

Phase II Environmental Site Assessment

Location:

2020 River Road
Town of Wheatfield, New York

Prepared for:

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LaBella Project No. 212505

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1.0 Introduction and Background

1.1 Introduction

LaBella Associates, P.C. (“LaBella”) was retained to conduct a Phase II Environmental Site Assessment (ESA) at the property located at 2020 River Road, Town of Wheatfield, Niagara County, New York, which is hereinafter referred to as the “Site.” Figure 1 shows the location of the Site while Figure 2 identifies the boundaries of the Site.

A Phase I Environmental Site Assessment (ESA) was completed at the 4.59-acre Site in 2006. The Phase I ESA identified the following Recognized Environmental Conditions (RECs) at the Site:

- Historical use of the property for filling purposes: Fill materials of more than 10 feet in depth were reportedly interred at the Site. The fill reportedly consists of industrial types of wastes such as slag, ash, cinders, fire-brick, coal, and foundry sand.
- Surrounding properties: The adjacent property to the east was formerly known as the Lynch Park/Brzezinski Landfill, in which industrial wastes were disposed. Extensive sampling of the waste materials indicated that no hazardous waste was present at the landfill. During the sampling program, trichloroethene and tetrachloroethene were identified in soils in the western portion of the landfill. Based on the proximity of those findings to the Site, the Phase I ESA identified the potential presence of volatile organic compounds in the soils at the Site as a concern.

A Phase II ESA was completed at the 2020 River Road Site in December 2006 and included the advancement and sampling of eight soil borings and the installation and sampling of four monitoring wells. The work confirmed the presence of industrial fill/waste on the Site and identified only very minor contraventions of groundwater standards. Although identified as a potential issue during a previous environmental assessment, the Phase II ESA did not evaluate the potential presence of buried drums at the Site.

1.2 Phase II ESA Objectives

The Town of Wheatfield is considering transforming the property into a public park that links the community to the Niagara River. However, the existing data is insufficient to determine if the property is safe for such development. Based upon this information and the intended end use, a Phase II ESA program was developed for this site that included a surface soil screening and analysis program to characterize the chemistry of materials exposed at the surface of the Site and a geophysical survey and a test pit program to investigate the potential presence of buried drums and more thoroughly characterize the nature and extent of fill on the site. Depending on the final design as well as management of the proposed park, the final land use designation may be Unrestricted Use, Residential Use, or Restricted Residential Use.

Niagara County has also expressed concern about radiological issues at other brownfield sites in the County, so as a precaution a screening level evaluation of the potential presence of radiation was included in this assessment. [No information has been found that suggests a radiological concern(s) exists at this specific property.]

2.0 Field Investigation Summary

This investigation was devised based upon a review of Niagara County's Request for Proposal (RFP), relevant reports provided by Niagara County, LaBella's experience with Phase II ESAs of similar brownfield sites, and U.S. environmental Protection Agency (USEPA) recommendations and requirements.

This section provides a summary of the fieldwork completed as part of this Phase II ESA, which included the following:

- A site survey to mark property boundaries
- An EM-31 Geophysical Survey to evaluate the potential presence of buried drums
- Surface soil screening and analysis to characterize the chemistry of materials exposed at the surface of the Site
- A test pit program to investigate the potential presence of buried drums and more thoroughly characterize the nature and extent of fill at the Site

2.1 Professional Site Survey

Because the Site corners/boundaries were not well marked and the irregular shape of the Site made it difficult to accurately locate the limits of the Site, LaBella retained Klettke Land Surveyors, P.C. of Niagara Falls, New York to re-establish and demarcate the Site boundaries. Surveying of the Site was conducted on September 25 and 26, 2012.

2.2 Geophysical Survey

Because information exists suggesting the potential presence of buried drums at the site, an EM-31 geophysical survey was conducted in accessible areas of the Site. Due to the dense nature of the vegetation at the Site, the geophysical survey was limited to cleared areas, existing trails, and other open areas present in portions of the Site.

The geophysical survey was completed on October 17, 2012, by AMEC Environment and Infrastructure, Inc. (Amec) of Amherst, New York. This work included a one-day, non-intrusive subsurface survey using a Geonics EM-31 capable of detecting and delineating metallic objects in the subsurface, such as drums. The EM-31 consists of a transmitter coil mounted at one end and a receiver coil mounted at the other end of a 3.7-meter long plastic boom. Electrical conductivity and in-phase field strength are measured and stored along with line and station numbers in a digital data logger. The EM-31 can explore to depths of about 20 feet below the ground surface.

The geophysical survey resulted in generation of two color-coded maps depicting the survey results and locations of anomalous readings potentially indicative of metallic materials that were observed. These results were utilized in establishing test pit locations. The Geophysical Survey Report is included as Appendix 2.

2.3 Surface Soil/Fill

On September 28, 2012, surface soil/fill sampling was conducted at the Site. At each location, LaBella utilized an X-Ray Fluorescence (XRF) meter to screen the surface soil/fill for lead, arsenic and other metals. X-Ray Fluorescence is a technique for chemical compositional measurement in which X-rays of a known energy are directed towards a target or sample, causing the atoms within the material to emit

"fluorescent" X-rays at energies characteristic of its elemental composition. The metals field screening results are included in Table 1.

In addition, the surface soil/fill was screened for radiation using a handheld radiation alert detector (Ludlum 2241-2 RK Kit Digital Ratemeter with a Model 44-2 high-sensitivity gamma scintillator) capable of detecting the presence of gamma radiation. The radiation field screening results are included in Table 2. Based upon the screening results and visual observations, samples were collected for laboratory analysis to characterize areas of elevated metals concentrations and to assess site-wide conditions. Due to dense tree cover, survey of the sampling locations using GPS was not performed.

A total of 29 surface soil/fill samples were collected from the Site. The sampling locations are shown on Figure 3. To confirm the field screening measurements and further characterize the surface soil/fill, 15 surface soil/fill samples were submitted under standard chain-of-custody procedures for laboratory analyses using USEPA methods.

The samples were placed on ice and transported to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory under proper chain-of-custody protocols for analysis of Target Compound List (TCL) Volatile Organic Compounds (VOCs), Semi-volatile Organic Compounds (SVOCs), pesticides and Polychlorinated Biphenyls (PCBs), and RCRA metals. This analytical program was selected based on the historic activities at the Site and the findings of previous investigatory activities. The analytical results were validated by a third party validator, and Appendix 3 includes the validation report. The data summary tables and the text in Section 3 describe the validated data.

2.4 Subsurface Soil/Fill

Prior to completing the test pit program, a subsurface utility stakeout was arranged with "Dig Safely New York" to locate any underground public subsurface utilities servicing the Site.

A total of 24 test pits (designated TP1 through TP24) were completed on November 26 and 27, 2012, by Nature's Way under LaBella supervision. The test pits were advanced to depths ranging from approximately six to ten feet below the ground surface using a bulldozer. The test pits were advanced in select locations along the existing cleared pathways. The locations of the test pits are shown on Figure 4.

Soil/fill from the test pits was continuously assessed in the field for visible impairment, olfactory indications of impairment, indication of detectable VOCs using a photoionization detector (PID), and/or the detection of radioactivity using a handheld radiation alert detector. The radiation field screening results are included in Table 3. Evidence of impairment gathered at the time of the fieldwork was used with observed environmental and geologic conditions to assist in determining the location and depth for sample collection. These observations along with any other pertinent information were recorded on test pit logs and are included in Appendix 1. Due to dense tree cover, survey of the sampling locations using GPS was not performed.

LaBella collected 15 soil/fill samples from select test pit locations for laboratory analysis. The samples were placed on ice and transported to a NYSDOH ELAP certified laboratory under proper chain-of-custody protocols for analysis of TCL VOCs, SVOCs plus tentatively identified compounds (TICs), pesticides, PCBs and RCRA metals.

Upon completion of excavation activities, all test pits were backfilled with original materials.

3.0 Results

LaBella submitted 15 surface soil/fill samples and 15 test pit soil/fill samples for laboratory analysis to evaluate the surface and subsurface conditions in the areas previously identified. The soil results were compared to the NYSDEC Part 375-6.8 Unrestricted Use, Restricted-Residential Use, Restricted-Commercial Use, Protection of Groundwater, and Protection of Ecological Resources Soil Cleanup Objectives (SCOs). The different media are discussed individually below.

The NYSDEC requires varying levels of soil cleanup objectives depending on the use of parks. For active recreation, Restricted-Residential SCOs apply, while for passive recreation Restricted-Commercial SCOs are used.

Active recreational uses are public uses with a reasonable potential for soil contact, such as:

- Designated picnic areas;
- Playgrounds
- Natural grass sports playing fields, including surrounding unpaved spectator areas

Passive recreational uses are public uses with limited potential for soil contact, such as:

- Artificial surface fields
- Outdoor tennis or basketball courts
- Other paved recreational facilities used for roller hockey, roller skating, shuffle board, etc.
- Outdoor pools
- Indoor sports or recreational facilities
- Golf courses
- Paved (raised) bike or walking paths

The design, future use, and management of the proposed park at the Site has not been finalized, so the results for the soil sampling program have been compared to both Restricted-Residential Use SCOs (for active recreation) and Restricted-Commercial Use SCOs (for passive recreation parks) in the discussion below.

3.1 Site Geology and Hydrogeology

The test pits were advanced four to ten feet below the ground surface before encountering native soils. Fill material was observed in 23 of the 24 test pit locations ranging in depth from zero to eight feet below the ground surface. Fill was not encountered in TP23. The fill materials included but were not limited to glass, brick, slag, ash, foundry sands, grinding stones, drums of various sizes, red clay tiles, mulch, concrete and asphalt pieces, and miscellaneous debris.

The underlying native soils at the Site consisted primarily of silt and clay with some gravel identified in select test pits.

The following observations were made during excavation of the 24 test pits at the Site:

- No elevated PID measurements were encountered in any of the test pit locations.
- Petroleum staining was observed in TP1 and TP7.
- Petroleum odors were observed in TP3, TP7, TP10, TP12 and TP18.

- A large metallic object was observed at approximately six feet below the ground surface in TP9. The structure had the appearance of a 275-gallon storage tank but such was not confirmed at the time of investigation due to concerns regarding the condition of the tank and the potential puncturing of the tank.
- A possible wood foundation was observed at approximately four feet below the ground surface in TP11. The excavation was halted and moved approximately three feet to the west where efforts commenced. Evidence of the possible wood foundation was not observed in the latter area of excavation.
- Two one-inch pipes were observed at approximately six to eight feet below the ground surface in TP14, in the vicinity of Anomaly B from the Geophysical Survey. Although a possible sheen was observed on water proximate to the pipes, no staining or odors were observed in the test pit. Although a storage tank was not observed in the test pit, due to concerns regarding potentially puncturing a tank (if encountered) without proper cleanup equipment, the test pit was terminated.
- An approximately one-foot thick concrete-like slab was observed at approximately 0.5 feet below the ground surface in TP18 through TP21. Excavation efforts continued at these test pits beneath the slab.

Apparent saturated conditions were encountered in only the two test pits located proximal to the Niagara River (TP8 and TP10) at depths ranging from four to ten feet below the ground surface.

3.2 Surface Soil/Fill

The 29 surface soil sample locations were screened for metals and gamma radiation and 15 of the samples were also analyzed in the laboratory for VOCs, SVOCs, pesticides, PCBs, and metals. The following sections describe the results.

The metals screening results show:

- **Arsenic** screening results in SS6 and SS9 were 21 and 17 parts per million (ppm), slightly above the applicable SCOs of 13 and 16 ppm. Screening results in SS18 were 41 ppm. Laboratory results for SS6 (20.8 ppm) and SS18 (13.1 ppm) were also slightly above SCOs, and arsenic was not detected in the laboratory sample submitted from SS9.
- **Lead** screening results were slightly above the Unrestricted Use and Protection of Ecological Resources SCOs for 14 of the samples, but all were below the Restricted-Residential Use SCOs. Laboratory results indicated that seven of these samples also contained lead concentrations above the Unrestricted Use SCOs but below the Restricted-Residential Use SCOs.
- **Copper** screening results were above the Unrestricted Use and Protection of Ecological Resources SCOs of 50 ppm for all but two of the samples. However, all concentrations were below the Restricted-Residential Use SCO of 270 ppm. Copper was not included in the laboratory analysis so no comparison could be made.
- **Chromium** screening results were above the Unrestricted Use SCOs in 17 of the samples and slightly above the Restricted-Residential Use SCOs in 1 of the samples. All chromium screening results were below the Commercial Use SCO of 400 ppm. These results were generally higher than the laboratory results, in which only four of 15 samples contained concentrations above the Residential Use SCOs and none exceeded the Restricted Residential Use SCOs.
- **Cadmium** was not identified in any of the screening results, which was corroborated by the laboratory results.

- **Mercury** screening results were above all applicable SCOs for four of the samples (SS11, SS12, SS18 and SS20). However, these results were not corroborated by the laboratory results, as the laboratory results for these four sample locations were below the Unrestricted Use SCOs. The screening results for the remaining 25 samples were non-detect.
- **Zinc** screening results were slightly above the Unrestricted Use and Protection of Ecological Resources SCOs of 109 ppm for all but one of the samples. However, all zinc screening results were well below the Restricted-Residential Use SCOs of 10,000 ppm. Zinc was not included in the laboratory analysis so no comparison could be made.
- **Nickel** screening results were above Unrestricted Use and Protection of Ecological Resources SCOs of 30 ppm for eight of the samples. However, all nickel screening results were well below the Restricted-Residential Use SCOs of 310 ppm. Nickel was not included in the laboratory analysis so no comparison could be made.

The gamma radiation screening results for the surface soil sample locations are shown in Table 2. Although nine of the 29 total samples demonstrated radiation levels above background levels, the highest measured value was only 3.99 kilocounts per minute (kC/m), only slightly above the background of 2.6 kC/m established for the surface soils at the Site.

