

PHASE II ENVIRONMENTAL SITE ASSESSMENT 500 SENECA STREET BUFFALO, NEW YORK

# PREPARED FOR:

Zdarsky, Sawicki & Agostinelli, LLP Buffalo, New York

# PREPARED BY:

GZA GeoEnvironmental of New York Buffalo, New York

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December 11, 2007 File No. 21.0056365.10

Mr. Guy Agostinelli Zdarsky, Sawicki & Agonstinelli, LLP 101 Cathedral Place 298 Main Street Buffalo, New York 14202



Re: Phase II Environmental Site Assessment

500 Seneca St Buffalo, New York

Dear Guy:

GZA GeoEnvironmental of New York (GZA) is pleased to submit this report describing the results of our Phase II investigation at the above referenced site. Our investigation included an EM-61 geophysical survey prior to the subsurface investigation, observing soil probes at ten locations, headspace screening of soil samples taken from the soil probe macrocore sampler, chemical analysis of six selected subsurface soil samples and two groundwater samples.

Based on the results of our Phase II investigation, two areas of concern have been identified.

- Underground Storage Tank (UST) Area Two historic USTs appear to be present in the northwestern corner of the Site. The USTs are not currently being used and appear to have been abandoned. Analytical results identified petroleum type compounds in the groundwater at concentrations above New York State Department of Environmental Conservation (NYSDEC) guidance values. Further investigation to confirm the presence of these USTs and their closure/removal is warranted. GZA recommends that NYSDEC be contacted and informed of the potential release.
- Chlorinated Solvents Chlorinated solvents were detected in one locations under the existing building slab. The source and extent of the chlorinated solvents is not know. However, the detected concentrations in both the soil and groundwater sample collected from this one location exceed NYSDEC groundwater standards. The potential exists for vapor intrusion into the building due to the elevated levels of PCE beneath the building. Additionally, the potential exists for off-site impacts (i.e. groundwater, vapor intrusion, etc.). The extent of the chlorinated solvents contamination should be further explored. GZA recommends that NYSDEC be contacted and informed of the results.

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GZA offers the following recommendations.

- GZA recommends that this report be provided to the NYSDEC and the two areas of concern be reported.
- The two apparent USTs should be properly registered and removed.
- Further investigation is recommended in the area of SP-9 to further evaluate the extent of the chlorinated solvent contamination identified in the soil and groundwater at this location. Additional chlorinated solvent vapor intrusion should be evaluated within the Site building.

We trust this report satisfies your present needs. Should you have any questions or require additional information following your review, please do not hesitate to contact the undersigned.

Sincerely

GZA GEOENVIRONMENTAL OF NEW YORK

Jennifer Davide

**Environmental Scientist** 

Michele Wittman, P.G.

Project Manager

Ernest R. Hanna, P.E.

Principal

# **TABLE OF CONTENTS**



	<u>Page</u>
1.00 INTRODUC	TION1
2.00 PURPOSE A	AND SCOPE OF WORK1
3.00 FIELD STU	DIES2
3.10 ELECTRO	MAGNETIC GEOPHYSICAL SURVEY2
	BE INSTALLATIONS
3.30 HEADSPA	CE SCREENING PROCEDURE4
3.40 GROUNDV	VATER COLLECTION4
4.00 ANALYTIC	AL LABORATORY TESTING4
5.00 SUBSURFA	CE CONDITIONS5
5.10 SOILS	5
	VATER5
6.00 ANALYTIC	AL TEST RESULTS5
6.10 SUBSURF	ACE SOILS6
6.20 GROUNDV	VATER7
7.00 CONCLUSIO	ONS AND RECOMMENDATIONS7
TABLES	
TABLE 1	ANALYTICAL TESTING PROGRAM SUMMARY
TABLE 2	SOIL ANALYTICAL TESTING RESULTS SUMMARY
TABLE 3	GROUNDWATER ANALYTICAL TESTING RESULTS SUMMARY
<b>FIGURES</b>	
FIGURE 1	LOCUS PLAN
FIGURE 2	SITE PLAN
FIGURE 3	GEOPHYSICAL SURVEY
APPENDICES	
APPENDIX A	LIMITATIONS
APPENDIX B	GEOPHYSICAL SURVEY
APPENDIX C	SOIL PROBE LOGS
APPENDIX D	ANALYTICAL TEST RESULTS

# 1.00 INTRODUCTION



In accordance with our October 8, 2007 proposal, GZA GeoEnvironmental of New York (GZA) performed a Phase II Environmental Site Assessment (ESA) at the Seneca and Myrtle Street Properties, located at 500 Seneca St, 322 Myrtle Ave, 332 Myrtle Ave, 27 Spring St and 29 Spring St in Buffalo, New York (Site) for Adarsky, Sawicki & Agostinelli, LLP. A Locus Plan is attached as Figure 1 and a Site Plan as Figure 2.

GZA completed a previous Phase I ESA<sup>1</sup> dated October 10, 2007 at the Site. The following environmental concerns were identified.

- The Site was owned and operated by New Era Cap Co since 1986. Prior to that, the Site was historically occupied by Wolkind Bros. Inc, clothing rentals from approximately 1970 to 1980, a parking lot, Burnt Company Box manufactures from at least 1930 to the late 1950s and residential dwellings from at least 1930 until approximately the late 1960s. The box manufacturer and New Era likely utilized various chemical and petroleum products. New Era was also identified as a RCRIS small quantity generator of hazardous wastes and on the NY Manifest for disposal of PCB containing transformers. These listings confirm the historic use of hazardous materials at the Site. The historic storage, transport and disposal at these facilities are unknown.
- Historic records identified a 2,000-gallon tank installed on the northwestern corner of the Parcel 1. The tank was installed in 1967. Additionally, the permit referenced a existing 550-gallon tank, for a total capacity of 2,550-gallons. The 550-gallon tank appears to have been installed in 1952. There were no records found that indicated these tanks have been removed. Additionally, GZA observed a potential vent pipe and the area of the former pump island. It is possible that the tanks are still present at the Site.

#### 2.00 PURPOSE AND SCOPE OF WORK

The purpose of this Phase II ESA is to assess if historic underground storage tanks (USTs) may be present and if the historic use and USTs have resulted in an environmental impact at the Site. To accomplish this, the following activities were done.

- Contacted our subcontractor, Geomatrix to perform an electromagnetic (EM) geophysical survey using an EM61 at the Site. The EM survey was completed on the northwestern portion of the Site to assist in identifying potential buried metal anomalies or potential presence of USTs.
- Observed the completion of ten soil probes done by GZA's subcontractor, Matrix Environmental Technologies, Inc. (Matrix)

<sup>&</sup>lt;sup>1</sup> "Phase I Environmental Site Assessment, Seneca and Myrtle Street Properties, 500 Seneca St, 322 Myrtle Ave, 332 Myrtle Ave, 27 Spring and 29 Spring Street, Buffalo, NY", prepared for Zdarsky, Sawicki & Agostinelli, LLP., dated October 10, 2007.

- Collected soil samples continuously in four-foot sample intervals to depths, which varied from approximately 12 feet to 16 feet below ground surface (bgs).
- Observed the installation of four (4) temporary micro-wells for groundwater sample collection.



- Field screened soil samples, using an organic vapor meter (OVM) equipped with a photoionization detector (PID), that were collected with a macrocore sampler at each probe location.
- Selected six soil probe samples for chemical analysis, which included five soil samples for volatile organic compounds (VOCs) via EPA Method 8260 Full List and semi-volatile organic compounds (SVOCs) via EPA Method 8270 base STARS list analysis. One soil sample (SP-7 from 1 to 4 feet) was also analyzed for PCBs via EPA Method 8082.
- Selected two groundwater samples from the temporary micro-wells installed. Each groundwater sample was analyzed for chemical analysis, which included VOCs via EPA Method 8260 Full List and SVOCs via EPA Method 8270 STARS list.
- Prepared this report, which summarizes the data collected during this Phase II ESA.

This report presents GZA's field observations, results, and opinions and is subject to the limitations presented in Appendix A and modifications if subsequent information is developed by GZA or any other party.

#### 3.00 FIELD STUDIES

This section describes the field studies done as part of GZA's EM geophysical survey and subsurface investigation. A copy of the geophysical survey report is included as Appendix B.

# 3.10 ELECTROMAGNETIC GEOPHYSICAL SURVEY

On November 8, 2007 GZA's subcontractor, Geomatrix, performed an EM geophysical survey, using an EM61, to assist is mapping the distribution of buried metals in an attempt to locate anomalies indicative of USTs at the Site. Readings were recorded to identify anomalies. Figure 3 provides a plan view of the geophysical EM results. The Geomatrix report is included as Appendix B.

 Anomaly A was identified as a buried metal anomaly. A linear anomaly appeared to be associated with anomaly A. A vent was also observed northwest of Anomaly A. Geomatric indicated that it is very likely that Anomaly A is related to a UST.

Anomaly B was also identified as a buried metal anomaly located between
the building and gate. The ground surface in this area is concrete.
Anomaly B may be related to a UST or it may be due to reinforcement
metal in the concrete and/or interference from the metal in the gate.



GZA reviewed the two identified anomaly locations and compared these locations to the historic records identifying the tank locations. There is good correlation between the locations, for both the 2,000-gallon UST, which appeared to be at a similar location to Anomaly A, and the 550-gallon UST, which appeared to correlate with Anomaly B. Based on the historic record review, geophysical survey results, and site observations of potential vent pipes in the areas, it is likely that the two USTs are currently present at the Site.

# 3.20 SOIL PROBE INSTALLATIONS

GZA's subcontractor, Matrix, completed ten soil probes as part of the Phase II ESA on November 12, 2007. The soil probes were completed using a Geoprobe 54LT track mounted rig equipped with a pneumatic hammer. The probes are designated as SP-1 through SP-10 as shown on Figure 2.

- SP-1 was done in the area of the 550-gallon UST located on the northwestern portion of the Site.
- SP-2, SP-3 and SP-4 were done on the three accessible sides of the apparent 2,000-gallon UST located on the northwestern portion of the Site.
- SP-5 was done in the area of the former pump island located on the northwestern portion of the Site.
- SP-6 and SP-8 were done in an assumed downgradient direction from the USTs and pump island.
- SP-7 was done on the southwestern portion of the Site across from the adjoining facility, where PCBs were previously detected.
- SP-9 was done within the loading dock area on the northern portion of the Site
- SP-10 was done within the courtyard area on the eastern portion of the Site.

Generally, the soil probes were advanced using a 2-inch diameter, 48-inch long macrocore sampler that was driven continuously at 48-inch intervals. A dedicated acetate sampler liner was used between sampling intervals. Representative portions of the recovered soils were placed in plastic zip-lock bags for further classification and headspace analysis. The completed soil probe holes were generally backfilled with the soil cuttings and/or topped with asphalt patch.

GZA prepared soil probe logs summarizing the general subsurface conditions that were observed and encountered at each probe location. These logs are based on visual observations

of the recovered soils and include a summary description of the soils using color and composition. Soil probe logs are presented as Appendix C.

# 3.30 HEADSPACE SCREENING PROCEDURE



Collected soil samples were placed in plastic zip-lock bags. The headspace in each bag was screened for organic vapor compounds using an organic vapor meter (OVM) outfitted with a photoionization detector and a 10.2 eV ultraviolet lamp. The OVM used was a Mini Ray 2000 and was calibrated in accordance with manufacturer's recommendations. A gas standard of isobutlyene was used at an equivalent concentration of 100 parts per million (ppm) as benzene for calibration. Ambient air at the Site was used to establish background organic vapor concentrations. Organic vapor concentrations were generally non-detect, or below 5 ppm in the samples collected from SP-3 to SP-8. Headspace readings at SP-1 and SP-2 generally ranged from non-detect to 83 ppm; and at SP-10 ranged from non-detect to 322 ppm. The highest OVM readings were detected at SP-9, ranging from non-detect to 9,999+. The highest reading was encountered from 6 to 8 feet below ground surface. Headspace results were recorded on the probe logs included as Appendix C.

# 3.40 GROUNDWATER COLLECTION

Temporary 1-inch diameter polyvinyl chloride (PVC) micro-wells were installed at the completion of drilling at locations SP-1 and SP-3, near the UST locations; at SP-7, an assumed downgradient location; and at SP-9, where the highest OVM reading was measured. Samples were collected using disposable polyethylene bailers and placed in laboratory supplied analytical jars. Temporary micro-wells were removed and the holes backfilled after groundwater samples were collected. Groundwater samples were collected and analyzed from SP-1 and SP-9 only.

# 4.00 ANALYTICAL LABORATORY TESTING

Six subsurface soil samples and two groundwater samples were selected and submitted for analytical testing. The selected soil and groundwater samples were packed in an ice filled cooler and sent to the GZA GeoEnvironmental Laboratory in Hopkinton, Massachusetts following typical chain-of-custody procedures. Table 1 is a summary of the samples collected and the analysis completed.

#### 5.00 SUBSURFACE CONDITIONS

# 5.10 SOILS

Subsurface conditions at the soil probe locations generally consisted of:



Layer Designation	Depth	Material Encountered
Surface Layer	Generally within the upper	6 inches of asphalt or
	0.5 to 1-foot	concrete with an underlying
		subbase; or
		6 inches of topsoil
Fill Layer	Encountered at each soil	Granular soils consisting of
	probe location, generally	sand and gravel, with lesser
	ranging from 4 to 4.5 feet	amounts of silt and brick.
	below ground surface	
		Cohesive fill material
		consisting of clayey silt with
		lesser amounts of gravel,
		sand and brick
Natural Soils	Below the fill and/or	Generally consists of a clay
	surficial layer.	and silt mixture with lesser
		amounts of sand and gravel.
		Intermittent layers of silty
		sand with gravel were found
		at SP-1, 2, 3, and 9.

# 5.20 GROUNDWATER

Groundwater was encountered at depths ranging from approximately 6 to 10 feet below ground surface at each probe location. Temporary 1 inch monitoring wells were installed at SP-1, SP-3, SP-7 and SP-9. Groundwater in the temporary wells ranged from 6.5 to 9.6 feet below ground surface.

# 6.00 ANALYTICAL TEST RESULTS

Findings of the laboratory testing of the six subsurface soil samples and two groundwater samples analyzed for chemical compounds are presented below. The analytical laboratory report is provided as Appendix D. The analytical results for the soil and ground water samples are summarized on Table 2 and Table 3 respectively.

The analytical test results for the subsurface soil samples were compared to:

 NYSDEC Recommended Soil Cleanup Objectives (RSCOs) presented in NYSDEC, Technical and Administrative Guidance Memorandum (TAGM) HWR- 94-4046: Determination of Soil Cleanup Objectives and Cleanup Levels, dated January 1994, amended December 2000.

• NYSDEC Part 375 Unrestricted and Restricted Use Soil Cleanup Objectives (SCO).



The analytical test results for the groundwater samples were compared to:

• NYSDEC Class GA criteria presented in the Division of Water Technical and Operational Guidance Series (TOGS 1.1.), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

# 6.10 SUBSURFACE SOILS

<u>Volatile Organic Compounds:</u> No VOCs were detected above method detection limits from the sample collected from SP-4 and SP-5, in the area of the suspect 2,000-gallon UST.

- SP-1 Two VOCs, including m&p xylene and 1,2,4-trimethylbenzene, were detected in the soil sample collected from 2-4 feet below ground surface, at concentrations below their respective TAGM 4046 guidance value. An OVM reading of 83 ppm was identified at this sample location, which is near the suspect 550-gallon UST.
- SP-9 Three VOCs, including cis-1,2-dichloroethene (DCE), trichloroethene (TCE) and tetrachloroethene (PCE) were detected at concentrations within the soil sample from 6 to 8 feet above their respective TAGM 4046 guidance values and the Part 375 Unrestricted Use SCO. Additionally, PCE was detected at a concentration of 270,000 parts per billion (ppb), which exceeds its respective Part 375 Restricted Commercial Use SCO. This soil sample exhibited an OVM reading of greater than 9,999+ ppm and an odor was detected during sample collection.
- SP-10 Eight typical petroleum type VOCs were detected above method detection limits at the sample collected from 4 to 6 feet below ground surface. The detected concentrations were below their respective TAGM 4046 guidance values. An OVM reading from the sample was recorded as 322 ppm.

<u>Semi-Volatile Organic Compounds:</u> No SVOCs were detected at concentrations above method detection limits in the five soil samples tested.

<u>Polychlorinated Biphenyls:</u> No PCBs were detected at concentrations above method detection limits in the one soil sample tested.

### 6.20 GROUNDWATER

<u>Volatile Organic Compounds:</u> Two groundwater samples were collected for VOC analysis.



- SP-1 Eight VOCs were detected above their respective Class GA criteria, as shown on Table 3. The VOCs appeared to be typical petroleum type compounds. SP-1 was located near the apparent 550-gallon UST. The highest detected concentration was benzene, at a concentration of 970 ppb, exceeding its Class GA criteria of 1 ppb.
- SP-9 Five VOCs were detected above their respective Class GA Criteria, as shown on Table 3. The detected VOCs appeared to be chlorinated solvents. The highest detected concentration was PCE at a concentration of 20,000 ppb, exceeding its Class GA criteria of 5 ppb.

<u>Semi-Volatile Organic Compounds:</u> No SVOCs were detected at concentrations above method detection limits in the one groundwater samples tested from SP-1.

#### 7.00 CONCLUSIONS AND RECOMMENDATIONS

GZA was retained to assess if historical Site usage or identified USTs have resulted in an environmental impact at the Site. Our work included an EM-61 geophysical survey prior to the subsurface investigation, observing soil probes at ten locations, collection of surface soil samples, headspace screening of soil samples taken from the soil probe macrocore sampler and chemical analysis of six subsurface soil samples and two groundwater samples.

A summary of our findings and our opinion based upon the work conducted as part of this study follows.

- GZA retained Geomatrix, to perform an EM geophysical survey using an EM61 at the Site, to map the distribution of buried metals in an attempt to locate anomalies indicative of USTs at the Site. Readings were recorded that identify the following two anomalies.
  - Anomaly A was identified as a buried metal anomaly. A linear anomaly appeared to be associated with anomaly A. A vent was also observed northwest of Anomaly A. Geomatric indicated that it is very likely that Anomaly A is related to a UST.
  - Anomaly B was also identified as a buried metal anomaly located between the building and gate. The ground surface in this area is concrete.

Anomaly B may be related to a UST or it may be due to reinforcement metal in the concrete and/or interference from the metal in the gate.

GZA reviewed the two identified anomaly locations and compared these locations to the historic records identifying the tank locations. There is good correlation between the locations, for both the 2,000-gallon UST, which appeared to be at a similar location to Anomaly A, and the 550-gallon UST, which appeared to correlate with Anomaly B. Based on the historic record review, geophysical survey results, and site observations of potential vent pipes in the areas, it is likely that the two USTs are currently present at the Site.



- Subsurface conditions at the soil probe locations generally consisted of approximately 6-inches of asphalt and subbase gravel, concrete (SP-9) or topsoil (SP-2) overlying a fill material, generally consisting of a sand and gravel mixture with silt, clay and brick. Fill depths generally ranged from 4 to 4.5 feet below ground surface. Native soils generally consisted of a clay and silt mixture with varying amounts of sand and gravel. Intermittent layers of silty sand and gravel were found at SP-1, 2, 3 and 9.
- Groundwater was encountered at depths ranging from approximately 6 to 10 feet below ground surface at each probe location. Temporary 1 inch monitoring wells were installed at SP-1, SP-3, SP-7 and SP-9. Groundwater in the temporary wells ranged from 6.5 to 9.6 feet below ground surface.

