      Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO    Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND	mg/kg	0.061	1	11/12/10 11:45	11/13/10 13:32	71-43-2	
Ethylbenzene	ND	mg/kg	0.061	1	11/12/10 11:45	11/13/10 13:32	100-41-4	
Gasoline Range Organics	ND	mg/kg	6.1	1	11/12/10 11:45	11/13/10 13:32		
Methyl-tert-butyl ether	ND	mg/kg	0.30	1	11/12/10 11:45	11/13/10 13:32	1634-04-4	
Toluene	ND	mg/kg	0.061	1	11/12/10 11:45	11/13/10 13:32	108-88-3	
Xylene (Total)	ND	mg/kg	0.18	1	11/12/10 11:45	11/13/10 13:32	1330-20-7	
a,a,a-Trifluorotoluene (S)	104	%	80-125	1	11/12/10 11:45	11/13/10 13:32	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	14.5	%	0.10	1		11/17/10 00:00		

**ANALYTICAL RESULTS**

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: D1 4 Lab ID: 10143006007 Collected: 11/11/10 13:15 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO						
Diesel Range Organics	ND	mg/kg	9.1	1	11/15/10 06:55	11/15/10 23:42		
n-Triacontane (S)	87	%	50-150	1	11/15/10 06:55	11/15/10 23:42		
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND	mg/kg	0.053	1	11/12/10 11:45	11/13/10 13:56	71-43-2	
Ethylbenzene	ND	mg/kg	0.053	1	11/12/10 11:45	11/13/10 13:56	100-41-4	
Gasoline Range Organics	ND	mg/kg	5.3	1	11/12/10 11:45	11/13/10 13:56		
Methyl-tert-butyl ether	ND	mg/kg	0.27	1	11/12/10 11:45	11/13/10 13:56	1634-04-4	
Toluene	ND	mg/kg	0.053	1	11/12/10 11:45	11/13/10 13:56	108-88-3	
Xylene (Total)	ND	mg/kg	0.16	1	11/12/10 11:45	11/13/10 13:56	1330-20-7	
a,a,a-Trifluorotoluene (S)	103	%	80-125	1	11/12/10 11:45	11/13/10 13:56	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	10.0	%	0.10	1		11/17/10 00:00		

**ANALYTICAL RESULTS**

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: D2 4 Lab ID: 10143006008 Collected: 11/11/10 13:25 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO						
Diesel Range Organics	ND	mg/kg	9.9	1	11/15/10 06:55	11/16/10 00:24		
n-Triacontane (S)	69	%	50-150	1	11/15/10 06:55	11/16/10 00:24		
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND	mg/kg	0.057	1	11/12/10 11:45	11/13/10 15:07	71-43-2	
Ethylbenzene	ND	mg/kg	0.057	1	11/12/10 11:45	11/13/10 15:07	100-41-4	
Gasoline Range Organics	ND	mg/kg	5.7	1	11/12/10 11:45	11/13/10 15:07		
Methyl-tert-butyl ether	ND	mg/kg	0.28	1	11/12/10 11:45	11/13/10 15:07	1634-04-4	
Toluene	ND	mg/kg	0.057	1	11/12/10 11:45	11/13/10 15:07	108-88-3	
Xylene (Total)	ND	mg/kg	0.17	1	11/12/10 11:45	11/13/10 15:07	1330-20-7	
a,a,a-Trifluorotoluene (S)	101	%	80-125	1	11/12/10 11:45	11/13/10 15:07	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	10.0	%	0.10	1		11/17/10 00:00		

### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: D3 4 Lab ID: 10143006009 Collected: 11/11/10 13:35 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO						
Diesel Range Organics	ND mg/kg		7.8	1	11/15/10 06:55	11/15/10 23:56		
n-Triacontane (S)	88 %		50-150	1	11/15/10 06:55	11/15/10 23:56		
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND mg/kg		0.057	1	11/12/10 11:45	11/13/10 15:31	71-43-2	
Ethylbenzene	ND mg/kg		0.057	1	11/12/10 11:45	11/13/10 15:31	100-41-4	
Gasoline Range Organics	ND mg/kg		5.7	1	11/12/10 11:45	11/13/10 15:31		
Methyl-tert-butyl ether	ND mg/kg		0.29	1	11/12/10 11:45	11/13/10 15:31	1634-04-4	
Toluene	ND mg/kg		0.057	1	11/12/10 11:45	11/13/10 15:31	108-88-3	
Xylene (Total)	ND mg/kg		0.17	1	11/12/10 11:45	11/13/10 15:31	1330-20-7	
a,a,a-Trifluorotoluene (S)	104 %		80-125	1	11/12/10 11:45	11/13/10 15:31	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	11.1 %		0.10	1		11/17/10 00:00		

### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020

Pace Project No.: 10143006

Sample: D4 4 Lab ID: 10143006010 Collected: 11/11/10 13:45 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO						
Diesel Range Organics	ND	mg/kg	9.0	1	11/15/10 06:55	11/15/10 23:35		
n-Triacontane (S)	68	%	50-150	1	11/15/10 06:55	11/15/10 23:35		
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.						
Benzene	ND	mg/kg	0.059	1	11/12/10 11:45	11/13/10 15:54	71-43-2	
Ethylbenzene	ND	mg/kg	0.059	1	11/12/10 11:45	11/13/10 15:54	100-41-4	
Gasoline Range Organics	ND	mg/kg	5.9	1	11/12/10 11:45	11/13/10 15:54		
Methyl-tert-butyl ether	ND	mg/kg	0.29	1	11/12/10 11:45	11/13/10 15:54	1634-04-4	
Toluene	ND	mg/kg	0.059	1	11/12/10 11:45	11/13/10 15:54	108-88-3	
Xylene (Total)	ND	mg/kg	0.18	1	11/12/10 11:45	11/13/10 15:54	1330-20-7	
a,a,a-Trifluorotoluene (S)	104	%	80-125	1	11/12/10 11:45	11/13/10 15:54	98-08-8	
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	11.0	%	0.10	1		11/17/10 00:00		



### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: HH1 8      Lab ID: 10143006011      Collected: 11/11/10 14:00      Received: 11/11/10 15:49      Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO						
Diesel Range Organics	ND mg/kg		8.5	1	11/15/10 06:55	11/15/10 23:49		
n-Triacontane (S)	77 %		50-150	1	11/15/10 06:55	11/15/10 23:49		
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	10.9 %		0.10	1		11/17/10 00:00		
<b>8260 MSV 5030 Med Level</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B						
Acetone	ND ug/kg		583	1	11/15/10 09:06	11/17/10 21:56	67-64-1	
Allyl chloride	ND ug/kg		233	1	11/15/10 09:06	11/17/10 21:56	107-05-1	
Benzene	ND ug/kg		23.3	1	11/15/10 09:06	11/17/10 21:56	71-43-2	
Bromobenzene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	108-86-1	
Bromochloromethane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	74-97-5	
Bromodichloromethane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	75-27-4	
Bromoform	ND ug/kg		466	1	11/15/10 09:06	11/17/10 21:56	75-25-2	
Bromomethane	ND ug/kg		583	1	11/15/10 09:06	11/17/10 21:56	74-83-9	
2-Butanone (MEK)	ND ug/kg		583	1	11/15/10 09:06	11/17/10 21:56	78-93-3	
n-Butylbenzene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	104-51-8	
sec-Butylbenzene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	135-98-8	
tert-Butylbenzene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	98-06-6	
Carbon tetrachloride	ND ug/kg		233	1	11/15/10 09:06	11/17/10 21:56	56-23-5	
Chlorobenzene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	108-90-7	
Chloroethane	ND ug/kg		583	1	11/15/10 09:06	11/17/10 21:56	75-00-3	
Chloroform	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	67-66-3	
Chloromethane	ND ug/kg		233	1	11/15/10 09:06	11/17/10 21:56	74-87-3	
2-Chlorotoluene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	95-49-8	
4-Chlorotoluene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		233	1	11/15/10 09:06	11/17/10 21:56	96-12-8	
Dibromochloromethane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	106-93-4	
Dibromomethane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	106-46-7	
Dichlorodifluoromethane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	75-71-8	
1,1-Dichloroethane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	75-34-3	
1,2-Dichloroethane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	107-06-2	
1,1-Dichloroethene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	156-60-5	
Dichlorofluoromethane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	75-43-4	
1,2-Dichloropropane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	78-87-5	
1,3-Dichloropropane	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	142-28-9	
2,2-Dichloropropane	ND ug/kg		233	1	11/15/10 09:06	11/17/10 21:56	594-20-7	
1,1-Dichloropropene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		58.3	1	11/15/10 09:06	11/17/10 21:56	10061-01-5	

Date: 11/19/2010 02:11 PM

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### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020

Pace Project No.: 10143006

Sample: HH1 8 Lab ID: 10143006011 Collected: 11/11/10 14:00 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV 5030 Med Level</b>		<b>Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B</b>						
trans-1,3-Dichloropropene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	233	1	11/15/10 09:06	11/17/10 21:56	60-29-7	
Ethylbenzene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	233	1	11/15/10 09:06	11/17/10 21:56	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	98-82-8	
p-Isopropyltoluene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	99-87-6	
Methylene Chloride	ND	ug/kg	233	1	11/15/10 09:06	11/17/10 21:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	583	1	11/15/10 09:06	11/17/10 21:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	1634-04-4	
Naphthalene	ND	ug/kg	233	1	11/15/10 09:06	11/17/10 21:56	91-20-3	
n-Propylbenzene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	103-65-1	
Styrene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	79-34-5	
Tetrachloroethene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	127-18-4	
Tetrahydrofuran	ND	ug/kg	583	1	11/15/10 09:06	11/17/10 21:56	109-99-9	
Toluene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	79-00-5	
Trichloroethene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	79-01-6	
Trichlorofluoromethane	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	58.3	1	11/15/10 09:06	11/17/10 21:56	108-67-8	
Vinyl chloride	ND	ug/kg	23.3	1	11/15/10 09:06	11/17/10 21:56	75-01-4	
Xylene (Total)	ND	ug/kg	175	1	11/15/10 09:06	11/17/10 21:56	1330-20-7	
Dibromofluoromethane (S)	94 %		69-127	1	11/15/10 09:06	11/17/10 21:56	1868-53-7	
1,2-Dichloroethane-d4 (S)	95 %		67-125	1	11/15/10 09:06	11/17/10 21:56	17080-07-0	
Toluene-d8 (S)	100 %		75-144	1	11/15/10 09:06	11/17/10 21:56	2037-26-5	
4-Bromofluorobenzene (S)	92 %		75-132	1	11/15/10 09:06	11/17/10 21:56	460-00-4	

### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: HH2 8 Lab ID: 10143006012 Collected: 11/11/10 14:15 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>		Analytical Method: WI MOD DRO Preparation Method: WI MOD DRO						
Diesel Range Organics	1930 mg/kg		460	50	11/15/10 06:55	11/16/10 11:38		T7
n-Triacontane (S)	0 %		50-150	50	11/15/10 06:55	11/16/10 11:38		S4
<b>Dry Weight</b>		Analytical Method: % Moisture						
Percent Moisture	10.1 %		0.10	1		11/17/10 00:00		
<b>8260 MSV 5030 Med Level</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B						
Acetone	ND ug/kg		2710	5	11/15/10 09:06	11/18/10 11:14	67-64-1	
Allyl chloride	ND ug/kg		1080	5	11/15/10 09:06	11/18/10 11:14	107-05-1	
Benzene	ND ug/kg		108	5	11/15/10 09:06	11/18/10 11:14	71-43-2	
Bromobenzene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	108-86-1	
Bromochloromethane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	74-97-5	
Bromodichloromethane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	75-27-4	
Bromofom	ND ug/kg		2170	5	11/15/10 09:06	11/18/10 11:14	75-25-2	
Bromomethane	ND ug/kg		2710	5	11/15/10 09:06	11/18/10 11:14	74-83-9	
2-Butanone (MEK)	ND ug/kg		2710	5	11/15/10 09:06	11/18/10 11:14	78-93-3	
n-Butylbenzene	9010 ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	104-51-8	
sec-Butylbenzene	3020 ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	135-98-8	
tert-Butylbenzene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	98-06-6	
Carbon tetrachloride	ND ug/kg		1080	5	11/15/10 09:06	11/18/10 11:14	56-23-5	
Chlorobenzene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	108-90-7	
Chloroethane	ND ug/kg		2710	5	11/15/10 09:06	11/18/10 11:14	75-00-3	
Chloroform	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	67-66-3	
Chloromethane	ND ug/kg		1080	5	11/15/10 09:06	11/18/10 11:14	74-87-3	
2-Chlorotoluene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	95-49-8	
4-Chlorotoluene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		1080	5	11/15/10 09:06	11/18/10 11:14	96-12-8	
Dibromochloromethane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	106-93-4	
Dibromomethane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	95-50-1	
1,3-Dichlorobenzene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	106-46-7	
Dichlorodifluoromethane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	75-71-8	
1,1-Dichloroethane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	75-34-3	
1,2-Dichloroethane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	107-06-2	
1,1-Dichloroethene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	156-60-5	
Dichlorofluoromethane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	75-43-4	
1,2-Dichloropropane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	78-87-5	
1,3-Dichloropropane	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	142-28-9	
2,2-Dichloropropane	ND ug/kg		1080	5	11/15/10 09:06	11/18/10 11:14	594-20-7	
1,1-Dichloropropene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		271	5	11/15/10 09:06	11/18/10 11:14	10061-01-5	

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### ANALYTICAL RESULTS

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

Sample: HH2 8 Lab ID: 10143006012 Collected: 11/11/10 14:15 Received: 11/11/10 15:49 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV 5030 Med Level</b>		<b>Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B</b>						
trans-1,3-Dichloropropene	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	1080	5	11/15/10 09:06	11/18/10 11:14	60-29-7	
Ethylbenzene	432	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	1080	5	11/15/10 09:06	11/18/10 11:14	87-68-3	
Isopropylbenzene (Cumene)	1380	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	98-82-8	
p-Isopropyltoluene	4600	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	99-87-6	
Methylene Chloride	ND	ug/kg	1080	5	11/15/10 09:06	11/18/10 11:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	2710	5	11/15/10 09:06	11/18/10 11:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	1634-04-4	
Naphthalene	2650	ug/kg	1080	5	11/15/10 09:06	11/18/10 11:14	91-20-3	
n-Propylbenzene	2850	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	103-65-1	
Styrene	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	79-34-5	
Tetrachloroethene	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	127-18-4	
Tetrahydrofuran	ND	ug/kg	2710	5	11/15/10 09:06	11/18/10 11:14	109-99-9	
Toluene	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	79-00-5	
Trichloroethene	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	79-01-6	
Trichlorofluoromethane	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	76-13-1	
1,2,4-Trimethylbenzene	30600	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	95-63-6	
1,3,5-Trimethylbenzene	9510	ug/kg	271	5	11/15/10 09:06	11/18/10 11:14	108-67-8	
Vinyl chloride	ND	ug/kg	108	5	11/15/10 09:06	11/18/10 11:14	75-01-4	
Xylene (Total)	2140	ug/kg	814	5	11/15/10 09:06	11/18/10 11:14	1330-20-7	
Dibromofluoromethane (S)	87 %		69-127	5	11/15/10 09:06	11/18/10 11:14	1868-53-7	
1,2-Dichloroethane-d4 (S)	89 %		67-125	5	11/15/10 09:06	11/18/10 11:14	17060-07-0	
Toluene-d8 (S)	101 %		75-144	5	11/15/10 09:06	11/18/10 11:14	2037-26-5	
4-Bromofluorobenzene (S)	82 %		75-132	5	11/15/10 09:06	11/18/10 11:14	460-00-4	

**QUALITY CONTROL DATA**

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

QC Batch: OEXT/14251 Analysis Method: WI MOD DRO  
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS  
Associated Lab Samples: 10143006001, 10143006002, 10143006007, 10143006008, 10143006009, 10143006010, 10143006011, 10143006012

METHOD BLANK: 891785 Matrix: Solid  
Associated Lab Samples: 10143006001, 10143006002, 10143006007, 10143006008, 10143006009, 10143006010, 10143006011, 10143006012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	ND	5.0	11/15/10 22:18	
n-Triacontane (S)	%	74	50-150	11/15/10 22:18	

LABORATORY CONTROL SAMPLE & LCSD: 891786 891787

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	80	57.2	58.2	72	73	70-120	2	20	
n-Triacontane (S)	%				86	82	50-150			

### QUALITY CONTROL DATA

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

QC Batch: GCV/7583 Analysis Method: WI MOD GRO  
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV  
Associated Lab Samples: 10143006001, 10143006002, 10143006003, 10143006004, 10143006005, 10143006006, 10143006007, 10143006008, 10143006009, 10143006010

METHOD BLANK: 890729 Matrix: Solid  
Associated Lab Samples: 10143006001, 10143006002, 10143006003, 10143006004, 10143006005, 10143006006, 10143006007, 10143006008, 10143006009, 10143006010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	mg/kg	ND	0.050	11/13/10 08:02	
Ethylbenzene	mg/kg	ND	0.050	11/13/10 08:02	
Gasoline Range Organics	mg/kg	ND	5.0	11/13/10 08:02	
Methyl-tert-butyl ether	mg/kg	ND	0.25	11/13/10 08:02	
Toluene	mg/kg	ND	0.050	11/13/10 08:02	
Xylene (Total)	mg/kg	ND	0.15	11/13/10 08:02	
a,a,a-Trifluorotoluene (S)	%	104	80-125	11/13/10 08:02	