The analytical surface soil results for the 15 submitted samples are summarized in Table 4, and include:

- Only two VOCs were detected and no VOC concentration exceeded the SCOs.
- Only one SVOC (benzo(b)fluoranthene) was detected in one sample (SS8) at a concentration above the Unrestricted SCOs. The detected concentration was below the Restricted-Residential Use SCO.
- Three pesticides (4,4-DDT, alpha-BHC and beta-BHC) were detected in at least one of the samples SS18, SS19 and SS29 at concentrations above Unrestricted SCOs but less than the Restricted-Residential Use SCOs.
- Metals results included:
 - **Arsenic** was detected in one sample at a concentration slightly above the Unrestricted Use SCO of 13 ppm and detected in one sample at a concentration of 20.8 ppm, above the SCO of 16 ppm for all Restricted Use categories.
 - **Barium** was detected in one sample (SS1) at an estimated concentration (1,290 ppm) above the Restricted-Commercial Use SCO (400 ppm) but below the Industrial Use SCO (10,000 ppm).
 - **Chromium** was detected in one sample above the Unrestricted Use SCO in four samples but all concentrations were well below the Restricted-Residential Use SCO.
 - **Lead** was detected in seven samples at concentrations above the Unrestricted Use SCO but all concentrations were significantly less than the Restricted-Residential Use SCO.
 - **Mercury** was detected in three samples at concentrations slightly above the Unrestricted Use SCO but below the Restricted-Residential Use SCO, and in one additional sample at a concentration above the Restricted-Residential Use SCO but below the Restricted-Commercial Use SCOs.
 - **Selenium** concentrations in four samples were slightly above the Unrestricted Use SCO but were well below the Restricted-Residential Use SCO.

3.3 Subsurface Soil/Fill

A total of 24 test pits were excavated and the excavated material was screened for gamma radiation. A total of 15 of the samples were also analyzed in the laboratory for VOCs, SVOCs, pesticides, PCBs, and metals. The following sections describe the results.

The gamma radiation screening of the test pits showed measurements ranging from 7.4 to 11 kC/m. Based on a background measurement of 10 kC/m, only one measurement slightly exceeded background.

Based upon analytical test pit results, summarized in Table 5, the following was identified:

- One VOC (Acetone) was detected in TP18 at a concentration slightly above Unrestricted and Protection of Groundwater SCOs but well below the Restricted-Residential Use SCO.
- One SVOC (Phenol) was detected in TP7 and TP9 above Unrestricted and Protection of Groundwater SCOs. Both concentrations were well below the Restricted-Residential Use SCO.
- One pesticide (4,4-DDT) was detected in TP22 slightly above Unrestricted SCOs and Protection of Ecological Resources SCOs but well below the Restricted-Residential Use SCO.
- Metals results included:
 - **Arsenic** was detected in one sample (TP1) at a concentration of 24.4 ppm, above the SCO of 16 ppm for all use categories.
 - **Cadmium** was detected in one sample at a concentration above the Unrestricted Use SCO but below the Restricted Residential Use SCO.
 - **Chromium** was detected in five samples above the Unrestricted Use SCO, four of which were above the Residential Use SCO and one of which was also slightly above Restricted-Residential SCO. All chromium concentrations were less than the Restricted-Commercial Use SCO (400 ppm).
 - **Lead** was detected in nine samples at concentrations above the Unrestricted Use SCO but eight of the concentrations were significantly less than the Restricted-Residential Use SCO. Sample TP9 contained lead at a concentration of 493 ppm, slightly above the Residential Use SCO of 400 ppm but below the Restricted-Commercial Use SCO of 1,000 ppm.
 - **Mercury, selenium, and silver** were each detected in at least one sample at concentrations above the respective Unrestricted Use SCO but below the Restricted-Residential Use SCO.

4.0 Discussion of Findings

Based on the results of the investigation, the following was observed for the characterized media:

- Although some minor contraventions of SCOs were identified, VOCs, SVOCs, and PCBs do not appear to be a significant concern at the Site.
- Fill material was observed in a majority of the test pit locations ranging in depth from zero to ten feet below the ground surface. The fill materials included but were not limited to glass, brick, slag, ash, foundry sands, grinding stones, red clay tiles, mulch, concrete and asphalt pieces, and miscellaneous debris.
- Drums were not encountered during the Phase II ESA.

- A large metallic object was observed at approximately six feet below the ground surface in TP9 that had the appearance of a 275-gallon storage tank. Due to site conditions and the lack of spill cleanup equipment and materials, the object was left in place. Future site work will need to evaluate the object and its condition, and determine if it is a storage tank and if it contains any fluids.
- Two one-inch pipes were observed at approximately six to eight feet below the ground surface in TP14, and the presence of a sheen on water proximal to the pipes suggested that the pipes led to a storage tank. Although a storage tank was not observed in the test pit, due to concerns regarding potentially puncturing a tank (if encountered) without proper cleanup equipment, the test pit was terminated. Future site work will need to evaluate this area to determine if a tank is present or absent.
- Gamma radiation levels at the Site appear to be at background levels.
- Although petroleum odors and staining were observed in select test pits, the analytical results indicated that petroleum-related compounds do not constitute a significant concern at the Site.
- The presence of select metals at concentrations above the Restricted-Residential Use SCOs suggests that development of the Site for a public park may require the performance of some level of remediation. However, the extent of such contraventions is relatively limited. Under the proposed future use scenario, users of the public park could be exposed to contaminants in the surface soil through the inhalation of airborne particles and the incidental ingestion of, or dermal contact, with the contaminated fill.
- A possible wood foundation was observed at approximately four feet below the ground surface in TP11. This may be associated with one of the two residences formerly located on the Site.
- The reason for the presence of the one-foot thick concrete-like slab observed at approximately 0.5 feet below the ground surface in TP18 through TP21 is not known. This pad may have been associated with one of the former residences at the Site, or may have been associated with historic filling operations on the Site.

5.0 Conclusions

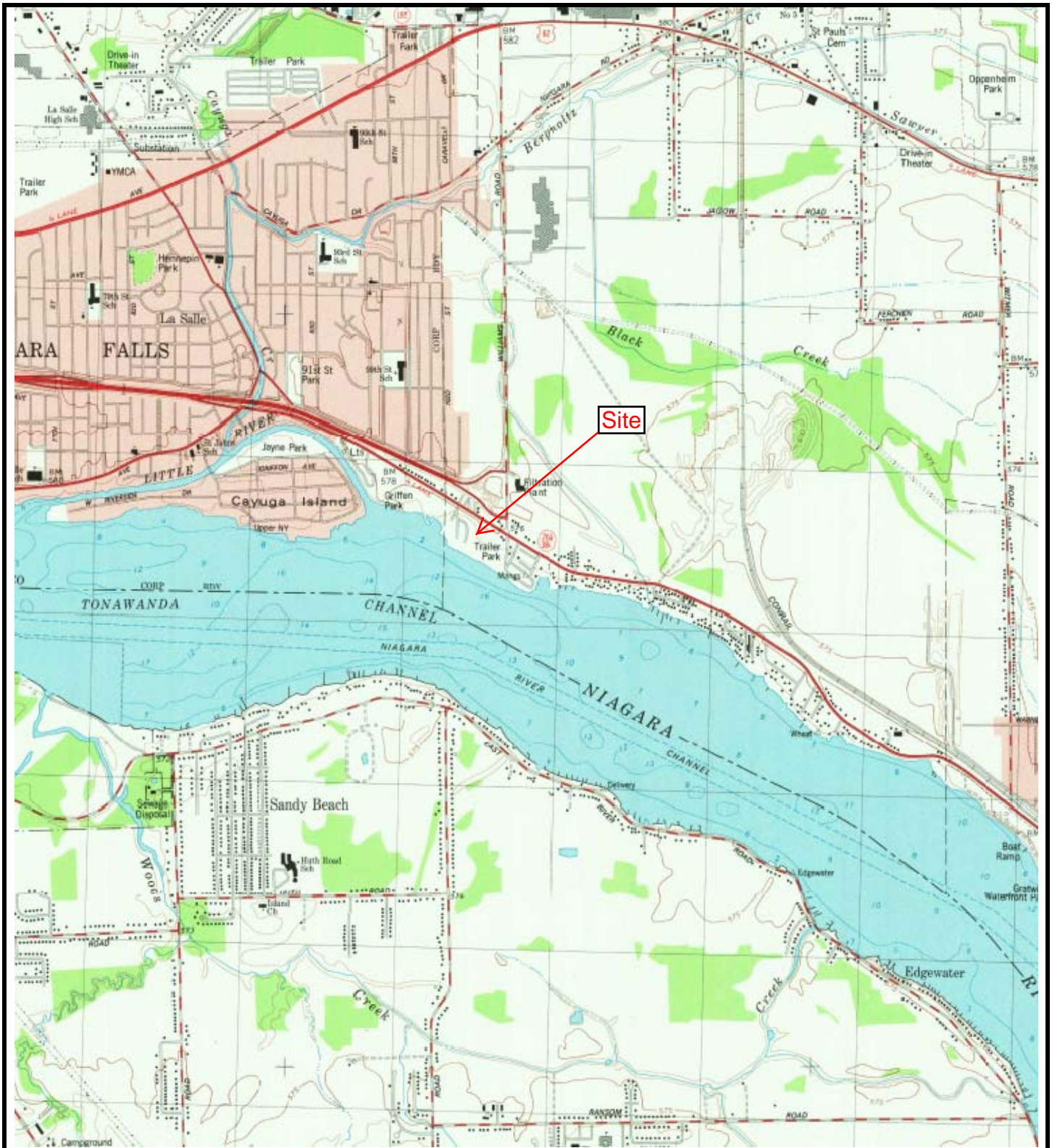
Based on the findings of this Phase II ESA as well as previous studies at the Site, it appears that a majority of the Site consists of non-native fill material ranging in depth from four to ten feet below the ground surface. The characterization information of this material suggests that one or more of the following remedial actions may be required by the NYSDEC prior to the creation of a public park at this property:

- Overall Site
 - The NYSDEC requires varying levels of soil cleanup objectives depending on the use of parks. For active recreation, Restricted-Residential SCOs apply, while for passive recreation Commercial SCOs are used.
 - Based on the presence of significant soil/fill at the Site, institutional controls should be prepared for the Site, including:

- A Site Management Plan that includes:
 - A Soil/Fill Management Plan for the safe excavation and disposal of soil/fill at the Site.
 - A prohibition on groundwater usage.
 - A description of accepted uses of the Site.
 - The institutional controls should be filed with the courts to ensure that the property is not used for residential purposes and that any actions that are undertaken at the Site are protective of human health and the environment.
 - The estimated costs associated with this action are \$10,000 to \$15,000 and include attorney and environmental consultant fees.
 - This action will likely take one to three months.
- Evaluation of Metallic Objects
 - Additional evaluation of the metallic objects in test pits TP9 and TP14 should be undertaken to determine if the objects are indeed tanks and if the tanks hold any fluids.
 - Equipment necessary to properly remove the objects, should they be positively identified as tanks, and any associated fluids should be mobilized to the site during this evaluation to mitigate the potential for release of the objects' contents.
 - Anticipated costs range from \$5,000 to \$15,000, assuming that no significant soil and/or groundwater contamination is encountered.
 - This action could be undertaken in one month.
- Surface Soil/Fill
 - Due to the presence of contaminants, primarily metals, in surface soil/fill at concentrations above Unrestricted and Restricted-Residential SCOs, the NYSDEC may require the implementation of some mitigation measures to reduce or eliminate the potential for exposure to the soil/fill.
 - The first step in the process would be to meet with the NYSDEC to determine if remedial actions are indeed necessary, and if so, create a plan to identify and evaluate the most cost-effective methods to reduce or eliminate the potential for exposure.
 - Such methods may include one or a combination of the following:
 - Delineation and removal of areas with elevated concentrations of contaminants, such as SS1 and SS29.
 - Placement of clean cover material over select areas of the Site.
 - Creation of covered paths such as boardwalks that limit users of the park to certain areas and eliminate direct contact with soil/fill.
 - Placement of clean cover material over the entire Site.
 - Because the NYSDEC's input would be needed prior to the determination of the need for remedial actions and the extent of those actions, estimates of the costs and duration of such actions cannot be ascertained at this time.
- Subsurface Soil/Fill
 - Based on the proposed use of the Site as a public park and the types of contaminants detected in the subsurface soil/fill, exposure to contamination in this material is not expected.
 - However, if excavation is necessary to prepare the Site for use as a public park, excavated materials must be properly handled in accordance with a Soil/Fill Management Plan that may include off-site disposal of the excavated soil/fill material.
 - Because the need for and extent of excavation at the Site will depend on the final development plans which have not yet been established, estimates of the costs and duration of such actions cannot be ascertained at this time.

- Funding
 - Depending on the final determination of the need for and the extent of remedial actions, Niagara Greenway, NY State and USEPA brownfield grants, or other sources of funding may be pursued to facilitate the development of the Site.

