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May 16, 2007

Richard L. DuPilka, P.E.
City of Poughkeepsie
62 Civic Center Plaza
PO Box 300
Poughkeepsie, NY 12602 via EMAIL: rdupilka@cityofpoughkeepsie.com

Re: Letter Report of Annual Operation and Maintenance Services performed on the property known as the "400 Block", City of Poughkeepsie, Dutchess County, New York
ESI File: CP9920.81

Dear Mr. DuPilka:

This Letter Report of Annual Operation and Maintenance Services (Letter Report) summarizes fieldwork performed by Ecosystems Strategies, Inc. (ESI) on the above-referenced property. Fieldwork was conducted in order to: document the integrity of the on-site barrier layer, document that on-site vapor extraction system fans were functioning, and document the integrity of groundwater at five (5) on-site monitoring wells. This Letter Report includes a Fieldwork map (Attachment A), laboratory data tables (Attachment B) and the complete laboratory report (Attachment C).

1.0 Inspection of Barrier Layer

A barrier layer was installed at the property in order to prevent potential contact with on-site contaminated soils. The barrier layer consists of a minimum of two feet of certified clean fill placed over all contaminated areas not covered by asphalt or buildings. ESI personnel visually inspected the barrier layer on April 20, 2007 and found it to be intact and free of damage.

2.0 Inspection of Vapor Extraction System

A sub-slab vapor extraction system was installed at the property in order to intercept accumulating vapors associated with on-site contaminated soils. Intercepted vapors are vented above the rooflines of the three, adjoining on-site buildings via three roof-mounted fans (one associated with each building). ESI personnel performed an inspection of the fans on April 25, 2007. At the time of the inspection, it was determined that the fan associated with the easternmost building ("Building C," see Fieldwork Map) was not functioning. An inspection of the associated visual fail-safe alarm (indicator light) confirmed that the fan was not functioning. Information provided by the property manager suggested that there might be an electrical problem. Remaining fans were determined to be functioning properly.

3.0 Groundwater Sampling

3.1 Fieldwork Methodology

Groundwater samples were collected from monitoring wells MW-2R-2, MW-3, MW-4, MW-5R, and MW-6 on April 20, 2007 (see Fieldwork Map). All wells were sampled utilizing dedicated tubing and a peristaltic pump. At least three (3) well volumes were purged from each well prior to sampling. Purge-water was screened for any indications of petroleum contamination (see Table 1, below).

All groundwater samples were collected in a manner consistent with New York State Department of Environmental Conservation (NYSDEC) sample collection protocols. Dedicated tubing was used at each sample location to avoid cross-contamination. Each groundwater sample was collected into laboratory-supplied glassware. After sample collection, the jars were kept cold and transported on April 23, 2007, via currier to York Analytical Labs, Inc., a New York State Department of Health-approved laboratory (ELAP Certification Number 10854). Appropriate chain-of-custody procedures were followed.

Table 1: Field Observations

Well ID	Depth of Well	Depth to Groundwater	Observations
MW-2R-2	19.68'	5.21'	Well cap loose and rubber seal gone. Red-brown purge to start, changing to cloudy gray, then clear. Slight sewage odor. No evidence of contamination.
MW-3	17.30'	8.16'	Red-brown purge to start, then clear. Slight sewage odor. No evidence of contamination
MW-4	20.45'	11.68'	Dark brown purge to start, then quickly clearing. No evidence of contamination.
MW-5R	15.00'	9.52'	Cloudy white to clear purge, then clearing. No evidence of contamination.
MW-6	14.78'	4.56'	Well cap loose and buried with sand/gravel material. A minor amount of material fell into well during well opening. Dark gray purge to start, then quickly clearing. No evidence of contamination.

3.2 Laboratory Analysis

One groundwater sample was collected at each monitoring well location and submitted for analysis of volatile organic compounds (VOCs) using USEPA Method 8021, and total and dissolved RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), using various USEPA methods. Complete laboratory results are included as Attachment C.

