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July 31, 2013

Mr. Kevin Kelly. P.E.
Environmental Engineer
NYSDEC Region 7 – Division of Environmental Remediation
615 Erie Boulevard West
Syracuse, NY 13204-2400

Re: Meridian ERP
Site # B00180
Supplemental IRM and RI Work Plan

Dear Mr. Kelly:

On behalf of Cayuga County, C&S Engineers, Inc. (C&S) has prepared this Work Plan for the above referenced site. This work plan includes:

- Supplemental excavation and disposal of petroleum-contaminated soils;
- Supplemental excavation and disposal of lead-contaminated soils; and
- Completion of the Remedial Investigation (RI) and Remedial Alternatives Assessment (RAA) for the site.

The supplemental excavation activities identified above are continuations of Interim Remedial Measures (IRMs) that were conducted consistent with Section 3 of the October 2009 Remedial Investigation/Alternatives Analysis (RI/AA) Work Plan which was approved by NYSDEC Region 7 in a January 29, 2010 letter (copy attached). Details regarding the scope of the proposed supplemental activities follow.

Supplemental Petroleum-Contaminated Soil Excavation and Disposal

The initial IRM petroleum-contaminated soil excavation and disposal actions were conducted in December 2010 as part of an Underground Storage Tanks (USTs) removal action. Following those actions, excavation sidewall samples S-1 and S-2 exhibited concentrations of volatile organic compounds that exceed the "Residential Use" Soil Cleanup Objectives from 6NYCRR Part 375-6. Those samples were collected at the northern boundary of the remedial excavation at a depth of 6 feet to eight feet below the ground surface. A Figure showing the previous IRM sample locations is attached, as are the associated data tables. Prior to backfilling the excavation, polyethylene sheeting was installed as a demarcation layer/barrier.

We propose to remove the sidewalk north of the portion of the remedial excavation associated with confirmation samples S-1 and S-2. We will then remove soils underlying the sidewalk as well as excavation backfill as needed to access the petroleum-contaminated materials. PID headspace sampling will be conducted on all materials removed or exposed and any materials with PID headspace measurements exceeding 5 parts-per-million above background will be stockpiled for off-site disposal. Materials that do not exhibit volatile vapors exceeding 5 ppm will be segregated for re-use on site. We will then extend the excavation to the north as needed to remove the remaining petroleum-contaminated soils. The excavation shall not be extended further if there appears to be a potential of endangering the integrity of the adjacent storm sewer. We believe that we should be able to extend the excavation approximately twelve feet before that situation should occur. We will collect confirmation samples at a frequency consistent with NYSDEC guidance set forth in the Department's *DER-10 Technical Guidance for Site Investigation and Remediation,* which specifies one sidewall sample for each 30 linear feet of excavation sidewall and one bottom sample for each 900 square feet of excavation bottom area. Samples will be analyzed for Spills Technology and Remediation Series (STARS) volatile organic compounds (VOCs).

Data Quality Control/Quality Assurance (QA/QC) for the IRM will be consistent with Analytical Services Protocol (ASP) 2005 and a Data Usability Summary Report (DUSR) will be prepared by an independent data validator.

Supplemental Lead-Contaminated Soil Excavation and Disposal

The initial IRM lead-contaminated soil excavation and disposal actions were conducted in July 2011. Following those actions, excavation bottom samples Quad 2 and Quad 3 exhibited concentrations of total lead that exceed the "Residential Use" Soil Cleanup Objective of 400 mg/kg from 6NYCRR Part 375-6. Those samples were collected at the bottom of the remedial excavation at a depth of 5 feet below the ground surface. A Figure showing the previous IRM sample locations and total lead data are attached. Prior to backfilling the excavation, polyethylene sheeting was installed as a demarcation layer/barrier. After the excavation was backfilled, the site was rough-graded and seeded.

The site will be prepared for this supplemental excavation by recovering and marking the horizontal limits of the previous work using GPS coordinates and physical surficial evidence. Previous backfill materials that exhibit no evidence of contact with adjacent soils will be stockpiled for re-use on site. Backfill soils that become intermixed with adjacent or underlying soils will be considered impacted and will be disposed off-site. After the backfill materials and demarcation barrier are removed, the bottom of the excavation will be deepened to a depth of six feet (based on previous sampling results), loaded directly into properly permitted transport vehicles, and transported to the City of Auburn Landfill for disposal.

Following excavation to the specified limits, soil confirmation/documentation samples for total lead will be collected from the excavation bottom and sidewalls. Sampling frequency shall be consistent with the frequency specified in Section 5.4 of NYSDEC's Guidance Document DER-10. In addition to the floor samples, additional sidewall samples will be collected to confirm/document the horizontal extent of lead contamination in the area.