FIGURES AND TABLES



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FIGURE 1 SITE LOCATION MAP

2020 River Road
Wheatfield, New York

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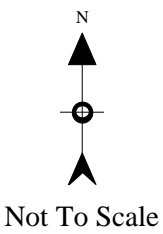
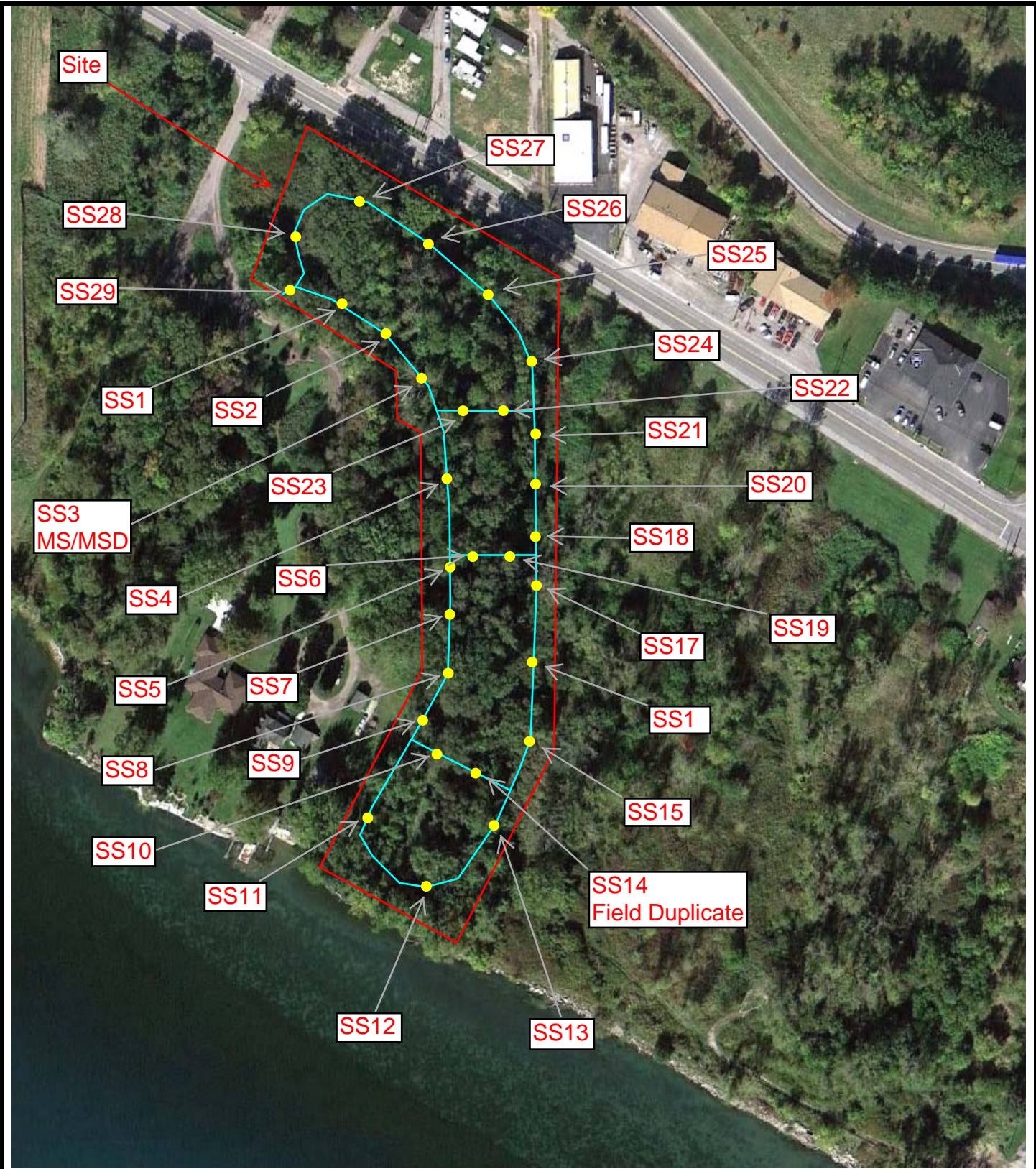


FIGURE 2
DETAILED SITE MAP

2020 River Road
Wheatfield, New York

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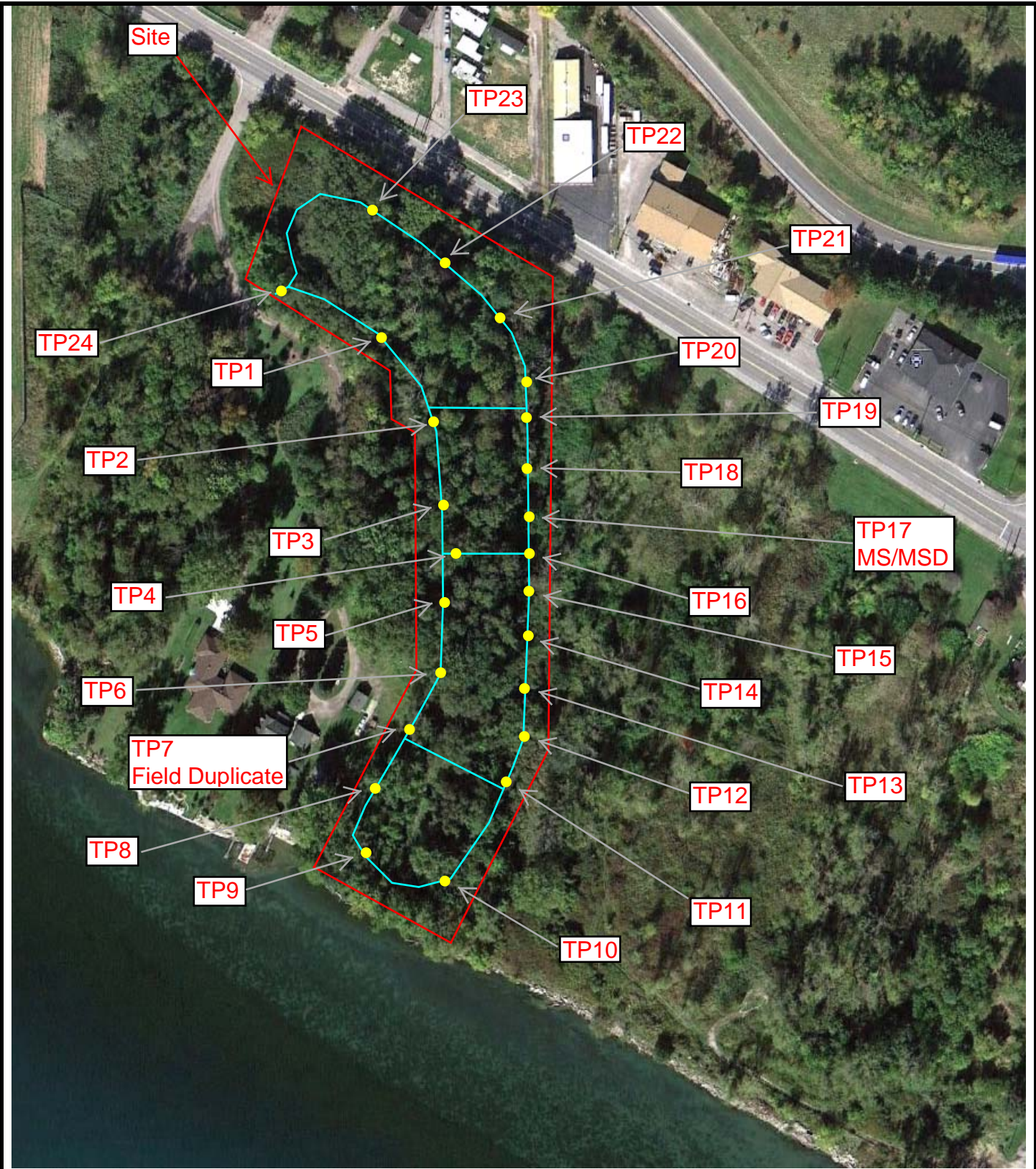
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FIGURE 3 SURFACE SOIL SAMPLING LOCATIONS MAP

2020 River Road
Wheatfield, New York

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FIGURE 4
TEST PIT SAMPLING
LOCATIONS MAP

2020 River Road
 Wheatfield, New York

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Table 1
2020 River Road, Niagara Falls, New York
Phase II Environmental Site Assessment
Surface Soil Screening Results-Metals

Sample ID	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10
Arsenic	12	4.1	ND	ND	3.9	21	5	9	17	5.7
Lead	138	26.7	43.2	38.6	34.6	133	40.1	200	108	5.7
Copper	152	90	ND	107	112	112	92	190	191	57
Chromium	56	ND	119	52	46	117	ND	183	174	ND
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	246	127	176	157	137	259	168	381	507	218
Nickel	ND	ND	35	27	24	29	ND	31	59	22

Sample ID	SS11	SS12	SS13	SS14	SS15	SS16	SS17	SS18	SS19	SS20
Arsenic	9	4.7	ND	3.8	4.2	6.3	ND	41	11	1.7
Lead	81	32.6	76.6	27.7	39.6	28.3	244	382	78	2
Copper	141	172	80	73	105	90	72	96	175	8
Chromium	151	131	ND	ND	ND	ND	ND	106	108	18
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	9	8.1	ND	ND	ND	ND	ND	5.4	ND	2
Zinc	251	216	288	142	189	148	277	499	319	6
Nickel	46	46	ND	ND	34	28	22	ND	36	8

Sample ID	SS21	SS22	SS23	SS22	SS25	SS26	SS27	SS28	SS29
Arsenic	ND	ND	3.6	5.7	ND	4.9	ND	ND	ND
Lead	47.9	68	29.3	65	32	29.1	150	199	134
Copper	57	119	70	83	83	64	125	236	108
Chromium	68	100	72	127	ND	ND	ND	101	54
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	392	196	124	169	137	113	235	305	159
Nickel	26	ND	ND	ND	26	ND	ND	38	26

Notes:

ND=Not detected

All measurements in parts per million

All samples collected and screened on September 28, 2012.

Table 2
2020 River Road, Niagara Falls, New York
Phase II Environmental Site Assessment
Surface Soil Screening Results-Gamma Radiation

Sample ID	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10
Gamma	1.89	1.68	1.54	2.01	2.43	1.89	2.15	3.12	2.12	1.54

Sample ID	SS11	SS12	SS13	SS14	SS15	SS16	SS17	SS18	SS19	SS20
Gamma	3.16	2.65	2.76	1.57	1.71	3.99	1.52	2.79	2.77	3.19

Sample ID	SS21	SS22	SS23	SS24	SS25	SS26	SS27	SS28	SS29
Gamma	2.02	1.29	1.93	2	2.47	1.85	3.13	2.51	1.82

Notes:

All Samples in kilocounts per minute (kC/m)

Background concentration at 2.6 kC/m

All samples collected and screened on September 28, 2012.

Table 3
2020 River Road, Niagara Falls, New York
Phase II Environmental Site Assessment
Test Pits Screening Results-Gamma Radiation

Sample ID	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP7/ FD	TP8
Gamma	8.9	8	7.4	8.5	9.8	8.1	9.9	9.4	10

Sample ID	TP9	TP10	TP11	TP12	TP13	TP14	TP15	TP16	TP17
Gamma	9.8	11	10	9	8.4	10	9.3	10	10

Sample ID	TP17 /MS- MSD	TP18	TP19	TP20	TP21	TP22	TP23	TP24
Gamma	9	8.1	8.5	8	10	9.2	9.6	8.5

Notes:

All Samples in kilocounts per minute (kC/m)

Background concentration at 10 kC/m

All samples collected and screened on November 26 and 27, 2012.

Table 4
2020 River Road, Niagara Falls, New York
Phase II Environmental Site Assessment
Summary of Surface Soil Analytical Results
(Detected Compounds Only)