The term "guidance level", as defined in this Letter Report, refers to the concentration of a particular contaminant above which remedial actions are considered more likely. The overall objective of setting guidance levels is to assess the integrity of on-site groundwater relative to conditions that are likely to present a threat to public health, given the existing and probable future uses of the site.

The guidance levels identified in this Letter Report for groundwater are determined based on the NYSDEC's Division of Water Technical and Operational Guidance Series, Ambient Water Quality Standards and Guidance levels and Groundwater Effluent Limitations (TOGS) 1.1.1, June 1998. All compounds referenced below are presented with their respective guidance levels.

3.3 Results

VOCs

No VOCs were detected at any sample location during this sampling round.

TOTAL RCRA METALS

Arsenic was detected above the guidance level (25 μg/L) at MW-2R-2 (71 μg/L). Lead was detected above the guidance level (25 μg/L) at MW-2R-2 (75 μg/L), but below the guidance level at MW-3, and MW-4 (7 μg/L and 14 μg/L, respectively). Barium was detected significantly below the guidance level (1,000 μg/L) at all locations (peak concentration: 256 μg/L at MW-5R, average concentration: 154.2 μg/L), and chromium was detected below the guidance level (50 μg/L) at all locations (peak concentration: 39 μg/L at MW-5R, average concentration: 14.8 μg/L). Mercury was detected below the guidance level (0.7 μg/L) at MW-2R-2 (0.3 μg/L). No other metals were detected at any other sample location.

DISSOLVED RCRA METALS

Dissolved barium was detected significantly below the guidance level (1,000 μg/L) in all samples (peak concentration: 252 μg/L at MW-5R, average concentration: 138 μg/L), and chromium was detected below the guidance level (50 μg/L) in all samples (peak concentration: 38 μg/L at MW-5R, average concentration: 13.8 μg/L). No other dissolved metals were detected at any other sample location.

3.4 Comparison with Previous Data

A discussion of the results of groundwater sampling at the property is presented below (data summary tables are provided as Attachment B).

VOCS

Both elevated and low-level concentrations of several VOCs were first detected at the property during sampling at monitoring well MW-2R in May 1999 and July 2003. Well MW-2R has since been destroyed and therefore no additional data exists. Slightly elevated concentrations of methyl tertiary butyl ether (MTBE) were detected at MW-3 in April, August, and December 2004, and April 2005. A low-level concentration of MTBE was also detected at MW-6 during the January 2004 sampling, and at MW-4 during the April 2005 sampling. MTBE has not been detected at MW-6 for the past six consecutive samplings, and has not been detected at MW-3 or MW-4 for the past three consecutive samplings. No other VOCs were detected at any other wells during any other sampling round.

PAHS

No PAHs have been detected in any of the groundwater monitoring wells in any sampling round. As a result, no PAH analysis was performed during the current sampling round.

TOTAL RCRA METALS

Total arsenic increased at MW-2R-2 from below the guidance level at 16 μg/L in the previous sampling round, to above the guidance level at 71 μg/L in the current sampling round. Total arsenic remains below the guidance level at MW-5 and has decreased slightly since the previous sampling. Total arsenic at all other wells has remained at non-detectable levels for several consecutive sampling periods.

Total lead increased at MW-2R-2 from below the guidance level at 5 μg/L in the previous sampling round, to above the guidance level at 75 μg/L in the current sampling round; however, total lead has generally decreased at MW-2R-2 since the initial sampling in April 2004 (1010 μg/L). Total lead increased only slightly from the previous sampling at MW-3 and MW-4, however, concentrations remain significantly below the guidance level. Total lead decreased to non-detectable levels at MW-5R and MW-6 during this sampling round.

Total barium decreased slightly at MW-5 and increased slightly at all other monitoring wells, when compared to the previous sampling round. Total chromium increased slightly at all wells from the previous sampling round. Concentrations of barium and chromium, however, remain significantly below respective guidance levels.

Total mercury was not detected in any of the monitoring wells during the current sampling round, with the exception of MW-2R-2, where the concentration rose from a non-detectable level in the previous sampling round to 0.3 μg/L (still below the guidance level). Cadmium and selenium concentrations have remained at non-detectable levels for several sampling rounds, and silver has not been detected in any of the wells during any sampling round.