LABORATORY CONTROL SAMPLE & LCSD: 890730 890731

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	mg/kg	5	5.0	5.0	100	99	80-120	.8	20	
Ethylbenzene	mg/kg	5	5.0	4.8	101	96	80-120	5	20	
Gasoline Range Organics	mg/kg	50	53.0	51.0	106	102	80-120	4	20	
Methyl-tert-butyl ether	mg/kg	5	5.1	5.2	102	103	80-120	1	20	
Toluene	mg/kg	5	4.9	4.8	98	97	80-120	1	20	
Xylene (Total)	mg/kg	15	15.2	14.6	102	97	80-120	4	20	
a,a,a-Trifluorotoluene (S)	%				98	103	80-125			

MATRIX SPIKE SAMPLE: 890732

Parameter	Units	10142898008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	mg/kg	ND	5.7	7.9	139	80-120	M1
Ethylbenzene	mg/kg	ND	5.7	7.7	137	80-120	M1
Gasoline Range Organics	mg/kg	ND	56.3	81.9	145	80-120	M1
Methyl-tert-butyl ether	mg/kg	ND	5.7	6.7	119	80-120	
Toluene	mg/kg	ND	5.7	7.8	138	80-120	M1
Xylene (Total)	mg/kg	ND	17	24.2	143	80-120	ES
a,a,a-Trifluorotoluene (S)	%				102	80-125	

SAMPLE DUPLICATE: 890733

Parameter	Units	10142898009 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	mg/kg	ND	ND		20	
Ethylbenzene	mg/kg	ND	ND		20	
Gasoline Range Organics	mg/kg	ND	ND		20	
Methyl-tert-butyl ether	mg/kg	ND	ND		20	

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### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

SAMPLE DUPLICATE: 890733

Parameter	Units	10142898009 Result	Dup Result	RPD	Max RPD	Qualifiers
Toluene	mg/kg	ND	ND		20	
Xylene (Total)	mg/kg	ND	ND		20	
a,a,a-Trifluorotoluene (S)	%	105	106	7		





**QUALITY CONTROL DATA**

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

QC Batch: MSV/15792 Analysis Method: EPA 8260  
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV 5030 Med Level  
Associated Lab Samples: 10143006011, 10143006012

METHOD BLANK: 891890 Matrix: Solid

Associated Lab Samples: 10143006011, 10143006012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	50.0	11/16/10 03:38	
1,1,1-Trichloroethane	ug/kg	ND	50.0	11/16/10 03:38	
1,1,2,2-Tetrachloroethane	ug/kg	ND	50.0	11/16/10 03:38	
1,1,2-Trichloroethane	ug/kg	ND	50.0	11/16/10 03:38	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	50.0	11/16/10 03:38	
1,1-Dichloroethane	ug/kg	ND	50.0	11/16/10 03:38	
1,1-Dichloroethene	ug/kg	ND	50.0	11/16/10 03:38	
1,1-Dichloropropene	ug/kg	ND	50.0	11/16/10 03:38	
1,2,3-Trichlorobenzene	ug/kg	ND	50.0	11/16/10 03:38	
1,2,3-Trichloropropane	ug/kg	ND	50.0	11/16/10 03:38	
1,2,4-Trichlorobenzene	ug/kg	ND	50.0	11/16/10 03:38	
1,2,4-Trimethylbenzene	ug/kg	ND	50.0	11/16/10 03:38	
1,2-Dibromo-3-chloropropane	ug/kg	ND	200	11/16/10 03:38	
1,2-Dibromoethane (EDB)	ug/kg	ND	50.0	11/16/10 03:38	
1,2-Dichlorobenzene	ug/kg	ND	50.0	11/16/10 03:38	
1,2-Dichloroethane	ug/kg	ND	50.0	11/16/10 03:38	
1,2-Dichloropropane	ug/kg	ND	50.0	11/16/10 03:38	
1,3,5-Trimethylbenzene	ug/kg	ND	50.0	11/16/10 03:38	
1,3-Dichlorobenzene	ug/kg	ND	50.0	11/16/10 03:38	
1,3-Dichloropropane	ug/kg	ND	50.0	11/16/10 03:38	
1,4-Dichlorobenzene	ug/kg	ND	50.0	11/16/10 03:38	
2,2-Dichloropropane	ug/kg	ND	200	11/16/10 03:38	
2-Butanone (MEK)	ug/kg	ND	500	11/16/10 03:38	
2-Chlorotoluene	ug/kg	ND	50.0	11/16/10 03:38	
4-Chlorotoluene	ug/kg	ND	50.0	11/16/10 03:38	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	500	11/16/10 03:38	
Acetone	ug/kg	ND	500	11/16/10 03:38	
Allyl chloride	ug/kg	ND	200	11/16/10 03:38	
Benzene	ug/kg	ND	20.0	11/16/10 03:38	
Bromobenzene	ug/kg	ND	50.0	11/16/10 03:38	
Bromochloromethane	ug/kg	ND	50.0	11/16/10 03:38	
Bromodichloromethane	ug/kg	ND	50.0	11/16/10 03:38	
Bromoform	ug/kg	ND	400	11/16/10 03:38	
Bromomethane	ug/kg	ND	500	11/16/10 03:38	
Carbon tetrachloride	ug/kg	ND	200	11/16/10 03:38	
Chlorobenzene	ug/kg	ND	50.0	11/16/10 03:38	
Chloroethane	ug/kg	ND	500	11/16/10 03:38	
Chloroform	ug/kg	ND	50.0	11/16/10 03:38	
Chloromethane	ug/kg	ND	200	11/16/10 03:38	
cis-1,2-Dichloroethene	ug/kg	ND	50.0	11/16/10 03:38	
cis-1,3-Dichloropropene	ug/kg	ND	50.0	11/16/10 03:38	
Dibromochloromethane	ug/kg	ND	50.0	11/16/10 03:38	
Dibromomethane	ug/kg	ND	50.0	11/16/10 03:38	