Sample ID	SS1	SS6	SS8	SS9	SS10	SS11	SS12	SS16	SS17	SS18	SS19	SS20	SS24	SS27	SS29	Part 375 Unrestricted Soil Cleanup Objectives	Part 375 Restricted-Residential Soil Cleanup Objectives	Part 375 Restricted-Commercial Soil Cleanup Objectives	Part 375 Protection of Ecological Resources Soil Cleanup Objectives	Part 375 Protection of Groundwater Soil Cleanup Objectives
Sample Date	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012	9/28/2012					
4-Methyl-2-Pentanone	>39 U	22 J	>43 U	>32 U	>37 U	>30 U	>30 U	>36 U	>38 U	>35 U	8.2 J	7.6 J	>30 U	30 J	>29 U	NL	NL	NL	NL	NL
Toluene	>7.8 U	1.8 J	<8.6 U	<6.3 U	<7.4 U	<6 U	<6 U	<7.1 U	<7.6 U	<6.9 U	<5.4 U	<5.6 U	<6.1 U	<6.1 U	<5.8 U	700	100,000	500,000	36,000	700
Semi-Volatile Organic Compounds (ug/kg)																				
Benzo(a)anthracene	<510 U	<420 U	890	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	210 J	360 J	290 J	1,000	1,000	5,600	NL	1,000
Benzo(a)pyrene	<510 U	<420 U	630	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	240 J	370 J	350 J	1,000	1,000	1,000	2,600	22,000
Benzo(b)fluoranthene	<510 U	<420 U	960	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	330 J	520	450	800	1,000	2,600	NL	1,700
Benzo(g,h,i)perylene	<510 U	<420 U	300 J	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	<400 U	180 J	180 J	100,000	100,000	500,000	NL	1,000,000
Benzo(k)fluoranthene	<510 U	<420 U	320 J	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	<400 U	200 J	170 J	800	3,900	56,000	NL	1,700
Chrysene	<510 U	<420 U	780	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	250 J	400 J	330 J	1,000	3,900	56,000	NL	1,000
Diethylphthalate	<510 U	<420 U	<570U	<420 U	<490 U	<390 U	<400 U	330 J	<500 U	<460 U	<350 U	<370 U	<400 U	<400 U	<380 U	NL	NL	NL	NL	NL
Dimethylphthalate	550	370 J	550 J	390 J	370 J	460	390 J	500	430 J	520	290 J	430	520	450	490	NL	NL	NL	NL	NL
Fluoranthene	<510 U	250 J	1,800	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	420	800	430	100,000	100,000	500,000	NL	1,000,000
Indeno(1,2,3-cd)pyrene	<510 U	<420 U	280 J	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	<400 U	<400 U	<380 U	500	500	5600	NL	8,200
Phenanthrene	<510 U	<420 U	320 J	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	220 J	390 J	210 J	100,000	100,000	500,000	NL	1,000,000
Pyrene	<510 U	200 J	1,400	<420 U	<490 U	<390 U	<400 U	<470 U	<500 U	<460 U	<350 U	<370 U	350 J	620	450	100,000	100,000	500,000	NL	1,000,000
Pesticides (ug/kg)																				
4,4-DDE	<2.7 U	<2.2 U	<2.9 U	<2.1 U	<2.5 U	<2 U	<2.1 U	<2.4 U	<2.6 U	<2.4 U	<1.8 U	<1.9 U	1.8 J	<2.1 U	<2 U	3.3	8,900	62,000	3.3	17,000
4,4-DDT	<2.7 U	<2.2 U	<2.9 U	<2.1 U	<2.5 U	<2 U	<2.1 U	<2.4 U	<2.6 U	2.9 J	<1.8 U	<1.9 U	<2.1 U	<2.1 U	140 J	3.3	7,900	47,000	3.3	136,000
Alpha-BHC	<2.7 U	<2.2 U	<2.9 U	<2.1 U	<2.5 U	<2 U	<2.1 U	<2.4 U	<2.6 U	5.2 J	16 J	<1.9 U	<2.1 U	4.1 J	64 J	20	480	3,400	40	20
Alpha-chlordane	<2.7 U	<2.2 U	8.6 J	<2.1 U	<2.5 U	<2 U	<2.1 U	<2.4 U	<2.6 U	<2.4 U	<1.8 U	<1.9 U	4.2 J	<2.1 U	<2 U	94	4200	24,000	1,300	2,900
Beta-BHC	<2.7 U	<2.2 U	<2.9 U	<2.1 U	<2.5 U	<2 U	<2.1 U	<2.4 U	<2.6 U	300 J	46 J	<1.9 U	<2.1 U	5.7 J	87 J	36	360	3,000	600	90
Delta-BHC	<2.7 U	<2.2 U	<2.9 U	<2.1 U	<2.5 U	<2 U	<2.1 U	<2.4 U	<2.6 U	<2.4 U	<1.8 U	<1.9 U	<2.1 U	1.9 J	<2 U	40	100,000	500,000	40	250
Gamma-chlordane	<2.7 U	<2.2 U	5.6 J	<2.1 U	<2.5 U	<2 U	<2.1 U	<2.4 U	<2.6 U	<2.4 U	<1.8 U	<1.9 U	2.1 J	<2.1 U	<2 U	NL	NL	NL	NL	NL
PCBs (ug/kg)																				
Aroclor-1254	<27 U	<22 U	<29 U	<21 U	<25 U	<20 U	<20 U	<24 U	<26 U	<24 U	80 J	120 J	<21 U	61 J	800 J	NL	NL	NL	NL	NL
Metals (mg/kg)																				
Arsenic	1.32	20.8	<1.3 U	<0.86 U	<1.02 U	<0.86 U	<0.82 U	<1.04 U	<1.08 U	13.1	<0.8 U	0.26 J	<0.88 U	9.61	2.9	13	16	16	13	16
Barium	1,290 J	42 J	102 J	135 J	73.3 J	155 J	172 J	29.7 J	84.5 J	60.7 J	46.1 J	130 J	116 J	81.5 J	89.4 J	350	400	400	433	820
Cadmium	<0.36 U	0.2 J	<0.4 U	1.01	0.32	0.32	<0.24 U	<0.32 U	0.16 U	0.07 J	0.32	0.36	<0.26 U	0.32	0.35	2.5	4.3	9.3	4	7.5
Chromium	37.5 J	63.2 J	37.7 J	5.47 J	8.27 J	3.91 J	3.51 J	8.33 J	35.1 J	22.8 J	<0.4 UN	5.19 J	29.6 J	28.4 J	36.5 J	30	180	1,500	41	NL
Lead	168 J	151 J	186 J	48.7 J	24.9 J	25.1 J	3.99 J	21 J	261 J	294 J	30.1 J	41.7 J	56.3 J	67.7 J	233 J	63	400	1,000	63	450
Mercury	0.32	0.14	0.26	0.01	0.06	0.01 J	0.01 J	0.08	0.16	0.14	0.01	0.01	0.3	0.34	2.61 D	0.18	0.81	2.8	0.18	0.73
Selenium	3.5	1.63	5.32	3.85	1.96	3.54	4.4	1.77	1.7	2.17	0.99	4.72	3.94	2.73	3.47	3.9	180	1,500	3.9	4
Silver	1.24	0.48	0.87	1.28	0.6	0.97	1.22	0.51 J	0.61	0.72	0.23 J	1.91	1.44	1.13	1.24	2	180	1,500	2	8.3

NL=Not listed

U=The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

J=The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

D=The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

 Analyte detected above Part 375 Unrestricted SCOs

 Analyte detected above Party 375 Restricted Residential SCOs

Analyte detected above Part 375 Restricted Commercial SCOs

Analyte detected above Part 375 Protection of Ecological Resources SCOs

 Analyte detected above Part 375 Protection of Groundwater SCOs

Table 5
2020 River Road, Niagara Falls, New York
Phase II Environmental Site Assessment
Summary of Test Pit Soil Analytical Results
(Detected Compounds Only)

Sample ID	TP1	TP5	TP7	TP8	TP9	TP10	TP11	TP12	TP14	TP16	TP17	TP18 Reanalysis	TP20	TP22	TP24	Part 375 Unrestricted Soil Cleanup Objectives	Part 375 Restricted-Residential Soil Cleanup Objectives	Part 375 Restricted-Commercial Soil Cleanup Objectives	Part 375 Protection of Ecological Resources Soil Cleanup Objectives	Part 375 Protection of Groundwater Soil Cleanup Objectives
Depth	2-4 ft. bgs	4-6 ft. bgs	2-4 ft. bgs	3-5 ft. bgs	3-5 ft. bgs	6-8 ft. bgs	2-4 ft. bgs	4-6 ft. bgs	5-7 ft. bgs	3-5 ft. bgs	2-4 ft. bgs	2-4 ft. bgs	2-4 ft. bgs	1-3 ft. bgs	5-7 ft. bgs					
Sample Date	11/26/2012	11/26/2012	11/26/2012	11/26/2012	11/26/2012	11/26/2012	11/27/2012	11/27/2012	11/27/2012	11/27/2012	11/27/2012	11/27/2012	11/27/2012	11/27/2012	11/27/2012					
Volatile Organic Compounds																				
Acetone	<35 U	14 J	48	<35 U	22 J	24 J	<30 UJ	<28 U	<30 U	<29 U	<33 U	56 J	<29 U	<29 U	<31 U	50	100,000	500,000	2,200	50
Carbon Disulfide	<6.9 U	<6.4 U	8.6	<7.1 U	2.2 J	2.6 J	<6.1 U	<5.7 U	<6.1 U	<5.9 U	<6.6 U	<6.2 UJ	<5.9 U	<5.7 U	<6.2 U	NL	NL	NL	NL	NL
Chlorobenzene	3.6 J	<6.4 U	<6 U	<7.1 U	<6 U	<6.2 U	<6.1 U	<5.7 U	<6.1 U	<5.9 U	<6.6 U	4.6 J	<5.9 U	<5.7 U	<6.2 U	1,100	100,000	500,000	40,000	1,100
Methylene Chloride	<6.9 U	<6.4 U	2.5 J	3.4 J	<6 U	<6.2 U	1.7 J	<5.7 U	<6.1 U	<5.9 U	<6.6 U	<6.2 UJ	<5.9 U	<5.7 U	<6.2 U	50	100,000	500,000	12,000	50
Tetrachloroethene	<6.9 U	<6.4 U	<6 U	<7.1 U	<6 U	<6.2 U	<6.1 U	<5.7 U	<6.1 U	<5.9 U	<6.6 U	<6.2 UJ	<5.9 U	1.5 J	<6.2 U	1,300	19,000	150,000	2,000	470
Semi-Volatile Organic Compounds																				
2,4-Dimethylphenol	<460 U	<420 U	<400 U	<460 U	440	<410 U	<400 U	<370 U	<400 U	<390 U	<430 U	<410 U	<390 U	<3,800 U	<410 U	NL	NL	NL	NL	NL
3+4-Methylphenols	<460 U	<420 U	<400 U	<460 U	730	<410 U	<400 U	<370 U	<400 U	<390 U	<430 U	<410 U	<390 U	<3,800 U	<410 U	NL	NL	NL	NL	NL
Benzo(a)anthracene	<460 U	<420 U	170 J	<460 U	<400 U	<410 U	<400 U	160 J	<400 U	<390 U	370 J	<410 U	<390 U	<3,800 U	<410 U	1,000	1,000	5,600	NL	1,000
Benzo(a)pyrene	<460 U	<420 U	210 J	240 J	<400 U	<410 U	<400 U	220 J	<400 U	<390 U	330 J	<410 U	<390 U	<3,800 U	<410 U	1,000	1,000	1,000	2,600	22,000
Benzo(b)fluoranthene	<460 U	<420 U	270 J	<460 U	<400 U	<410 U	<400 U	200 J	<400 U	<390 U	440	<410 U	<390 U	<3,800 U	<410 U	800	1,000	5,600	NL	1,700
Benzo(g,h,i)perylene	<460 U	<420 U	320 J	240 NJ	<400 U	<410 U	<400 U	320 J	<400 U	<390 U	230 J	<410 U	<390 U	<3,800 U	<410 U	100,000	100,000	500,000	NL	1,000,000
Chrysene	<460 U	<420 U	410	<460 U	<400 U	1,200	<400 U	300 J	<400 U	<390 U	400 J	<410 U	<390 U	<3,800 U	<410 U	1,000	3,900	56,000	NL	1,000
Diethylphthalate	<460 U	<420 U	360 J	<460 U	<400 U	<410 U	<400 U	160 J	<400 U	<390 U	<430 U	<410 U	<390 U	<3,800 U	<410 U	NL	NL	NL	NL	NL
Dimethylphthalate	890	710	620	560	630	500	570	520	580	530	540	570	460	<3,800 U	570	NL	NL	NL	NL	NL
Di-n-butylphthalate	<460 U	<420 U	770	<460 U	<400 U	<410 U	<400 U	<370 U	<400 U	<390 U	<430 U	<410 U	<390 U	<3,800 U	<410 U	NL	NL	NL	NL	NL
Fluoranthene	<460 U	<420 U	240 J	<460 U	<400 U	<410 U	<400 U	<370 U	<400 U	<390 U	780	<410 U	<390 U	<3,800 U	<410 U	100,000	100,000	500,000	NL	1,000,000
Indeno(1,2,3-cd)pyrene	<460 U	<420 U	170 J	<460 U	<400 U	<410 U	<400 U	160 J	<400 U	<390 U	220 J	<410 U	<390 U	<3,800 U	<410 U	500	500	5600	NL	8,200
Phenanthrene	<460 U	<420 U	270 J	<460 U	<400 U	<410 U	<400 U	360 J	<400 U	<390 U	500	<410 U	<390 U	<3,800 U	<410 U	100,000	100,000	500,000	NL	1,000,000
Phenol	<460 U	<420 U	460	300 J	20,000	260 J	<400 U	310 J	<400 U	<390 U	<430 U	<410 U	<390 U	<3,800 U	<410 U	330	100,000	500,000	30,000	330
Pyrene	<460 U	<420 U	260 J	850	<400 U	<410 U	<400 U	260 J	<400 U	<390 U	600	<410 U	<390 U	<3,800 U	<410 U	100,000	100,000	500,000	NL	1,000,000
Pesticides																				
4,4-DDT	<2.4 U	<2.2 U	R	<2.4 U	<2 UJ	<2.1 U	<2.1 U	<1.9 U	<2.1 U	<2 U	<2.2 U	<2.1 U	<2 U	7.6	<2.1 U	3.3	7,900	47,000	3.3	136,000
PCBs																				
Aroclor-1248	<24 UJ	<22 U	< 20 UJ	<24 UJ	<20 UJ	<21 UJ	<21 U	<19 UJ	<21 UJ	<20 U	150 J	<21 U	<20 U	<19 UJ	<21 UJ	NL	NL	NL	NL	NL
Aroclor-1260	<24 UJ	<22 U	19 J	<24 UJ	<20 UJ	<21 UJ	<21 U	19 J	<21 UJ	<20 U	<22 U	<21 U	98	<19 UJ	<21 UJ	NL	NL	NL	NL	NL
Metals																				
Arsenic	24.4 J	4.18	4.07	7.21	10	3.71	4.15	2.72	2.79	3.04	4.92	4.39	6.07	3.92	3.96	13	16	16	13	16
Barium	210 J	15.8 J	88.9 J	97.7 J	69.9 J	64.6 J	65.7 J	63.4 J	35.1 J	56.6 J	103 J	47.8 J	107 J	56 J	41.2 J	350	400	400	433	820
Cadmium	4 N	0.16 JN	1.07 N	1.13 N	1.36 N	0.37 N	0.53 N	0.32 N	0.27 N	0.62 N	0.68 N	0.21 N	1.07 N	0.9 N	0.33 N	2.5	4.3	9.3	4	7.5
Chromium	69.6 J	>7.85 UJ	92.7 J	146 J	212 J	20 J	<10.9 UJ	28.8 J	<8.24 UJ	<9.75 UJ	<10.7 UJ	<10.9 UJ	32.1 J	12.3 J	<6.44 UJ	30	180	400	41	NL
Lead	313	7.88	148	186	493	156	36.5	237	20.9	200	34.9	39	26.2	88.8	352	63	400	1,000	63	450
Mercury	0.79 D	<0.02 U	0.05 J	0.08	0.08	0.1	0.04	0.35	0.04	0.05	0.08	0.02	0.05	0.11	0.22	0.18	0.81	2.8	0.18	0.73
Selenium	1.18	<056 U	9.79	5.04	9.48	2.19	0.76	1.54	0.22 J	0.49 J	1.76	<0.52 U	1.16	0.38 J	1.13	3.9	180	1,500	3.9	4
Silver	2.55 J	0.2 J	0.57 J	<0.32 UJ	0.56 J	0.16 J	0.37 J	0.28 J	0.15 J	0.33 J	1 J	0.12 J	0.9 J	0.17 J	1.01 J	2	180	1,500	2	8.3

NL=Not listed

U=The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

J=The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

UJ=The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.