DISSOLVED RCRA METALS

No dissolved metals were detected in the current sampling round at concentrations above NYSDEC guidance levels. Lead concentrations have remained at non-detectable levels at all wells. Dissolved barium and chromium increased slightly at all wells. Dissolved arsenic, cadmium, mercury, selenium and silver remained constant at non-detected levels. The absence of dissolved metal concentrations relative to total metals indicates that contamination is limited to metal particulates suspended in the groundwater, which are likely to be the result of contaminated soil.

4.0 CONCLUSIONS

Annual site management activities were conducted on the property known as the “400 Block” located in the City of Poughkeepsie, Dutchess County, New York. Investigative and analytical work was conducted to verify the integrity of the on-site barrier layer, to verify the proper functioning of on-site vapor extraction system fans, and to document the presence or absence of petroleum hydrocarbons and RCRA metals in on-site groundwater.

Data support the following conclusions:

1. **The vapor extraction system fan associated with the easternmost building (Building C) is not functioning. The fan and/or wiring will need to be repaired or replaced, a follow-up inspection will need to be made, and documentation of proper functioning will need to be submitted to the NYSDEC. Inspections will continue thereafter on an annual basis.**

2. **Only one VOC (MTBE) has been detected at three of the five, currently existing on-site monitoring wells (only MW-3, MW-4, and MW-6). MTBE has not been detected at any of these wells for at least the past three consecutive sampling rounds, and no other VOCs have been detected at any of the other on-site monitoring wells during any other sample round. Elevated concentrations of several total RCRA metals are still present in groundwater at on-site monitoring wells; however, no significant changes in concentration are noted. Low-level concentrations of two dissolved RCRA metals continue to exist at all on-site wells. These data suggest that the overall condition of the on-site groundwater is generally improving, and that VOC and RCRA metal concentrations are not at levels warranting further remediation. Therefore, in accordance with the schedule outlined in the NYSDEC approved <u>Site Management Plan</u>, sampling will continue to occur on an annual basis.**

3. The on-site barrier layer is intact and inspection will continue annually.

The operation and maintenance services summarized herein are part of an approved NYSDEC Brownfields Site Management Plan and are considered by ESI to satisfy the requirements set forth in the Site Management Plan. By copy, this Letter Report is being forwarded to the NYSDEC.

Please review this information and call me at (845) 452-1658 should you have any questions or comments.

Sincerely,

ECOSYSTEMS STRATEGIES, INC.