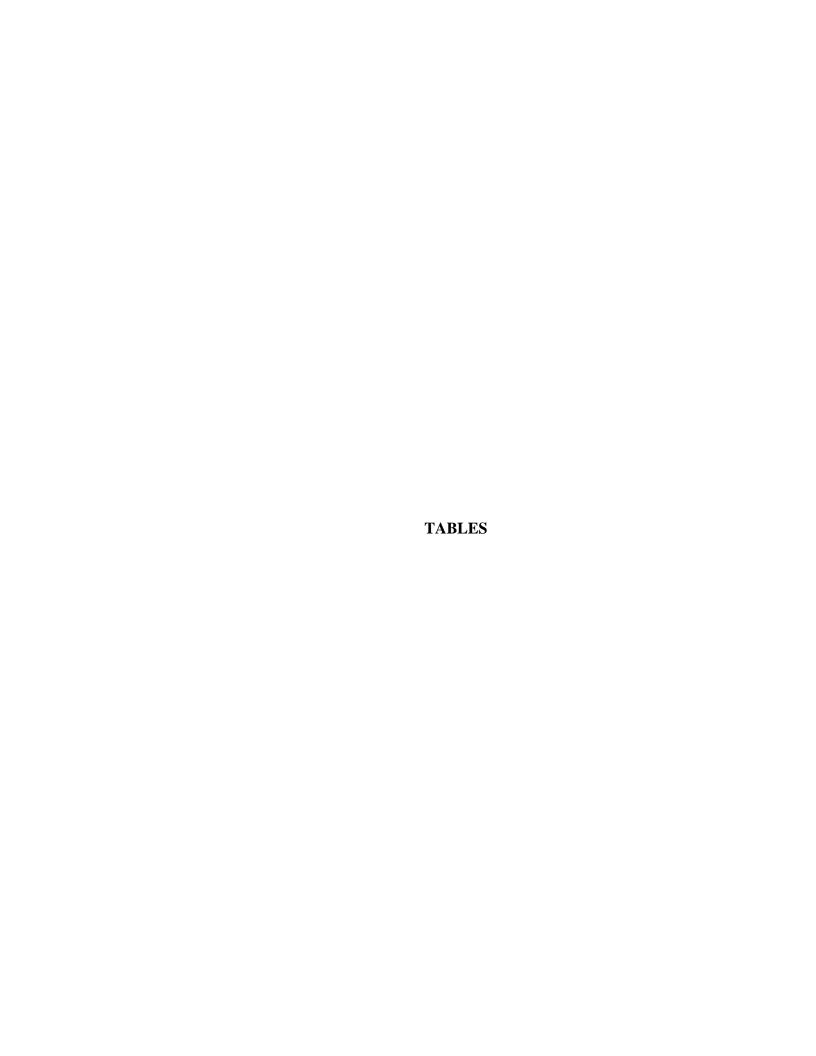
Based on the results of our Phase II investigation, two areas of concern have been identified.

- UST Area Two historic USTs appear to be present in the northwestern corner of the Site. The USTs are not currently being used and appear to have been abandoned. Analytical results identified petroleum type compounds in the groundwater at concentrations above NYSDEC guidance values. Further investigation to confirm the presence of these USTs and their closure/removal is warranted. *GZA recommends that NYSDEC be contacted and informed of the potential release*.
- Chlorinated Solvents Chlorinated solvents were detected in one locations under the existing building slab. The source and extent of the chlorinated solvents is not know. However, the detected concentrations in both the soil and groundwater sample collected from this one location exceed NYSDEC groundwater standards. The potential exists for vapor intrusion into the building due to the elevated levels of PCE beneath the building. Additionally, the potential exists for off-site impacts (i.e. groundwater, vapor intrusion, etc.). The extent of the chlorinated solvents contamination should be further explored. GZA recommends that NYSDEC be contacted and informed of the results.

GZA offers the following recommendations.

- GZA recommends that this report be provided to the NYSDEC and the two areas of concern be reported.
- The two apparent USTs should be properly registered and removed.
- Further investigation is recommended in the area of SP-9 to further evaluate the extent of the chlorinated solvent contamination identified in the soil and groundwater at this location. Additional chlorinated solvent vapor intrusion should be evaluated within the Site building.





# Table 1 Analytical Testing Program Summary 500 Seneca Street Buffalo, New York

Location	Date Collected	Depth/ Interval (ft bgs)	VOCs EPA Method 8260-Full list	SVOCs EPA Method 8270 STARS	PCBs EPA Method 8082
<b>Groundwater San</b>	mples				
SP-1	11/12/07	NA	X	X	
SP-9	11/12/07	NA	X		
Soilprobe Sample	es				
SP-1	11/12/07	2 to 4	Χ	Χ	
SP-4	11/12/07	3 to 5	X	X	
SP-5	11/12/07	3 to 5	Χ	Χ	
SP-7	11/12/07	1 to 4			X
SP-9	11/12/07	6 to 8	Χ	X	
SP-10	11/12/07	4 to 6	X	X	

# Notes:

- 1. NA = not applicable.
- 2. ft bgs = feet below ground surface
- 3. VOCs = Volatile Organic Compounds
- 4. SVOCs = Semi-Volatile Organic Compounds

**Table 2**Soil Analytical Testing Results Summary
500 Seneca
Buffalo, New York

	NYSDEC	Unrestricted Use	Restricted Se	oil Cleanup Object	ctives (SCO)	SP - 1 2-4ft.	SP - 4 3-5ft.	SP - 5 3-5ft.	SP - 7 1-4ft.	SP - 9 6-8ft.	SP - 10 4-6ft.
Parameter	TAGM 4046	Soil Cleanup	Restricted	Restricted	Restricted	11/12/2007	11/12/2007	11/12/2007	11/12/2007	11/12/2007	11/12/2007
	RSCO	Objectives	Residential	Commercial	Industrial	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds - El	PA Method 8260	TCL (ug/kg)									
cis-1,2-Dichloroethene	400	250	100,000	500,000	100,000	<	<	<	NT	1,000	<
1,1,1-Trichloroethane	800	680	100,000	500,000	1,000,000	<	<	<		<	<
Trichloroethene	700	470	21,000	200,000	400,000	<	<	<	NT	6,000	<
Tetrachloroethene	1,400	1,300	19,000	150,000	300,000	<	<	<	NT	270,000	<
m&p-Xylene	1,200	260	100,000	500,000	1,000,000	54	<	<	NT	<	<
Isopropylbenzene	5,000	NV	NV	NV	NV	<	<	<	NT	<	65
n-Propylbenzene	14,000	3,900	100,000	500,000	1,000,000	<	<	<	NT	<	110
1,3,5-Trimethylbenzene	3,000	8,400	52,000	190,000	380,000	<	<	<	NT	<	83
1,2,4-Trimethylbenzene	13,000	3,600	52,000	190,000	380,000	52	<	<	NT	<	220
sec-Butylbenzene	25,000	11,000	100,000	500,000	1,000,000	<	<	<	NT	<	61
p-Isopropyltoluene	11,000	NV	NV	NV	NV	<	<	<	NT	<	77
n-Butylbenzene	18,000	12,000	100,000	500,000	1,000,000	<	<	<	NT	<	88
Naphthalene	13,000	12,000	100,000	500,000	1,000,000	<	<	<	NT	<	82
Total VOCs						106	<	<		277,000	786
Semi-Volatile Organic Compound	ds - EPA Metho	d 8270 STARS (u	ıg/kg)								
No compounds detected above meth	od detection lim	its				<	<	<	NT	<	<
Polychlorinated Biphenyls - EPA	Method 8282 (ug	g/kg)									
No compounds detected above meth	od detection limi	its				NT	NT	NT	<	NT	NT

#### Notes:

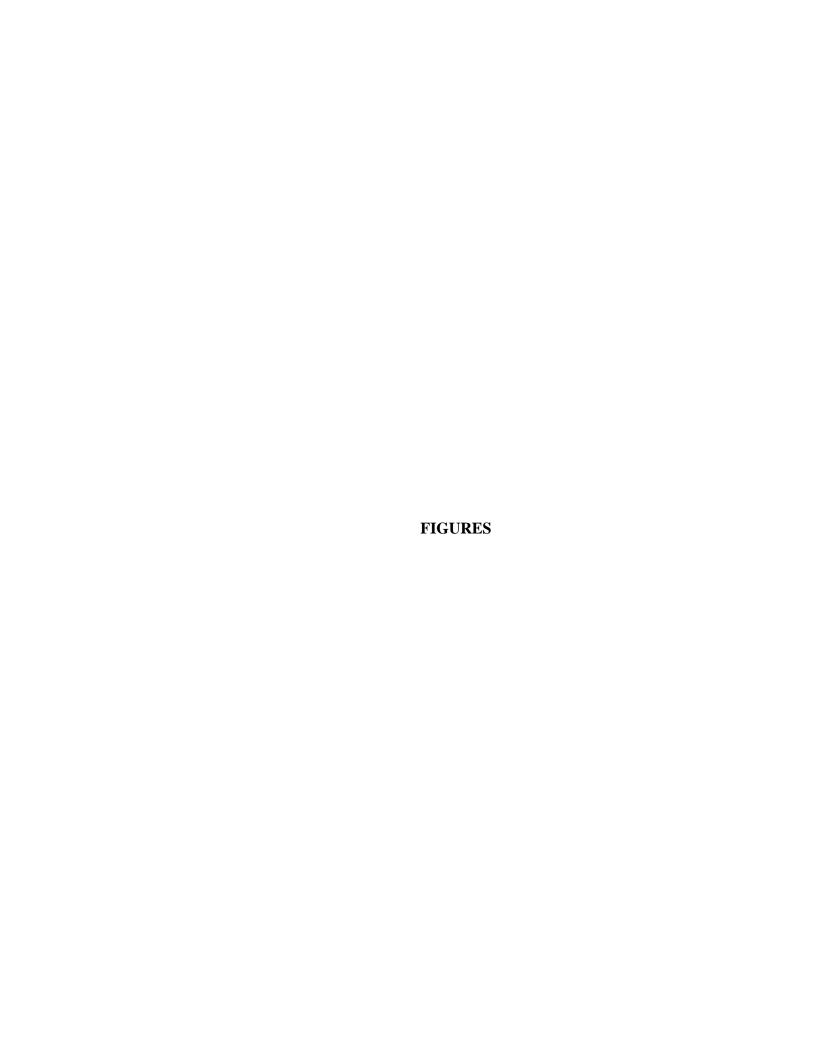
- 1. Compounds detected in one or more samples are presented on this table. Refer to Attachment C for list of all compounds included in analysis.
- 2. Analytical testing completed by GZA GeoEnvironmental Laboratory.
- 3. ug/kg = part per billion and mg/kg = parts per million.
- 4. < indicates compound was not detected.
- 5. Italics indicates value exceeds the NYSDEC TAGM 4046 Recommended Soil Cleanup Objective (RSCO).
- 6. **Bold** indicates value exceeds the Unrestricted Use Soil Cleanup Objectives
- 7. Blue shading indicates value exceeds the Restricted Residential Use Soil Cleanup Objectives
- 8. Yellow shading indicates value exceeds the Restricted Commercial Use Soil Cleanup Objectives
- 9. Red shading indicates value exceeds the Restricted Industrial Use Soil Cleanup Objectives
- 10. NT = not tested

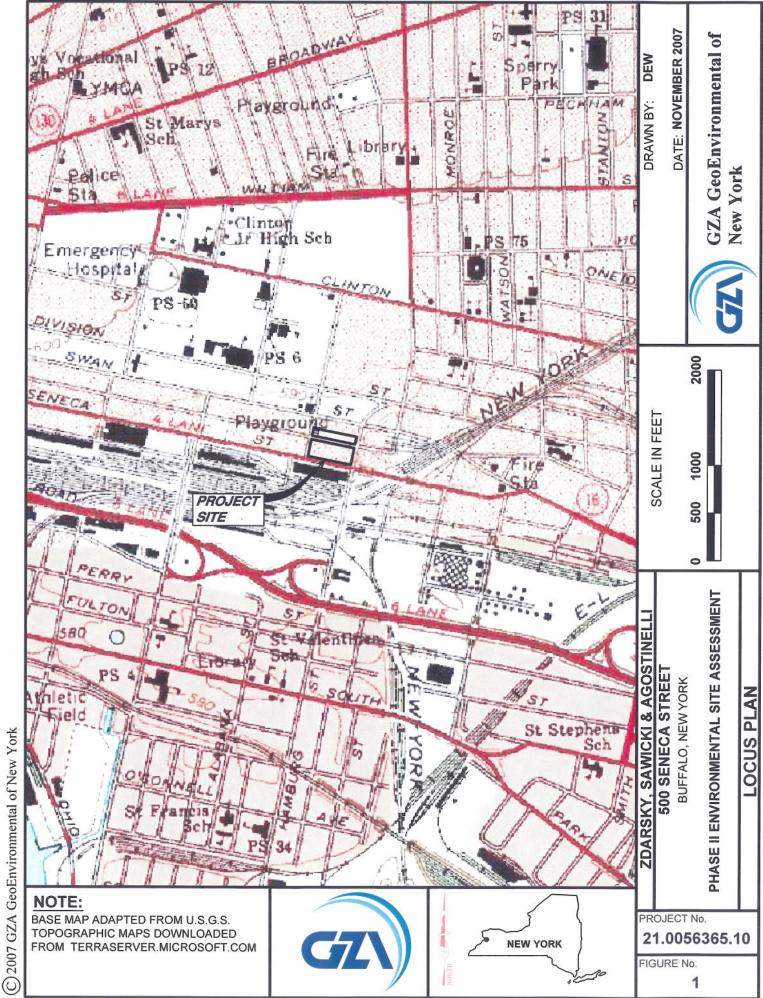
Table 3
Groundwater Analytical Testing Results Summary
500 Seneca
Buffalo, New York

		SP - 1	SP - 9
Parameter	Class GA	11/12/2007	11/12/2007
	Criteria	Result	Result
VOC - EPA Method 820	60 STARS (ug/	L)	
Vinyl Chloride	2	<	6.7
1,1-Dichloroethene	5	<	5.2
trans-1,2-Dichloroethene	5	<	4.8
cis-1,2-Dichloroethene	5	<	380
Benzene	1	970	<
Trichloroethene	5	<	2,100
Tetrachloroethene	5	<	20,000
Ethylbenzene	5	11	<
m&p-Xylene	5	36	<
o-Xylene	5	15	<
Isopropylbenzene	5	34	<
N-Propylbenzene	5	75	<
sec-Butylbenzene	5	11	<
n-Butylbenzene	5	11	<

# Notes:

- 1. Compounds detected in one or more samples are presented on this table.
- 2. Analytical testing completed by GZA GeoEnvironmental Laboratory.
- 3. NYSDEC Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), June 1998.
- 4. ug/L = part per billion (ppb).
- 5. Blank indicates compound was not detected.
- 6. Shaded area indicates analyte concentration exceeds Class GA criteria
- 7. \* = 5ug/L criteria is for total xylenes
- 8. NT = Not tested for; NV = No value







GZA GeoEnvironmental of New York

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PHASE II ENVIRONMENTAL SITE ASSESSMENT

PROJECT No.

21.0056365.10

FIGURE No.

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APPENDIX A
LIMITATIONS

# **LIMITATIONS**

- 1. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Client. The work described in this report was carried out in accordance with the Terms and Conditions of our Agreement.
- In preparing this report, GZA GeoEnvironmental of New York (GZA) has relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to GZA at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment.
- 3. In the event that bank counsel or title examiner for Client obtains information on environmental or hazardous waste issues at the site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.
- 4. Observations were made of the site and of structures on the site as indicated within the report. Where access to portions of the site or to structures on the site was unavailable or limited, GZA renders no opinion as to the presence of hazardous material or oil, or to the presence of indirect evidence relating to hazardous material or oil, in that portion of the site or structure. In addition, GZA renders no opinion as to the presence of hazardous material or oil, or to the presence of indirect evidence relating to hazardous material or oil, where direct observation of the interior walls, floor, or ceiling of a structure on a site was obstructed by objects or coverings on or over these surfaces.
- 5. Unless otherwise specified in the report, GZA did not perform testing or analyses to determine the presence or concentration of asbestos or polychlorinated biphenyls (PCB's) at the site or in the environment at the site.
- 6. The purpose of this report was to assess the physical characteristics of the subject site with respect to the presence in the environment of hazardous material or oil. No specific attempt was made to check on the compliance of present or past owners or operators of the site with federal, state, or local laws and regulations, environmental or otherwise.
- 7. The conclusions and recommendations contained in this report are based in part upon the data obtained from a limited number of soil and/or groundwater samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and

recommendations of this report.

- 8. Water level readings have been made in the test pits, borings, and/or observation wells at the times and under the conditions stated on the test pit or boring logs. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.
- 9. Except as noted within the text of the report, no quantitative laboratory testing was performed as part of the site assessment. Where such analyses have been conducted by an outside laboratory, GZA has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these data.
- 10. The conclusions and recommendations contained in this report are based in part upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. As indicated within the report, some of these data are preliminary "screening" level data, and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by GZA and the conclusions and recommendations presented herein modified accordingly.
- 11. Chemical analyses have been performed for specific parameters during the course of this site assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the site.
- 12. It is recommended that GZA be retained to provide further engineering services during construction and/or implementation of any remedial measures recommended in this report. This is to allow GZA to observe compliance with the concepts and recommendations contained herein, and to allow the development of design changes in the event that subsurface conditions differ from those anticipated.

# APPENDIX B GEOPHYSICAL SURVEY

90 B John Muir Drive Amherst, New York 14228 (716) 565-0624 • Fax (716) 565-0625



November 20, 2007

Michele M. Wittman, P.G. Senior Project Manager GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203

Transmitted via email to: Michele Wittman [michele.wittman@gza.com]

Dear Ms. Wittman:

Subject: Geophysical Survey Results – 500 Seneca St, Buffalo, NY

# 1.0 INTRODUCTION

This report presents the results of a geophysical investigation performed at a portion of the property located at 500 Seneca Street in Buffalo, NY. Historical information obtained by GZA indicate the potential for two underground storage tanks to be present on site. A geophysical survey was performed by Geomatrix Consultants, Inc. (Geomatrix) to map the distribution of buried metals in an attempt to locate anomalies indicative of USTs. The survey was performed on November 12, 2007 utilizing electromagnetic techniques.

The geophysical results presented herein are intended to serve as a guide to focus any future intrusive investigations, if warranted. Additional collaborative data are generally necessary to confirm geophysical anomalies.

# 2.0 METHODOLOGY

A reference grid was installed to facilitate data acquisition along lines spaced 3 feet apart. The grid was marked with orange and white paint. Select grid coordinates were labeled to aid in the event that future work was necessary. The southwest corner of the building was established as grid coordinate 50N,50E. Grid North was taken as the direction parallel to the west wall of the building.

GZA GeoEnvironmental of New York November 20, 2007 Page 2

# **ELECTROMAGNETIC SURVEY METHODOLOGY**

The site was geophysically surveyed using the Geonics EM61. The EM61 unit is a high

sensitivity, high resolution time domain electromagnetic (TDEM) metal detector that can detect both ferrous and nonferrous metallic objects. It has an approximate investigation depth of 10 feet. The processing console is contained in a backpack worn by the operator which is interfaced to a digital data logger. The transmitter and two receiver coils are located on a two-wheeled cart that is pulled by the operator.

The device's transmitter coil generates a pulsed primary EM field at a rate of 150 pulses per second, inducing eddy currents into the subsurface. The decay rates of these eddy currents are measured



**EM** equipment in use (photo not from this site)

by two, 3.28 foot by 1.64 foot (1 meter by ½ meter) rectangular receiver coils. By taking the measurements at a relatively long time frame after termination of the primary pulse, the response is practically independent of the survey area's terrain conductivity. Specifically, the decay rates of the eddy currents are much longer for metals than for normal soils allowing the discrimination of the two.