N=(Organics)-Presumptive evidence of a compound

N=(Inorganics)-The matrix spike recovery was outside control limits.

☐ Analyte detected above Part 375 Unrestricted SCOs

☐ Analyte detected above Party 375 Restricted Residential SCOs

Bold Analyte detected above Part 375 Restricted Commercial SCOs

Italic Analyte detected above Part 375 Protection of Ecological Resources SCOs

Underlined Analyte detected above Part 375 Protection of Groundwater SCOs

APPENDIX 1

Field Logs

X-Ray Detection for Metal Concentrations (Units in PPM)

Date	9-28	9-28	9-28	9-28	9-28	9-28	9-28	9-28	9-28	9-28
Location	551	552	553	554	555	556	557	558	559	5510
Arsenic	12	9.1	ND	ND	3.9	21	5	9	17	5.7
Lead	138	26.7	43.2	38.6	34.6	133	40.1	200	108	27.1
Copper	253	90	ND	107	112	112	92	190	191	57
Chromium	56	ND	119	52	46	117	ND	183	174	ND
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	246	127	176	157	137	259	168	381	507	28
Nickel	ND	ND	35	27	24	24	ND	31	59	22

- (As)
- (Pb)
- (Cu)
- (Cr)
- (Cd)
- (Hg)
- (Zn)
- (Ni)

X-Ray Detection for Metal Concentrations (Units in PPM)

Date	9-28	9-28	9-28	9-28	9-28	9-28	9-28	9-28	9-28	9-28
Location	SS11	SS12	SS13	SS14	SS15	SS16	SS17	SS18	SS19	SS20
Arsenic	9	4.7	ND	3.8	4.2	6.3	ND	41	11	1.7
Lead	81	32.6	26.6	27.2	39.6	28.3	244	382	78	2
Copper	141	172	80	73	105	90	72	96	175	8
Chromium	151	131	ND	ND	ND	ND	ND	106	108	18
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	9	8.1	ND	ND	ND	ND	ND	54	ND	2
Zinc	251	216	288	142	189	148	277	499	319	6
Nickel	46	46	ND	ND	34	28	22	ND	36	8

X-Ray Detection for Metal Concentrations (Units in PPM)

Date	9-28	9-28	9-28	9-28	9-28	9-28	9-28	9-28	9-28	9-28
Location	SS21	SS22	SS23	SS24	SS25	SS26	SS27	SS28	SS29	SS30
Arsenic	ND	ND	3.6	5.1	ND	4.9	ND	ND	ND	
Lead	47.9	68	29.3	64.5	32	29.1	150	199	134	
Copper	57	119	70	83	83	64	125	236	108	
Chromium	68	100	72	127	ND	ND	ND	101	54	
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	392	196	124	169	137	113	235	305	159	
Nickel	26	ND	ND	ND	26	ND	ND	38	26	

- Entire circle is ~ 780 steps
- 24 samples is 1 sample every ~ 32 steps
- 3 middle cuts in circle; each at ~ 40 steps
- 2 samples per middle cut; 1 sample ~ 10 steps into each cut



River Rd

La Salle Expy

Wildwood Fwy

9/18 FD



CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Labelka
 ADDRESS: 300 Pearl St, Suite 325
 CITY: Buffalo STATE: NY ZIP: 14202
 ATTENTION: Chris Weber
 PHONE: 716-551-6281 FAX: 716-551-6282

CLIENT PROJECT INFORMATION

PROJECT NAME: 22505 - River Rd
 PROJECT NO.: 22505 LOCATION: River Rd
 PROJECT MANAGER: Dan River
 e-mail: dan@river.com
 PHONE: 716-551-6281 FAX: 716-551-6282

CLIENT BILLING INFORMATION

BILL TO: Labelka PO#: 22505
 ADDRESS: 300 Pearl St, Suite 325
 CITY: Buffalo STATE: NY ZIP: 14202
 ATTENTION: Dan River PHONE: 716-551-6281

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
 HARD COPY: _____ DAYS *
 EDD: Standard Turn DAYS *
 PREAPPROVED TAT: YES NO
 * STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

LEVEL 1: Results only Others _____
 LEVEL 2: Results + QC
 LEVEL 3: Results (plus results raw data) + QC
 LEVEL 4: Results + QC (all raw data)
 EDD Format: _____

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE	SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS		
				DATE	TIME		1	2	3	4	5	6	7	8	9			
1.	5511	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	1402, 1802
2.	5512	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	
3.	5513	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	
4.	5514	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	
5.	5515	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	
6.	5516	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	
7.	5517	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	
8.	5518	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	
9.	5519	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	
10.	5520	501	X	8/8	12:00	1	X	X	X	X	X	X	X	X	X	X	X	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

REINQUISHED BY SAMPLER: _____ DATE/TIME: _____ RECEIVED BY: _____
 REINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____
 REINQUISHED BY: _____ DATE/TIME: _____ RECEIVED FOR LAB BY: _____

Conditions of bottles or coolers at receipt: Compliant Non Compliant
 MeOH extraction requires an additional 4 oz jar for percent solid. Cooler Temp. _____
 Comments: _____ Ice in Cooler? _____

SHIPPED VIA: CLIENT: HAND DELIVERED OVERNIGHT
 CHEMTECH: PICKED UP OVERNIGHT. Shipment Complete: YES NO

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092

(908) 789-8900 Fax (908) 789-8922

www.chemtech.net

CHEMTECH PROJECT NO.

QUOTE NO.

COC Number 024688

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Labovka

ADDRESS: 300 Pearl St, Suite 305

CITY: Buffalo STATE: NY ZIP: 14202

ATTENTION: Chris Vinko

PHONE: 716-551-1028 FAX: 716-551-1028

CLIENT PROJECT INFORMATION

PROJECT NAME: 20505-River Rd

PROJECT NO.: 20505 LOCATION: River Rd.

PROJECT MANAGER: Don Rivers

e-mail: drivers@labovka.com

PHONE: 716-551-1028 FAX: 716-551-1028

CLIENT BILLING INFORMATION

BILL TO: Labovka PO#: 20505

ADDRESS: 300 Pearl St, Suite 305

CITY: Buffalo STATE: NY ZIP: 14202

ATTENTION: Don Rivers PHONE: 716-551-1028

ANALYSIS

DATA TURNAROUND INFORMATION

FAX: _____ DAYS * _____

HARD COPY: _____ DAYS * _____

EDD: Standard Turn _____ DAYS * _____

PREAPPROVED TAT: YES NO

* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

LEVEL 1: Results only

LEVEL 2: Results + QC

LEVEL 3: Results (plus results raw data) + QC

LEVEL 4: Results + QC (all raw data)

EDD Format: _____

Others _____

PRESERVATIVES

COMMENTS

← Specify Preservatives
A-HCl B-HNO₃
C-H₂SO₄ D-NaOH
E-ICE F-Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS			
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9				
1.	TCL VOC'S	Water			9-27-12	6:50pm	2													2 40ml vials
2.	PCRA Metals	Water			9-27-12	6:50pm	1													1 1 liter amber
3.	TCL SVOC'S	Water			9-27-12	6:50pm	1													1 1 liter amber
4.	Pesticides	Water			9-27-12	6:50pm	1													1 1 liter amber
5.	PCBs	Water			9-27-12	6:50pm	1													1 1 liter amber
6.																				
7.																				
8.																				
9.																				
10.																				

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

Conditions of bottles or coolers at receipt: Compliant Non Compliant Cooler Temp. _____

MeOH extraction requires an additional 4 oz jar for percent solid. Ice in Cooler?: _____

Comments: _____

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. <u>[Signature]</u>		1. _____
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2. _____		2. _____
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3. _____		3. _____

SHIPPED VIA: CLIENT: HAND DELIVERED OVERNIGHT YES NO
CHEMTECH: PICKED UP OVERNIGHT: _____

Land Survey Order Form
KLETTKE LAND SURVEYORS, P.C.

Neal R. Klettke, L.S. – Matthew F. Klettke, L.S.
2470 Stoelting St. (Bergholz), Niagara Falls, N.Y. 14304
(716)731-5613 FAX (716)731-9607

Date: 9/21/2012

Property Owner: **Town of Wheatfield**

Property Address: **Vacant Parcels - 2020 River Road, Niagara Falls, NY 14304**

Tax Map Info - Municipality: **Town of Wheatfield** S.B.L. No's.: **174.07-3-6 through 174.07-3-9**

Requested By (Client): **LaBella Associates, P.C.**

Mailing Address: **300 Pearl Street, Buffalo, NY 14202**

Purpose Of Survey (check all that apply):

- pending sale pending mortgage pending construction
 municipal subdivision or zoning requirements boundary dispute
 other (describe): **Environmental investigation of overall site.**

Type of Survey - Failure to specify the correct type of survey can result in substantial delays and cost over-runs due to duplicitous effort required. Persons ordering surveys are urged to consult other involved parties (lenders, title companies, etc.) to verify type of survey required before completing this form.

(check one):

- Niagara Frontier Land Surveyor Association (NFLSA) Code
 2010 American Land Title Assoc. / American Congress on Surveying & Mapping (ALTA/ACSM) Code - list Table A optional requirements by number (2 through 20; monumentation option 1 is mandated by local NFLSA Code): _____

Other (describe): **Office research and field reconnaissance of outer-most boundaries of composite of 4 tax parcels listed. Current deed and Klettke office survey records will be investigated prior to field survey activities. Field efforts will be limited to scouting for existing survey boundary markers and other evidence in accordance with survey records. Since the current need is for approximate ($\pm 10'$) boundary determination, post-field work analysis of findings versus title information is not included in this proposal. Standard orange flagging will be tied to vegetation or lath along perimeter boundaries so approximated, at intervals sufficient for intervisibility for client's current purposes. Client shall make owner aware that the Klettke firm will not be responsible for any further use of boundaries so marked, unless further engaged to perform boundary analysis and provide mapping in accordance with standards stipulated in survey codes of practice listed above.**

Reference Material (provided by Client per Code requirements):

- Title Abstract by Title Company: _____
Abstract No: _____ check one: original / photocopy
Set-out No's. _____ through _____ Dates: _____ - _____
- Current Deed copy – Liber: **3385** Page(s): **0237**
- Copies of Pertinent Easements, etc. (not in Abstract), list:
Liber: _____ Page: _____ Benefiting: _____

KLETTKE LAND SURVEYORS, P.C.

Land Survey Order Form - page 2

Client/Owner: **LaBella Associates, P.C. / Town of Wheatfield**

Address/SBLNo: **2020 River Road - T/Wheatfield 174.07-3-6 through 174.07-3-9**

Date: **9/21/2012**

Reference Material (cont.)

<u>X Prior Survey(s) by</u>	<u>Job No.</u>	<u>Date(s)</u>
Klettke:	<u>Various</u>	<u>Various</u>
Keller:	<u>Various</u>	<u>Various</u>
Haseley:	<u>Various</u>	<u>Various</u>
Quinn:	<u>Various?</u>	_____
Other: _____	_____	_____

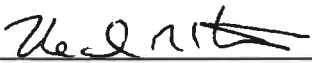
Note: Failure to provide pertinent title information, etc. May result in substantial delays and cost over-runs due to duplicitous efforts and field and office work after initial map issue.

Other Instructions: _____

Estimated Completion Date flagged (approx..) boundaries: 7 days from receipt of signed acceptance of this proposal (together with any additional reference material) as notice to proceed. (Schedule is dependent on timely acceptance, weather and other factors listed here-in).

Cost Estimate

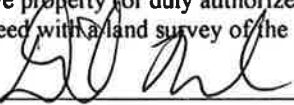
Survey Fee Range: **\$950.00 to \$1150.00, invoiced upon completion of perimeter flagging.**
Total due within 15 days of invoice.

Surveyor Signature:  Date: 9-21-2012

Print Name: Neal R. Klettke

Acceptance of Proposal

As owner(s) of the above property (or duly authorized agent of owner(s), I hereby authorize Klettke Land Surveyors, P.C. to proceed with a land survey of the above defined property as specified here-in:

Client Signature:  Date: 9/21/12

Print Name: DANIEL RIKER

LABELLA
Associates, P.C.

300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - 1
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: ~~Russ~~ Nature's Way
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #1
GROUND SURFACE ELEVATION: NA
START DATE:

DATUM: NA
11-26-12

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			Brown (fill material) (soil)	0.1	lots of glass
2			Black (soil) (fill material)	0.2	
4			Black silty clay (p.s.m)	0.2	
6			Grey Brown clay (p.s.m)	0.1	
8			Brown clay (p.h.m)	0.1	
10					
12					
14					
16					

- fill from 0-4'
- no obs
- staining 2-4'

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

TEST PIT: TP - 1

LABELLA
Associates, P.C.