Adam Lee
Project Manager

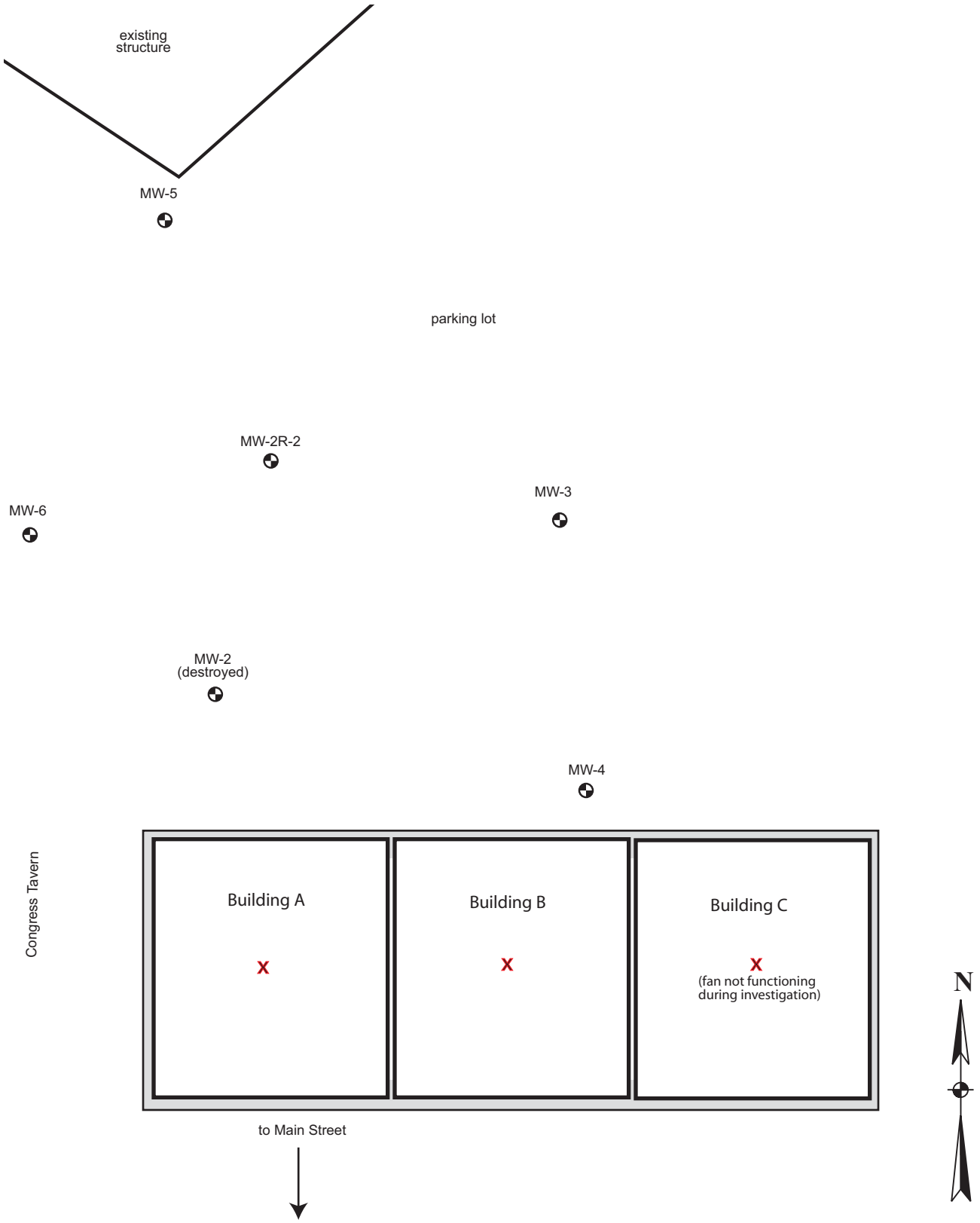
cc: M. Mason, NYSDEC – via Email: mamason@gw.dec.state.ny.us
File

Attachments:

A *Fieldwork Map*
B *Data Summary Tables*
C *Laboratory Results*

ATTACHMENT A

Fieldwork Map



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Selected Site Features Map

"400 Block" Property
City of Poughkeepsie
Dutchess County, New York

Legend:
monitoring well
X roof-mounted fans

ESI File: CP9920.81
May 2007
Not to scale
Attachment A

ATTACHMENT B

Data Summary Tables

Table 2: Summary of VOCs and PAHs in Groundwater

All data provided in ppb. Concentration in **bold** exceed NYSDEC guidance levels

VOCs (Method 8260)	Guidance Levels	Sample Identification																						
		MW-1				MW-2R		MW-2R-2							MW-3									
		May-99	July-03	Apr-04	Aug-04	May-99	July-03	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07	May-99	July-03	Jan-04	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07
Benzene	0.7	ND	ND	ND	Monitoring well not found	**92**	**6**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND		3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tert-Butylbenzene	5	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethylene (Total)	5	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND		2	**8**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND		1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND		**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND		ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	10	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**16**	**27**	**17**	**19**	ND	ND	ND
Naphthalene	10	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND		ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloro-ethylene	5	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND		**10**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND		**79**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P/m-Xylene	5	ND	ND	ND		**15**	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs (Method 8270)	varies	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS

VOCs (Method 8260)	Guidance Levels	Sample Identification																												
		MW-4								MW-5							MW-5R			MW-6										
		May-99	July-03	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07	May-99	July-03	Jan-04	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07	May-99	July-03	Jan-04	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07
Benzene	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Monitoring well temporarily inoperable/unuseable	ND	ND	ND	ND	Monitoring well not found	ND	ND	Monitoring well not sampled	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
1,2-Dichloroethylene (Total)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
MTBE	10	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		1	ND		ND	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Tetrachloro-ethylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
o-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
P/m-Xylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Total PAHs (Method 8270)	varies	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND		ND	ND	NS	ND		ND	ND		ND	ND	ND	ND	NS

Notes: Source: TOGS 1.1.1, June 1998.
NS = Not Sampled
ND = Not Detected

Table 3: Summary of Total RCRA Metals in Groundwater

All data provided in ppb. Concentrations in **bold** exceed NYSDEC guidance levels.

Metals	Guidance Level	Sample Identification																						
		MW-1				MW-2R		MW-2R-2							MW-3									
		May-99	July-03	Apr-04	Aug-04	May-99	July-03	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07	May-99	July-03	Jan-04	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07
Arsenic	25	12	ND	6	Monitoring well not found	**31**	14	**30**	**48**	**83**	**43**	18	16	**71**	10	ND	ND	5	10	ND	7	ND	ND	ND
Barium	1,000	120	173	113		**1,090**	312	652	477	970	518	233	40	115	780	75	60	148	181	251	65	99	40	89
Cadmium	5	ND	ND	ND		2	ND	ND	ND	**6**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	12	12		ND	17	20	18	29	15	12	ND	9	**60**	7	5	7	10	15	6	6	ND	8
Lead	25	**59**	**46**	**96**		**214**	**160**	**1010**	**683**	**1860**	**864**	**307**	5	**75**	13	**46**	ND	**108**	**275**	**574**	16	**31**	ND	7
Mercury	0.7	ND	**5.7**	0.5		ND	**2**	**4.3**	**8**	**12.7**	**9.4**	**1.4**	ND	0.3	ND	**5.2**	ND	ND	**0.8**	**2.7**	ND	ND	ND	ND
Selenium	10	ND	ND	ND		ND	ND	ND	**16**	**22**	ND	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND

Metals	Guidance Level	Sample Identification																										
		MW-4								MW-5							MW-5R			MW-6								
		May-99	July-03	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07	May-99	July-03	Jan-04	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07	May-99	July-03	Jan-04	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07
Arsenic	25	ND	ND	11	ND	ND	ND	ND	ND	17	ND	10	17	10	Monitoring well not found	Monitoring well temporarily inoperable/unuseable	ND	ND	ND	8	Monitoring well not found	ND	9	Monitoring well not sampled	ND	ND	ND	ND	ND
Barium	1,000	320	144	191	141	106	175	99	110	320	195	92	235	212			111	108	256	140		28	84		94	103	112	169	201
Cadmium	5	1	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND			ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Chromium	50	ND	ND	10	8	6	12	6	10	20	24	8	15	32			11	7	39	ND		7	10		11	12	10	7	8
Lead	25	6	10	**245**	**114**	**58**	**115**	12	14	**508**	**193**	**27**	**253**	**395**			ND	6	ND	**60**		ND	**26**		**38**	18	9	5	ND
Mercury	0.7	ND	ND	**1.2**	**1**	0.3	ND	ND	ND	ND	**11.6**	**4.5**	0.5	**3.8**			ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Selenium	10	ND	ND	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**13**			ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Silver	50	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND

Notes: Source: TOGS 1.1.1, June 1998.

ND = Not Detected

Table 4: Summary of Dissolved RCRA Metals in Groundwater

All data provided in ppb. Concentrations in **bold** exceed NYSDEC guidance levels.