Data are collected from the EM61's two receiver coils. One of the receiver coils is located coincident to the transmitter coil. The other receiver coil is located 1.31 feet (0.4 meters) above the transmitter coil. Data from the top receiver coil are stored on Channel 1 of a digital data logger. Data from the bottom receiver coil are stored on Channel 2 of the data logger. Channel 1 and Channel 2 data are simultaneously recorded at each station location. The instrument responses are recorded in units of milliVolts (mV). Data were recorded digitally by a data logger at a rate of approximately 2 measurements per foot along the survey lines which were spaced 3 feet apart.

# 3.0 RESULTS

The EM61 data for the survey are presented in Figure 1. The color bar to the right of the map indicates the colors associated with the values measured with the EM61. Areas suspected to be free of buried metals are shown as color shades of light blue. All areas exhibiting a

GZA GeoEnvironmental of New York November 20, 2007 Page 3

response greater than background (0 to 30 mVolts) likely contain buried metals. These areas are depicted in shades of dark blue through yellow on the figures.

**Anomaly A** is a buried metal anomaly centered at 70N,35E. A linear anomaly appears to be associated with Anomaly A. A vent was observed northwest of Anomaly A. It is very likely that Anomaly A is related to a UST.

**Anomaly B** is a buried metal anomaly located between the building and the gate. We noted the ground surface in this area is concrete. Anomaly B may be related to a UST or it may be due to reinforcement metal in the concrete and/or interference from the metal in the gate.

# 4.0 LIMITATIONS

The geophysical methods used during this survey are established, indirect techniques for non-invasive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. All geophysical methods utilize interpretative techniques which can be significantly impacted by varying site conditions. Anomalies can only be identified if they show recognizable patterns against data representative of background or natural conditions. Therefore, where possible, confirmation of any geophysical anomalies identified or interpreted should be sought through the use of historical aerial photography, test pit and/or borehole information.

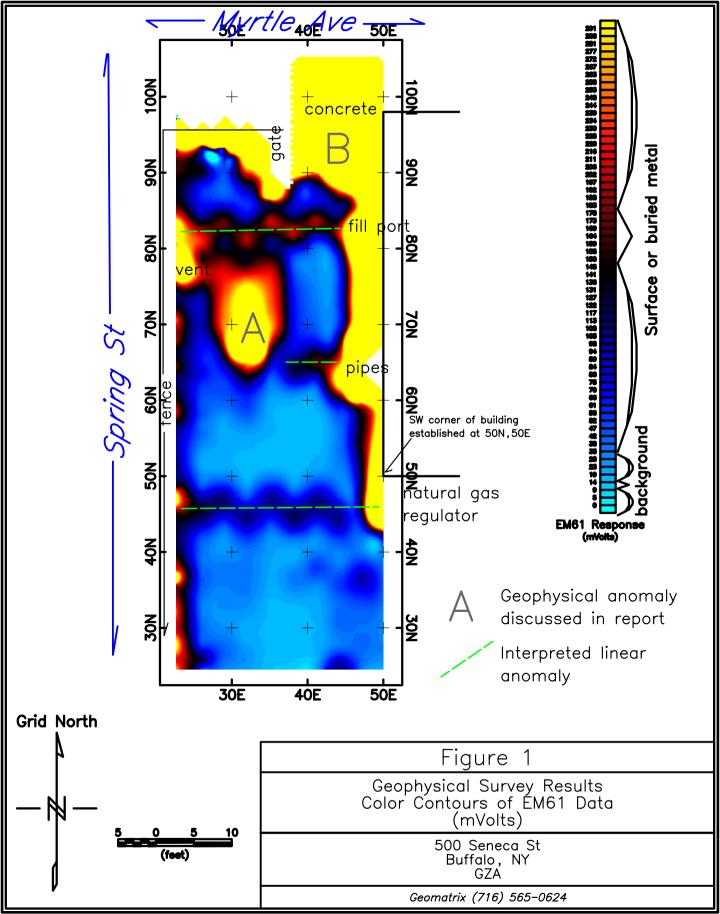
We trust the information contained in this report is sufficient for your present needs. Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely yours, GEOMATRIX CONSULTANTS, INC.

John Luttinga

John Luttinger

Senior Geophysicist



APPENDIX C
SOIL PROBE LOGS

NC NIS	LLER		Marc Janus	mental Technologies	BORING LOCATION         See Location Plan           GROUND SURFACE ELEVATION         NA DATUM	NA	
	RT DATE		11/12/2007	END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRESENTATIVE J. Davide	IVA	
				END DATE 11/12/07			
W	ATER LEV	EL DA		1	TYPE OF DRILL RIG Geoprobe 540 U track more	unted rig	
	DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER 2" diameter by 48" long		
	11/12/07		6.7	1"	OVERBURDEN SAMPLING METHOD Direct push		
					ROCK DRILLING METHOD NA		
)		•	•	•			
		9	SAMPLE INFO	RMATION	SAMPLE DESCRIPTION	NOTES	
,		,	STAVII EE IIVI O	TOTAL TOTAL	OAWII EE BEGORII HOW	140120	
	Comple N	umbor	DEDTIL	DECOVEDY (9/)	_		
	Sample N	umber		RECOVERY (%)			
			(FT)				(
	S-1		0-2	65	ASPHALT		
1					Gray brown Clayey SILT, trace Sand, trace Gravel, trace Brick,		
					moist, (FILL).		
2					7		
	S-2		2-4	65	Grades to:Dark gray SILT and Sand, some Gravel, trace Clay.	staining/odor	
3						otan mig, odo.	
J	1				_		
					4		
4					_		
	S-3		4-6	80			
5					Light yellowish brown Silty CLAY, trace Sand, trace Gravel,		
					moist.		
6	3						
	S-4		6-8	80			
7							
•					=		
_					_		
8			0.40	CF	4		
	S-5		8-10	65			-   -
9					Gray SAND and Gravel, some Silt, trace Clay, wet.	staining/odor	
0	)						
	S-6		10-12	65	Light gray Clayey SILT, some Gravel, trace Sand, moist.	odor	
1							
					Dark gray SAND and Gravel, some weathered Shale, wet.	staining/odor	
2	,				Dark gray Clayey SILT, some Sand, wet.	staining/odor	
_	S-7		12-13	30	Bank gray Olayby Ole 1, solito Salia, wet.	Stairing/Oddi	
_					-		
3	'			1	D ( 1 40 ( 1)		
					Refusal at 13 feet bgs.		
4				1			
5							
6							
_				1			
, ,	,			+	+		
7			-		-		
•			ample	NOTES: 1) Mini	Rae 2000 organic vapor meter used to field screen and		

C - Rock Core Sample General

1) Stratification lines represent approximate boundary between soil types, transitions may be gradual.

Page 1

Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

	ITRACTOR LLER		Marc Janus	mental Technologies	BORING LOCATION         See Location Plan           GROUND SURFACE ELEVATION         NA         DATUM         NA	
	RT DATE			END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRESENTATIVE J. Davide	
	ATER LEV	EL DA		LIND DATE 11/12/01	TYPE OF DRILL RIG Geoprobe 540 U track mounted rig	
٧١	DATE	TIME		CASING	CASING SIZE AND DIAMETER 2" diameter by 48" long	
	11/12/07	TIIVIL	6.0'	none	OVERBURDEN SAMPLING METHOD Direct push	<del></del>
	11/12/07		0.0	none	ROCK DRILLING METHOD NA	
					ROOK DRILLING WE THOD INA	
) =			SAMPLE INFOR	DAMATION	SAMPLE DESCRIPTION NOTE	≣S (
- -		•	SAMPLE INFOR	RIVIATION	SAMPLE DESCRIPTION NOTE	-5
Г	Sample N	umber	DEPTH	RECOVERY (%)		
1			(FT)			(1)
	S-1		0-2	50	TOPSOIL	
1					Gray SAND and Gravel, trace Silt, trace Clay, trace Brick,	
·					trace Organics, moist. (FILL).	
2					trado organico, moiot. (1122).	
_	S-2		2-4	50	-	
3					Reddish brown Silty CLAY, some Gravel, trace Sand, moist	
_					(FILL).	
4					(i icc).	
4	S-3		4-6	100	Boddigh brown Cilty CLAV troop Cond troop Croyal maint	
_			7.0	100	Reddish brown Silty CLAY, trace Sand, trace Gravel, moist.	`
5					-	
_					-	
6	S-4		6-8	100	Grades to: wet.	
_			0-0	100	Grades to wet.	
7					-	
_					-	
8	S-5		9.10	100	-	
_			8-10	100	Grades to: Yellowish brown, some Sand.	
9					-	
					-	
10	S-6		10.10	400		
			10-12	100	Light gray SAND and Gravel, some Silt, little Clay, moist.	
11					-	
					-	
12			40.40	0.5	-	
	S-7		12-13	35	-	
13					B ( 1 + 10 ( 1)	
	<u> </u>				Refusal at 13 feet bgs.	
4					1	
15					1	
					_	
16						
17						
				1		

C - Rock Core Sample

General

Notes:

Page 1

<sup>1)</sup> Stratification lines represent approximate boundary between soil types, transitions may be gradual.

<sup>2)</sup> Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Notes:

CON	TRACTOR		Matrix	Environr	mental Technologies	BORING LOCATION See Location Plan	
DRIL	LER		Marc J	anus		GROUND SURFACE ELEVATION NA DATUM NA	
STA	RT DATE		11/12	2/2007	END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRESENTATIVE J. Davide	
W	ATER LEVI				T	TYPE OF DRILL RIG Geoprobe 540 U track mounted rig	
	DATE	TIME		ATER	CASING	CASING SIZE AND DIAMETER 2" diameter by 48" long	
	11/12/07		5	.96	1"	OVERBURDEN SAMPLING METHOD Direct push	
						ROCK DRILLING METHOD NA	
D					L		
Е		S	SAMPLE	INFOR	MATION	SAMPLE DESCRIPTION NOTES	0
Р							V
Т	Sample No	ımber	DE	PTH	RECOVERY (%)		М
Н			_	FT)			(ppm)
<b>.</b>	S-1		C	-2	45	ASPHALT	0
1						Brown SAND and Gravel, some Clay, little Silt, trace Brick,	
2						moist, (FILL).	
-	S-2		2	:-4	45	-	1
3						1	
4							
	S-3		4	-6	80		4
5						Reddish brown Silty CLAY, trace Sand, trace Gravel, moist.	
6						-	
ľ	S-4		6	i-8	80	-	3
7							
8							
	S-5		8-	·10	100	Grades to: wet.	1
9						Light gray Clayey SILT, some Sand, little Clay, little Gravel,	
10						moist.	
10	S-6		10	-12	100		0
11						1	
						Light gray SAND and Gravel, some Silt, little Clay, moist.	
12							
						End of probe at 12 feet bgs.	
13						-	
14						-	
'-						-	
15							
							ļ
16							ļ
						_	ļ
17						-	ļ
S -	Split Spo	on Sí	ample	,	NOTES: 1) Mini	Rae 2000 organic vapor meter used to field screen and headspace soil samples.	
	Rock Co				1, 10111	Tao 2000 organic vapor meter used to held screen and headspace soil samples.	ļ

General 1) Stratification lines represent approximate boundary between soil types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

	ITRACTOR LLER		Marc Janus	mental Technologies	BORING LOCATION         See Location Plan           GROUND SURFACE ELEVATION         NA DATUM         NA		-
	RT DATE		11/12/2007	END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRESENTATIVE J. Davide		-
	/ATER LEVI	FI DA		2.13 27.12 1.17.12/01	TYPE OF DRILL RIG Geoprobe 540 U track mounted rig		
•	DATE	TIME		CASING	CASING SIZE AND DIAMETER 2" diameter by 48" long		-
	11/12/07		6.5'	none	OVERBURDEN SAMPLING METHOD Direct push		-
	11/12/01		0.0	Hone	ROCK DRILLING METHOD NA		-
					NOOK BINELING WE THOS		-
)			0.44DL E INIEQ	DMATION	O MANUE DESCRIPTION	NOTEO	$\prod_{i}$
5		,	SAMPLE INFO	RMATION	SAMPLE DESCRIPTION	NOTES	,
Г	Sample No	umber	DEPTH	RECOVERY (%)	-		
1			(FT)				(F
	S-1		0-2	60	ASPHALT		
1					Brown SAND, trace Gravel, trace Silt, trace Clay, moist, (FILL).		
•					Brown Graves, nace Graves, nace Gray, moist, (1 122).		
2							
	S-2		2-4	60	<u> </u>		
3					Reddish brown Silty CLAY, trace Sand, trace Gravel, moist,		
					(FILL).		
4					Gray brown SAND and Gravel, trace Silt, trace Clay,		
	S-3		4-6	100	trace Brick, moist (FILL)		
5					Reddish brown Silty CLAY, trace Sand, trace Gravel, moist.		
					<u> </u>		
6					<u> </u>		
	S-4		6-8	100			
7					Grades to: Yellowish brown, wet.		
8							
	S-5		8-10	100	Grades to: Reddish brown, some Gravel.		
9							
					Yellowish brown Clayey SILT, trace Sand, trace Gravel, moist.		
0							
	S-6		10-12	100	<u> </u>		
11					Grades to: Light gray, some Sand, little Gravel, moist.		
2					End of probe at 12 feet has		
13					End of probe at 12 feet bgs.		
14							
1 -					-		
15							
16							
17					_		
							1

C - Rock Core Sample
General 1) Stratification lines represe

1) Stratification lines represent approximate boundary between soil types, transitions may be gradual.

Page 1

Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

	ITRACTOR LLER		Marc Janus	nental Technologies	BORING LOCATION         See Location Plan           GROUND SURFACE ELEVATION         NA         DATUM         NA	
	RT DATE			END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRESENTATIVE J. Davide	
	ATER LEV	EL DA		END DATE TIATEOU	TYPE OF DRILL RIG Geoprobe 540 U track mounted rig	
v	DATE	TIME	WATER	CASING	CASING SIZE AND DIAMETER 2" diameter by 48" long	
	11/12/07	TIIVIL	6.5'	none	OVERBURDEN SAMPLING METHOD Direct push	
	11/12/07		0.5	none	ROCK DRILLING METHOD NA	
					NOCK DIVILLING WILL THOD INA	
)						
			SAMPLE INFOR	MATION	SAMPLE DESCRIPTION NOTES	S
	Sample N	umber	DEPTH	RECOVERY (%)	-	
ł			(FT)	(,,,		(0
_	S-1		0-2	65	ASPHALT	0
1			0.2	00	Reddish brown Silty CLAY, trace Sand, trace Gravel, trace	
^					Brick, moist, (FILL).	
2	S-2		2-4	65		
_			2 4		-	
3					-	
					0 0000 10 10 000 000 000	
4	S-3		4-6	75	Gray SAND and Gravel, some Silt, little Clay, trace Brick,	
_	3-3		4-0	75	moist (FILL).	
5					-	
_					D. Little Ol. Ol. T. O. Little Ol. Little	
6	S-4		6-8	75	Reddish brown Clayey SILT, some Sand, trace Gravel, moist.	
_	3-4		0-0	73	-	
7					Grades to: wet.	
_					Condendary Valleysiah harrya	
8	S-5		8-10	100	Grades to: Yellowish brown.	
^			0 10	100		
9						
^					-	
0	S-6		10-12	100	Consider the United States Consideration of the Constant of th	
	3-0		10-12	100	Grades to: Light gray, some Sand, little Gravel, moist.	
1					-	
2					-	
					End of probe at 12 feet bgs.	
13						
					_	
14					-	
F					-	
15					-	
16					-	
17						
•					-	

C - Rock Core Sample

General 1) Stratifi

1) Stratification lines represent approximate boundary between soil types, transitions may be gradual.

Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Page 1

RILLER	Marc Janus		_GROUND SURFACE ELEVATIONNADATUM	NA	
ART DATE	11/12/2007	END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRESENTATIVE J. Davide		
WATER LEV	EL DATA		TYPE OF DRILL RIG Geoprobe 540 U track mount	ed rig	
DATE	TIME WATER	CASING	CASING SIZE AND DIAMETER 2" diameter by 48" long		
11/12/07	7.0'	none	OVERBURDEN SAMPLING METHOD Direct push		
			ROCK DRILLING METHOD NA		
)					
	SAMPLE INFO	ORMATION	SAMPLE DESCRIPTION	NOTES	
)					
Sample N	umber DEPTH	RECOVERY (%)			
1	(FT)				
S-1	0-2	75	ASPHALT		
1			Gray Silty CLAY, some Sand, little Gravel, trace Brick, moist		
			(FILL).		
2			1 ` ´		
S-2	2-4	75	-		
3			1		
			1		
4			1		
S-3	4-6	100	1		
		100	Vollowish brown Clavey Cll T. same Cond. trace Cravel maist		
5			Yellowish brown Clayey SILT, some Sand, trace Gravel, moist.		
			-		
6S-4	6-8	100	-		
	0-0	100	-		
7			Crades to wet		
_			Grades to: wet.		
8 S-5	9.10	100	-		
	8-10	100	One day to the Control		
9			Grades to: little Gravel.		
_			4		
0	40.40	400			
S-6	10-12	100	Grades to: Light gray, some Gravel.		
1			-		
			-		
2				-	
			End of probe at 12 feet bgs.		
3			4		
4					
			4		
5			4		
6					
7					

C - Rock Core Sample General

1) Stratification lines represent approximate boundary between soil types, transitions may be gradual.

Page 1

Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CON	TRACTOR		Matrix	Environr	nental Technologies	BORING LOCATION	See Location Plan		_
DRIL	LER		Marc J	anus		_GROUND SURFACE ELEVATION	NA DATUM	NA	
STAI	RT DATE		11/12	2/2007	END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRE	SENTATIVE J. Davide		
W	ATER LEVI				T	TYPE OF DRILL RIG	Geoprobe 540 U track mount	ed rig	
	DATE	TIME	W	ATER	CASING	CASING SIZE AND DIAMETER	2" diameter by 48" long		
	11/12/07		8	.29	1"	OVERBURDEN SAMPLING METH	OD Direct push		
						ROCK DRILLING METHOD	NA		
									ı
D		_		- 111505	MATION	CAMPI E DI	- CODIDTION	NOTES	
E P		٤	AWPL	= INFOR	MATION	SAMPLE DE	ESCRIPTION	NOTES	0 V
T	Sample No	ımher	DE	PTH	RECOVERY (%)	+			M
Н	Gampio III			FT)					(ppm)
	S-1		_	)-2	40	ASPHALT			0
1						Gray SAND and Gravel, some Silt,	trace Clay, trace Brick,		
						moist (FILL).	,		
2									
	S-2		2	2-4	40				0
3									
						1			
4	0.0				70	4			
	S-3		4	-6	70				0
5						Reddish brown Clayey SILT, some	Sand, trace Gravel, moist.		
6						+			
0	S-4		6	5-8	70	1			0
7						†			
8						1			
	S-5		8-	-10	100	Grades to: Brown.			0
9									
10			4.0	140	100				
	S-6		10	)-12	100	Reddish Brown Silty CLAY, trace Sa	and, trace Gravel, moist.		0
11						+			
12						-			
'-						End of probe at 12 feet bgs.		1	
13									
14									
						_			
15									
						4			
16						-			
17						-			
''						1			
S -	Split Spo	on Sa	ample		NOTES: 1) Mini	Rae 2000 organic vapor meter	used to field screen and he	eadspace soil samples	
S - Split Spoon Sample NOTES: 1) Min C - Rock Core Sample						3 Input			

General 1) Stratification lines represent approximate boundary between soil types, transitions may be gradual.

Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Page 1

	TRACTOR		Matrix	Environr	mental Technologies	BORING LOCATION See Location Plan	
	LER		Marc J		END DATE 44/40/07	GROUND SURFACE ELEVATION NA DATUM NA	
	RT DATE			2/2007	END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRESENTATIVE J. Davide	
VV	ATER LEVI	TIME		ATER	CASING	TYPE OF DRILL RIG  Geoprobe 540 U track mounted rig  CASING SIZE AND DIAMETER  2" diameter by 48" long	
	11/12/07			.5'	none	OVERBURDEN SAMPLING METHOD Direct push	
						ROCK DRILLING METHOD NA	
D							
E			SAMPLE INFORMATION		RMATION	SAMPLE DESCRIPTION NOTES	0
P T	Sample No	ımher	DE	PTH	RECOVERY (%)	-	V
H	Gample 140	inibei		FT)	RECOVERT (78)		M (ppm)
	S-1			-2	50	ASPHALT	0
1						Gray SAND and Gravel, some Silt, trace Clay, trace Brick,	
						moist (FILL).	
2							
	S-2		2	-4	50		0
3						Reddish brown Silty CLAY, little Gravel, trace Sand, moist,	
4						(FILL).	
	S-3		4	-6	90		0
5						Reddish brown Silty CLAY, trace Sand, trace Gravel, moist.	
6							_
l _	S-4		6	-8	90	Grades to: wet.	0
7							
8						-	
	S-5		8-	10	100		0
9							
10	S-6		10	-12	100	-	0
11	3-0		10	-12	100	Grades to: Yellowish brown.	0
''						-	
12							
						End of probe at 12 feet bgs.	
13							
						_	
14						-	
15						-	
16							
17						-	
<u> </u>	Calit Ca -	on C	mpl-		NOTES: 4\ M:-:	Pag 2000 organia vapor mater used to field series and headeness self-series	
	Split Spo Rock Co				NOTES: 1) Mini	Rae 2000 organic vapor meter used to field screen and headspace soil samples	

General 1) Stratification lines represent approximate boundary between soil types, transitions may be gradual.

Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

CON	CONTRACTOR Matrix Environmen		mental Technologies	BORING LOCATION	See Location Plan				
DRIL	LER		Marc J	anus		GROUND SURFACE ELEVATION	NA DATUM	NA	_
STA	RT DATE		11/12	2/2007	END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRES	ENTATIVE J. Davide		
W	ATER LEV	EL DA	ГА		T	TYPE OF DRILL RIG	Geoprobe 540 U track mou	nted rig	_
	DATE	TIME	W	ATER	CASING	CASING SIZE AND DIAMETER	2" diameter by 48" long		_
	11/12/07		9	.65	1"	OVERBURDEN SAMPLING METHO			_
						ROCK DRILLING METHOD	NA		_
D									
E		9	ΔMDI I	= INFOR	RMATION	SAMPLE DE	SCRIPTION	NOTES	0
P			MIVIT LI	- IIVI ON	MINATION	SAIVIF LE DE	NOTES	V	
l T	Sample N	umber	DF	PTH	RECOVERY (%)	_			M
H				FT)	, ,				(ppm)
	S-1			)-2	15	CONCRTE			0
1						Reddish brown Clayey SILT, some G	Gravel, little Sand, moist		
						(FILL).			
2									
	S-2		2	2-4	15				4
3									
4					75				
_	S-3		- 4	-6	75	Yellowish brown SAND and Gravel, t	race Silt, trace Clay,		50
5						moist.			
6						Reddish brown Clayey SILT, trace S	and, trace Gravei, moist.		
0	S-4		6	5-8	75	_		odor	9999
7						_		odoi	0000
•									
8									
	S-5		8-	-10	100				792
9									
10									
	S-6		10	)-12	100	Light gray SAND and Gravel, some S	Silt, little Clay, moist.		30
11						_			
12						_			
12						End of probe at 12 feet bgs.			
13									
.									
14									
15						_			
						4			
16						4			
						-			
17						-			
S -	Split Spo	on Sa	ample		NOTES: 1) Mini	Rae 2000 organic vapor meter u	ised to field screen and	headsnace soil sample	
ľ	Spir Opt	-	· · · ·		1.10120. 1/1/1/1111	rao 2000 organio vapor meter u	ioda to ficia sofeeri affu	noddopado son sample.	٥.

C - Rock Core Sample

General 1) Stratifi

1) Stratification lines represent approximate boundary between soil types, transitions may be gradual.

Page 1

Notes: 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

C - Rock Core Sample

Notes:

	ITRACTOR LLER		Marc Janus	mental Technologies	BORING LOCATION         See Location Plan           GROUND SURFACE ELEVATION         NA         DATUM         NA	—
	RT DATE		11/12/2007	END DATE 11/12/07	GZA GEOENVIRONMENTAL REPRESENTATIVE J. Davide	—
	ATER LEVI	FI DA			TYPE OF DRILL RIG Geoprobe 540 U track mounted rig	
•	DATE	TIME		CASING	CASING SIZE AND DIAMETER 2" diameter by 48" long	
	11/12/07		10.0'	none	OVERBURDEN SAMPLING METHOD Direct push	
	11/12/01		10.0	Hone	ROCK DRILLING METHOD NA	
					THE TRANSPORT OF THE TR	
D E		;	SAMPLE INFO	RMATION	SAMPLE DESCRIPTION NOTES	C
-	Sample No	umbor	DEDTU	DECOVERY (9/)	-	\
Γ.	Sample IN	umber		RECOVERY (%)		N
1	0.4		(FT)	4.0	0.0000	(p
	S-1		0-2	10	Gray SAND and Gravel, some Silt, trace Clay, moist (FILL).	(
1					-	
2					-	
	S-2		2-4	10		
3						
4						
	S-3		4-6	75	Gray brown Clayey SILT, trace Sand, trace Gravel, moist. odor	3
5						
6						
	S-4		6-8	75		5
7						
8						
	S-5		8-10	100		5
9						
10						
	S-6		10-12	100	Grades to: Reddish brown, wet.	•
11						
12						
	S-7		12-14	5		
13						
14			14.40	-	4	
	S-8		14-16	5	4	
15					4	
	-				4	
16	ļ				5 1 ( 1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
					End of soil probe at 16 feet bgs.	
17	-				4	
						oles.

General 1) Stratification lines represent approximate boundary between soil types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

# APPENDIX D ANALYTICAL TEST RESULTS



Laboratory Identification Numbers:
MA and ME: MA092 NH: 2028
CT: PH0579 RI: LAO00236
NELAC - NYS DOH: 11063

#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman Project No.: 21.0056365.00
Work Order No.: 0711-00106
Date Received: 11/13/2007
Date Reported: 11/20/2007

#### **SAMPLE INFORMATION**

Date Sampled	Matrix	Laboratory ID	Sample ID
11/12/2007	Solid	0711-00106 001	SP - 1 2-4ft.
11/12/2007	Solid	0711-00106 002	SP - 4 3-5ft.
11/12/2007	Solid	0711-00106 003	SP - 5 3-5ft.
11/12/2007	Solid	0711-00106 004	SP - 7 1-4ft.
11/12/2007	Solid	0711-00106 005	SP - 9 6-8ft.
11/12/2007	Solid	0711-00106 006	SP - 10 4-6ft.





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.: 500 Seneca St.-Former New Era

Project No.: 21.0056365.00

Date Received:

11/13/2007

Date Reported: 11/20/2007

Work Order No.: 0711-00106

#### PROJECT NARRATIVE:

#### 1. Sample Receipt

The samples were received on 11/13/07 via \_\_GZA courier, \_x\_UPS, \_\_FEDEX, or \_\_hand delivered The temperature of the \_\_temperature blank/\_x\_cooler air, was 4.7 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

The percent recoveries for the surrogates in the diluted runs are as follows:

SP-9 6-8ft.: 1,2- Dichloroethane-D4 - 104%, Toluene-D8 - 124%, 4-Bromofluorobenzene - 97.2%

Attach QC 8260 11/15/07 S - Solid Attach QC 8260 11/17/07 S - Solid

3. EPA Method 8082 - PCBs

Attach QC 8082 11/14/07 - Solid

4. EPA Method 8270 - PAHs

Attach QC 8270 11/14/07 - Solid



#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor

Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:

11/13/2007

Date Reported:

11/20/2007

Work Order No.:

0711-00106

Data Authorized By:

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

#### Abbreviations:

% R = % Recovery

DF = Dilution Factor

DFS = Dilution Factor Solids

CF = Calculation Factor

DO = Diluted Out

#### Method Key:

Method 8260: The current version of the method is 8260B. Method 8021: The current version of the method is 8021B. Method 8270: The current version of the method is 8270C. Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received: Date Reported: 11/13/2007

Work Order No.:

11/20/2007 0711-00106

Sample ID:

SP - 1 2-4ft.

Sample No.: 001

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Test Ferrormed	Method	Results			
PERCENT SOLID		91.7	%	TAJ	11/15/2007
VOLATILE ORGANICS	EPA 8260			MQS	11/15/2007
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromomethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Diethylether	EPA 8260	<50	ug/kg	MQS	11/15/2007
Acetone	EPA 8260	<500	ug/kg	MQS	11/15/2007
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Butanone	EPA 8260	<500	ug/kg	MQS	11/15/2007
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Chloroform	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Benzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dibromomethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Toluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Hexanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
• •					



Sample No.:

001



# GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748 (781) 278-4700

#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.: 500 S

500 Seneca St.-Former New Era

Project No.: **21.0056365.00** 

Date Received: 11/13/2007
Date Reported: 11/20/2007

Work Order No.: 0711-00106

Sample ID:

SP - 1 2-4ft.

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
m&p-Xylene	EPA 8260	54	ug/kg	MQS	11/15/2007
o-Xylene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Styrene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromoform	EPA 8260	<100	ug/kg	MQS	11/15/2007
Isopropylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Propylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,4-Trimethylbenzene	EPA 8260	52	ug/kg	MQS	11/15/2007
sec-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
p-Isopropyltoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	11/15/2007
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Naphthalene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	101	% R	MQS	11/15/2007
***Toluene-D8	EPA 8260	102	% R	MQS	11/15/2007
***4-Bromofluorobenzene	EPA 8260	92.3	% R	MQS	11/15/2007
Preparation	EPA 5035	1.0	CF	MQS	11/15/2007
PAHS BY GCMS	EPA 8270			CMG	11/17/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received: Date Reported: 11/13/2007 11/20/2007

Work Order No.:

0711-00106

Sample ID:

SP - 1 2-4ft.

Sample No.: 001

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Naphthalene	EPA 8270	<330	ug/kg	CMG	11/17/2007
2-Methylnaphthalene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Acenaphthylene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Acenaphthene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Fluorene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Phenanthrene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Anthracene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Pyrene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [a] Anthracene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Chrysene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [b] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [k] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [a] Pyrene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Dibenzo [a,h] Anthracene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [g,h,i] Perylene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Surrogates:	EPA 8270				
***Nitrobenzene-D5	EPA 8270	56.6	% R	CMG	11/17/2007
***2-Fluorobiphenyl	EPA 8270	51.7	% R	CMG	11/17/2007
***P-Terphenyl-D14	EPA 8270	74.2	% R	CMG	11/17/2007
Extraction	EPA 3545	1.0	DF	TN	11/14/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:

11/13/2007

Date Reported: Work Order No.:

11/20/2007 0711-00106

Sample ID:

SP - 4 3-5ft.

Sample No.:

002

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		72.5	%	TAJ	11/15/2007
VOLATILE ORGANICS	EPA 8260			MQS	11/15/2007
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromomethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Diethylether	EPA 8260	<50	ug/kg	MQS	11/15/2007
Acetone	EPA 8260	<500	ug/kg	MQS	11/15/2007
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Butanone	EPA 8260	<500	ug/kg	MQS	11/15/2007
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Chloroform	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Benzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dibromomethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Toluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Hexanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received: Date Reported:

11/13/2007 11/20/2007

Work Order No.: 0711-00106

Sample ID:

SP - 4 3-5ft.

Sample No.:

002

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
m&p-Xylene	EPA 8260	<50	ug/kg	MQS	11/15/2007
o-Xylene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Styrene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromoform	EPA 8260	<100	ug/kg	MQS	11/15/2007
Isopropylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Propylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
sec-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
p-Isopropyltoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	11/15/2007
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Naphthalene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	94.8	% R	MQS	11/15/2007
***Toluene-D8	EPA 8260	93.0	% R	MQS	11/15/2007
***4-Bromofluorobenzene	EPA 8260	93.9	% R	MQS	11/15/2007
Preparation	EPA 5035	1.0	CF	MQS	11/15/2007
PAHS BY GCMS	EPA 8270			CMG	11/17/2007



11/13/2007



# GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748 (781) 278-4700

#### ANALYTICAL REPORT

Date Received:

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

500 Seneca St.-Former New Era Project Name.:

Date Reported: 11/20/2007 Project No.: 21.0056365.00 Work Order No.: 0711-00106

Sample No.: 002 Sample ID: SP - 4 3-5ft.

Sample Date: 11/12/2007

Test Performed	Method	Results	Units	Tech	Analysis Date
Naphthalene	EPA 8270	<330	ug/kg	CMG	11/17/2007
2-Methylnaphthalene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Acenaphthylene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Acenaphthene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Fluorene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Phenanthrene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Anthracene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Pyrene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [a] Anthracene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Chrysene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [b] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [k] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [a] Pyrene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Dibenzo [a,h] Anthracene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Benzo [g,h,i] Perylene	EPA 8270	<330	ug/kg	CMG	11/17/2007
Surrogates:	EPA 8270				
***Nitrobenzene-D5	EPA 8270	59.1	% R	CMG	11/17/2007
***2-Fluorobiphenyl	EPA 8270	54.2	% R	CMG	11/17/2007
***P-Terphenyl-D14	EPA 8270	72.9	% R	CMG	11/17/2007
Extraction	EPA 3545	1.0	DF	TN	11/14/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.: **21.0056365.00** 

Date Received: 11/2
Date Reported: 11/2

11/13/2007 11/20/2007

Work Order No.: 0711-00106

Sample ID:

SP - 5 3-5ft.

Sample No.: 003

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		68.4	%	TAJ	11/15/2007
VOLATILE ORGANICS	EPA 8260			MQS	11/15/2007
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromomethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Diethylether	EPA 8260	<50	ug/kg	MQS	11/15/2007
Acetone	EPA 8260	<500	ug/kg	MQS	11/15/2007
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Butanone	EPA 8260	<500	ug/kg	MQS	11/15/2007
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Chloroform	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Benzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dibromomethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Toluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Hexanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received: Date Reported: 11/13/2007

Work Order No.:

11/20/2007 0711-00106

Sample ID:

SP - 5 3-5ft.

Sample No.: 003

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
m&p-Xylene	EPA 8260	<50	ug/kg	MQS	11/15/2007
o-Xylene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Styrene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromoform	EPA 8260	<100	ug/kg	MQS	11/15/2007
Isopropylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Propylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
sec-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
p-Isopropyltoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	11/15/2007
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Naphthalene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	97.2	% R	MQS	11/15/2007
***Toluene-D8	EPA 8260	100	% R	MQS	11/15/2007
***4-Bromofluorobenzene	EPA 8260	94.4	% R	MQS	11/15/2007
Preparation	EPA 5035	1.0	CF	MQS	11/15/2007
PAHS BY GCMS	EPA 8270			CMG	11/19/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.: 21.0056365.00 Date Received:

11/13/2007

Date Reported: Work Order No.: 0711-00106

11/20/2007

Sample ID:

SP - 5 3-5ft.

Sample No.:

003

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Naphthalene	EPA 8270	<330	ug/kg	CMG	11/19/2007
2-Methylnaphthalene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Acenaphthylene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Acenaphthene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Fluorene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Phenanthrene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Anthracene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Pyrene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Benzo [a] Anthracene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Chrysene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Benzo [b] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Benzo [k] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Benzo [a] Pyrene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Dibenzo [a,h] Anthracene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Benzo [g,h,i] Perylene	EPA 8270	<330	ug/kg	CMG	11/19/2007
Surrogates:	EPA 8270				
***Nitrobenzene-D5	EPA 8270	73.4	% R	CMG	11/19/2007
***2-Fluorobiphenyl	EPA 8270	63.6	% R	CMG	11/19/2007
***P-Terphenyl-D14	EPA 8270	88.0	% R	CMG	11/19/2007
Extraction	EPA 3545	1.0	DF	TN	11/14/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:
Date Reported:

11/13/2007 11/20/2007

Work Order No.:

0711-00106

Sample ID:

SP - 7 1-4ft.

Sample No.: 004

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		79.6	%	TAJ	11/15/2007
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	11/17/2007
Aroclor 1268	EPA 8082	<100	ug/kg	TAJ	11/17/2007
Aroclor 1262	EPA 8082	<100	ug/kg	TAJ	11/17/2007
Aroclor 1260	EPA 8082	<100	ug/kg	TAJ	11/17/2007
Aroclor 1254	EPA 8082	<100	ug/kg	TAJ	11/17/2007
Aroclor 1248	EPA 8082	<100	ug/kg	TAJ	11/17/2007
Aroclor 1242/1016	EPA 8082	<100	ug/kg	TAJ	11/17/2007
Aroclor 1232	EPA 8082	<100	ug/kg	TAJ	11/17/2007
Aroclor 1221	EPA 8082	<100	ug/kg	TAJ	11/17/2007
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	82.7	% R	TAJ	11/17/2007
***Tetrachloro-m-xylene	EPA 8082	82.5	% R	TAJ	11/17/2007
***Decachlorobiphenyl	EPA 8082	96.7	% R	TAJ	11/17/2007
***Decachlorobiphenyl	EPA 8082	98.4	% R	TAJ	11/17/2007
Extraction	EPA 3541	1.0	DF	TN	11/14/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.: 21.00

21.0056365.00

Date Received:
Date Reported:

11/13/2007 11/20/2007

Work Order No.: 0711-00106

Sample ID:

SP - 9 6-8ft.

Sample No.: 005

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		79.9	%	TAJ	11/15/2007
VOLATILE ORGANICS	EPA 8260			MQS	11/15/2007
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromomethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Diethylether	EPA 8260	<50	ug/kg	MQS	11/15/2007
Acetone	EPA 8260	<500	ug/kg	MQS	11/15/2007
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Butanone	EPA 8260	<500	ug/kg	MQS	11/15/2007
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
cis-1,2-Dichloroethene	EPA 8260	1000	ug/kg	MQS	11/15/2007
Chloroform	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Benzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichloroethene	EPA 8260	6000	ug/kg	MQS	11/15/2007
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dibromomethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Toluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Hexanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received: Date Reported: 11/13/2007 11/20/2007

Work Order No.: 0711-00106

Sample ID:

SP - 9 6-8ft.

Sample No.:

005

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Tetrachloroethene	EPA 8260	270000	ug/kg	MQS	11/17/2007
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
m&p-Xylene	EPA 8260	<50	ug/kg	MQS	11/15/2007
o-Xylene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Styrene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromoform	EPA 8260	<100	ug/kg	MQS	11/15/2007
Isopropylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Propylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,3,5-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,4-Trimethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
sec-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
p-Isopropyltoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	11/15/2007
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Naphthalene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	106	% R	MQS	11/15/2007
***Toluene-D8	EPA 8260	118	% R	MQS	11/15/2007
***4-Bromofluorobenzene	EPA 8260	98.3	% R	MQS	11/15/2007
Preparation	EPA 5035	10	CF	MQS	11/15/2007
PAHS BY GCMS	EPA 8270			CMG	11/18/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:
Date Reported:

11/13/2007 11/20/2007

Work Order No.:

0711-00106

Sample ID:

SP - 9 6-8ft.