Supplemental IRM Protective Measures

To minimize the spread of contamination during the petroleum-contaminated soils and lead-contaminated soils excavations, the following control measures will be employed:

- Excavated materials will be loaded directly into trucks lined with polyethylene sheeting and will be covered during transit to the landfill;
- Temporary staging, if needed, will be on poly-lined stockpiles; any stockpile left overnight will be covered with polyethylene sheeting; and
- Soil inadvertently released during handling (e.g., falling from excavator bucket) will be recovered manually.

Throughout the field activities, the IRM Contractor will be responsible for complying with local, state, and federal rules and regulations associated with construction practices, including maintenance of Construction Best Management Practices (BMPs) associated with erosion and sedimentation control. The contractor will be required to containerize, characterize, and properly dispose of any groundwater removed from the excavations.

Data Quality Control/Quality Assurance (QA/QC) for the IRM will be consistent with Analytical Services Protocol (ASP) 2005 and a Data Usability Summary Report (DUSR) will be prepared by an independent data validator.

After the confirmation/documentation samples are collected, a layer of separation material (plastic or geo-textile) will be placed in the excavation and the excavation will be backfilled with clean re-usable fill materials and topped with clean imported materials. The horizontal limits of the excavation area will be surveyed using differential GPS.

Supplemental IRM Contracts

The remedial contractor for the initial IRMs was Op-Tech of Syracuse, NY. Cayuga County is currently in discussions with Op-Tech regarding extension of that Contract to cover this additional work. C&S will provide an RFP for the needed analytical laboratory work to qualified labs (including the labs used for the previous IRM work) for competitive bids for that work.

Community Air Monitoring

For the duration of ground-intrusive activities associated with the supplemental IRMs, community air monitoring for particulates and VOCs will be implemented. Community air monitoring and fugitive dust control (if needed) will be implemented consistent with NYSDOH's Generic Community Air Monitoring Plan (CAMP) and NYSDEC's Technical and Guidance Memorandum 4031 *Fugitive Dust Suppression and Particulate Monitoring Program.* Documentation of the CAMP will be included in the IRM Report.

Supplemental IRM Documentation

An IRM Report will be submitted to NYSDEC and NYSDOH that will include:

- A description of the initial and supplemental IRM activities;
- A figure illustrating the horizontal and vertical limits of excavation and the location of each soil confirmation/documentation sample;
- Validated soil quality data for each confirmation/documentation sample collected and comparison of the data generated with Soil Cleanup Objectives (SCOs) listed in Subpart 375-6 and NYSDEC's Soil Cleanup Guidance document CP-51;
- Transport and disposal documentation for all soil leaving the site
- Documentation of the source and quality of fill materials brought onto the site; and
- Air monitoring data generated from implementation of the CAMP.

The IRM Report will be provided as a stand-alone document and subsequently appended to the Brownfields Site Investigation/Remedial Alternatives Assessment (SI/RAA) Report for the purpose of identifying the appropriate final remedy for the site. The SI/RAA Report will include plans to address areas of the site not meeting 6NYCRR Part 375 SCOs.

Remaining SI/RAA Activities

As previously agreed upon between Cayuga County and NYSDEC, four surface soil samples remain to be collected as part of the Brownfileds SI. The locations for these samples will be determined based on consultation between NYSDEC Region 7 and Cayuga County or the County's representative to provide data relevant to site cover. As also previously agreed upon between Cayuga County and NYSDEC (January 29, 2010

NYSDEC approval letter), the need for a soil vapor testing will be determined by NYSDEC and NYSDOH based on SI and IRM analytical results.

Following receipt of SI surface soil and supplemental IRM data, the SI/RAA Report, including the Qualitative Human Health Risk Assessment and the Remedial Alternatives Assessment will be completed by C&S.

Please contact me at 315-455-2000 if you have any questions.

Sincerely,

C&S ENGINEERS, INC.

Rory Woodmansee
Senior Engineer

Cc: Mr. Bruce Natale, Cayuga County Department of Planning and Economic Development
Mr. Richard Jones, NYSDOH

Attachments

F:\Project\108 - Cayuga County\108.008.001 - Meridian Brownfield\IRM\Supplemental IRM WP.doc

ATTACHMENT A

January 29, 2010 NYSDEC RI/IRM Work Plan Approval Letter

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 7
615 Erie Boulevard West, Syracuse, NY 13204
Phone: (315) 426-7551 • **Fax:** (315) 426-2653
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

January 29, 2009

Mr. Bruce Natale, P.E.
Environmental Engineer
Cayuga County Office Building 5th Floor
160 Genesee St.
Auburn, New York 13021

Re: Conditional Work Plan Approval
For: Meridian Brwonfield Site
Site No. B001807

Dear Mr. Natale,

The revised Remedial Investigation/Alternatives Analysis Work Plan (RI/AA WP) for the above referenced site dated October 2009 has been approved if the following Conditions are acceptable.