Metals	Guidance Level	Sample Identification																						
		MW-1				MW-2R		MW-2R-2							MW-3									
		May-99	July-03	Apr-04	Aug-04	May-99	July-03	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07	May-99	July-03	Jan-04	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07
Arsenic	25	ND	ND	ND	Monitoring well not found	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	10	65	69		480	185	170	96	49	55	74	25	68	700	44	57	111	95	82	58	83	36	80
Cadmium	5	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	ND	6		ND	ND	6	5	5	ND	ND	ND	6	**60**	ND	ND	ND	6	6	5	6	ND	8
Lead	25	ND	ND	ND		1	5	5	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	ND
Mercury	0.7	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.9**	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND

Metals	Guidance Level	Sample Identification																										
		MW-4								MW-5							MW-5R			MW-6								
		May-99	July-03	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07	May-99	July-03	Jan-04	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07	May-99	July-03	Jan-04	Apr-04	Aug-04	Dec-04	Apr-05	Oct-05	Mar-06	Apr-07
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND	Monitoring well not found	Monitoring well temporarily inoperable/unuseable	ND	ND	ND	ND	Monitoring well not found	ND	ND	Monitoring well not sampled	ND	ND	ND	ND	ND
Barium	1,000	280	134	90	76	76	98	85	99	120	69	77	12	76			111	98	252	80		18	51		40	45	59	132	191
Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Chromium	50	ND	ND	5	5	6	5	6	9	ND	6	ND	ND	16			11	ND	38	1		7	8		6	8	ND	7	8
Lead	25	ND	ND	ND	ND	6	ND	ND	ND	4	10	8	**34**	15			ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	ND			ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	ND	ND	ND		ND	ND		ND	ND	ND	ND	ND

Notes: Source: TOGS 1.1.1, June 1998.

ND = Not Detected

ATTACHMENT C

Laboratory Results

YORK
ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for:

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: Adam Lee

Report Date: 4/27/2007
Re: Client Project ID: CP9920.81
York Project No.: 07040637

CT License No. PH-0723 New York License No. 10854

120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

Report Date: 4/27/2007
Client Project ID: CP9920.81
York Project No.: 07040637

Ecosystems Strategies, Inc.
24 Davis Avenue
Poughkeepsie, NY 12603
Attention: Adam Lee

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 04/23/07. The project was identified as your project "CP9920.81".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			MW-2R-2		MW-3	
York Sample ID			07040637-01		07040637-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles, 8021+MTBE	SW846-8260	ug/L	---	---	---	---
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,1-Dichloropropylene			Not detected	5.0	Not detected	5.0
1,2,3-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,3-Trichloropropane			Not detected	5.0	Not detected	5.0
1,2,4-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2-Dibromo-3-chloropropane			Not detected	5.0	Not detected	5.0
1,2-Dibromoethane			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0

YORK

Client Sample ID			MW-2R-2		MW-3	
York Sample ID			07040637-01		07040637-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,3-Dichloropropane			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
2,2-Dichloropropane			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromochloromethane			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	5.0	Not detected	5.0
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	5.0	Not detected	5.0
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Hexachlorobutadiene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	5.0	Not detected	5.0
p- & m-Xylenes			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
Styrene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	5.0	Not detected	5.0
Metals, Total RCRA List	SW846-6010B	mg/L	---	---	---	---
Arsenic, total			0.071	0.004	Not detected	0.004
Barium, total			0.115	0.005	0.089	0.005
Cadmium, total			Not detected	0.005	Not detected	0.005
Chromium, total			0.009	0.005	0.008	0.005
Lead, total			0.075	0.003	0.007	0.003
Selenium, total			Not detected	0.005	Not detected	0.005
Silver, total			Not detected	0.005	Not detected	0.005
Mercury	SW846-7470	mg/L	0.0003	0.0002	Not detected	0.0002

YORK

Client Sample ID			MW-2R-2		MW-3	
York Sample ID			07040637-01		07040637-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Metals, Total RCRA List Dissolved	SW846	mg/L	---	---	---	---
Arsenic, dissolved			Not detected	0.010	Not detected	0.010
Barium, dissolved			0.068	0.005	0.080	0.005
Cadmium, dissolved			Not detected	0.005	Not detected	0.005
Chromium, dissolved			0.006	0.005	0.008	0.005
Lead, dissolved			Not detected	0.005	Not detected	0.005
Selenium, dissolved			Not detected	0.010	Not detected	0.010
Silver, dissolved			Not detected	0.005	Not detected	0.005
Mercury, Dissolved	SW-7470	mg/L	Not detected	0.0002	Not detected	0.0002