Sample No.:

005

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Naphthalene	EPA 8270	<330	ug/kg	CMG	11/18/2007
2-Methylnaphthalene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Acenaphthylene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Acenaphthene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Fluorene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Phenanthrene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Anthracene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Pyrene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [a] Anthracene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Chrysene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [b] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [k] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [a] Pyrene	EPA -8270	<330	ug/kg	CMG	11/18/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Dibenzo [a,h] Anthracene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [g,h,i] Perylene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Surrogates:	EPA 8270				
***Nitrobenzene-D5	EPA 8270	52.9	% R	CMG	11/18/2007
***2-Fluorobiphenyl	EPA 8270	49.3	% R	CMG	11/18/2007
***P-Terphenyl-D14	EPA 8270	75.0	% R	CMG	11/18/2007
Extraction	EPA 3545	1.0	DF	TN	11/14/2007



11/13/2007

11/20/2007

0711-00106

Date Received:

Date Reported:

Work Order No.:



# GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748 (781) 278-4700

#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.: 500 Seneca St.-Former New Era

Project No.: **21.0056365.00** 

Sample ID: SP - 10 4-6ft. Sample No.: 006

Sample Date: 11/12/2007

Test Performed	Method	Results	Units	Tech	Analysis Date
PERCENT SOLID		82.5	%	TAJ	11/15/2007
VOLATILE ORGANICS	EPA 8260			MQS	11/15/2007
Dichlorodifluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Vinyl Chloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromomethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichlorofluoromethane	EPA 8260	<100	ug/kg	MQS	11/15/2007
Diethylether	EPA 8260	<50	ug/kg	MQS	11/15/2007
Acetone	EPA 8260	<500	ug/kg	MQS	11/15/2007
1,1-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Butanone	EPA 8260	<500	ug/kg	MQS	11/15/2007
2,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
cis-1,2-Dichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Chloroform	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Tetrahydrofuran	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,1,1-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Carbon Tetrachloride	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Benzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Trichloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromodichloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dibromomethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
4-Methyl-2-Pentanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
cis-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Toluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
trans-1,3-Dichloropropene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,2-Trichloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
2-Hexanone	EPA 8260	<100	ug/kg	MQS	11/15/2007
1,3-Dichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:
Date Reported:

11/13/2007 11/20/2007

Work Order No.: 0711-00106

Sample ID:

SP - 10 4-6ft.

Sample No.:

006

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Tetrachloroethene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Dibromochloromethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromoethane (EDB)	EPA 8260	<100	ug/kg	MQS	11/15/2007
Chlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Ethylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
m&p-Xylene	EPA 8260	<50	ug/kg	MQS	11/15/2007
o-Xylene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Styrene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromoform	EPA 8260	<100	ug/kg	MQS	11/15/2007
Isopropylbenzene	EPA 8260	65	ug/kg	MQS	11/15/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,3-Trichloropropane	EPA 8260	<50	ug/kg	MQS	11/15/2007
Bromobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Propylbenzene	EPA 8260	110	ug/kg	MQS	11/15/2007
2-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,3,5-Trimethylbenzene	EPA 8260	83	ug/kg	MQS	11/15/2007
4-Chlorotoluene	EPA 8260	<50	ug/kg	MQS	11/15/2007
tert-Butylbenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2,4-Trimethylbenzene	EPA 8260	220	ug/kg	MQS	11/15/2007
sec-Butylbenzene	EPA 8260	61	ug/kg	MQS	11/15/2007
p-Isopropyltoluene	EPA 8260	77	ug/kg	MQS	11/15/2007
1,3-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,4-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
n-Butylbenzene	EPA 8260	88	ug/kg	MQS	11/15/2007
1,2-Dichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<250	ug/kg	MQS	11/15/2007
1,2,4-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Hexachlorobutadiene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Naphthalene	EPA 8260	82	ug/kg	MQS	11/15/2007
1,2,3-Trichlorobenzene	EPA 8260	<50	ug/kg	MQS	11/15/2007
Surrogates:	EPA 8260				
***1,2-Dichloroethane-D4	EPA 8260	95.5	% R	MQS	11/15/2007
***Toluene-D8	EPA 8260	105	% R	MQS	11/15/2007
***4-Bromofluorobenzene	EPA 8260	94.9	% R	MQS	11/15/2007
Preparation	EPA 5035	1.0	CF	MQS	11/15/2007
PAHS BY GCMS	EPA 8270			CMG	11/18/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:
Date Reported:

11/13/2007 11/20/2007

Work Order No.: 0711-00106

Sample ID:

SP - 10 4-6ft.

Sample No.:

006

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Naphthalene	EPA 8270	<330	ug/kg	CMG	11/18/2007
2-Methylnaphthalene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Acenaphthylene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Acenaphthene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Fluorene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Phenanthrene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Anthracene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Pyrene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [a] Anthracene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Chrysene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [b] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [k] Fluoranthene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [a] Pyrene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Indeno [1,2,3-cd] Pyrene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Dibenzo [a,h] Anthracene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Benzo [g,h,i] Perylene	EPA 8270	<330	ug/kg	CMG	11/18/2007
Surrogates:	EPA 8270				
***Nitrobenzene-D5	EPA 8270	76.5	% R	CMG	11/18/2007
***2-Fluorobiphenyl	EPA 8270	71.1	% R	CMG	11/18/2007
***P-Terphenyl-D14	EPA 8270	74.7	% R	CMG	11/18/2007
Extraction	EPA 3545	1.0	DF	TN	11/14/2007

#### GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748

EPA Method 8260 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

#### Method Blank

#### Laboratory Control Sample

Date Analyzed:	11/15/07	A	Date Analyzed: Spike Concentration = 2500ug/kg	11/15/07	Ato Limite	Verdict
Volatile Organics dichlorodifluoromethane	Conc. ug/kg < 100	Acceptance Limit < 100	dichlorodifluoromethane	% Recovery 133	Acceptance Limits 70-130	out
chloromethane	< 100	< 100	chloromethane	113	70-130	ok
vinyl chloride	< 50	< 50	vinyl chloride	97.0	70-130	ok
bromomethane	< 100	< 100	bromomethane	69.8	70-130	out
chloroethane	< 50	< 50	chloroethane	71.1	70-130	ok
trichlorofluoromethane	< 100	< 100	trichlorofluoromethane	96.4	70-130	ok
diethyl ether	< 250	< 250	diethyl ether	86.1	70-130	ok
acrolein	< 1300	< 1300	acrolein	115 109	70-130 70-130	ok ok
acetone 1,1-dichloroethene	< 1300 < 50	< 1300 < 50	acetone 1,1-dichloroethene	90.2	70-130 70-130	ok
FREON-113	< 100	< 100	FREON-113	86.3	70-130	ok
iodomethane	< 50	< 50	iodomethane	86.1	70-130	ok
carbon disulfide	< 500	< 500	carbon disulfide	90.7	70-130	ok
dichtoromethane	< 100	< 100	dichloromethane	90.5	70-130	ok
tert-butyl alcohol (TBA)	< 1300	< 1300	tert-butyl alcohol (TBA)	129	70-130	ok
acrylonitrile	< 50	< 50	acrylonitrile	110	70-130	ok
methyl-tert-butyl-ether	< 50	< 50	methyl-tert-butyl-ether	101	70-130	ok
trans-1,2-dichloroethene	< 50	< 50	trans-1,2-dichloroethene	95.1	70-130 70-130	ok
1,1-dichloroethane di-isopropyl ether (DIPE)	< 50 < 100	< 50 < 100	1,1-dichloroethane di-isopropyl ether (DIPE)	104 106	70-130 70-130	ok ok
ethyl tert-butyl ether (EtBE)	< 100	< 100	ethyl tert-butyl ether (EtBE)	109	70-130	ok
vinyl acetate	< 1300	< 1300	vinyl acetate	108	70-130	ok
2-butanone	< 1300	< 1300	2-butanone	97.0	70-130	ok
2,2-dichloropropane	< 50	< 50	2,2-dichloropropane	100	70-130	ok
cis-1,2-dichloroethene	< 50	< 50	cis-1,2-dichloroethene	93.5	70-130	ok
chloroform	< 50	< 50	chloroform	95.0	70-130	ok
bromochloromethane	< 50	< 50	bromochloromethane	91.1	70-130	ok
tetrahydrafuran	< 500	< 500	tetrahydrafuran	112	70-130	ok
1,1,1-trichloroethane	< 50	< 50	1,1,1-trichloroethane	105	70-130	ok
1,1-dichloropropene	< 50 < 50	< 50 < 50	1,1-dichloropropene carbon tetrachloride	103 109	70-130 70-130	ok ok
carbon tetrachloride 1,2-dichloroethane	< 50	< 50	1.2-dichloroethane	118	70-130	ok
benzene	< 50	< 50	benzene	96.8	70-130	ok
tert-amyl methyl ether (TAME)	< 100	< 100	tert-amyl methyl ether (TAME)	104	70-130	ok
trichloroethene	< 50	< 50	trichloroethene	95.2	70-130	ok
1,2-dichloropropane	< 50	< 50	1,2-dichloropropane	103	70-130	ok
bromodichloromethane	< 50	< 50	bromodichloromethane	99.1	70-130	ok
1,4-Dioxane	< 5000	< 5000	1,4-Dioxane	108	70-130	ok
dibromomethane	< 50	< 50	dibromomethane	94.7	70-130	ok
4-methyl-2-pentanone	< 1300	< 1300	4-methyl-2-pentanone	114	70-130	ok
cis-1,3-dichloropropene	< 50 < 50	< 50 < 50	cis-1,3-dichloropropene	104 98.1	70-130 70-130	ok ok
toluene trans-1,3-dichloropropene	< 100	< 100	toluene trans-1,3-dichloropropene	104	70-130	ok
1,1,2-trichloroethane	< 50	< 50	1.1.2-trichloroethane	104	70-130	ok
2-hexanone	< 1300	< 1300	2-hexanone	120	70-130	ok
1,3-dichloropropane	< 50	< 50	1,3-dichloropropane	103	70-130	ok
tetrachloroethene	< 50	< 50	tetrachloroethene	95.0	70-130	ok
dibromochloromethane	< 50	< 50	dibromochloromethane	101	70-130	ok
1,2-dibromoethane (EDB)	< 100	< 100	1,2-dibromoethane (EDB)	109	70-130	ok
chlorobenzene	< 50	< 50	chlorobenzene	102	70-130	ok
1,1,1,2-tetrachioroethane	< 50	< 50	1,1,1,2-tetrachioroethane	101	70-130	ok
ethylbenzene	< 50 < 50	< 50 < 50	ethylbenzene 1,1,2,2-tetrachioroethane	102 103	70-130 70-130	ok ok
1,1,2,2-tetrachloroethane m&p-xylene	< 100	< 100	m&p-xylene	105	70-130	ok
o-xylene	< 50	< 50	o-xylene	111	70-130	ok
styrene	< 50	< 50	styrene	108	70-130	ok
bromoform	< 100	< 100	bromoform	111	70-130	ok
isopropylbenzene	< 50	< 50	isopropylbenzene	110	70-130	ok
1,2,3-trichloropropane	< 50	< 50	1,2,3-trichloropropane	115	70-130	ok
bromobenzene	< 50	< 50	bromobenzene	99.8	70-130	ok
n-propylbenzene	< 50 < 50	< 50 < 50	n-propylbenzene 2-chlorotoluene	107 114	70-130 70-130	ok ok
2-chlorotoluene 1,3,5-trimethylbenzene	< 50	< 50	1,3,5-trimethylbenzene	111	70-130	ok
trans-1.4-dichloro-2-butene	< 100	< 100	trans-1,4-dichloro-2-butene	117	70-130	ok
4-chlorotoluene	< 50	< 50	4-chlorotoluene	110	70-130	ok
tert-butyl-benzene	< 50	< 50	tert-butyl-benzene	105	70-130	ok
1,2,4-trimethylbenzene	< 50	< 50	1,2,4-trimethylbenzene	110	70-130	ok
sec-butyl-benzene	< 50	< 50	sec-butyl-benzene	108	70-130	ok
p-isopropyltoluene	< 50	< 50	p-isopropyltoluene	108	70-130	ok
1,3-dichlorobenzene	< 50	< 50	1,3-dichlorobenzene	101	70-130	ok
1,4-dichlorobenzene	< 50	< 50	1,4-dichlorobenzene	101	70-130 70-130	ok ok
n-butylbenzene	< 50 < 50	< 50 < 50	n-butylbenzene 1,2-dichlorobenzene	111 98.1	70-130 70-130	ok ok
1,2-dichlorobenzene 1,2-dibromo-3-chloropropane	< 250 < 250	< 250 < 250	1,2-dibromo-3-chloropropane	117	70-130 70-130	ok ok
1,2-dibromo-3-chioropropane 1,2,4-trichlorobenzene	< 50	< 50	1,2,4-trichlorobenzene	108	70-130	ok
hexachlorobutadiene	< 50	< 50	hexachlorobutadiene	105	70-130	ok
naphthalene	< 100	< 100	naphthalene	109	70-130	ok
1,2,3-trichlorobenzene	< 50	< 50	1,2,3-trichlorobenzene	109	70-130	ok

#### SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	106	70-130	DIBROMOFLUOROMETHANE	92.6	70-130	ok
1,2-DICHLOROETHANE-D4	102	70-130	1,2-DICHLOROETHANE-D4	105	70-130	ok
TOLUENE-D8	105	70-130	TOLUENE-D8	93.5	70-130	ok
4-BROMOFLUOROBENZENE	92.4	70-130	4-BROMOFLUOROBENZENE	94.9	70-130	ok
1,2-DICHLOROBENZENE-D4	89.6	70-130	1,2-DICHLOROBENZENE-D4	93.5	70-130	ok

#### GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748

EPA Method 8260 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

#### Method Blank

#### Laboratory Control Sample

Method Blank			Laboratory Control Sample			
Date Analyzed:	11/17/07		Date Analyzed:	11/17/07		
Volatile Organics	Conc. ug/kg	Acceptance Limit	Spike Concentration = 2500ug/kg		Acceptance Limits	
dichlorodifluoromethane chloromethane	< 100 < 100	< 100 < 100	dichlorodifluoromethane chloromethane	139 120	70-130 70-130	out ok
vinyl chloride	< 50	< 50	vinyl chloride	106	70-130	ok
bromomethane	< 100	< 100	bromomethane	70.4	70-130	ok
chloroethane	< 50	< 50	chloroethane	71.9	70-130	ok
trichlorofluoromethane	< 100	< 100	trichlorofluoromethane	112	70-130	ok
diethyl ether	< 250	< 250	diethyl ether	74.8	70-130	ok
acrolein	< 1300	< 1300	acrolein	103	70-130	ok
acetone	< 1300 < 50	< 1300 < 50	acetone	96.2 98.2	70-130 70-130	ok ok
1,1-dichloroethene FREON-113	< 100	< 100	1,1-dichloroethene FREON-113	92.9	70-130	ok
iodomethane	< 50	< 50	iodomethane	89.1	70-130	ok
carbon disulfide	< 500	< 500	carbon disulfide	93.2	70-130	ok
dichloromethane	< 100	< 100	dichloromethane	88.2	70-130	ok
tert-butyl alcohol (TBA)	< 1300	< 1300	tert-butyl alcohol (TBA)	71.6	70-130	ok
acrylonitrile	< 50	< 50	acrylonitrile	119	70-130	ok
methyl-tert-butyl-ether	< 50	< 50	methyl-tert-butyl-ether	84.6	70-130	ok
trans-1,2-dichloroethene	< 50 < 50	< 50 < 50	trans-1,2-dichloroethene 1,1-dichloroethane	101 108	70-130 70-130	ok ok
1,1-dichloroethane di-isopropyl ether (DIPE)	< 100	< 100	di-isopropyl ether (DIPE)	99.7	70-130	ok
ethyl tert-butyl ether (EtBE)	< 100	< 100	ethyl tert-butyl ether (EtBE)	94.7	70-130	ok
vinyl acetate	< 1300	< 1300	vinyl acetate	96.7	70-130	ok
2-butanone	< 1300	< 1300	2-butanone	76.6	70-130	ok
2,2-dichloropropane	< 50	< 50	2,2-dichloropropane	95.6	70-130	ok
cis-1,2-dichloroethene	< 50	< 50	cis-1,2-dichloroethene	96.0	70-130	ok
chloroform	< 50	< 50	chloroform	96.8	70-130	ok
bromochioromethane	< 50	< 50	bromochloromethane	83.8	70-130	ok
tetrahydrafuran	< 500	< 500	tetrahydrafuran	109	70-130 70-130	ok
1,1,1-trichloroethane	< 50 < 50	< 50 < 50	1,1,1-trichioroethane 1,1-dichloropropene	117 99.1	70-130 70-130	ok ok
1,1-dichloropropene carbon tetrachloride	< 50	< 50	carbon tetrachloride	111	70-130	ok
1,2-dichloroethane	< 50	< 50	1,2-dichloroethane	107	70-130	ok
benzene	< 50	< 50	benzene	99.0	70-130	ok
tert-amyl methyl ether (TAME)	< 100	< 100	tert-amyl methyl ether (TAME)	83.1	70-130	ok
trichloroethene	< 50	< 50	trichloroethene	93.4	70-130	ok
1,2-dichloropropane	< 50	< 50	1,2-dichloropropane	100	70-130	ok
bromodichloromethane	< 50	< 50	bromodichloromethane	93.3	70-130	ok
1,4-Dioxane	< 5000	< 5000	1,4-Dioxane	88.8	70-130 70-130	ok ok
dibromomethane	< 50 < 1300	< 50 < 1300	dibromomethane	85.9 90.0	70-130 70-130	ok ok
4-methyl-2-pentanone cis-1,3-dichloropropene	< 50	< 50	4-methyl-2-pentanone cis-1,3-dichloropropene	92.3	70-130	ok
toluene	< 50	< 50	toluene	101	70-130	ok
trans-1,3-dichloropropene	< 100	< 100	trans-1,3-dichloropropene	88.2	70-130	ok
1,1,2-trichloroethane	< 50	< 50	1,1,2-trichloroethane	97.1	70-130	ok
2-hexanone	< 1300	< 1300	2-hexanone	99.3	70-130	ok
1,3-dichloropropane	< 50	< 50	1,3-dichloropropane	95.4	70-130	ok
tetrachloroethene	< 50	< 50	tetrachloroethene	106	70-130	ok
dibromochloromethane	< 50	< 50	dibromochloromethane	93.8	70-130	ok
1,2-dibromoethane (EDB)	< 100 < 50	< 100 < 50	1,2-dibromoethane (EDB) chlorobenzene	103 109	70-130 70-130	ok ok
chlorobenzene 1,1,1,2-tetrachloroethane	< 50	< 50	1,1,1,2-tetrachioroethane	101	70-130	ok
ethylbenzene	< 50	< 50	ethylbenzene	113	70-130	ok
1,1,2,2-tetrachloroethane	< 50	< 50	1,1,2,2-tetrachioroethane	90.7	70-130	ok
m&p-xylene	< 100	< 100	m&p-xylene	115	70-130	ok
o-xylene	< 50	< 50	o-xylene	114	70-130	ok
styrene	< 50	< 50	styrene	109	70-130	ok
bromoform	< 100 < 50	< 100 < 50	bromoform	94.3 119	70-130 70-130	ok ok
isopropylbenzene 1,2,3-trichloropropane	< 50 < 50	< 50 < 50	isopropylbenzene 1,2,3-trichloropropane	97.3	70-130	ok
bromobenzene	< 50	< 50	bromobenzene	93.6	70-130	ok
n-propylbenzene	< 50	< 50	n-propylbenzene	113	70-130	ok
2-chlorotoluene	< 50	< 50	2-chlorotoluene	120	70-130	ok
1,3,5-trimethylbenzene	< 50	< 50	1,3,5-trimethylbenzene	119	70-130	ok
trans-1,4-dichloro-2-butene	< 100	< 100	trans-1,4-dichloro-2-butene	104	70-130	ok
4-chlorotoluene	< 50	< 50	4-chlorotoluene	113	70-130	ok
tert-butyl-benzene	< 50	< 50	tert-butyl-benzene	114 119	70-130	ok
1,2,4-trimethylbenzene	< 50 < 50	< 50 < 50	1,2,4-trimethylbenzene sec-butyl-benzene	119	70-130 70-130	ok ok
sec-butyl-benzene p-isopropyltoluene	< 50 < 50	< 50	p-isopropyltoluene	124	70-130	ok
1.3-dichlorobenzene	< 50	< 50	1,3-dichlorobenzene	102	70-130	ok
1,4-dichlorobenzene	< 50	< 50	1,4-dichlorobenzene	101	70-130	ok
n-butylbenzene	< 50	< 50	n-butylbenzene	127	70-130	ok
1,2-dichlorobenzene	< 50	< 50	1,2-dichlorobenzene	97.6	70-130	ok
1,2-dibromo-3-chloropropane	< 250	< 250	1,2-dibromo-3-chloropropane	98.3	70-130	ok
1,2,4-trichlorobenzene	< 50	< 50	1,2,4-trichlorobenzene	103	70-130	ok
hexachlorobutadiene	< 50	< 50 < 100	hexachlorobutadiene	117 93.1	70-130 70-130	ok ok
naphthalene 1,2,3-trichlorobenzene	< 100 < 50	< 100 < 50	naphthalene 1,2,3-trichlorobenzene	93.1 97.9	70-130 70-130	ok ok
1,2,5-01011010DE112E11E	- 50	- 50	,,o- 110111010101120110	Ų1.5	. 5 150	J.K

#### SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	103	70-130	DIBROMOFLUOROMETHANE	92.9	70-130	ok
1,2-DICHLOROETHANE-D4	90.0	70-130	1,2-DICHLOROETHANE-D4	101	70-130	ok
TOLUENE-D8	106	70-130	TOLUENE-D8	99.5	70-130	ok
4-BROMOFLUOROBENZENE	92.8	70-130	4-BROMOFLUOROBENZENE	94.6	70-130	ok
1,2-DICHLOROBENZENE-D4	96.1	70-130	1,2-DICHLOROBENZENE-D4	93.3	70-130	ok

# GZA GEOENVIRONMENTAL, INC. ENVIRONMENTAL CHEMISTRY LABORATORY 106 SOUTH STREET, HOPKINTON, MA 01748 MASSACHUSETTS LABORATORY I.D. NO. MA092

# EPA METHOD 8082 ANALYSIS QUALITY CONTROL SOLID

DATE EXTRACTED: 11/14/07 DATE ANALYZED: 11/17/07

METHOD BLANK	Concer	itration	Quantitation Limit
POLYCHLORINATED BIPHENYLS as AROCLORS	ug/kg-PPB		ug/kg-PPB
Aroclor 1262	N	D .	25.0
Aroclor 1260	N	D	25.0
Aroclor 1254	N	ID .	25.0
Aroclor 1248	N	D	25.0
Aroclor 1242/1016	N	D	25.0
Aroclor 1232	N	D	25.0
Aroclor 1221	N	D	25.0
Aroclor 1268	N	D	25.0
Surrogates:	(A)	<b>(B)</b>	
Tetrachloro-m-xylene	103	106	30-150
Decachlorobiphenyl	113	109	30-150
LABORATORY CONTROL SAMPLE (LCS)	% Re	covery	Acceptance Limits
Aroclor 1016	108	129	40-140
Aroclor 1260	118	110	40-140
Surrogates:			
Tetrachloro-m-xylene	115	114	30-150
Decachlorobiphenyl	118	119	30-150

<sup>\*</sup>Matrix Spike/Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

#### GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748

EPA Method 8270 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

#### Method Blank

Date Extracted: Date Analyzed: File Name:	11/14/07 11/17/07 L5726	Reporting Limit
Carri Malatila Caranian	Result	(ug/kg)
Semi-Volatile Organics	ND	(ug/kg) 330
naphthalene		
2-methylnaphthalene	ND	330
acenaphthylene	ND	330
acenaphthene	ND	330
fluorene	ND	330
phenanthrene	ND	330
anthracene	ND	330
fluoranthene	ND	330
pyrene	ND	330
benz [a] anthracene	ND	330
chrysene	ND	330
benzo [b] fluoranthene	ND	330
benzo [k] fluoranthene	ND	330
benzo [a] pyrene	ND	330
indeno [1,2,3-cd] pyrene	ND	330
dibenz [a,h] anthracene	ND	330
benzo [ghi] perylene	ND	330
Surrogates:	Recovery (%)	Acceptance Limits
NITROBENZENE-D5	83.2	30-130
2-FLUOROBIPHENYL	71.6	30-130
p-TERPHENYL-D14	80.1	30-130

Page 1 of 2 Report generated: 11/19/07 12:58 PM

#### GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748

EPA Method 8270 Solid Method Blank (MB) and Laboratory Control Sample (LCS) Data

#### Laboratory Control Sample

Date Extracted:	11/14/07
Date Analyzed:	11/17/07
File Name:	L5727

Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict
naphthalene	61.7	40-140	ok
2-methylnaphthalene	62.3	40-140	ok
acenaphthylene	60.7	40-140	ok
acenaphthene	63.2	40-140	ok
fluorene	66.6	40-140	ok
phenanthrene	74.9	40-140	ok
anthracene	75.0	40-140	ok
fluoranthene	74.5	40-140	ok
pyrene	72.4	40-140	ok
benz [a] anthracene	64.0	40-140	ok
chrysene	79.8	40-140	ok
benzo [b] fluoranthene	83.9	40-140	ok
benzo [k] fluoranthene	91.0	40-140	ok
benzo [a] pyrene	90.9	40-140	ok
indeno [1,2,3-cd] pyrene	79.0	40-140	ok
dibenz [a,h] anthracene	83.3	40-140	ok
benzo [ghi] perylene	79.3	40-140	ok

#### CAM criteria allows 15% of analytes to exceed criteria.

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
NITROBENZENE-D5	64.0	30-130	ok
2-FLUOROBIPHENYL	58.3	30-130	ok
p-TERPHENYL-D14	66.8	30-130	ok

Page 2 of 2 Report generated: 11/19/07 12:58 PM



Laboratory Identification Numbers:
MA and ME: MA092 NH: 2028
CT: PH0579 RI: LAO00236
NELAC - NYS DOH: 11063

#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman Project No.: 21.0056365.00

Work Order No.: 0711-00107

Date Received: 11/13/2007

Date Reported: 11/20/2007

#### **SAMPLE INFORMATION**

Date Sampled	Matrix	Laboratory ID	Sample ID
11/12/2007	Aqueous	0711-00107 001	SP - 1
11/12/2007	Aqueous	0711-00107 002	SP - 9



#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:

11/13/2007

Date Reported:

11/20/2007

Work Order No.: 0711-00107

#### PROJECT NARRATIVE:

#### 1. Sample Receipt

The samples were received on 11/13/07 via \_\_GZA courier, \_x\_UPS, \_\_FEDEX, or \_\_ The temperature of the \_\_temperature blank $\sqrt{x}$ \_cooler air, was 4.7 degrees C. The temperature requirement for most analyses is above freezing to 6 degrees C. The samples were received intact for all requested analyses.

The chain of custody indicates that the samples, when required, were chemically preserved in accordance with the method they reference.

#### 2. EPA Method 8260 - VOCs

Attach QC 8260 11/14/07 S - Aqueous Attach QC 8260 11/15/07 S - Aqueous



#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor

Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:

11/13/2007

Date Reported:

11/20/2007

Work Order No.:

0711-00107

Data Authorized By:

NELAC certification, as indicated by the NELAC Lab ID Number, is per analyte. For a complete list of NELAC validated analytes, please contact the laboratory.

#### Abbreviations:

% R = % Recovery

DF = Dilution Factor

DFS = Dilution Factor Solids

CF = Calculation Factor

DO = Diluted Out

#### Method Key:

Method 8260: The current version of the method is 8260B. Method 8021: The current version of the method is 8021B. Method 8270: The current version of the method is 8270C. Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per method and are reported at the end of the analytical report if assigned on the Chain of Custody.





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:

Date Reported:

11/13/2007 11/20/2007

Work Order No.: 0711-00107

Sample ID: Sample Date: SP - 1

11/12/2007

Sample No.: 001

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	11/14/2007
Dichlorodifluoromethane	EPA 8260	<20	ug/L	MQS	11/14/2007
Chloromethane	EPA 8260	<20	ug/L	MQS	11/14/2007
Vinyl Chloride	EPA 8260	<10	ug/L	MQS	11/14/2007
Bromomethane	EPA 8260	<20	ug/L	MQS	11/14/2007
Chloroethane	EPA 8260	<10	ug/L	MQS	11/14/2007
Trichlorofluoromethane	EPA 8260	<20	ug/L	MQS	11/14/2007
Diethylether	EPA 8260	<50	ug/L	MQS	11/14/2007
Acetone	EPA 8260	<250	ug/L	MQS	11/14/2007
1,1-Dichloroethene	EPA 8260	<10	ug/L	MQS	11/14/2007
Dichloromethane	EPA 8260	<20	ug/L	MQS	11/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<10	ug/L	MQS	11/14/2007
trans-1,2-Dichloroethene	EPA 8260	<10	ug/L	MQS	11/14/2007
1,1-Dichloroethane	EPA 8260	<10	ug/L	MQS	11/14/2007
2-Butanone	EPA 8260	<250	ug/L	MQS	11/14/2007
2,2-Dichloropropane	EPA 8260	<10	ug/L	MQS	11/14/2007
cis-1,2-Dichloroethene	EPA 8260	<10	ug/L	MQS	11/14/2007
Chloroform	EPA 8260	<10	ug/L	MQS	11/14/2007
Bromochloromethane	EPA 8260	<10	ug/L	MQS	11/14/2007
Tetrahydrofuran	EPA 8260	<100	ug/L	MQS	11/14/2007
1,1,1-Trichloroethane	EPA 8260	<10	ug/L	MQS	11/14/2007
1,1-Dichloropropene	EPA 8260	<10	ug/L	MQS	11/14/2007
Carbon Tetrachloride	EPA 8260	<10	ug/L	MQS	11/14/2007
1,2-Dichloroethane	EPA 8260	<10	ug/L	MQS	11/14/2007
Benzene	EPA 8260	970	ug/L	MQS	11/14/2007
Trichloroethene	EPA 8260	<10	ug/L	MQS	11/14/2007
1,2-Dichloropropane	EPA 8260	<10	ug/L	MQS	11/14/2007
Bromodichloromethane	EPA 8260	<10	ug/L	MQS	11/14/2007
Dibromomethane	EPA 8260	<10	ug/L	MQS	11/14/2007
4-Methyl-2-Pentanone	EPA 8260	<250	ug/L	MQS	11/14/2007
cis-1,3-Dichloropropene	EPA 8260	<10	ug/L	MQS	11/14/2007
Toluene	EPA 8260	<10	ug/L	MQS	11/14/2007
trans-1,3-Dichloropropene	EPA 8260	<20	ug/L	MQS	11/14/2007
1,1,2-Trichloroethane	EPA 8260	<10	ug/L	MQS	11/14/2007
2-Hexanone	EPA 8260	<250	ug/L	MQS	11/14/2007
1,3-Dichloropropane	EPA 8260	<10	ug/L	MQS	11/14/2007
Tetrachloroethene	EPA 8260	<10	ug/L	MQS	11/14/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received: Date Reported: 11/13/2007 11/20/2007

Work Order No.: 0711-00107

Sample No.:

001

Sample ID:

SP - 1

Sample Date:

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<10	ug/L	MQS	11/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<20	ug/L	MQS	11/14/2007
Chlorobenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<10	ug/L	MQS	11/14/2007
Ethylbenzene	EPA 8260	11	ug/L	MQS	11/14/2007
m&p-Xylene	EPA 8260	36	ug/L	MQS	11/14/2007
o-Xylene	EPA 8260	15	ug/L	MQS	11/14/2007
Styrene	EPA 8260	<10	ug/L	MQS	11/14/2007
Bromoform	EPA 8260	<20	ug/L	MQS	11/14/2007
Isopropylbenzene	EPA 8260	34	ug/L	MQS	11/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<10	ug/L	MQS	11/14/2007
1,2,3-Trichloropropane	EPA 8260	<10	ug/L	MQS	11/14/2007
Bromobenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
N-Propylbenzene	EPA 8260	75	ug/L	MQS	11/14/2007
2-Chlorotoluene	EPA 8260	<10	ug/L	MQS	11/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
4-Chlorotoluene	EPA 8260	<10	ug/L	MQS	11/14/2007
tert-Butylbenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
sec-Butylbenzene	EPA 8260	11	ug/L	MQS	11/14/2007
p-Isopropyltoluene	EPA 8260	<10	ug/L	MQS	11/14/2007
1,3-Dichlorobenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
1,4-Dichlorobenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
n-Butylbenzene	EPA 8260	11	ug/L	MQS	11/14/2007
1,2-Dichlorobenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<50	ug/L	MQS	11/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
Hexachlorobutadiene	EPA 8260	<10	ug/L	MQS	11/14/2007
Naphthalene	EPA 8260	<20	ug/L	MQS	11/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<10	ug/L	MQS	11/14/2007
Surrogates:	EPA 8260		ū		
***1,2-Dichloroethane-D4	EPA 8260	108	% R	MQS	11/14/2007
***Toluene-D8	EPA 8260	119	% R	MQS	11/14/2007
***4-Bromofluorobenzene	EPA 8260	94.9	% R	MQS	11/14/2007
Preparation	EPA 5030B	10	CF	MQS	11/14/2007





#### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:
Date Reported:

11/13/2007 11/20/2007

Work Order No.: 0711-00107

Sample ID:

SP - 9

Sample Date:

11/12/2007

Sample No.: 002

Test Performed	Method	Results	Units	Tech	Analysis Date
VOLATILE ORGANICS	EPA 8260			MQS	11/14/2007
Dichlorodifluoromethane	EPA 8260	<5.0	ug/L	MQS	11/14/2007
Chloromethane	EPA 8260	<5.0	ug/L	MQS	11/14/2007
Vinyl Chloride	EPA 8260	6.7	ug/L	MQS	11/14/2007
Bromomethane	EPA 8260	<5.0	ug/L	MQS	11/14/2007
Chloroethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Trichlorofluoromethane	EPA 8260	<5.0	ug/L	MQS	11/14/2007
Diethylether	EPA 8260	<13	ug/L	MQS	11/14/2007
Acetone	EPA 8260	<63	ug/L	MQS	11/14/2007
1,1-Dichloroethene	EPA 8260	5.2	ug/L	MQS	11/14/2007
Dichloromethane	EPA 8260	<5.0	ug/L	MQS	11/14/2007
Methyl-Tert-Butyl-Ether	EPA 8260	<2.5	ug/L	MQS	11/14/2007
trans-1,2-Dichloroethene	EPA 8260	4.8	ug/L	MQS	11/14/2007
1,1-Dichloroethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
2-Butanone	EPA 8260	<63	ug/L	MQS	11/14/2007
2,2-Dichloropropane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
cis-1,2-Dichloroethene	EPA 8260	380	ug/L	MQS	11/14/2007
Chloroform	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Bromochloromethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Tetrahydrofuran	EPA 8260	<25	ug/L	MQS	11/14/2007
1,1,1-Trichloroethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,1-Dichloropropene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Carbon Tetrachloride	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,2-Dichloroethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Benzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Trichloroethene	EPA 8260	2100	ug/L	MQS	11/16/2007
1,2-Dichloropropane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Bromodichloromethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Dibromomethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
4-Methyl-2-Pentanone	EPA 8260	<63	ug/L	MQS	11/14/2007
cis-1,3-Dichloropropene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Toluene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
trans-1,3-Dichloropropene	EPA 8260	<5.0	ug/L	MQS	11/14/2007
1,1,2-Trichloroethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
2-Hexanone	EPA 8260	<63	ug/L	MQS	11/14/2007
1,3-Dichloropropane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Tetrachloroethene	EPA 8260	20000	ug/L	MQS	11/16/2007





### GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748 (781) 278-4700

### ANALYTICAL REPORT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203-1415 Michelle Wittman

Project Name.:

500 Seneca St.-Former New Era

Project No.:

21.0056365.00

Date Received:

11/13/2007

Date Reported:

11/20/2007

Work Order No.: 0711-00107

Sample ID:

**SP - 9** 

Sample No.: 002

Sample Date:

11/12/2007

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromochloromethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,2-Dibromoethane (EDB)	EPA 8260	<5.0	ug/L	MQS	11/14/2007
Chlorobenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,1,1,2-Tetrachloroethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Ethylbenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
m&p-Xylene	EPA 8260	<5.0	ug/L	MQS	11/14/2007
o-Xylene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Styrene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Bromoform	EPA 8260	<5.0	ug/L	MQS	11/14/2007
Isopropylbenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,1,2,2-Tetrachloroethane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,2,3-Trichloropropane	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Bromobenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
N-Propylbenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
2-Chlorotoluene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,3,5-Trimethylbenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
4-Chlorotoluene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
tert-Butylbenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,2,4-Trimethylbenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
sec-Butylbenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
p-Isopropyltoluene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,3-Dichlorobenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,4-Dichlorobenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
n-Butylbenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,2-Dichlorobenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
1,2-Dibromo-3-Chloropropane	EPA 8260	<13	ug/L	MQS	11/14/2007
1,2,4-Trichlorobenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Hexachlorobutadiene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Naphthalene	EPA 8260	<5.0	ug/L	MQS	11/14/2007
1,2,3-Trichlorobenzene	EPA 8260	<2.5	ug/L	MQS	11/14/2007
Surrogates:	EPA 8260		. 3		
***1,2-Dichloroethane-D4	EPA 8260	96.5	% R	MQS	11/14/2007
***Toluene-D8	EPA 8260	92.3	% R	MQS	11/14/2007
***4-Bromofluorobenzene	EPA 8260	97.8	% R	MQS	11/14/2007
Preparation	EPA 5030B	2.5	CF	MQS	11/14/2007

#### GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

### Method Blank

### Laboratory Control Sample

Date Analyzed:	11/14/07		Date Analyzed:	11/14/07		
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict
dichlorodifluoromethane	< 1.0	< 1.0	dichlorodifluoromethane	156	70-130	out
chloromethane	< 1.0	< 1.0	chloromethane	132	70-130	out
vinyl chloride	< 0.5	< 0.5	vinyl chloride	122	70-130	ok
bromomethane	< 1.0	< 1.0	bromomethane	105	70-130	ok
chloroethane	< 0.5	< 0.5	chloroethane	113	70-130	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	139	70-130	out
diethyl ether	< 2.5	< 2.5	diethyl ether	107	70-130	ok
acrolein	< 13	< 13	acrolein	134	70-130	out ok
acetone	< 13	< 13 < 0.5	acetone	115 110	70-130 70-130	ok ok
1,1-dichloroethene	< 0.5 < 1.0	< 0.5 < 1.0	1,1-dichloroethene FREON-113	105	70-130	ok
FREON-113	< 0.5	< 0.5	iodomethane	102	70-130	ok
iodomethane carbon disulfide	< 5.0	< 5.0	carbon disulfide	107	70-130	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	102	70-130	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	123	70-130	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	126	70-130	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	111	70-130	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	108	70-130	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	117	70-130	ok
di-isopropyl ether (DIPE)	< 1.0	< 1.0	di-isopropyl ether (DIPE)	118	70-130	ok
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0	ethyl tert-butyl ether (EtBE)	121	70-130	ok
vinyl acetate	< 13	< 13	vinyl acetate	119	70-130	ok
2-butanone	< 13	< 13	2-butanone	101	70-130	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	121	70-130	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	104	70-130	ok
chloroform	< 0.5	< 0.5	chioroform	107	70-130	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	99.8	70-130	ok
tetrahydrafuran	< 5.0	< 5.0	tetrahydrafuran	124	70-130	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	119	70-130	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	107	70-130	ok
carbon tetrachloride	< 0.5	< 0.5	carbon tetrachloride	118	70-130	ok
1,2-dichloroethane	< 0.5	< 0.5	1,2-dichloroethane	119	70-130	ok
benzene	< 0.5	< 0.5	benzene	94.7	70-130	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	93.7	70-130	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	105	70-130	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	114	70-130	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	110	70-130	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	119	70-130	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	105	70-130	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	123	70-130	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	116	70-130	ok
toluene	< 0.5	< 0.5	toluene	112	70-130	ok
trans-1,3-dichloropropene	< 1.0	< 1.0	trans-1,3-dichloropropene	116	70-130	ok
1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	104	70-130	ok
2-hexanone	< 13	< 13	2-hexanone	115	70-130	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	102 97.0	70-130 70-130	ok ok
tetrachloroethene	< 0.5	< 0.5 < 0.5	tetrachloroethene	100	70-130	ok
dibromochloromethane	< 0.5 < 1.0	< 0.5 < 1.0	dibromochloromethane 1,2-dibromoethane (EDB)	108	70-130	ok
1,2-dibromoethane (EDB)	< 0.5	< 0.5	chlorobenzene	104	70-130	ok
chlorobenzene 1,1,1,2-tetrachloroethane	< 0.5	< 0.5	1,1,1,2-tetrachloroethane	103	70-130	ok
ethylbenzene	< 0.5	< 0.5	ethylbenzene	105	70-130	ok
1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1.1.2.2-tetrachloroethane	104	70-130	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	107	70-130	ok
o-xylene	< 0.5	< 0.5	o-xylene	108	70-130	ok
styrene	< 0.5	< 0.5	styrene	105	70-130	ok
bromoform	< 1.0	< 1.0	bromoform	107	70-130	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	108	70-130	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	112	70-130	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	96.4	70-130	ok
n-propylbenzene	< 0.5	< 0.5	n-propylbenzene	107	70-130	ok
2-chlorotoluene	< 0.5	< 0.5	2-chlorotoluene	111	70-130	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	111	70-130	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	116	70-130	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	110	70-130	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	109	70-130	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	115	70-130	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	115	70-130	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	116	70-130	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	108	70-130	ok
1,4-dichlorobenzene	< 0.5	< 0.5	1,4-dichlorobenzene	105	70-130	ok
n-butylbenzene	< 0.5	< 0.5	n-butylbenzene	116	70-130	ok
1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	104	70-130	ok
1,2-dibromo-3-chloropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	118	70-130	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	107	70-130	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	107	70-130	ok
naphthalene	< 1.0	< 1.0	naphthalene	106	70-130	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	105	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits	Surrogates:	Recovery (%)	<b>Acceptance Limits</b>	Verdict
DIBROMOFLUOROMETHANE	104	70-130	DIBROMOFLUOROMETHANE	104	70-130	ok
1,2-DICHLOROETHANE-D4	90.7	70-130	1,2-DICHLOROETHANE-D4	104	70-130	ok
TOLUENE-D8	105	70-130	TOLUENE-D8	108	70-130	ok
4-BROMOFLUOROBENZENE	93.4	70-130	4-BROMOFLUOROBENZENE	94.2	70-130	ok
1,2-DICHLOROBENZENE-D4	97.6	70-130	1,2-DICHLOROBENZENE-D4	99.9	70-130	ok

#### GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

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### **Laboratory Control Sample**

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Date Analyzed:	11/15/07		Date Analyzed:	11/15/07		
Volatile Organics	Conc. ug/L	Acceptance Limit	Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	
dichlorodifluoromethane	< 1.0	< 1.0 < 1.0	dichlorodifiuoromethane	139 117	70-130 70-130	out ok
chloromethane vinyt chloride	< 1.0 < 0.5	< 0.5	chloromethane vinyl chloride	107	70-130	ok
bromomethane	< 1.0	< 1.0	bromomethane	93.0	70-130	ok
chloroethane	< 0.5	< 0.5	chloroethane	99.8	70-130	ok
trichlorofluoromethane	< 1.0	< 1.0	trichlorofluoromethane	127	70-130	ok
diethyl ether	< 2.5	< 2.5	diethyl ether	96.7	70-130	ok
acrolein	< 13	< 13	acrolein	131	70-130	out
acetone	< 13	< 13	acetone	113	70-130	ok
1,1-dichloroethene	< 0.5	< 0.5	1,1-dichloroethene	102	70-130 70-130	ok
FREON-113 iodomethane	< 1.0 < 0.5	< 1.0 < 0.5	FREON-113 iodomethane	96.6 93.6	70-130 70-130	ok ok
carbon disulfide	< 5.0	< 5.0	carbon disulfide	96.2	70-130	ok
dichloromethane	< 1.0	< 1.0	dichloromethane	94.1	70-130	ok
tert-butyl alcohol (TBA)	< 13	< 13	tert-butyl alcohol (TBA)	116	70-130	ok
acrylonitrile	< 0.5	< 0.5	acrylonitrile	117	70-130	ok
methyl-tert-butyl-ether	< 0.5	< 0.5	methyl-tert-butyl-ether	105	70-130	ok
trans-1,2-dichloroethene	< 0.5	< 0.5	trans-1,2-dichloroethene	99.8	70-130	ok
1,1-dichloroethane	< 0.5	< 0.5	1,1-dichloroethane	108	70-130	ok
di-isopropyl ether (DIPE)	< 1.0 < 1.0	< 1.0 < 1.0	di-isopropyl ether (DIPE)	108 110	70-130 70-130	ok ok
ethyl tert-butyl ether (EtBE) vinyl acetate	< 13	< 13	ethyl tert-butyl ether (EtBE) vinyl acetate	108	70-130	ok
2-butanone	< 13	< 13	2-butanone	91.3	70-130	ok
2,2-dichloropropane	< 0.5	< 0.5	2,2-dichloropropane	95.4	70-130	ok
cis-1,2-dichloroethene	< 0.5	< 0.5	cis-1,2-dichloroethene	96.9	70-130	ok
chloroform	< 0.5	< 0.5	chloroform	98.6	70-130	ok
bromochloromethane	< 0.5	< 0.5	bromochloromethane	93.4	70-130	ok
tetrahydrafuran	< 5.0	< 5.0	tetrahydrafuran	122	70-130	ok
1,1,1-trichloroethane	< 0.5	< 0.5	1,1,1-trichloroethane	111	70-130	ok
1,1-dichloropropene	< 0.5	< 0.5	1,1-dichloropropene	106	70-130	ok
carbon tetrachloride	< 0.5 < 0.5	< 0.5 < 0.5	carbon tetrachloride 1.2-dichloroethane	116 121	70-130 70-130	ok ok
1,2-dichloroethane benzene	< 0.5	< 0.5 < 0.5	benzene	98.0	70-130	ok
tert-amyl methyl ether (TAME)	< 1.0	< 1.0	tert-amyl methyl ether (TAME)	98.7	70-130	ok
trichloroethene	< 0.5	< 0.5	trichloroethene	91.5	70-130	ok
1,2-dichloropropane	< 0.5	< 0.5	1,2-dichloropropane	97.2	70-130	ok
bromodichloromethane	< 0.5	< 0.5	bromodichloromethane	98.2	70-130	ok
1,4-Dioxane	< 50	< 50	1,4-Dioxane	97.1	70-130	ok
dibromomethane	< 0.5	< 0.5	dibromomethane	90.0	70-130	ok
4-methyl-2-pentanone	< 13	< 13	4-methyl-2-pentanone	111	70-130	ok
cis-1,3-dichloropropene	< 0.5	< 0.5	cis-1,3-dichloropropene	104	70-130	ok
toluene	< 0.5 < 1.0	< 0.5 < 1.0	toluene trans-1,3-dichloropropene	103 103	70-130 70-130	ok ok
trans-1,3-dichloropropene 1,1,2-trichloroethane	< 0.5	< 0.5	1,1,2-trichloroethane	104	70-130	ok
2-hexanone	< 13	< 13	2-hexanone	115	70-130	ok
1,3-dichloropropane	< 0.5	< 0.5	1,3-dichloropropane	104	70-130	ok
tetrachloroethene	< 0.5	< 0.5	tetrachloroethene	97.8	70-130	ok
dibromochloromethane	< 0.5	< 0.5	dibromochloromethane	102	70-130	ok
1,2-dibromoethane (EDB)	< 1.0	< 1.0	1,2-dibromoethane (EDB)	111	70-130	ok
chlorobenzene	< 0.5	< 0.5	chlorobenzene	107	70-130	ok
1,1,1,2-tetrachloroethane	< 0.5 < 0.5	< 0.5 < 0.5	1,1,1,2-tetrachloroethane ethylbenzene	105 107	70-130 70-130	ok ok
ethylbenzene 1,1,2,2-tetrachloroethane	< 0.5	< 0.5	1,1,2,2-tetrachloroethane	105	70-130	ok
m&p-xylene	< 1.0	< 1.0	m&p-xylene	108	70-130	ok
o-xylene	< 0.5	< 0.5	o-xylene	109	70-130	ok
styrene	< 0.5	< 0.5	styrene	107	70-130	ok
bromoform	< 1.0	< 1.0	bromoform	108	70-130	ok
isopropylbenzene	< 0.5	< 0.5	isopropylbenzene	112	70-130	ok
1,2,3-trichloropropane	< 0.5	< 0.5	1,2,3-trichloropropane	109	70-130	ok
bromobenzene	< 0.5	< 0.5	bromobenzene	98.1 109	70-130 70-130	ok ok
n-propylbenzene 2-chlorotoluene	< 0.5 < 0.5	< 0.5 < 0.5	п-propylbenzene 2-chlorotoluene	109	70-130	ok
1,3,5-trimethylbenzene	< 0.5	< 0.5	1,3,5-trimethylbenzene	113	70-130	ok
trans-1,4-dichloro-2-butene	< 1.0	< 1.0	trans-1,4-dichloro-2-butene	112	70-130	ok
4-chlorotoluene	< 0.5	< 0.5	4-chlorotoluene	110	70-130	ok
tert-butyl-benzene	< 0.5	< 0.5	tert-butyl-benzene	109	70-130	ok
1,2,4-trimethylbenzene	< 0.5	< 0.5	1,2,4-trimethylbenzene	113	70-130	ok
sec-butyl-benzene	< 0.5	< 0.5	sec-butyl-benzene	111	70-130	ok
p-isopropyltoluene	< 0.5	< 0.5	p-isopropyltoluene	111	70-130	ok
1,3-dichlorobenzene	< 0.5	< 0.5	1,3-dichlorobenzene	102	70-130 70-130	ok
1,4-dichlorobenzene	< 0.5 < 0.5	< 0.5 < 0.5	1,4-dichlorobenzene n-butylbenzene	99.8 112	70-130 70-130	ok ok
n-butylbenzene 1,2-dichlorobenzene	< 0.5	< 0.5	1,2-dichlorobenzene	101	70-130	ok
1,2-dibromo-3-chioropropane	< 2.5	< 2.5	1,2-dibromo-3-chloropropane	118	70-130	ok
1,2,4-trichlorobenzene	< 0.5	< 0.5	1,2,4-trichlorobenzene	107	70-130	ok
hexachlorobutadiene	< 0.5	< 0.5	hexachlorobutadiene	106	70-130	ok
naphthalene	< 1.0	< 1.0	naphthalene	106	70-130	ok
1,2,3-trichlorobenzene	< 0.5	< 0.5	1,2,3-trichlorobenzene	108	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates: DIBROMOFLUOROMETHANE	Recovery (%) 124	Acceptance Limits 70-130	Surrogates: DIBROMOFLUOROMETHANE	97.9	Acceptance Limits 70-130 70-130	ok
1,2-DICHLOROETHANE-D4	108	70-130	1,2-DICHLOROETHANE-D4	108	70-130	ok
TOLUENE-D8	122	70-130	TOLUENE-D8	99.7	70-130	ok
4-BROMOFLUOROBENZENE	93.3	70-130	4-BROMOFLUOROBENZENE	98.0	70-130	ok
1,2-DICHLOROBENZENE-D4	95.8	70-130	1,2-DICHLOROBENZENE-D4	98.8	70-130	ok



January 28, 2008

New Era Cap Company, Inc. c/o Michael C. Murphy, Esq. Phillips Lytle LLP 3400 HSBC Center Buffalo, New York 14203

Re: Summary Report; USTs Removal and Excavation Report

500 Seneca Street, Buffalo, New York

NYSDEC Spill # 0751217

Dear Mr. Murphy:

In accordance with an agreement between New Era Cap Company, Inc. ("Client") and Hazard Evaluations, Inc. (HEI), HEI completed activities at the above-referenced (subject) site related to the closure of two underground gasoline storage tanks (USTs; one 2,000-gallon and one 500-gallon), the management of fluids related to the UST removals, and the remediation of impacted soil encountered. A summary of the remedial activities completed at the subject site is provided below.

#### **UST Removals**

Prior to the initiation of any field activities, HEI: 1) Requested the locations of underground utilities in the vicinity of the subject site; 2) Notified the New York State Department of Environmental Conservation (NYSDEC) regarding these UST removals; and 3) Obtained a proper building permit from the City of Buffalo. Subsequently, on December 13, 2007, HEI retained Frank's Vacuum Truck Services to remove the remaining fluids in the existing USTs. A total of 1,650 gallons of non-hazardous petroleum/water mixture was removed from the USTs and transported offsite to an appropriate facility for disposal (Refer to Attachment 1; Waste Disposal Receipts).

A tracked excavator was then used to remove soil from above and around the USTs to allow their removal. Clean overburden material was stockpiled on-site for later use as backfill after confirmatory sampling/analysis). HEI observed that soil in the immediate vicinity of the 500-gallon UST exhibited petroleum odors and staining. As a result, HEI reported the apparent petroleum release to the NYSDEC, and Spill # 0751217 was issued to the subject site. Readily accessible, visually impacted soil was removed from the 500-gallon UST excavation and staged on polyethylene sheeting in an on-site location within the fenced work area. Once the soil/fill material in the immediate area of the 500-gallon UST was removed, apparent native soils consisting of very dense clay and silt were encountered at a depth of approximately eight feet below grade (bg). The extent of the 500-gallon UST excavation to the East and North was limited due to the presence of the facility structure and the adjacent

street (Myrtle Avenue), respectively. It should be noted that Mr. John Otto of the NYSDEC visited the site and observed the 500-gallon UST excavation prior to backfilling.

Please Note: No soil staining, petroleum odors or other visible evidence of impacted soil was observed in the immediate vicinity of the 2000-gallon UST. Also, no groundwater was observed in either UST excavation.

Upon the removal of the USTs from their excavations, they were placed on polyethylene sheeting. The 2,000-gallon UST was observed to be in excellent condition, while the 500-gallon tank exhibited several holes in its surface, apparently due to corrosion. The atmospheres in both tanks were rendered safe through the use of Nitrogen gas, and the tanks were cut open for cleaning. Residues from the interior surfaces of the USTs were evacuated using the vacuum truck. The cleaned USTs and associated piping were removed from the site and transported to a scrap yard for recycling. The 'clean tank' certificate is presented in Attachment 1.

A total of seven subsurface soil post-excavation verification samples were collected for laboratory analysis, including one from each of the sidewalls of the 500-gallon UST excavation, one from the floor of the 500-gallon UST excavation, one from the floor of the 2,000-gallon UST excavation and one from the pump island and piping area. The soil samples were placed in sampling bags and screened for the presence of VOCs utilizing a photoionization detector (PID). The East and North wall samples exhibited elevated PID readings (22,323 ppb and 1,639 ppb, respectively); however, as noted above, further soil excavation could not be performed due to the presence of the on-site building and the adjacent street. Each of these soil samples was submitted to a NYSDEC-certified laboratory for analysis using USEPA Method 8260 (VOCs; STARS list). Following the post-excavation soil sampling, the excavation was backfilled with clean fill material from an off-site source, which was compacted using the excavator bucket. Attachment 2 presents HEI's field notes.

### Impacted Soil Disposal

A composite sample of the stockpiled impacted soil removed from the 500-gallon tank excavation was collected and submitted for laboratory analysis for Toxicity Characteristic Leaching Procedure (TCLP) Benzene, TCLP Lead, Total Petroleum Hydrocarbons (TPH), pH and Ignitability, as required by the disposal facility. This stockpiled contaminated soil was approved for disposal at the Tonawanda Landfill by Ensol, Inc. (NYSDEC Facility #15S29). On January 9, 2008, this stockpiled soil was loaded onto dump trucks and transported to the landfill for disposal. A total of 44.58 tons of impacted soil was removed from the site (Attachment 1).

### Post-Excavation Verification Sampling Results

The post-excavation soil sample laboratory analytical results (Table 1, Attachment 3) revealed the presence of target VOCs parameters at concentrations exceeding method detection limits (MDLs) in five of the seven samples submitted; however, only the East Wall and Excavation Floor samples for the 500-gallon UST

exhibited parameters at concentrations exceeding the applicable NYSDEC Recommended Soil Cleanup Objectives (RSCOs) as published in Technical and Administrative Guidance Memorandum (TAGM) #4046. It should be noted that the Excavation Floor sample had only one parameter (Benzene) exceeding its applicable RSCO, and that sample consisted of native clay, exhibited a relatively low PID headspace screening result (56 ppm), and was observed by Mr. John Otto, the NYSDEC representative, who indicated on-site that the extent of excavation appeared to be adequate.

No elevated concentrations of target VOCs above MDLs were detected in the soil sample collected from the floor of the 2,000-gallon UST excavation. The Laboratory Analytical Report is presented in Attachment 4.

### CONCLUSIONS

Based on the remedial activities performed and the post-excavation verification soil sample laboratory analytical results, HEI suggests that this site is eligible to be granted an "inactive" status on the NYSDEC Spills Database with no further remedial activities being required at this time. Field observations and post-excavation sampling results indicate that there were no petroleum releases from the 2,000-gallon UST. Although the post-excavation samples indicate that residual VOCs contamination remains within the soil profile in both the eastern wall and floor of the 500-gallon UST excavation, HEI does not recommend additional remedial action. Additional excavation of soils in the eastern wall of the 500-gallon UST excavation would be impracticable due to the potential impact on the stability of the foundation of the building at the subject site, which is immediately adjacent to this excavation. Moreover, based on the dense nature of the clay and silt that comprises the soil profile encountered on the floor of the 500-gallon UST excavation, it appears that there is a low probability for the residual contamination to impact the underlying groundwater table.

The information presented above should adequately summarize HEI's remedial efforts at the subject site. Upon written Client authorization, HEI will prepare both a copy of this report and a cover letter requesting site inactivation which will be submitted to the NYSDEC for review. If you have any questions regarding the content of this letter report or its attachments, please contact me directly.

Very truly yours,

HAZARD EVALUATIONS, INC.

C. Mark Hanna, CHMM

President

Attachments

25901\NewEra\500Seneca USTremed Rpt 012808

# Attachment 1 Waste Disposal Receipts

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HAZARD EVALUATIONS, INC. 3836 N. Buffalo Road

3836 N. Buffalo Road Orchard Park, New York 14127 (716) 667-3130; (716) 667-3156 FAX

### **TANK CLEAN CERTIFICATE**

To whom it may concern: the following tank(s) have been cleaned per all applicable local, state and federal regulations (NYSDEC, USEPA and OSHA).