Interim remedial measures (IRMs) will be proposed in a separate IRM work plan, which will be submitted for the Department's review and approval after the site characterization activities proposed in the RI/AAWP are completed. As such, it is assumed that the information provided in the RI/AAWP regarding possible activities associated with interim remedial actions, such as the IRM confirmation sampling discussed in Section 3.3.5 of Appendix A, will be re-presented in the IRM work plan.

Conditions relating to the Work Plan Text:

1. General:
The address for the site and NYSDEC's site number must be provided in the final report.

2. Section 2.7, page 7: For the Qualitative Exposure Assessment, data will be compared to applicable standards, criteria and guidance values, not typical background levels.

3. Section 4.1, page 10, criteria for evaluating alternatives:
In developing the Alternatives analysis report, the second bullet at the top of Work Plan page 10 (residual public health risks…) will be removed and the second bullet under "Long-term effectiveness and permanence" will be revised as follows: "If contamination would remain on-

site or off-site after the selected remedy has been implemented, human exposures to residual contamination will be identified and evaluated."

Figures:

4. A figure showing the site with respect to surrounding land uses, such as an aerial image, must be provided in the final document.

Appendix A — Sampling and Analysis Plan:

5. Section 2.3, page 2, Risk Assessment:
The data are to be used in a qualitative exposure assessment, not a "risk assessment," to evaluate actual or potential exposures, not "risks". The Report must reflect this distinction.

6. Section 2.5, page 4:
As discussed (and confirmed, i.e. Mitkem) in earlier e-mails, a laboratory certified by the NYSDOH's Environmental Laboratory Approval Program for the analyte and matrix will be used as opposed to CLP.

7. Section 3.2, page 8:
Surface soil: The remedial party understands that, based on the results of this sampling effort, additional sampling of surface soils might be needed to evaluate human exposures.

8. Section 3.4, page 17:
The lamp utilized in the Photoionization Detector will be appropriate for detecting the compounds of concern at the site.

Appendix B — Health and Safety Plan:

9. HASP Appendix C, General:
Actions will be taken to minimize human exposures to volatile compounds that may off-gas from open excavation/trenching areas during "off-hours" (e.g., overnight if the pits are not backfilled the same work day).

10. HASP Appendix C, Section 5.3, page 2:
#3: Excavated material stored at the edge of the excavation will be placed on a tarp or barrier, not directly on the ground.

Appendix C — Citizen Participation Plan:

11. Section 1.6, page 3:
Henri Hamel is replaced as a contact by Mr. Dick Jones, public health specialist, in the table.

If these conditions are acceptable, the tasks set in the Work Plan may begin.

Please note that Henri Hamel is no longer the site Project Manager for NYSDOH. NYSDOH's new project manager for this site is: Mr. Dick Jones, Central New York Regional Office, 217 South Salina Street, Syracuse, NY 13202. Future NYSDOH correspondence pertaining to this site, including the investigation report and IRM work plan, should be sent to him.

If you have any questions regarding this, please contact me at (315) 426-7421.