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

METHOD BLANK: 891890 Matrix: Solid

Associated Lab Samples: 10143006011, 10143006012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/kg	ND	50.0	11/16/10 03:38	
Dichlorofluoromethane	ug/kg	ND	50.0	11/16/10 03:38	
Diethyl ether (Ethyl ether)	ug/kg	ND	200	11/16/10 03:38	
Ethylbenzene	ug/kg	ND	50.0	11/16/10 03:38	
Hexachloro-1,3-butadiene	ug/kg	ND	200	11/16/10 03:38	
Isopropylbenzene (Cumene)	ug/kg	ND	50.0	11/16/10 03:38	
Methyl-tert-butyl ether	ug/kg	ND	50.0	11/16/10 03:38	
Methylene Chloride	ug/kg	ND	200	11/16/10 03:38	
n-Butylbenzene	ug/kg	ND	50.0	11/16/10 03:38	
n-Propylbenzene	ug/kg	ND	50.0	11/16/10 03:38	
Naphthalene	ug/kg	ND	200	11/16/10 03:38	
p-Isopropyltoluene	ug/kg	ND	50.0	11/16/10 03:38	
sec-Butylbenzene	ug/kg	ND	50.0	11/16/10 03:38	
Styrene	ug/kg	ND	50.0	11/16/10 03:38	
tert-Butylbenzene	ug/kg	ND	50.0	11/16/10 03:38	
Tetrachloroethene	ug/kg	ND	50.0	11/16/10 03:38	
Tetrahydrofuran	ug/kg	ND	500	11/16/10 03:38	
Toluene	ug/kg	ND	50.0	11/16/10 03:38	
trans-1,2-Dichloroethene	ug/kg	ND	50.0	11/16/10 03:38	
trans-1,3-Dichloropropene	ug/kg	ND	50.0	11/16/10 03:38	
Trichloroethene	ug/kg	ND	50.0	11/16/10 03:38	
Trichlorofluoromethane	ug/kg	ND	50.0	11/16/10 03:38	
Vinyl chloride	ug/kg	ND	20.0	11/16/10 03:38	
Xylene (Total)	ug/kg	ND	150	11/16/10 03:38	
1,2-Dichloroethane-d4 (S)	%	122	67-125	11/16/10 03:38	
4-Bromofluorobenzene (S)	%	128	75-132	11/16/10 03:38	
Dibromofluoromethane (S)	%	118	69-127	11/16/10 03:38	
Toluene-d8 (S)	%	127	75-144	11/16/10 03:38	

LABORATORY CONTROL SAMPLE & LCSD: 891891

891892

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1000	1050	1190	105	119	75-125	12	20	
1,1,1-Trichloroethane	ug/kg	1000	1060	1180	106	118	75-136	11	20	
1,1,2,2-Tetrachloroethane	ug/kg	1000	982	1130	98	113	70-135	14	20	
1,1,2-Trichloroethane	ug/kg	1000	1050	1170	105	117	75-126	11	20	
1,1,2-Trichlorotrifluoroethane	ug/kg	1000	1130	1080	113	108	47-150	5	20	
1,1-Dichloroethane	ug/kg	1000	1040	1160	104	116	75-130	11	20	
1,1-Dichloroethene	ug/kg	1000	989	1070	99	107	69-134	8	20	
1,1-Dichloropropene	ug/kg	1000	994	1060	99	106	70-130	7	20	
1,2,3-Trichlorobenzene	ug/kg	1000	1170	1250	117	125	75-141	6	20	
1,2,3-Trichloropropane	ug/kg	1000	925	1120	93	112	71-136	19	20	
1,2,4-Trichlorobenzene	ug/kg	1000	1180	1240	118	124	75-139	6	20	
1,2,4-Trimethylbenzene	ug/kg	1000	1030	1170	103	117	75-126	13	20	
1,2-Dibromo-3-chloropropane	ug/kg	1000	1070	1170	107	117	58-150	10	20	