Client Sample ID			MW-4		MW-5R	
York Sample ID			07040637-03		07040637-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles, 8021+MTBE	SW846-8260	ug/L	---	---	---	---
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,1-Dichloropropylene			Not detected	5.0	Not detected	5.0
1,2,3-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,3-Trichloropropane			Not detected	5.0	Not detected	5.0
1,2,4-Trichlorobenzene			Not detected	5.0	Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,2-Dibromo-3-chloropropane			Not detected	5.0	Not detected	5.0
1,2-Dibromoethane			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,3-Dichloropropane			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
2,2-Dichloropropane			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromochloromethane			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	5.0	Not detected	5.0
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	5.0	Not detected	5.0
Chloroform			Not detected	5.0	Not detected	5.0

YORK

Client Sample ID			MW-4		MW-5R	
York Sample ID			07040637-03		07040637-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Chloromethane			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Hexachlorobutadiene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	5.0	Not detected	5.0
p- & m-Xylenes			Not detected	5.0	Not detected	5.0
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
Styrene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	5.0	Not detected	5.0
Metals, Total RCRA List	SW846-6010B	mg/L	---	---	---	---
Arsenic, total			Not detected	0.004	Not detected	0.004
Barium, total			0.110	0.005	0.256	0.005
Cadmium, total			Not detected	0.005	Not detected	0.005
Chromium, total			0.010	0.005	0.039	0.005
Lead, total			0.014	0.003	Not detected	0.003
Selenium, total			Not detected	0.005	Not detected	0.005
Silver, total			Not detected	0.005	Not detected	0.005
Mercury	SW846-7470	mg/L	Not detected	0.0002	Not detected	0.0002
Metals, Total RCRA List Dissolved	SW846	mg/L	---	---	---	---
Arsenic, dissolved			Not detected	0.010	Not detected	0.010
Barium, dissolved			0.099	0.005	0.252	0.005
Cadmium, dissolved			Not detected	0.005	Not detected	0.005
Chromium, dissolved			0.009	0.005	0.038	0.005
Lead, dissolved			Not detected	0.005	Not detected	0.005
Selenium, dissolved			Not detected	0.010	Not detected	0.010
Silver, dissolved			Not detected	0.005	Not detected	0.005
Mercury, Dissolved	SW-7470	mg/L	Not detected	0.0002	Not detected	0.0002

YORK

Client Sample ID			MW-6	
York Sample ID			07040637-05	
Matrix			WATER	
Parameter	Method	Units	Results	MDL
Volatiles, 8021+MTBE	SW846-8260	ug/L	---	---
1,1,1,2-Tetrachloroethane			Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0
1,1-Dichloroethane			Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0
1,1-Dichloropropylene			Not detected	5.0
1,2,3-Trichlorobenzene			Not detected	5.0
1,2,3-Trichloropropane			Not detected	5.0
1,2,4-Trichlorobenzene			Not detected	5.0
1,2,4-Trimethylbenzene			Not detected	5.0
1,2-Dibromo-3-chloropropane			Not detected	5.0
1,2-Dibromoethane			Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0
1,2-Dichloroethane			Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0
1,2-Dichloropropane			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0
1,3-Dichloropropane			Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0
2,2-Dichloropropane			Not detected	5.0
2-Chlorotoluene			Not detected	5.0
4-Chlorotoluene			Not detected	5.0
Benzene			Not detected	5.0
Bromobenzene			Not detected	5.0
Bromochloromethane			Not detected	5.0
Bromodichloromethane			Not detected	5.0
Bromoform			Not detected	5.0
Bromomethane			Not detected	5.0
Carbon tetrachloride			Not detected	5.0
Chlorobenzene			Not detected	5.0
Chloroethane			Not detected	5.0
Chloroform			Not detected	5.0
Chloromethane			Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0
Dibromochloromethane			Not detected	5.0
Dibromomethane			Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0
Ethylbenzene			Not detected	5.0
Hexachlorobutadiene			Not detected	5.0
Isopropylbenzene			Not detected	5.0
Methyl tert-butyl ether (MTBE)			Not detected	5.0
Methylene chloride			Not detected	5.0
Naphthalene			Not detected	5.0
n-Butylbenzene			Not detected	5.0
n-Propylbenzene			Not detected	5.0
o-Xylene			Not detected	5.0
p- & m-Xylenes			Not detected	5.0
p-Isopropyltoluene			Not detected	5.0