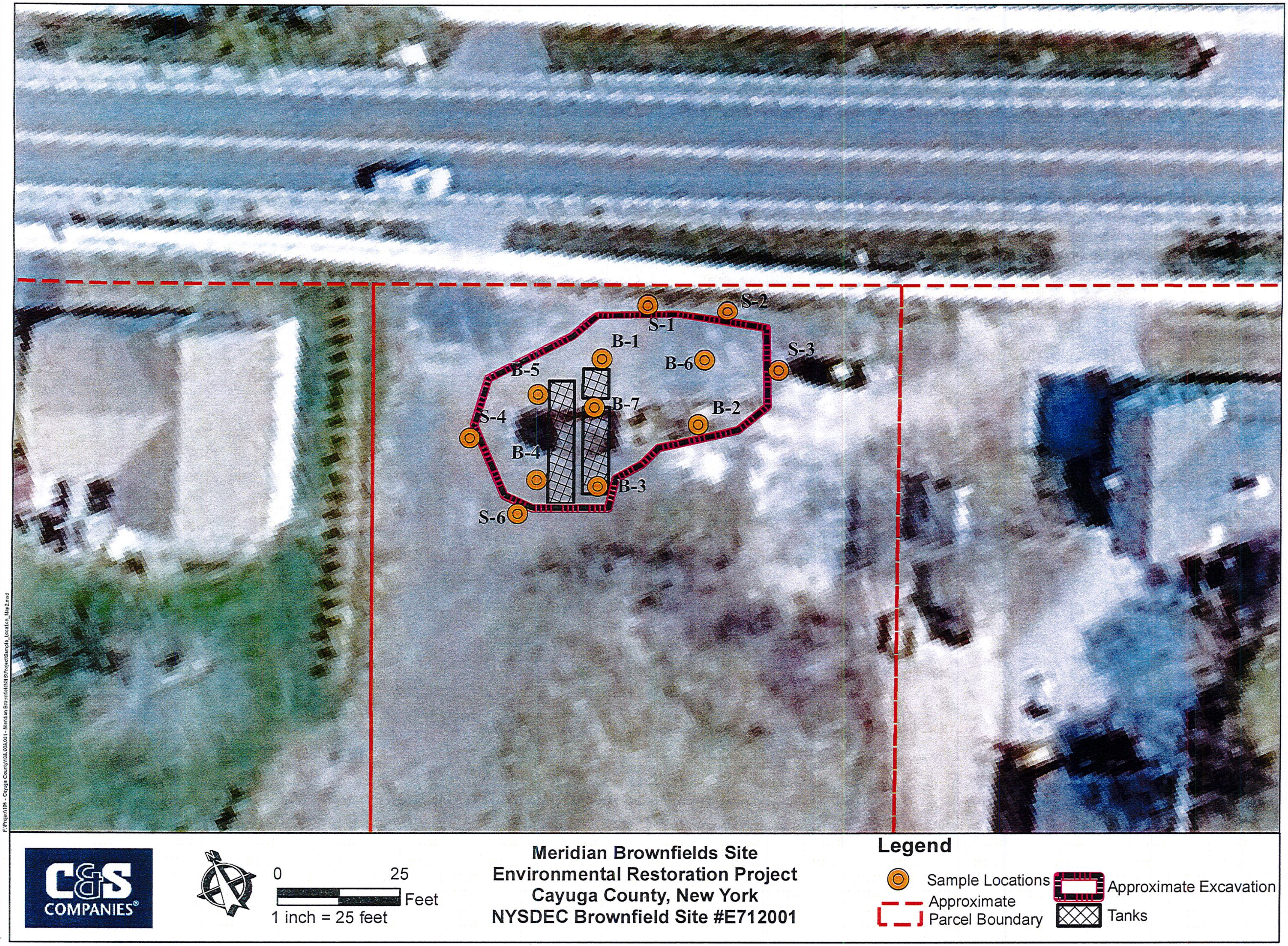
Sincerely,

Kevin Kelly
Environmental Engineer
Project Manager

cc: G. Townsend
W. Daigle
D. Desnoyers
S. Ervolina
D. Jones

ATTACHMENT B

IRM Figures and Data



C&S COMPANIES®

Meridian Brownfields Site
Environmental Restoration Project
Cayuga County, New York
NYSDEC Brownfield Site #E712001

Table 1
Meridian Brownfields Site
Environmental Restoration Project
Cayuga County, New York
NYSDEC Brownfield Site #E712001
Soil Analytical Data Summary for UST Removal

Sample ID	6 NYCRR Part 375.6 Soil Cleanup Objective - Residential	6 NYCRR Part 375.6 Soil Cleanup Objective - Residential Restricted	6 NYCRR Part 375.6 Soil Cleanup Objective - Commercial	7 NYCRR Part 375.6 Soil Cleanup Objective - Protection of Groundwater	Unit	S-1			S-1DL			S-2			S-2DL			S-3			S-4			S-6			
Sample Depth Interval						6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			
Date Sampled						12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			
						Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	DF
SEMIVOLATILE ORGANIC COMPOUNDS																											
1,2,4-Trichlorobenzene	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
1,2-Dichlorobenzene	100,000.00	100,000.00	500,000.00	1,100.00	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
1,3-Dichlorobenzene	17,000.00	49,000.00	280,000.00	2,400.00	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
1,4-Dichlorobenzene	9,800.00	13,000.00	130,000.00	1,800.00	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2,2´-oxybis(1-Chloropropane)	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2,4,5-Trichlorophenol	NA	NA	NA	NA	ug/kg	920.00	U		**			860.00	U		1,700.00	U		790.00	U		790.00	U		1,200.00	U		
2,4,6-Trichlorophenol	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2,4-Dichlorophenol	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2,4-Dimethylphenol	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2,4-Dinitrophenol	NA	NA	NA	NA	ug/kg	920.00	U		**			860.00	U		1,700.00	U		790.00	U		790.00	U		1,200.00	U		
2,4-Dinitrotoluene	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2,6-Dinitrotoluene	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2-Chloronaphthalene	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2-Chlorophenol	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2-Methylnaphthalene	NA	NA	NA	NA	ug/kg	**5,500.00**			**			**9,600.00**	E		**9,800.00**	D		390.00	U		**99.00**	J		580.00	U		
2-Methylphenol	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
2-Nitroaniline	NA	NA	NA	NA	ug/kg	920.00	U		**			860.00	U		1,700.00	U		790.00	U		790.00	U		1,200.00	U		
2-Nitrophenol	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
3,3'-Dichlorobenzidine	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
3-Nitroaniline	NA	NA	NA	NA	ug/kg	920.00	U		**			860.00	U		1,700.00	U		790.00	U		790.00	U		1,200.00	U		
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	ug/kg	920.00	U		**			860.00	U		1,700.00	U		790.00	U		790.00	U		1,200.00	U		
4-Bromophenyl phenyl ether	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
4-Chloro-3-methylphenol	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
4-Chloroaniline	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
4-Methylphenol	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
4-Nitroaniline	NA	NA	NA	NA	ug/kg	920.00	U		**			860.00	U		1,700.00	U		790.00	U		790.00	U		1,200.00	U		
4-Nitrophenol	NA	NA	NA	NA	ug/kg	920.00	U		**			860.00	U		1,700.00	U		790.00	U		790.00	U		1,200.00	U		
Acenaphthene *	100,000	100,000	500,000	98,000	ug/kg	**65.00**	J		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Acenaphthylene *	100,000	100,000	500,000	107,000	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Anthracene *	100,000	100,000	500,000	1,000,000	ug/kg	**140.00**	J		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		