300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - 2
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #2
GROUND SURFACE ELEVATION: NA
START DATE: 11-26-13

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			Light brown fill 0-2' Light brown fill (soil)	0.1	
2			2-3 " 3-4 Dark brown fill (soil)	0.1	
			4-6 "	0.1	
			6-8 Grey silty clay (mp, ms, n)	0.1	
8			8-10 Red-gay clay (sp, stiff, n)	0.1	
10			- fill to 6' (no debris) - no odors just not native material!		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP - 2



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - #3

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #3
GROUND SURFACE ELEVATION: NA
START DATE: 11-26-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Light Brown fill (soil)	0.1	
2			2-4 Black fill (soil)	0.2	
			4-6 Grey brown silt (mp, ol, m) slight odor	0.4	
			6-8 Grey silt (mp, l, m) slight odor	0.3	
8			8-10 "	0.6	
10			fill 0-4' - slight odor 4-10' - no debris in fill; just not native material		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES: ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			

GENERAL NOTES

- STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

TEST PIT: TP - #3



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - #4

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #4
GROUND SURFACE ELEVATION: NA
START DATE: 11-26-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Light Brown (soil) fill	0.1	
2			2-4 Black (soil) fill	0.2	
			4-6 Grey brown silt (mp.lm)	0.1	
			6-8 Grey silt (mp.lm)	0	
8			8-10"	0	
10			- fill to 4' - no debris, just not native material - no odors		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP - #4



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - #5

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #5
GROUND SURFACE ELEVATION: NA
START DATE: 11-26-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Light brown (soil) fill	0.1	
2			2-4 Brown-black (soil) fill	0.2	
			4-6 Grey silt (mp, ms, m)	0.2	
			6-8"	0.1	
8			8-10"	0.3	
10			- fill to 4' - no debris just not native material - no odors		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
NA	NA	NA	NA			

GENERAL NOTES

- 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

TEST PIT: TP - #5



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP-#6

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo

OPERATOR:

LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #6

GROUND SURFACE ELEVATION: NA

START DATE: 11-26-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Black (soil) fill	0.1	0
2			2-4 Light Black (soil) fill	0.2	2
			4-5 Brown grey silt (mp, l, m) 5-6 Brown black silt (mp, l, m)	0.2	4
			6-8 Grey silt (p, stiff, m)	0.1	6
8			"	0.3	8
10			- fill to 4'		10
12			- no debris, just not native material		12
14					14
16					16

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP-#6



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - #7

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo

OPERATOR:

LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #7

GROUND SURFACE ELEVATION NA

START DATE: 11-26-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2' Red brown (soil) fill	0.2	0
2			2-4- Black (soil) fill	Petroleum odors 0.3	2
			4-5- "		4
			5-6 Brown grey silt (mp, ms, m)	odors 0.2	6
			6-8 Grey silt (lp, ms, m)	0.2	8
8			8-10- "	0.1	8
10			10-4' - fill		10
12			- no debris just not native material		12
14			- staining/odor 2-6'		14
16					16

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP - #7



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - #8
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #8
GROUND SURFACE ELEVATION: NA
START DATE: 11-26-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			Black-brown 0-2 Fill + debris bricks, misc. debris	0.2	
2			2-4 SAA	0.1	
4			4-6 Brown grey silt (p, l, w)	0.2	
6			6-8 SAA	0.1	
8			8-10 Grey silt (p, l, w)	0.1	
10			- Fill 0-4' - Fill included brick, misc. debris - no obs		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
NA	NA	NA	NA		4'	

GENERAL NOTES

- 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

TEST PIT: TP - #8



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP-~~19~~
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #9
GROUND SURFACE ELEVATION: NA
START DATE: 11-26-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			Black-brown Fill Brick drums, misc. debris	2.1	0
2			2-4"	0.1	2
4			4-6 - Drums, possible tank, debris	0.1	4
6			- stopped excavating @ 6'		6
8					8
10					10
12			- Fill debris to 6', possible tank, step excavation @ 6' hole		12
14			- no odors		14
16					16

WATER LEVEL DATA			DEPTH (FT)			NOTES: ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			

GENERAL NOTES

- 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

TEST PIT: TP-~~19~~



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - #10
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #10
GROUND SURFACE ELEVATION: NA
START DATE: 11-26-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			Black-brown-red-grey 0-2 Fill (Brick, debris, misc. rock)	0.1	
2			2-4"	0.2	
4			4-6"	0.2	
6			6-8 Black silt (lp, ms, w)	0	Slight odor
8			8-10 Grey silt (lp, stib, w)	0.1	
10					
12			- fill to 0-6'		
14			- lots of brick, debris, misc. rock		
16			- slight odor		

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA		6	

GENERAL NOTES

- 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

TEST PIT: TP #10

LABELLA
Associates, P.C.

300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP-~~11~~1
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #11
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2' - Brown silt (hp, soft, m) possible fill	0.1	0
2			2-4' - Black (soil) fill	0.1	2
			4-6' Brown silt (mp, ms, m) possible fill	0.2	4
			6-7' SAA		6
			7-8' - Grey clay (p, stiff, m)	0.1	8
8			8-10 SAA	0	8
10			- fill to 0-10' (possibly) - no debris just not native soil		10
12			- no rocks		12
14			- Some kind of lead foundation 4' down ; stepped excavation, moved a few feet to the west		14
16					16

WATER LEVEL DATA			DEPTH (FT)		
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED
NA	NA	NA	NA		

NOTES:
ND = Non Detect
BGS = Below the Ground Surface
NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP-~~11~~1



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ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP-~~#1~~2

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #12
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Light brown (soil) fill	0.6	
2			2-4 - Brown-grey-red (soil) fill debris brick misc. rock	0.8	
			4-6"	1.3	
			6-8 Grey clay (p, ms, m)	2.4	
8			8-10"	0.7	
10			- Fill 0-6' debris, brick, misc. rock		
12			- Slight odors 2-6'		
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP-~~#1~~2



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ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP-13

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 13
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Light Brown (soil) possibly fill	0.1	0
2			2-4 "	0.6	2
			4-6 " and pockets of red clay tiles buried (perched water)	0.8	4
			6-7-" 7-8 Grey clay (p, stib, m)	1.2	6
8			8-10-"	0.8	8
10			-Fill 0-6' including red clay tiles -perched water 4-6' -no odors		10
12					12
14					14
16					16

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP-13

LABELLA
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PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP-#14

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo

OPERATOR:

LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 14

GROUND SURFACE ELEVATION: NA

START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Light brown (soil) fill	0.3	
2			2-4 - 11	0.4	
			4-6 Dark brown (soil) fill	0.2	
			6-8 Grey clay - piping 1" possible tank proximate?	0.1	
8			8-10 Grey clay (p.m.s.m)	0.2	
10			Fill 0-6' - at least 2, 1" pipes @ 6-8' - possible tank proximate - no odors, staining, evidence of product though		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES: ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			

GENERAL NOTES

- 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

TEST PIT: TP - 14



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PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP-15

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 15
GROUND SURFACE ELEVATION NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2' Light brown red (soil) fill	0.1	
2			2-3-11 3-4- Black (soil) fill	0.3	
			4-6 Grey brown silt (hp, s, m)	0.3	
			6-8 Grey clay (p, ms, m)	0.2	
8			8-10 SAA	0.1	
10			-Fill 0-4' no debris just not native material -no odors		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES: ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			

GENERAL NOTES

- 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

TEST PIT: TP-15



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP-16

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 16
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Black brown (soil) fill	0.1	
2			2-4 "	0.3	
			4-6 Brown grey clay (lp, stiff, m)	0.2	
			6-8 - Grey clay (lp, stiff, m)	0	
8			8-10 "	0.4	
10			Fill 0-4' no debris just not native material -no odds		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES: ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			

GENERAL NOTES

- 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

TEST PIT: TP-16



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - 17
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: #17
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Black gravel asphalt fill	0.1	
2			2-4-u	0.2	
			4-6 Grey clay (mp, ms, m)	0.2	
			6-8-u	0.1	
8			8-10"	0.2	
10			-Fill to 0-4' (all asphalt, gravel)		
12			-no odors		
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP-17



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - 18

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 18
GROUND SURFACE ELEVATION NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-0.6 - fill (black)		Slight odor
2			0.6- concrete 0-4 - " substance	0.2	
			4-6 Brown clay (hp, soft, m)	0.1	
			6-8 Brown grey clay (mp, ms, m)	0	
8			8-10 Grey clay (lp, stiff, m)	0.6	
10			scribble	0.4	
12			scribble		
14			- mud 3' West, resumed test pit excavation - fill 0-4' - slight odor 0-4'		
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP - 18



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - 19

SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 19
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-0.6 - Brown (soil) fill 1-2 Gravel fill	0.1	
2			0.6-1 - Concrete slab		
			2-4 Black (soil) fill	0.2	
			4-6 Brown silty clay (mp, ms, m)	0.4	
			6-8 Brown grey clay (mp, ms, m)	0.4	
8			8-10 Grey clay (lp, stiff, m)	0.1	
10			Fill 0-4' gravel 6" concrete slab		
12			- no odors		
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP - 19



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ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - 20
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 20
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-0.6 - Brown (silt) fill	0.1	
			0.6-1 Concrete-like substance		
2			1-4 Black fill fill (gravelly)	0.2	
			4-6 Black grey clay (mp, mx, m)	0.2	
			6-8 Grey clay (p, st, t, f, m)	0.6	
8			8-10 - "	0.4	
10					
12			-Fill 0-4'		
			-no odors		
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable

GENERAL NOTES

- 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

TEST PIT: TP - 20



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP 21

SHEET 1 OF 1

JOB: 212505

CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 21
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-0.6 Brown grey (soil) fill	0.1	0
2			0.6-1 Concrete like substance slab		2
			1-4 Black red brown (soil) fill	0.1	
			4-6 Grey silty clay (mp, ms, m)	0	4
			6-8 - Brown clay (lp, stiff, m)	0.2	6
8			8-10-11	0.1	8
10			Fill - 0-4' concrete like substance		10
12			-no odors		12
14					14
16					16

WATER LEVEL DATA			DEPTH (FT)			NOTES: ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			

GENERAL NOTES

- 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

TEST PIT: TP 21



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - 22

SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 22
GROUND SURFACE ELEVATION NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Brown red clay w/ brick, asphalt, (mp, soil, n) concrete chunks	0.1	
2			2-4 - "	0.2	
4			4-6 - Appears to be bedrock	0	
6			6-8 - "	0	
8			8-10 - "	0.1	
10			- Dig to 10' appear to be bedrock ~ 4' - fill mixed in last 4'		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES: ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			

GENERAL NOTES

- 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

TEST PIT: TP - 22



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - 23
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 23
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			Brown silt 0-10' (ppm) - apparent bedrock ~10'	0.1	
2			"	0.3	
			"	1.1	
			"	0.2	
8			"	0.3	
10			- no fill or debris suspected		
12					
14					
16					

WATER LEVEL DATA			DEPTH (FT)			NOTES: ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			

GENERAL NOTES

- 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

TEST PIT: TP - 23



300 PEARL STREET, BUFFALO, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

2020 River Road
Wheatfield, NY
Test Pit Study

TEST PIT: TP - 24
SHEET 1 OF 1
JOB: 212505
CHKD BY: CK

CONTRACTOR: Russo
OPERATOR:
LABELLA REPRESENTATIVE: Chris Kibler

TEST PIT LOCATION: 24
GROUND SURFACE ELEVATION: NA
START DATE: 11-27-12

DATUM: NA

TYPE OF EQUIPMENT:

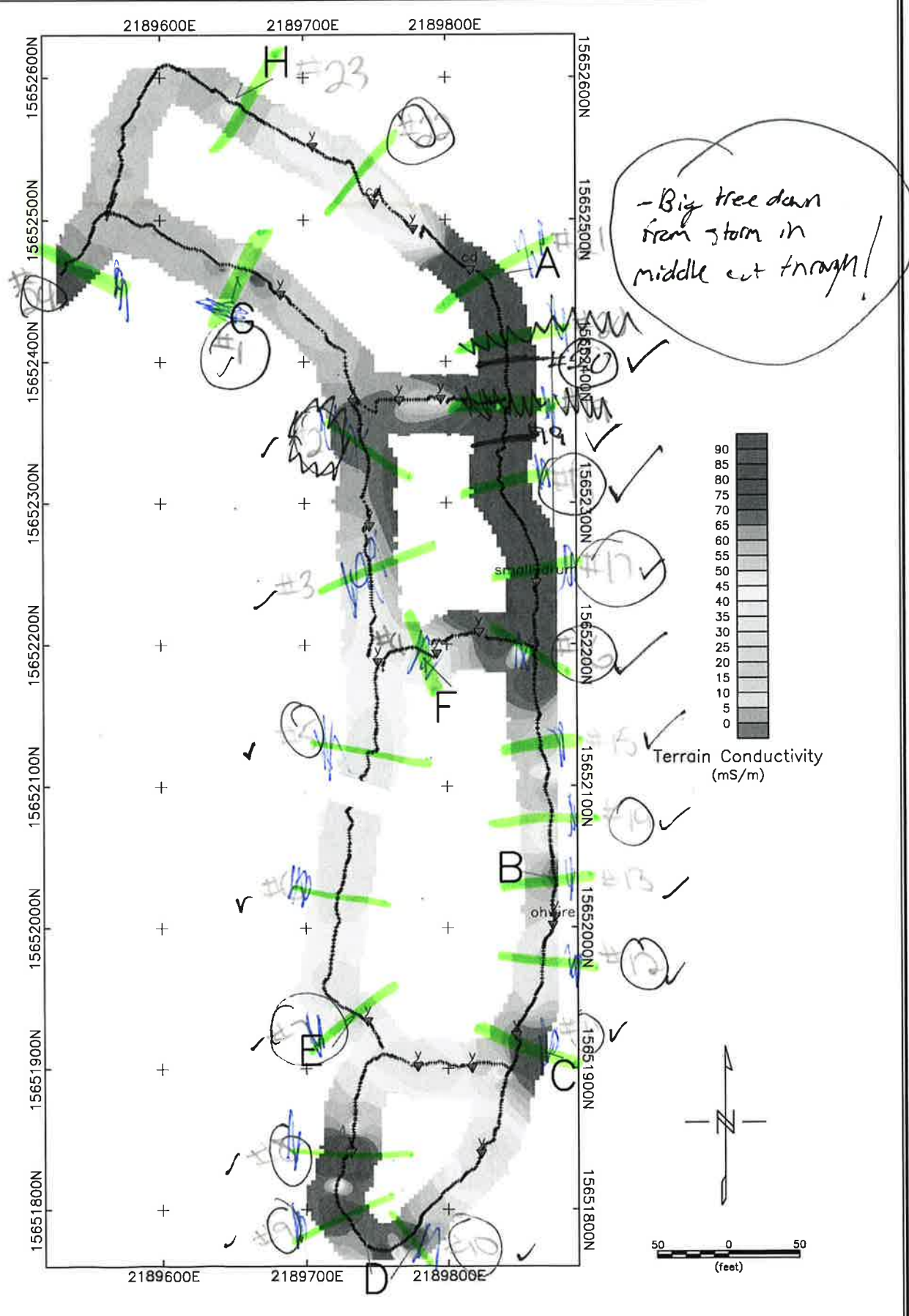
DEPTH (FEET)	SAMPLE		VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)			
0			0-2 Brown red (soil) fill	0.1	0
2			2-4 Brown (soil) fill with mulch	0.3	2
			4-6 Black (soil) fill (gravel)	0.4	4
			6-8"	0.2	6
8			8-10 - Grey clay (mp, ms, m)	0.1	8
10			Fill 0-8" mulch, red tile brick - no odds		10
12					12
14					14
16					16