Date: /2/13/07

	Tank Size (gal)	Туре	Product	UST/AST
1.	500	Steel	Gasoline	1157
2.	2,000	Steel	Gasoline Gasoline	1157
3.				
4.				
5.				
6.				
7.				
8.				
9.				

Owner's Name and Address:  New Ga Cap Company, Inc. 500 Seneca Street Buffala, M	Contractor's Name and Address: <u>Hazard Grawafich's Two</u> 3836 N. Buffalo Rd  Orchard Park, Nf 14127
HEI's Supervisor's signature:	Ama Sendent

## CARMEN M. PARISO, INC.

3649 RIVER ROAD TONAWANDA, NEW YORK 14150

OFFICE: (716) 875-6168 FAX: (716) 875-4121

SCALE: (716) 875-0902

**TANDEMS** 

TRI-AXLES

**DUMP TRAILERS** 

VARIETY OF PRODUCTS AVAILABLE FROM OUR STOCKPILES

CUSTOMER #	TICKET #P 81855
CUSTOMER NAME	DATE STATE
	DELIVERED
<b>JOB</b>	PICKED UP
SHIP TO	CUSTOMER P.O. #
- Landa	
TARE POUNDS HAU NET POUNDS TAX	
PRODUCT S	CODE
CUSTOMER SIGNATURE	
WEIGHMASTER: CARMEN M. PARISO N.Y.S. LICENSE #140123	WEIGHED BY
THUCKER'S SIGNATURE	
CUSTON	
	CUSTOMER NAME  JOB #  SHIP TO  GROSS POUNDS MATT TARE POUNDS HAU NET POUNDS TAX  TOTA  PRODUCT  CUSTOMER SIGNATURE  WEIGHMASTER: CARMEN M. PARISO N.Y.S. LICENSE #140123  TRUCK NO TRUCKING  TRUCKERS SIGNATURE

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## CARMEN M. PARISO, INC.

3649 RIVER ROAD TONAWANDA, NEW YORK 14150

OFFICE: (716) 875-6168 FAX: (716) 875-4121 SCALE: (716) 875-0902

**TANDEMS** 

THI-AXLES

**DUMP TRAILERS** 

VARIETY OF PRODUCTS AVAILABLE FROM OUR STOCKPILES

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À	NON-HAZARDOUS WASTE MANIFEST	1 Generator ID Number		2. Page 1 of	3. Emergency Respo	nse Phone	4. Waste	Tracking Nu	ımber		
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## Attachment 2 Field Notes

Date 12/13/07 Client Nestru Phillip 14/4	No. <u>15210</u>	Hazard Evaluations, Inc.
Client <u>New Phillips Lylfe</u> Subject <i>INST P.II</i>		3836 N. Buffalo Rd.
Weather	Temp.	Orchard Park, NY 14127 (716) 667-3130

## FIELD INVESTIGATION REPORT

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.3/18/05/heilogshts/reports/fieldbox

Date			No	15210
Client _	NIO EIR	- Phillips	Little	700.0
Subject	UST.		0	
Weather			Tem	p

Hazard Evaluations, Inc. 3836 N. Buffalo Rd. Orchard Park, NY 14127 (716) 667-3130

### FIELD INVESTIGATION REPORT

Soil- Screening Results
500 Gillon Tank Excustion Floor (1) 164 ppm
Excavità another Foot to 8 BG
500 Gallon Tark Excavator Floor (8') 55.90pm Schnitter.
500 Gallon Tark (North Wall) 983 ppm Stom HW.
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- ( M D 4 ( C = 1) 10)
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was and the east wall was bound by the Building.
Soil characterization and submitted.
Dil Character Tutton and Submitted.
Excavation and surposed the 2,000 Gallon tank. No contamination note. Collected composite stor sample for analysis. NOC seading of 1.4 ppm
contamination nota. Collected compos to stoop sample
to analysis. VOC reading of 1.4 pen
The tanks were phew or drike for cleaning the
00 Gallon tank had object to the half
The tanks were placed on plastic for cleaning. The DD Gallon tank had obvious holes in the bottom of tank along the ends. The zoon Gallon tank appeared to be in good condition. Prosed tanks with nitrogen and and opened and cleaned.
be in good condition Proced to he is
I wrened and claned.
yes we are of the second

Signature Shan Title A

Date <u>iz/i){o7</u> Client <u>No En - Pri/lips Lyt/le -</u> Subject <u>osī Pr//</u> Weather	No. <u>/SZ/0</u> Temp.	Hazard Evaluations, Inc. 3836 N. Buffalo Rd. Orchard Park, NY 14127 (716) 667-3130

## FIELD INVESTIGATION REPORT

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composel sangle from under the purp island and the
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3/18/05/heilogshts/reports/fieldbox

# Attachment 3 Analytical Summary Table

Table 1
Excavation Soil Sample Analytical Results; STARS Volatile Organics 500 Seneca Street, Buffalo, NY
December 13, 2007 Sampling Date

Parameter Benzene				500 Gal UST	Recommended
Benzene	N. Wall	S. Wall	E Wall	W.Wall	Soil Cleanup Objective
	28.1	*	11,700	# # # # # # # # # # # # # # # # # # #	
n-Bulylbenzene	80.3		408	*	40.000
Sec-Bulylbenzene	97/9		166		40.000
tert-Buty/benzene				· · · · · · · · · · · · · · · · · · ·	00000
Elhylbenzene	2.2				2000
n-Propylbenzene	28.7	*			
Sopropylbenzene	97.3	***	288	**	006.0
p-Isopropyltoluene	63,7	*	a,	4	40.000
Naphthalene	250	*	697		
Toldene	2	**	1.850	*	1 600
1,2,4-Trimethylbenzene	45.9		1.520	£4	200
1,3,5-Trimethylbenzene		***	485	44	2000
Xylenes	127	9.20	2,979	*	1,200
Methyl tert-butyl Ether	33.6	***	***	**	120
Total Target Analytes	1,638.5	9.20	22,323	27	<10.000

Table 1 (Continued)

Excavation Soil Sample Analytical Results; STARS Volatile Organics 500 Seneca Street, Buffalo, NY December 13, 2007 Sampling Date

Analytical	500 Gat, UST	2,000 Gal. UST	Pump Island &	Recommender
Parameter	Floor (8')	Floor	Piping Comp.	Soil Cleanup Objective
				(TAGM 4046)
Benzene	3,320		**************************************	99
n-Butylbenzene		***	漢	10,000
Sec Bulylbenzane	And the second s			10,000
lent-Butylbenzene			4	30.00
Ethylbenzene		***	*	
n-Propylbenzeine				
Isopropylbenzene	***		Sold from Hilbert Comment of the Com	Z S S S
p-isopropyitoluene	*	*		COOCE
Naphilhalene	***	*	*	0000
Koluene		*		
1,2,4-Trimethylbenzene	The second of the second secon			1000
1,3,5-Trimethylbenzene				
Xylenes			9.18	1200
Methyl tert∻butyl Ether				120
Calla protocal yes	3,320	· · · · · · · · · · · · · · · · · · ·	**	<10.000

 Results from USEPA Method 8260 for Volatiles; All results in ppb (ug/kg).
 NA = Not Applicable
 " means compound not detected above Method Detection Limit (MDL). Notes:

# Table 4 Laboratory Analytical Report



### Analytical Report Cover Page

For Lab Project # 01 - 4598

The reported results relate only to the samples as they have been received by the laboratory.

Any noncompliant QC parameters having impact on the data are flagged or documented on the final report.

All soil or solid samples have been reported on a dry weight basis, unless qualified "reported as received".

This page is part of a multipage document. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of frequently used data flags and their meaning:

"ND" = analyzed for but not detected.

"E" = Result has been estimated, calibration limit exceeded.

"D" = Duplicate results outside QC limits. May indicate a non-homogenous matrix.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

This report contains a total of  $\frac{1}{2}$  pages.



### 179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client:

Hazard Evaluations, Inc.

Lab Project No.:

07-4598

Client Job Site:

500 Seneca

Sample Type:

Soil

Client Job No.:

15210

Method:

SW846 9045C

Date(s) Sampled: Date Received: 12/13/2007 12/17/2007

Date Analyzed:

12/17/2007

### Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
15143	N/A	Soil Pile Comp.	8.59
i men bala. Babah 1 Babah 1			

ELAP ID No.: 10958

Comments:

Approved By:

Bruce Hogeesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional sample information, including compliance with sample condition requirments upon receipt.

File ID:074598.XLS



### 179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

ient:	

Hazard Evaluations, Inc.

Lab Project No.:

07-4598

Client Job Site:

500 Seneca

Sample Type:

Soil

Client Job No.:

15210

Method:

SW846 1010

Date(s) Sampled: Date Received:

12/13/2007 12/17/2007

Date Analyzed:

12/17/2007

### **Laboratory Report for Flashpoint Analysis**

Lab Sample No.	Field ID No.	Field Location	Flashpoint Results (°C)
15143	N/A	Soil Pile Comp.	>70.0

ELAP ID No.: 10958

Comments:

Approved By:



### 179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client:

Hazard Evaluations, Inc.

Lab Project No.:

07-4598

**Client Job Site:** 

500 Seneca

Sample Type:

**TCLP Extract** 

Client Job No.: 15210 Date Sampled:

Analytical Method: EPA 6010 Date Sampled: 12/13/2007

Date Received:

12/17/2007

Date Analyzed:

12/19/2007

### Laboratory Report for TCLP Lead Analysis

15143 N/A Soil Pile Comp. <0.100 5.0	Lab ID No.	Field ID No.	Field Location	Result (mg/L)	Regulatory Limit (mg/L)
	<u> </u>				
	15143	N/A	Soil Pile Comp.	<0.100	5.0

ELAP ID No.: 10958

Comments:

Approved By:

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional sample information, including compliance with sample condition requirements upon receipt.

File ID:074598.XLS

ENVIRONMENTAL SERVICES, INC. ) Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### PHC Analysis Report for Soils/Solids/Sludges

Client: Hazard Evaluations, Inc

Client Job Site:

500 Seneca

Lab Project Number: 07-4598

Lab Sample Number: 15143

Client Job Number: 15210

. ಕರ್ನ ೧ನಕ

Date Sampled:

12/13/2007

Field Location: Field ID Number:

Soil Pile Comp N/A

Date Received:

12/17/2007

Sample Type:

N/A Soil

Date Analyzed:

12/21/2007

PHC Classification

Medium Weight PHC as:

Kerosene

50,800

Results in ug / Kg

ELAP Number 10958

Method: NYSDOH 310.13

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram PHC = Petroleum Hydrocarbon

Signature:

### Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Hazard Evaluations, Inc.

Client Job Site:

500 Seneca

Lab Project Number: 07-4598

Lab Sample Number: 15144

Client Job Number:

15210

Date Sampled:

12/13/2007

Field Location: Field ID Number:

500 Gallon Tank (North Wall) N/A

Date Received:

12/17/2007

Sample Type:

Soil

Date Analyzed:

12/21/2007

 Aromatics	Results in ug / Kg
 Benzene	28.1
n-Butylbenzene	80.3
sec-Butylbenzene	64.6
tert-Butylbenzene	ND< 30.1
Ethylbenzene	273
n-Propylbenzene	237
Isopropylbenzene	97.3
p-Isopropyltoluene	63.7
Naphthalene	534
Toluene	12.3
1,2,4-Trimethylbenzene	45.9
1,3,5-Trimethylbenzene	41.7
m,p-Xylene	127
o-Xylene	33.6
Miscellaneous	
Methyl tert-butyl Ether	ND< 12.0

ELAP Number 10958

Method: EPA 8260B

Data File: V52837.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature:

ENVIRONMENTAL SERVICES, INC. 3 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Hazard Evaluations, Inc.

Client Job Site:

500 Seneca

Lab Project Number: 07-4598

Lab Sample Number: 15145

Client Job Number: Field Location:

15210 500 Gallon Tank (South Wall)

Date Sampled:

12/13/2007

Field ID Number:

N/A

Date Received:

12/17/2007

Sample Type:

Soil

Date Analyzed:

12/21/2007

 Aromatics	Results in ug / Kg
Benzene	ND< 8.32
n-Butylbenzene	ND< 41.6
sec-Butylbenzene	ND< 8.32
tert-Butylbenzene	ND< 20.8
Ethylbenzene	ND< 8.32
n-Propylbenzene	ND< 8.32
Isopropylbenzene	ND< 41.6
p-Isopropyltoluene	ND< 41.6
Naphthalene	ND< 20.8
Toluene	ND< 8.32
1,2,4-Trimethylbenzene	ND< 8.32
1,3,5-Trimethylbenzene	ND< 8.32
m,p-Xylene	9.20
o-Xylene	ND< 8.32
Miscellaneous	
Methyl tert-butyl Ether	ND< 8.32

ELAP Number 10958

Method: EPA 8260B

Data File: V52838.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature:

ENVIRONMENTAL SERVICES. INC. 2 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Hazard Evaluations, Inc.

Client Job Site:

500 Seneca

Lab Project Number: 07-4598

Lab Sample Number: 15146

Client Job Number: 15210

Date Sampled:

12/13/2007

Field Location: Field ID Number: 500 Gallon Tank (West Wall)

**Date Received:** 

12/17/2007

Sample Type:

Soil

Date Analyzed:

12/21/2007

Aromatics	Results in ug / Kg
Benzene	ND< 11.2
n-Butylbenzene	ND< 56.1
sec-Butylbenzene	ND< 11.2
tert-Butylbenzene	ND< 28.1
Ethylbenzene	ND< 11.2
n-Propylbenzene	ND< 11.2
Isopropylbenzene	ND< 56.1
p-Isopropyltoluene	ND< 56.1
Naphthatene	ND< 28.1
Toluene	ND< 11.2
1,2,4-Trimethylbenzene	ND< 11.2
1,3,5-Trimethylbenzene	ND< 11.2
m,p-Xylene	ND< 11.2
o-Xylene	ND< 11.2
Miscellaneous	
Methyl tert-butyl Ether	ND< 11.2

ELAP Number 10958

Method: EPA 8260B

Data File: V52839.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature:

### Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Hazard Evaluations, Inc.

**Client Job Site:** 

500 Seneca

Lab Project Number: 07-4598

Lab Sample Number: 15147

Client Job Number:

Field Location:

15210 500 Gallon Tank (East Wall)

Date Sampled:

12/13/2007

Field ID Number:

N/A

Date Received:

12/17/2007

Sample Type:

Soil

Date Analyzed:

12/21/2007

Aromatics	Results in ug / Kg
Benzene	E 11,700
n-Butylbenzene	408
sec-Butylbenzene	166
tert-Butylbenzene	ND< 90.3
Ethylbenzene	1,610
n-Propylbenzene	1,150
Isopropylbenzene	288
p-Isopropyltoluene	ND< 181
Naphthalene	697
Toluene	1,320
1,2,4-Trimethylbenzene	1,520
1,3,5-Trimethylbenzene	485
m,p-Xylene	2,410
o-Xylene	569
Miscellaneous	
Methyl tert-butyl Ether	ND< 36.1

ELAP Number 10958

Method: EPA 8260B

Data File: V52840.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature:

ENVIRONMENTAL SERVICES. INC. Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Hazard Evaluations, Inc.

Client Job Site:

500 Seneca

Lab Project Number: 07-4598

Lab Sample Number: 15148

Client Job Number:

15210

Date Sampled:

12/13/2007

Field Location: Field ID Number: 500 Gallon Tank (Floor 8') N/A

**Date Received:** 

12/17/2007

Sample Type:

Soil

Date Analyzed:

12/21/2007

Aromatics	Results in ug / Kg
Benzene	3,320
n-Butylbenzene	ND< 499
sec-Butylbenzene	ND< 99.8
tert-Butylbenzene	ND< 250
Ethylbenzene	ND< 99.8
n-Propylbenzene	ND< 99.8
Isopropylbenzene	ND< 499
p-Isopropyltoluene	ND< 499
Naphthalene	ND< 250
Toluene	ND< 99.8
1,2,4-Trimethylbenzene	ND< 99.8
1,3,5-Trimethylbenzene	ND< 99.8
m,p-Xylene	ND< 99.8
o-Xylene	ND< 99.8
Miscellaneous	
Methyl tert-butyl Ether	ND< 99.8

ELAP Number 10958

Method: EPA 8260B

Data File: V52841.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature:

### Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Hazard Evaluations, Inc.

Client Job Site:

500 Seneca

Lab Project Number: 07-4598

Lab Sample Number: 15149

Client Job Number:

15210

Date Sampled:

12/13/2007

Field Location: Field ID Number: Pump Island - Pipe Composite N/A

**Date Received:** 

12/17/2007

Sample Type:

Soil

Date Analyzed:

12/21/2007

Aromatics	Results in ug / Kg
Benzene	ND< 8.63
n-Butylbenzene	ND< 43.2
sec-Butylbenzene	ND< 8.63
tert-Butylbenzene	ND< 21.6
Ethylbenzene	ND< 8.63
n-Propylbenzene	ND< 8.63
Isopropylbenzene	ND< 43.2
p-Isopropyltoluene	ND< 43.2
Naphthalene	ND< 21.6
Toluene	11.1
1,2,4-Trimethylbenzene	ND< 8.63
1,3,5-Trimethylbenzene	ND< 8.63
m,p-Xylene	9.18
o-Xylene	ND< 8.63
Miscellaneous	
Methyl tert-butyl Ether	ND< 8.63

ELAP Number 10958

Method: EPA 8260B

Data File: V52842.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature:

ENVIRONMENTAL SERVICES. INC. 3 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: <u>Hazard Evaluations, Inc</u>

Client Job Site:

500 Seneça

Lab Project Number: 07-4598

Lab Sample Number: 15150

Client Job Number:

15210

Date Sampled:

12/13/2007

Field Location: Field ID Number:

2000 Gallon Tank (Floor Comp) N/A

Date Received:

12/17/2007

Sample Type:

Soil

Date Analyzed:

12/21/2007

Aromatics	Results in ug / Kg
Benzene	ND< 6.70
л-Butylbenzene	ND< 33.5
sec-Butylbenzene	ND< 6.70
tert-Butylbenzene	ND< 16.8
Ethylbenzene	ND< 6.70
n-Propylbenzene	ND< 6.70
Isopropylbenzene	ND< 33.5
p-Isopropyltoluene	ND< 33.5
Naphthalene	ND< 16.8
Toluene	ND< 6.70
1,2,4-Trimethylbenzene	ND< 6.70
1,3,5-Trimethylbenzene	ND< 6.70
m,p-Xylene	ND< 6.70
o-Xylene	ND< 6.70
Miscellaneous	
Methyl tert-butyl Ether	ND< 6.70

ELAP Number 10958

Method: EPA 8260B

Data File: V52845.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature:

ENVIRONMENTAL SERVICES. INC. Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile Analysis Report for TCLP Extract

Client: Hazard Evaluations, Inc.

Client Job Site:

500 Seneca

Lab Project Number: 07-4598

Lab Sample Number: 15143

Client Job Number:

15210 Soil Pile Comp

Date Sampled:

12/13/2007

Field Location: Field ID Number:

N/A

**Date Received:** 

12/17/2007

Date Analyzed:

12/21/2007

Sample Type:

TCLP Extract

Aromatic	Results in ug / L	Regulatory Limits in ug / L
Benzene	58.9	500
ELAP Number 10958	Method: EPA 8260B	Data File: V52847.D

Comments: ND denotes Non Detect ug / L = microgram per Liter

Signature:

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LAB USE ONLY BELOW THIS LINE\*\*
Sample Condition: Per NELAC/ELAP 210/241/242/243/244

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