Table 1
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Environmental Restoration Project
Cayuga County, New York
NYSDEC Brownfield Site #E712001
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Sample Depth Interval						6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			
Date Sampled						12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			
						Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	DF
SEMIVOLATILE ORGANIC COMPOUNDS (continued…)																											
Benzo[a]anthracene *	1,000	1,000	5,600	1,000	ug/kg	**150.00**	J		**			420.00	U		840.00	U		390.00	U		**44.00**	J		**110.00**	J		
Benzo[a]pyrene *	1,000	1,000	1,000	22,000	ug/kg	**130.00**	J		**			420.00	U		840.00	U		390.00	U		**48.00**	J		**150.00**	J		
Benzo[b]fluoranthene *	1,000	1,000	5,600	1,700	ug/kg	**130.00**	J		**			420.00	U		840.00	U		390.00	U		**67.00**	J		**130.00**	J		
Benzo[g,h,i]perylene *	100,000	100,000	500,000	1,000,000	ug/kg	**110.00**	J		**			420.00	U		840.00	U		390.00	U		390.00	U		**150.00**	J		
Benzo[k]fluoranthene *	1,000	3,900	56,000	1,700	ug/kg	**130.00**	J		**			420.00	U		840.00	U		390.00	U		390.00	U		**190.00**	J		
Bis(2-chloroethoxy)methane	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Bis(2-chloroethyl)ether	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Bis(2-ethylhexyl) phthalate	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Butyl benzyl phthalate	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Carbazole	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Chrysene *	1,000	3,900	56,000	1,000	ug/kg	**180.00**	J		**			420.00	U		840.00	U		390.00	U		**64.00**	J		**150.00**	J		
Di-n-butyl phthalate	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Di-n-octyl phthalate	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Dibenz[a,h]anthracene *	330	330	560	1,000,000	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Dibenzofuran	14,000	59,000	350,000	210,000	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Diethyl phthalate	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Dimethyl phthalate	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Fluoranthene *	100,000	100,000	500,000	1,000,000	ug/kg	**400.00**	J		**			**48.00**	J		840.00	U		390.00	U		**76.00**	J		**170.00**	J		
Fluorene *	100,000	100,000	500,000	386,000	ug/kg	**140.00**	J		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Hexachlorobenzene	330	1,200	6,000	3,200	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Hexachlorobutadiene	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Hexachlorocyclopentadiene	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Hexachloroethane	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Indeno[1,2,3-cd]pyrene *	500	500	5,600	8,200	ug/kg	**81.00**	J		**			420.00	U		840.00	U		390.00	U		390.00	U		**120.00**	J		
Isophorone	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
N-Nitrosodi-n-propylamine	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
N-Nitrosodiphenylamine	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Naphthalene *	100,000	100,000	500,000	12,000	ug/kg	**5,500.00**			**			**8,200.00**	E		**8,500.00**	D		390.00	U		390.00	U		580.00	U		
Nitrobenzene	NA	NA	NA	NA	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Pentachlorophenol	2,400	2,400	6,700	800	ug/kg	920.00	U		**			860.00	U		1,700.00	U		790.00	U		790.00	U		1,200.00	U		
Phenanthrene *	100,000	100,000	500,000	1,000,000	ug/kg	**460.00**			**			**66.00**	J		840.00	U		390.00	U		390.00	U		**83.00**	J		
Phenol	100,000	100,000	500,000	330	ug/kg	450.00	U		**			420.00	U		840.00	U		390.00	U		390.00	U		580.00	U		
Pyrene *	100,000	100,000	500,000	1,000,000	ug/kg	**450.00**			**			**48.00**	J		840.00	U		390.00	U		**78.00**	J		**170.00**	J		