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### QUALITY CONTROL DATA

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

LABORATORY CONTROL SAMPLE & LCSD: 891891		891892									
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
1,2-Dibromoethane (EDB)	ug/kg	1000	1020	1120	102	112	75-128	10	20		
1,2-Dichlorobenzene	ug/kg	1000	1030	1160	103	116	75-125	12	20		
1,2-Dichloroethane	ug/kg	1000	1010	1080	101	108	73-130	7	20		
1,2-Dichloropropane	ug/kg	1000	987	1150	99	115	75-125	15	20		
1,3,5-Trimethylbenzene	ug/kg	1000	1030	1190	103	119	75-125	14	20		
1,3-Dichlorobenzene	ug/kg	1000	1020	1170	102	117	75-125	14	20		
1,3-Dichloropropane	ug/kg	1000	1030	1120	103	112	75-125	9	20		
1,4-Dichlorobenzene	ug/kg	1000	1030	1140	103	114	75-131	11	20		
2,2-Dichloropropane	ug/kg	1000	940	980	94	98	42-150	4	20		
2-Butanone (MEK)	ug/kg	1000	1050	1090	105	109	44-150	4	20		
2-Chlorotoluene	ug/kg	1000	972	1140	97	114	75-125	16	20		
4-Chlorotoluene	ug/kg	1000	988	1140	99	114	75-125	14	20		
4-Methyl-2-pentanone (MIBK)	ug/kg	1000	1040	1190	104	119	56-147	13	20		
Acetone	ug/kg	2500	2200	3040	88	121	57-146	32	20	D6	
Allyl chloride	ug/kg	1000	1070	1170	107	117	75-128	10	20		
Benzene	ug/kg	1000	1000	1130	100	113	69-134	12	20		
Bromobenzene	ug/kg	1000	1080	1170	108	117	75-125	8	20		
Bromochloromethane	ug/kg	1000	1150	1140	115	114	75-125	1	20		
Bromodichloromethane	ug/kg	1000	1030	1140	103	114	75-129	10	20		
Bromoform	ug/kg	1000	1020	1130	102	113	73-141	10	20		
Bromomethane	ug/kg	1000	1050	1060	105	106	71-142	1	20		
Carbon tetrachloride	ug/kg	1000	1020	1120	102	112	73-141	10	20		
Chlorobenzene	ug/kg	1000	1040	1150	104	115	75-125	10	20		
Chloroethane	ug/kg	1000	1050	1090	105	109	65-137	4	20		
Chloroform	ug/kg	1000	1010	1100	101	110	75-127	9	20		
Chloromethane	ug/kg	1000	930	956	93	96	60-125	3	20		
cis-1,2-Dichloroethene	ug/kg	1000	1040	1070	104	107	75-129	3	20		
cis-1,3-Dichloropropene	ug/kg	1000	996	1120	100	112	75-134	12	20		
Dibromochloromethane	ug/kg	1000	1060	1160	106	116	75-129	9	20		
Dibromomethane	ug/kg	1000	1000	1140	100	114	75-127	12	20		
Dichlorodifluoromethane	ug/kg	1000	886	929	89	93	36-134	5	20		
Dichlorofluoromethane	ug/kg	1000	1040	1100	104	110	53-142	5	20		
Diethyl ether (Ethyl ether)	ug/kg	1000	966	1040	97	104	64-131	7	20		
Ethylbenzene	ug/kg	1000	1060	1140	106	114	75-125	7	20		
Hexachloro-1,3-butadiene	ug/kg	500	530	591	106	118	70-150	11	20		
Isopropylbenzene (Cumene)	ug/kg	1000	1100	1170	110	117	75-127	6	20		
Methyl-tert-butyl ether	ug/kg	1000	962	1090	96	109	69-138	13	20		
Methylene Chloride	ug/kg	1000	1010	1050	101	105	69-130	4	20		
n-Butylbenzene	ug/kg	1000	1110	1240	111	124	75-135	11	20		
n-Propylbenzene	ug/kg	1000	1000	1170	100	117	75-125	15	20		
Naphthalene	ug/kg	1000	1150	1220	115	122	75-142	5	20		
p-Isopropyltoluene	ug/kg	1000	1120	1220	112	122	75-133	9	20		
sec-Butylbenzene	ug/kg	1000	1090	1190	109	119	75-129	9	20		
Styrene	ug/kg	1000	1010	1100	101	110	75-125	8	20		
tert-Butylbenzene	ug/kg	1000	1020	1150	102	115	75-128	13	20		
Tetrachloroethene	ug/kg	1000	1130	1100	113	110	75-130	3	20		
Tetrahydrofuran	ug/kg	10000	9690	11100	97	111	53-136	14	20		
Toluene	ug/kg	1000	997	1140	100	114	75-125	13	20		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

LABORATORY CONTROL SAMPLE & LCSD:		891891		891892							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
trans-1,2-Dichloroethene	ug/kg	1000	966	1120	97	112	75-132	14	20		
trans-1,3-Dichloropropene	ug/kg	1000	955	1070	95	107	75-128	12	20		
Trichloroethene	ug/kg	1000	997	1160	100	116	75-125	15	20		
Trichlorofluoromethane	ug/kg	1000	1010	1110	101	111	35-150	10	20		
Vinyl chloride	ug/kg	1000	912	1040	91	104	60-126	13	20		
Xylene (Total)	ug/kg	3000	3190	3370	106	112	75-125	5	20		
1,2-Dichloroethane-d4 (S)	%				104	119	67-125				
4-Bromofluorobenzene (S)	%				101	122	75-132				
Dibromofluoromethane (S)	%				107	120	69-127				
Toluene-d8 (S)	%				107	122	75-144				

MATRIX SPIKE SAMPLE:		891893		10142908010							
Parameter	Units	Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers				
1,1,1,2-Tetrachloroethane	ug/kg	ND	999	1330	133	49-150					
1,1,1-Trichloroethane	ug/kg	ND	999	1390	139	58-150					
1,1,1,2-Tetrachloroethane	ug/kg	ND	999	1260	126	54-146					
1,1,2-Trichloroethane	ug/kg	ND	999	1360	136	48-154					
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	999	1550	155	47-150	M1				
1,1-Dichloroethane	ug/kg	ND	999	1330	133	57-143					
1,1-Dichloroethene	ug/kg	ND	999	1300	130	52-150					
1,1-Dichloropropene	ug/kg	ND	999	1320	132	58-147					
1,2,3-Trichlorobenzene	ug/kg	ND	999	1400	140	36-150					
1,2,3-Trichloropropane	ug/kg	ND	999	1260	126	56-147					
1,2,4-Trichlorobenzene	ug/kg	ND	999	1470	147	30-150					
1,2,4-Trimethylbenzene	ug/kg	ND	999	1310	131	38-150					
1,2-Dibromo-3-chloropropane	ug/kg	ND	999	1240	124	30-150					
1,2-Dibromoethane (EDB)	ug/kg	ND	999	1340	134	53-144					
1,2-Dichlorobenzene	ug/kg	ND	999	1280	128	45-150					
1,2-Dichloroethane	ug/kg	ND	999	1250	125	39-150					
1,2-Dichloropropane	ug/kg	ND	999	1190	119	60-135					
1,3,5-Trimethylbenzene	ug/kg	ND	999	1280	128	30-150					
1,3-Dichlorobenzene	ug/kg	ND	999	1310	131	42-150					
1,3-Dichloropropane	ug/kg	ND	999	1310	131	62-129	M1				
1,4-Dichlorobenzene	ug/kg	ND	999	1280	128	45-150					
2,2-Dichloropropane	ug/kg	ND	999	1290	129	30-150					
2-Butanone (MEK)	ug/kg	ND	999	1330	133	37-150					
2-Chlorotoluene	ug/kg	ND	999	1220	122	30-150					
4-Chlorotoluene	ug/kg	ND	999	1260	126	40-150					
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	999	1280	128	45-150					
Acetone	ug/kg	ND	2500	2910	116	30-150					
Allyl chloride	ug/kg	ND	999	1340	134	30-150					
Benzene	ug/kg	ND	999	1290	129	57-140					
Bromobenzene	ug/kg	ND	999	1230	123	57-141					
Bromochloromethane	ug/kg	ND	999	1380	138	58-140					
Bromodichloromethane	ug/kg	ND	999	1270	127	54-146					
Bromoform	ug/kg	ND	999	1370	137	35-150					