WATER LEVEL DATA			DEPTH (FT)			NOTES: ND = Non Detect BGS = Below the Ground Surface NA = Not Applicable
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA			

GENERAL NOTES

- 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

TEST PIT: TP - 24



A Geophysical anomaly (or anomalous area) discussed in report

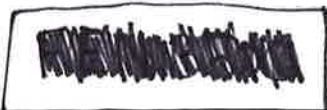
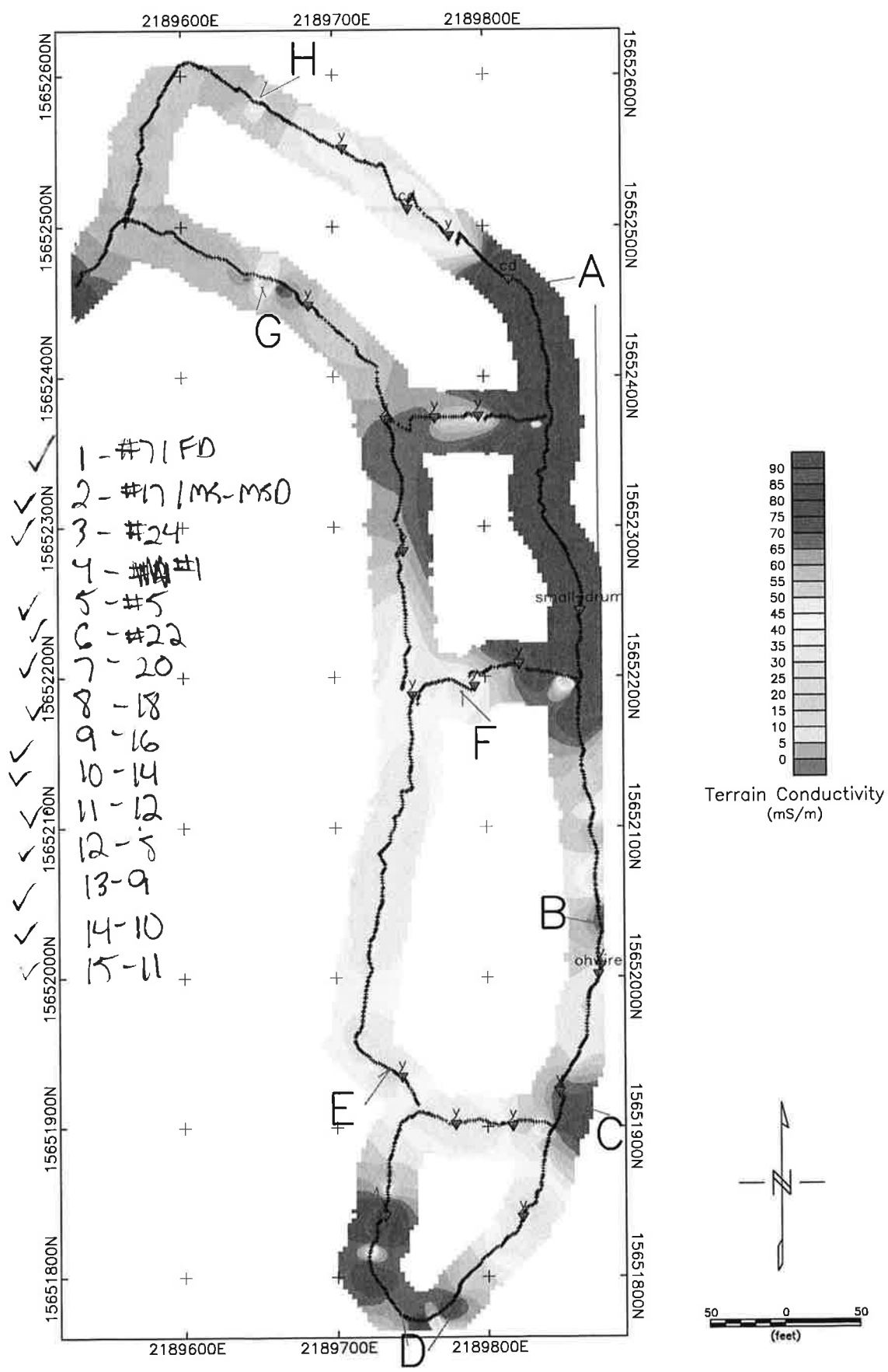


Figure 1
 Geophysical Survey Results
 Color Contours of EM31 Data
 Terrain Conductivity (mS/m)
 2020 River Road
 Wheatfield, NY
 LaBella Associates
 AMEC (716) 565-0624



A Geophysical anomaly (or anomalous area) discussed in report

Figure 1
 Geophysical Survey Results
 Color Contours of EM31 Data
 Terrain Conductivity (mS/m)

2020 River Road
 Wheatfield, NY
 LaBella Associates

AMEC (716) 565-0624

Radiation Detection Results

Date	11-26	11-26	11-26	11-26	11-26	11-26	11-26	11-26	11-26	11-26
Location	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP7/FD	TP8	TP9
Gamma	8.9	8.0	7.4	8.5	9.8	8.1	9.9	9.4	10.0	9.8

Date	11-26	11-27	11-27	11-27	11-27	11-27	11-27	11-27	11-27	11-27
Location	TP10	TP11	TP12	TP13	TP14	TP15	TP16	TP17	TP17/ MS1/MS0	TP18
Gamma	11.0	10.0	9.0	8.4	10.0	9.3	10.0	10.0	9.0	8.1

Date	11-27	11-27	11-27	11-27	11-27	11-27				
Location	TP19	TP20	TP21	TP22	TP23	TP24				
Gamma	8.5	8.4	10.0	9.2	9.6	8.5				

Background Concentration read at 10



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.
QUOTE NO.
COC Number **025395**

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Libella Associates
ADDRESS: 300 Pearl St
CITY: Buffalo River STATE: NY ZIP: 14202
ATTENTION: Don Rivers PHONE: 716-551-6251 FAX: 716-551-6282

CLIENT PROJECT INFORMATION

PROJECT NAME: 212508
PROJECT NO.: 212508 LOCATION: Libert Field
PROJECT MANAGER: Don Rivers
e-mail: drivers@bknbridge.com
PHONE: _____ FAX: _____

CLIENT BILLING INFORMATION

BILL TO: Libella Assoc PO#: 212508
ADDRESS: 300 Pearl St
CITY: Buffalo River STATE: NY ZIP: 14202
ATTENTION: Don Rivers PHONE: _____

DATA TURNAROUND INFORMATION

FAX: _____ DAYS: _____
HARD COPY: _____ DAYS: _____
EDD: _____ DAYS: _____
PREAPPROVED TAT: YES NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

LEVEL 1: Results only
 LEVEL 2: Results + QC
 LEVEL 3: Results (plus results raw data) + QC
 LEVEL 4: Results + QC (all raw data)
 EDD Format: _____

CHEMTECH SAMPLE ID

PROJECT IDENTIFICATION

1. TPM 0-4
2. TPM 0-4
3. TPM 0-4
4. TPM 0-4 (FD)
5. TPM 0-4
6. TPM 0-4
7. TPM 0-4
8. TPM 0-4
9. TPM 0-4
10. TPM 0-4

COMMENTS

← Specify Preservatives
A - HCl B - HNO₃
C - H₂SO₄ D - NaOH
E - ICE F - Other

PRESERVATIVES

CHEMTECH SAMPLE ID	SAMPLE MATRIX	SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES															
		TYPE	DATE		TIME	1	2	3	4	5	6	7	8	9						
1.																				
2.																				
3.																				
4.																				
5.																				
6.																				
7.																				
8.																				
9.																				
10.																				

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. <u>TPM 0-4</u>	<u>11-27-10</u>	1. _____
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2. _____	_____	2. _____
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3. _____	_____	3. _____

Conditions of bottles or coolers at receipt: Compliant Non Compliant
MeOH extraction requires an additional 4 oz jar for percent solid.
Cooler Temp. _____
Ice in Cooler?: _____

Comments:
Page _____ of _____

SHIPMENT COMPLETE:
SHIPPED VIA: CLIENT: HAND DELIVERED OVERNIGHT
CHEMTECH: PICKED UP OVERNIGHT
YES NO



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.
QUOTE NO.
COC Number 025396

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Labella Associates
ADDRESS: 300 Pearl St
CITY: Buffalo NY
ATTENTION: Dan Pines
PHONE: 765-1-6281 FAX: 765-51-6281
STATE: NY ZIP: 14202

CLIENT PROJECT INFORMATION

PROJECT NAME: 212505
PROJECT NO.: 212505 LOCATION: 1 Westfield
PROJECT MANAGER: Dan Pines
e-mail: dpines@labella.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Labella Associates PO#: 212505
ADDRESS: 300 Pearl St
CITY: Buffalo NY STATE: NY ZIP: 14202
ATTENTION: Dan Pines
PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS*
HARD COPY: _____ DAYS*
EDD: _____ DAYS*
PREAPPROVED TAT: YES NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

LEVEL 1: Results only Others
 LEVEL 2: Results + QC
 LEVEL 3: Results (plus results raw data) + QC
 LEVEL 4: Results + QC (all raw data)
 EDD Format:

PROJECT IDENTIFICATION

CHEMTECH SAMPLE ID

E.D.

COMMENTS

PRESERVATIVES

SAMPLE MATRIX	SAMPLE TYPE	SAMPLE COLLECTION	
		DATE	TIME
1	A	11/27/11	11:00 AM
2	X		
3	X		
4	X		
5	X		
6	X		
7	X		
8	X		
9	X		

← Specify Preservatives
A - HCl B - HNO₃
C - H₂SO₄ D - NaOH
E - ICE F - Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. [Signature]	11/27/11	1. [Signature]	11/27/11
2. [Signature]		2. [Signature]	
3. [Signature]		3. [Signature]	

Conditions of bottles or coolers at receipt: Compliant Non Compliant
MeOH extraction requires an additional 4 oz jar for percent solid.

Comments:

SHIPPED VIA: CLIENT: HAND DELIVERED OVERNIGHT
CHEMTECH: PICKED UP OVERNIGHT

Shipment Complete: YES NO

Page _____ of _____

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

APPENDIX 2

Geophysical Survey Report

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



November 4, 2012

Daniel Riker
LaBella Associates, P.C.
300 Pearl Street, Suite 325
Buffalo, NY 14202

Transmitted via email to: DRiker@LaBellaPC.com

Dear Mr. Riker:

Subject: Geophysical Survey Results, 2020 River Road, Wheatfield, NY

1.0 INTRODUCTION

This letter report presents the results of the geophysical investigation performed for LaBella Associates, P.C. in support of their environmental investigation of a property located at 2020 River Road in Wheatfield, NY (the Site). The Site is a wooded parcel located between River Road and the Niagara River. Survey lines were cleared through the Site to allow access for investigation activities.

The geophysical investigation was designed to geophysically characterize the subsurface and focus a follow-up intrusive investigation, if warranted. The information provided herein is intended to assist LaBella with their assessment of potential environmental concerns at the Site. AMEC Environment and Infrastructure, Inc. (Amec) performed data acquisition on October 17, 2012 using frequency domain electromagnetic techniques.

2.0 METHODOLOGY

The following sections present the geophysical methodology utilized for this investigation.

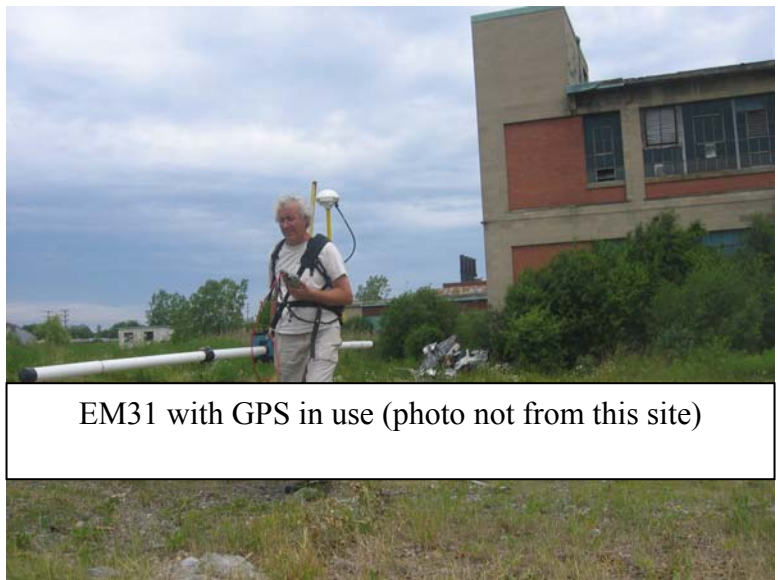
2.1 Reference Grid

The EM31 survey utilized a differential GPS system for positioning. The equipment was the Trimble AG114 interfaced to an Allegro data logger. Positioning was displayed in real time. Geophysical data were collected along the cleared lines at the Site. In several places, yellow

markers (painted stones) were observed and, when encountered, their locations were noted on the geophysical survey. This may aid in the re-location of detected anomalies. .