Table 1
Meridian Brownfields Site
Environmental Restoration Project
Cayuga County, New York
NYSDEC Brownfield Site #E712001
Soil Analytical Data Summary for UST Removal

Sample ID	6 NYCRR Part 375.6 Soil Cleanup Objective - Residential	6 NYCRR Part 375.6 Soil Cleanup Objective - Residential Restricted	6 NYCRR Part 375.6 Soil Cleanup Objective - Commercial	7 NYCRR Part 375.6 Soil Cleanup Objective - Protection of Groundwater	Unit	S-1			S-1DL			S-2			S-2DL			S-3			S-4			S-6			
Sample Depth Interval						6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			
Date Sampled						12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			
						Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	DF
VOLATILE ORGANIC COMPOUNDS																											
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,1,1-Trichloroethane	100,000	100,000	500,000	680	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,1,2-Trichloroethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,1-Dichloroethane	19,000	26,000	240,000	270	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,1-Dichloroethene	100,000	100,000	500,000	330	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,1-Dichloropropene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,2,3-Trichlorobenzene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		**1.20**	J		5.80	U		8.60	U		
1,2,3-Trichloropropane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,2,4-Trichlorobenzene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,2,4-Trimethylbenzene *	47,000	52,000	190,000	3,600	ug/kg	**63,000.00**	E		**87,000.00**	D		**140,000.00**	E		**110,000.00**	D		**1.90**	J		**87.00**			8.60	U		
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,2-Dibromoethane (EDB)	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,2-Dichlorobenzene	100,000	100,000	500,000	1,100	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,2-Dichloroethane	2,300	3,100	30,000	20	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,2-Dichloropropane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,3,5-Trimethylbenzene *	47,000	52,000	190,000	8,400	ug/kg	**16,000.00**			**24,000.00**	D		**33,000.00**	E		**38,000.00**	D		5.80	U		**41.00**			8.60	U		
1,3-Dichlorobenzene	17,000	49,000	280,000	2,400	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,3-Dichloropropane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
1,4-Dichlorobenzene	9,800	13,000	130,000	1,800	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
2,2-Dichloropropane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
2-Butanone (MEK)	100,000	100,000	500,000	120	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		**11.00**			**23.00**			
2-Chlorotoluene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
2-Hexanone	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		**3.20**	J		5.80	U		8.60	U		
4-Chlorotoluene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
4-Isopropyltoluene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		**3.80**	J		8.60	U		
4-Methyl-2-pentanone (MIBK)	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Acetone	100,000	100,000	500,000	50	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		**7.90**			**43.00**			**71.00**			
Benzene *	2900	4800	44,000	60	ug/kg	440.00	U		4,400.00	U		**370.00**	J		7,700.00	U		5.80	U		**1.40**	J		8.60	U		
Bromobenzene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Bromochloromethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Bromodichloromethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Bromoform	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Bromomethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		

Table 1
Meridian Brownfields Site
Environmental Restoration Project
Cayuga County, New York
NYSDEC Brownfield Site #E712001
Soil Analytical Data Summary for UST Removal