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### QUALITY CONTROL DATA

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

MATRIX SPIKE SAMPLE: 891893		10142908010	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Bromomethane	ug/kg	ND	999	1220	122	30-150	
Carbon tetrachloride	ug/kg	ND	999	1320	132	34-150	
Chlorobenzene	ug/kg	ND	999	1350	135	54-142	
Chloroethane	ug/kg	ND	999	1440	144	30-150	
Chloroform	ug/kg	ND	999	1260	126	60-136	
Chloromethane	ug/kg	ND	999	1160	117	44-129	
cis-1,2-Dichloroethene	ug/kg	ND	999	1260	126	54-144	
cis-1,3-Dichloropropene	ug/kg	ND	999	1250	125	52-141	
Dibromochloromethane	ug/kg	ND	999	1340	134	43-150	
Dibromomethane	ug/kg	ND	999	1190	119	55-139	
Dichlorodifluoromethane	ug/kg	ND	999	1300	130	30-150	
Dichlorofluoromethane	ug/kg	ND	999	1350	136	53-142	
Diethyl ether (Ethyl ether)	ug/kg	ND	999	1150	115	59-135	
Ethylbenzene	ug/kg	ND	999	1350	135	51-150	
Hexachloro-1,3-butadiene	ug/kg	ND	500	753	151	30-150 M1	
Isopropylbenzene (Cumene)	ug/kg	ND	999	1430	143	41-150	
Methyl-tert-butyl ether	ug/kg	ND	999	1230	123	52-139	
Methylene Chloride	ug/kg	ND	999	1230	123	56-138	
n-Butylbenzene	ug/kg	ND	999	1380	138	30-150	
n-Propylbenzene	ug/kg	ND	999	1340	134	30-150	
Naphthalene	ug/kg	ND	999	1440	144	30-150	
p-Isopropyltoluene	ug/kg	ND	999	1400	140	30-150	
sec-Butylbenzene	ug/kg	ND	999	1340	134	30-150	
Styrene	ug/kg	ND	999	1290	129	40-150	
tert-Butylbenzene	ug/kg	ND	999	1320	132	61-150	
Tetrachloroethene	ug/kg	ND	999	1430	144	30-150	
Tetrahydrofuran	ug/kg	ND	9990	12800	129	53-136	
Toluene	ug/kg	ND	999	1360	136	50-146	
trans-1,2-Dichloroethene	ug/kg	ND	999	1340	134	58-139	
trans-1,3-Dichloropropene	ug/kg	ND	999	1210	121	43-146	
Trichloroethene	ug/kg	ND	999	1290	129	30-150	
Trichlorofluoromethane	ug/kg	ND	999	1420	142	30-150	
Vinyl chloride	ug/kg	ND	999	1250	125	45-142	
Xylene (Total)	ug/kg	ND	3000	4030	134	43-150	
1,2-Dichloroethane-d4 (S)	%				130	67-125 S0	
4-Bromofluorobenzene (S)	%				125	75-132	
Dibromofluoromethane (S)	%				127	69-127	
Toluene-d8 (S)	%				132	75-144	

SAMPLE DUPLICATE: 891894

Parameter	Units	10142908011	Dup	RPD	Max	Qualifiers
		Result	Result		RPD	
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,1-Trichloroethane	ug/kg	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,2-Trichloroethane	ug/kg	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	ND		30	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 3500919 Sinclair Station 22020