YORK

Client Sample ID			MW-6	
York Sample ID			07040637-05	
Matrix			WATER	
Parameter	Method	Units	Results	MDL
sec-Butylbenzene			Not detected	5.0
Styrene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Tetrachloroethylene			Not detected	5.0
Toluene			Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0
Trichloroethylene			Not detected	5.0
Trichlorofluoromethane			Not detected	5.0
Vinyl chloride			Not detected	5.0
Metals, Total RCRA List	SW846-6010B	mg/L	---	---
Arsenic, total			Not detected	0.004
Barium, total			0.201	0.005
Cadmium, total			Not detected	0.005
Chromium, total			0.008	0.005
Lead, total			Not detected	0.003
Selenium, total			Not detected	0.005
Silver, total			Not detected	0.005
Mercury	SW846-7470	mg/L	Not detected	0.0002
Metals, Total RCRA List Dissolved	SW846	mg/L	---	---
Arsenic, dissolved			Not detected	0.010
Barium, dissolved			0.191	0.005
Cadmium, dissolved			Not detected	0.005
Chromium, dissolved			0.008	0.005
Lead, dissolved			Not detected	0.005
Selenium, dissolved			Not detected	0.010
Silver, dissolved			Not detected	0.005
Mercury, Dissolved	SW-7470	mg/L	Not detected	0.0002

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 07040637

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. This MDL is the REPORTING LIMIT and is based upon the lowest standard utilized for calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: Robert Q. Bradley
Managing Director

Date: 4/27/2007

YORK

YORK
Analytical Laboratories, Inc.
120 Research Drive
Stratford, CT 06615
203.325.1371 FAX 203.357-0166

07040037

Field Chain-of-Custody Record

Company Name	Report to:	Invoice to:	Project ID/No.	Samples Collected by (signature)
Ecosystems Strategies Inc.	Adam Lee	BRENDA	CP9920.81	Adam Lee (Name printed)

Sample No.	Location/ID	Date Sampled	Sample Matrix: Water	Soil	Air	Other	Analyses Requested	Container Desc.
	MW-2R-2	4/20/2007	X				VOCs (8021) + MTBE , Total and Dissolved RCRA Metals	40 mL vial (x2), 1 L Amber jar (x3)
	MW-3	4/20/2007	X				VOCs (8021) + MTBE , Total and Dissolved RCRA Metals	40 mL vial (x2), 1 L Amber jar (x3)
	MW-4	4/20/2007	X				VOCs (8021) + MTBE , Total and Dissolved RCRA Metals	40 mL vial (x2), 1 L Amber jar (x3)
	MW-5R	4/20/2007	X				VOCs (8021) + MTBE , Total and Dissolved RCRA Metals	40 mL vial (x2), 1 L Amber jar (x3)
	MW-6	4/20/2007	X				VOCs (8021) + MTBE , Total and Dissolved RCRA Metals	40 mL vial (x2), 1 L Amber jar (x3)

Chain-of-Custody Record

Bottles Relinquished from Lab by	Date/Time	Samples Relinquished by	4/23 9:50 Date/Time	Samples received by	4/23 9:40 Date/Time
Bottles received in field by	Date/Time	Samples Relinquished by	Date/Time	Samples received in LAB by	Date/Time

Comments/Special Instructions

4.40

Turn-Around Time Requested- Specify Date Expected if RUSH Requested: DATE DUE FOR RUSH:

X STANDARD _____ RUSH(Define)_____