Sample ID	6 NYCRR Part 375.6 Soil Cleanup Objective - Residential	6 NYCRR Part 375.6 Soil Cleanup Objective - Residential Restricted	6 NYCRR Part 375.6 Soil Cleanup Objective - Commercial	7 NYCRR Part 375.6 Soil Cleanup Objective - Protection of Groundwater	Unit	S-1			S-1DL			S-2			S-2DL			S-3			S-4			S-6			
Sample Depth Interval						6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			6-8 Feet			
Date Sampled						12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			12/21/2010			
						Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	Result	Qual	DF	DF
VOLATILE ORGANIC COMPOUNDS (continued…)																											
Carbon disulfide	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Carbon Tetrachloride	1,400	2,400	22,000	760	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Chlorobenzene	100,000	100,000	500,000	1,100	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Chloroethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Chloroform	10,000	49,000	350,000	370	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Chloromethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
cis-1,2-Dichloroethene	59,000	100,000	500,000	250	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
cis-1,3-Dichloropropene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Dibromochloromethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Dibromomethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Dichlorodifluoromethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Ethylbenzene *	30,000	41,000	390,000	1,000	ug/kg	**11,000.00**			**18,000.00**	D		**19,000.00**	E		**22,000.00**	D		**3.40**	J		**39.00**			**4.00**	J		
Hexachlorobutadiene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Iodomethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Isopropylbenzene *	NA	NA	NA	NA	ug/kg	**1,800.00**			**3,000.00**	DJ		**4,800.00**			**5,800.00**	DJ		5.80	U		**16.00**			8.60	U		
m,p-Xylene [1]	NA	NA	NA	NA		**59,000.00**	E		**85,000.00**	D		**140,000.00**	E		**120,000.00**	D		**14.00**			**170.00**			**16.00**			
Methyl tert-Butyl Ether *	62,000	100,000	500,000	930	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Methylene Chloride	51,000	100,000	500,000	50	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
n-Butylbenzene *	100,000	100,000	500,000	12,000	ug/kg	**3,900.00**			**7,400.00**	D		**11,000.00**			**15,000.00**	D		5.80	U		**39.00**			8.60	U		
n-Propylbenzene *	100,000	100,000	500,000	3,900	ug/kg	**7,000.00**			**11,000.00**	D		**14,000.00**			**16,000.00**	D		5.80	U		**49.00**			8.60	U		
Naphthalene *	100,000	100,000	500,000	12,000	ug/kg	**5,800.00**			**13,000.00**	D		**11,000.00**			**18,000.00**	D		5.80	U		**27.00**	B		8.60	U		
o-Xylene [1]	NA	NA	NA	NA	ug/kg	**5,000.00**			**8,400.00**	D		**4,200.00**			**4,800.00**	DJ		5.80	U		**2.10**	J		8.60	U		
sec-Butylbenzene *	100,000	100,000	500,000	11,000	ug/kg	**800.00**			**1,600.00**	DJ		**2,400.00**			**3,200.00**	DJ		5.80	U		**11.00**			8.60	U		
Styrene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
tert-Butylbenzene *	100,000	100,000	500,000	5,900	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Tetrachloroethene	5,500	19,000	150,000	1,300	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		**1.20**	J		5.80	U		8.60	U		
Toluene *	100,000	100,000	500,000	700	ug/kg	440.00	U		4,400.00	U		**490.00**			7,700.00	U		5.80	U		5.80	U		8.60	U		
trans-1,2-Dichloroethene	100,000	100,000	500,000	190	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
trans-1,3-Dichloropropene	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Trichloroethene	10,000	21,000	200,000	470	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Trichlorofluoromethane	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Vinyl acetate	NA	NA	NA	NA	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Vinyl chloride	210	900	13,000	20	ug/kg	440.00	U		4,400.00	U		390.00	U		7,700.00	U		5.80	U		5.80	U		8.60	U		
Xylenes, total *	100,000	100,000	500,000	1,600	ug/kg	**64,000.00**	E		**93,000.00**	D		**150,000.00**	E		**120,000.00**	D		**14.00**			**170.00**			**16.00**			

General Notes:

NA = No cleanup objective for this analyte per 6 NYCRR Part 375.6 and / or NYSDEC Commissioner Policy 51 Supplemental Soil Cleanup Objectives.

* NYSDEC CP-51 SCO's for these compounds apply to fuel oil and / or gasoline contaminated soil.

** = Analysis for this parameter not performed.

[1] - Refer to "Xylenes, total" for comparison to applicable SCO.

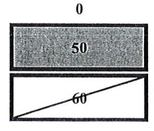
S = Sidewall Sample
B = Bottom Sample

Soil Cleanup Objective Notes:

Detected analytes are shown in **BOLD**

Analyte concentrations exceeding Residential SCO's are denoted by:

Analyte concentrations exceeding all SCO's listed above are denoted by:



Data Qualifiers:

U = analyte was not detected at the listed quantitation limit

J = Listed concentration is estimated
B = analyte was detected in associated method blank;
D = Concentration was obtained from a diluted analysis

E = The compound concentration exceeded the calibration range.

Cayuga County - Meridian Brownfields ERP Site
Former Battery Disposal Area Soils Investigation
Lead Concentrations at Discrete Depth Intervals