Pace Project No.: 10143006

SAMPLE DUPLICATE: 891894

Parameter	Units	10142908011 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1-Dichloroethane	ug/kg	ND	ND		30	
1,1-Dichloroethene	ug/kg	ND	ND		30	
1,1-Dichloropropene	ug/kg	ND	ND		30	
1,2,3-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,3-Trichloropropane	ug/kg	ND	ND		30	
1,2,4-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,4-Trimethylbenzene	ug/kg	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		30	
1,2-Dichlorobenzene	ug/kg	ND	ND		30	
1,2-Dichloroethane	ug/kg	ND	ND		30	
1,2-Dichloropropane	ug/kg	ND	ND		30	
1,3,5-Trimethylbenzene	ug/kg	ND	ND		30	
1,3-Dichlorobenzene	ug/kg	ND	ND		30	
1,3-Dichloropropane	ug/kg	ND	ND		30	
1,4-Dichlorobenzene	ug/kg	ND	ND		30	
2,2-Dichloropropane	ug/kg	ND	ND		30	
2-Butanone (MEK)	ug/kg	ND	ND		30	
2-Chlorotoluene	ug/kg	ND	ND		30	
4-Chlorotoluene	ug/kg	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		30	
Acetone	ug/kg	ND	ND		30	
Allyl chloride	ug/kg	ND	ND		30	
Benzene	ug/kg	ND	ND		30	
Bromobenzene	ug/kg	ND	ND		30	
Bromochloromethane	ug/kg	ND	ND		30	
Bromodichloromethane	ug/kg	ND	ND		30	
Bromoform	ug/kg	ND	ND		30	
Bromomethane	ug/kg	ND	ND		30	
Carbon tetrachloride	ug/kg	ND	ND		30	
Chlorobenzene	ug/kg	ND	ND		30	
Chloroethane	ug/kg	ND	ND		30	
Chloroform	ug/kg	ND	ND		30	
Chloromethane	ug/kg	ND	ND		30	
cis-1,2-Dichloroethene	ug/kg	ND	ND		30	
cis-1,3-Dichloropropene	ug/kg	ND	ND		30	
Dibromochloromethane	ug/kg	ND	ND		30	
Dibromomethane	ug/kg	ND	ND		30	
Dichlorodifluoromethane	ug/kg	ND	ND		30	
Dichlorofluoromethane	ug/kg	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/kg	ND	ND		30	
Ethylbenzene	ug/kg	ND	ND		30	
Hexachloro-1,3-butadiene	ug/kg	ND	ND		30	
Isopropylbenzene (Cumene)	ug/kg	ND	ND		30	
Methyl-tert-butyl ether	ug/kg	ND	ND		30	
Methylene Chloride	ug/kg	ND	ND		30	
n-Butylbenzene	ug/kg	ND	ND		30	
n-Propylbenzene	ug/kg	ND	ND		30	

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### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

SAMPLE DUPLICATE: 891894

Parameter	Units	10142908011 Result	Dup Result	RPD	Max RPD	Qualifiers
Naphthalene	ug/kg	ND	ND		30	
p-Isopropyltoluene	ug/kg	ND	ND		30	
sec-Butylbenzene	ug/kg	ND	ND		30	
Styrene	ug/kg	ND	ND		30	
tert-Butylbenzene	ug/kg	ND	ND		30	
Tetrachloroethene	ug/kg	ND	ND		30	
Tetrahydrofuran	ug/kg	ND	ND		30	
Toluene	ug/kg	ND	ND		30	
trans-1,2-Dichloroethene	ug/kg	ND	ND		30	
trans-1,3-Dichloropropene	ug/kg	ND	ND		30	
Trichloroethene	ug/kg	ND	ND		30	
Trichlorofluoromethane	ug/kg	ND	ND		30	
Vinyl chloride	ug/kg	ND	ND		30	
Xylene (Total)	ug/kg	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	107	123	16		
4-Bromofluorobenzene (S)	%	111	127	15		
Dibromofluoromethane (S)	%	105	121	16		
Toluene-d8 (S)	%	113	122	9		

## QUALIFIERS

Project: 3500919 Sinclair Station 22020  
Pace Project No.: 10143006

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

### ANALYTE QUALIFIERS

- D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
- ES The reported result is estimated because one or more of the constituent results are qualified as such.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- S0 Surrogate recovery outside laboratory control limits.
- S4 Surrogate recovery not evaluated against control limits due to sample dilution.
- T7 Low boiling point hydrocarbons are present in the sample.



**CHAIN-OF-CUSTODY / Analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10/43006

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: <u>1</u> of <u>1</u>	
Company: <u>GES</u>		Report To: <u>Valerie Wood</u>		Attention:		1384159	
Address: <u>1285 Copanata Ct</u> <u>Engen MN</u>		Copy To:		Company Name:		REGULATORY AGENCY	
Email To:		Purchase Order No.:		Address:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Phone: <u>800-735-0771</u> fax:		Project Name: <u>Sandair Station 22020</u>		Pace Quote Reference:		Site Location	
Requested Due Date/TAT: <u>5-day</u>		Project Number: <u>3500919</u>		Pace Project Manager:		STATE:	
				Pace Profile #:			

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test ↓	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Methanol	Other				Y/N
					DATE	TIME	DATE	TIME														
1	B1	14	S	G	11-10-10	940			3												001	
2	B2	14	S	G	11-10-10	945			1												002	
3	B3	14	S	G	11-10-10	1105			1												003	
4	B4	14	S	G	11-10-10	1110			1												004	
5	B5	14	S	G	11-10-10	1130			1												005	
6	B6	14	S	G	11-10-10	1135			1												006	
7	D1	14	S	G	11-10-10	1315			3												007	
8	D2	14	S	G	11-10-10	1325			3												108	
9	D3	14	S	G	11-10-10	1335			3												009	
10	D4	14	S	G	11-10-10	1345			3												010	
11	H1	14	S	G	11-10-10	1400			3												011	
12	H2	14	S	G	11-10-10	1415			3												012	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	<u>[Signature]</u>	11-10	1549	<u>Michael / Pace, MN</u>	11/11/10	1549	0.0 Y N Y

ORIGINAL

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	<u>T.M. Morrell</u>				
SIGNATURE of SAMPLER:	<u>[Signature]</u>	DATE Signed (MM/DD/YY):	<u>11-11-10</u>		

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

1135  
1136



Sample Condition Upon Receipt

Client Name: GES Project # 10143006

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other RUC

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals Intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_ Temp Blank: Yes  No

Thermometer Used 80344042 or 79428 Type of Ice: Wa Blue None  Samples on Ice, cooling process has begun

Cooler Temperature 0.0 Biological Tissue is Frozen: Yes No  
Temp should be above freezing to 5°C

Date and Initials of person examining contents: 11-11-10 JB

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7. <u>5 day</u>
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>SL</u>	
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Initial when completed
Exceptions: <u>VOA</u> , <u>Coliform</u> , <u>TOC</u> , <u>Oil and Grease</u> , <u>WI-DRO (water)</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: \_\_\_\_\_ Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: [Signature] Date: 11-11-10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the Pace Analytical SEMMS, Inc. F-1213Rev.00, 05Aug2009 1700 Elm Street SE, Suite 200, Minneapolis, MN 55414