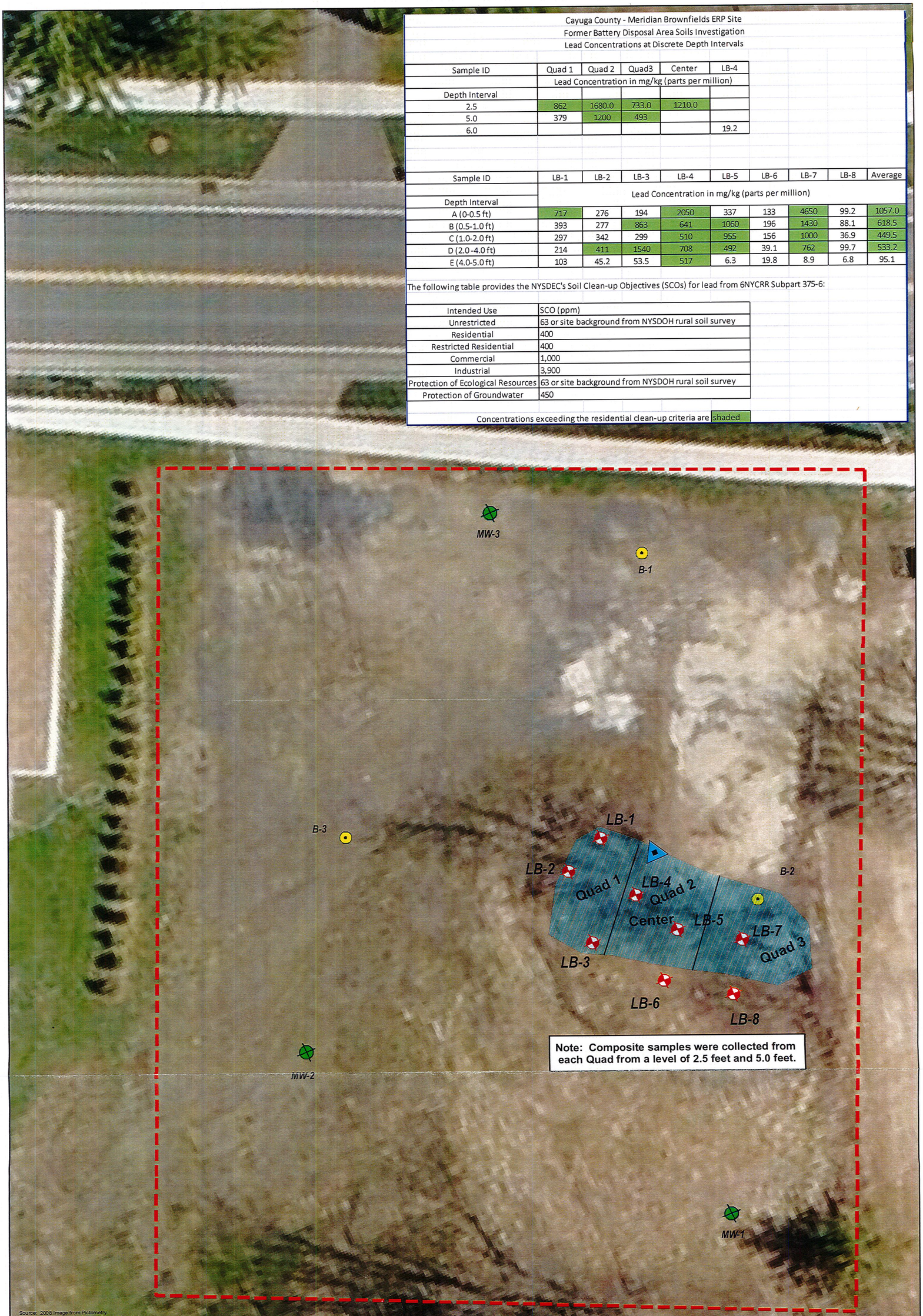
Sample ID	Quad 1	Quad 2	Quad3	Center	LB-4
	Lead Concentration in mg/kg (parts per million)				
Depth Interval					
2.5	862	1680.0	733.0	1210.0	
5.0	379	1200	493		
6.0					19.2

Sample ID	LB-1	LB-2	LB-3	LB-4	LB-5	LB-6	LB-7	LB-8	Average
	Lead Concentration in mg/kg (parts per million)								
Depth Interval									
A (0-0.5 ft)	717	276	194	2050	337	133	4650	99.2	1057.0
B (0.5-1.0 ft)	393	277	863	641	1060	196	1430	88.1	618.5
C (1.0-2.0 ft)	297	342	299	510	955	156	1000	36.9	449.5
D (2.0 -4.0 ft)	214	411	1540	708	492	39.1	762	99.7	533.2
E (4.0-5.0 ft)	103	45.2	53.5	517	6.3	19.8	8.9	6.8	95.1

The following table provides the NYSDEC's Soil Clean-up Objectives (SCOs) for lead from 6NYCRR Subpart 375-6:

Intended Use	SCO (ppm)
Unrestricted	63 or site background from NYSDOH rural soil survey
Residential	400
Restricted Residential	400
Commercial	1,000
Industrial	3,900
Protection of Ecological Resources	63 or site background from NYSDOH rural soil survey
Protection of Groundwater	450

Concentrations exceeding the residential clean-up criteria are shaded



Source: 2008 Image from Pictometry.
Parcel Boundary from the Cayuga County New York "ImageMate On-Line" website.

C&S COMPANIES®

0 2.5 5 7.5 10 Feet

Legend

- Approximate Parcel Boundary
- Lead Dig Out
- Lead Boring Location
- VOC Sample
- Monitoring Well
- Boring

Meridian Brownfields Site
Environmental Restoration Project
Cayuga County, New York
NYSDEC Brownfield Site #E712001