2.2 Electromagnetic EM31 Survey Methodology

A Geonics EM31 Terrain Conductivity meter was used to measure and record the quadrature component (ground conductivity) and the inphase component of the EM field along the survey lines. The quadrature component of the EM field is a measurement of the apparent ground conductivity. The inphase component of the EM field is sensitive to metallic objects. Comparison of the quadrature component of the EM field data (expressed in units of milliSiemens per meter (mS/m)) and the inphase component data (expressed in units of parts per thousand (ppt)) results in increased anomaly definition. The character of the EM response, low or high, is partially dependent on the orientation of the buried target relative to the orientation of the EM31 device during data acquisition, and the survey direction. A buried metal pipe, for example, will exhibit a high valued response when the trend of the pipe is parallel to the survey direction. Alternatively, when a survey line crosses a buried metal pipe whose trend is perpendicular to the survey direction, it is characterized by a low response. Similarly, other complex buried metal anomalies are indicated by a coupling of a high and low response.



EM31 with GPS in use (photo not from this site)

All readings were taken with the instrument oriented parallel to the direction of travel, in the vertical dipole mode and with the instrument at waist height. The depth of penetration with the instrument in this configuration is approximately 12 to 15 feet below ground surface. Data were collected and stored in a solid state memory data logger during the survey. The data logger was interfaced to a portable computer and the data were transferred to a floppy disk for subsequent processing and interpretation. A survey base station was established on-site and was revisited throughout the survey to check for instrument drift and malfunction. No significant drift or malfunction was observed.

The terrain conductivity and inphase data were initially edited and then plotted as profile lines for interpretation. Contour maps of the data were then constructed and utilized for final interpretation. The geophysical data are presented in final form as a series of color contour maps. The color maps allow for an illustration of detected anomalies that are associated with conductive materials such as buried metals, wastes, fill, utilities, and changes in soil texture and/or moisture content.

3.0 EM31 Results

EM31 conductivity and inphase data for the site is shown in Figures 1 and 2, respectively. Surface features that were observed during the data acquisition are noted on the figures. As discussed above, several yellow markers were observed during the survey and these are denoted with a red triangle and the text "Y" on the figures.

Conductivity values at the site were observed to range from below 0 mS/m to over 100 mS/m. The variation in terrain conductivity may be related to any one or combination of the following conditions:

- A change in soil/fill type. For example, an increase in relative clay content may increase the measured conductivity and variations in fill type will cause associated anomalies;
- A change in soil moisture. Moisture content would be expected to increase in areas of low topographic elevation as more saturated sediments lie within the depth of investigation of the EM instrument;
- A change in pore fluid specific conductance. For example, the presence of salt-impacted water within the pore space of the shallow soil will increase the measured conductivity primarily due to the presence of chloride ions; or
- Interference from surface metallic anthropogenic features such as powerlines, fences, pipes, reinforced concrete and other metallic structures.

The inphase data set that is shown in Figure 2 exhibits a response that is similar to the conductivity data. The majority of the anomalies evident with both the Conductivity and Inphase data are likely related to surface or near surface anthropogenic features.

Eight anomalies were identified as potentially being related to features of environmental significance and are labeled A through H on Figures 1 and 2. Most anomalies are expressed in both conductivity and inphase data sets however the inphase data set of Figure 2 best displays all anomalies.

Anomalous Zone A is a large conductivity and inphase high observed on both the conductivity and inphase data sets and extends for approximately 300 feet. This anomalous zone is located on the eastern portion of the survey area. Construction and demolition (C&D) debris were observed day-lighting from the earth in portions of this area. It is possible that Anomalous Zone A represents a zone of buried C&D debris.

Anomalies B and C are conductivity and inphase high anomalies observed on both Figures 1 and 2. These anomalies are located on the eastern portion of the survey area south of Anomalous Zone A. These anomalies may represent smaller pockets of C&D debris or other conductive material.

Anomalous Zone D is a zone of anomalous responses located in the southern extent of the survey area. This anomalous zone is characterized by both high and low conductivity and inphase responses and may represent buried objects of potential environmental significance.

Anomalies E, F, G, and H are all best observed on the inphase data set of Figure 2 and are characterized as an inphase low (shades of blue) response. These anomalies likely represent buried metallic objects.

Any of the additional unlabeled anomalies may be significant from an environmental perspective. It should be noted that the geophysical survey only focused on the portion of the site that was cleared of vegetation.

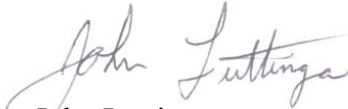
4.0 LIMITATIONS

The geophysical methods used during this survey are established, indirect techniques for non-destructive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. Metallic surface features (electrical wires, scrap metal, railroad lines, etc.) preclude reliable non-invasive data/results beneath, and in the immediate vicinity of, the surface features. Targets such as buried drums, buried tanks, conduits, etc. are detectable only if they produce recognizable anomalies or patterns against the background geophysical data collected. As with any remote sensing technique, the anomalies identified during a geophysical survey should be further investigated by other techniques such as historical aerial photography, test pit excavation and/or test boring, if warranted.

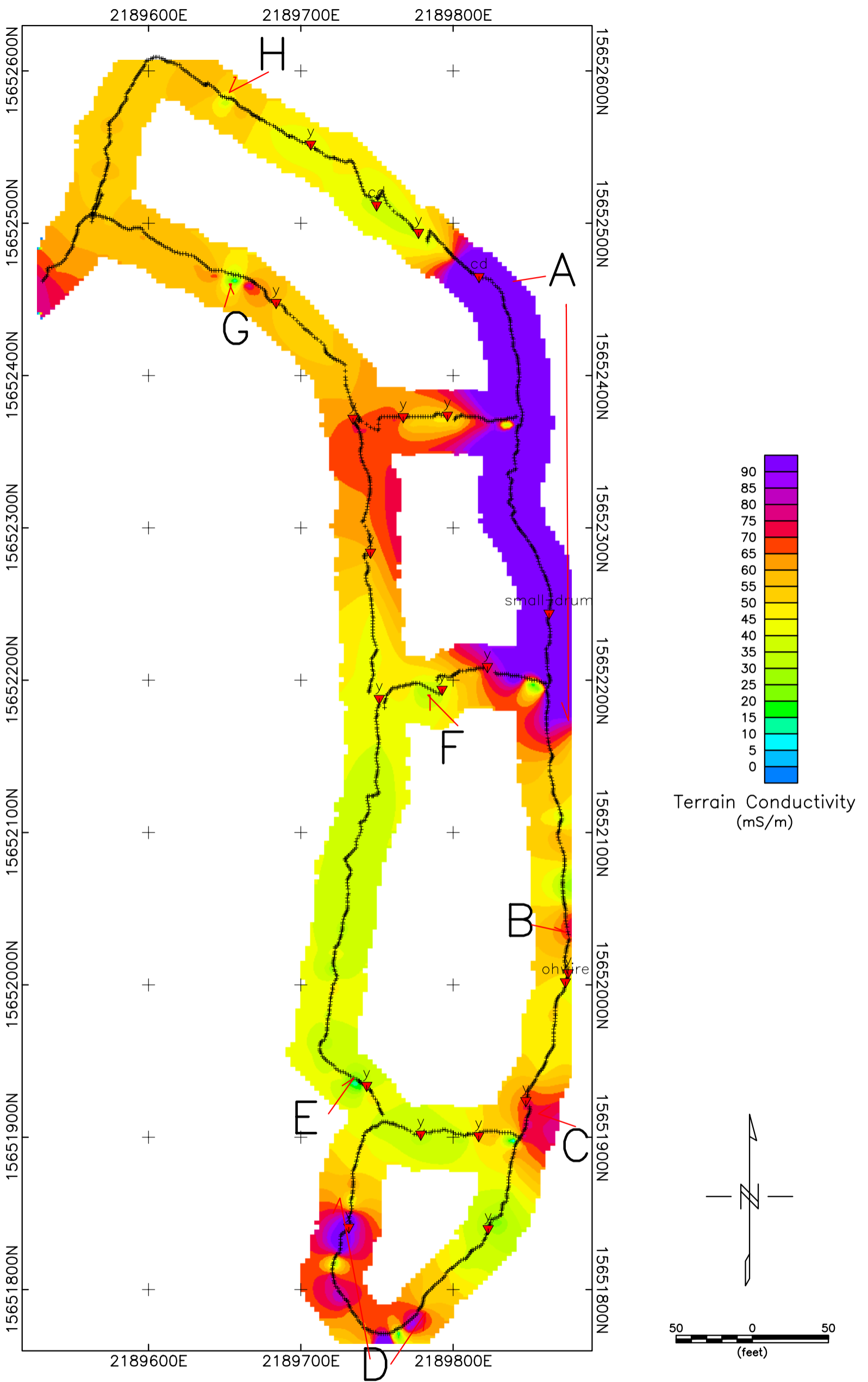
Daniel Riker
LaBella Associates, P.C.
November 4, 2012
Page 5

Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely yours,
AMEC

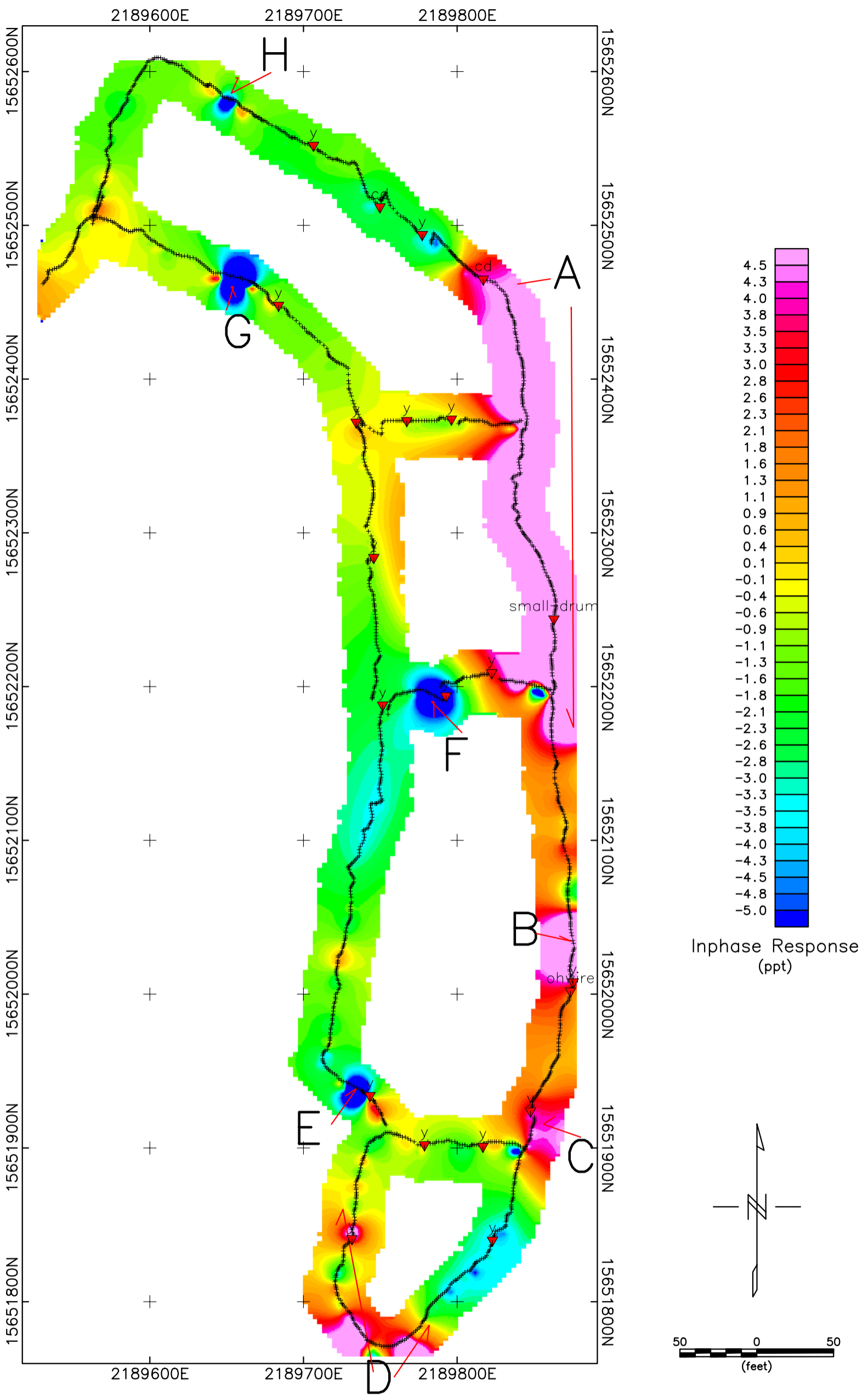
A handwritten signature in cursive script that reads "John Luttinger". The signature is written in black ink and is positioned above the printed name and title.

John Luttinger
Senior Geophysicist



A Geophysical anomaly (or anomalous area) discussed in report

Figure 1	
Geophysical Survey Results Color Contours of EM31 Data Terrain Conductivity (mS/m)	
2020 River Road Wheatfield, NY LaBella Associates	
AMEC (716) 565-0624	



A Geophysical anomaly (or anomalous area) discussed in report

Figure 2
 Geophysical Survey Results
 Color Contours of EM31 Data
 Inphase Response (ppt)
 2020 River Road
 Wheatfield, NY
 LaBella Associates
 AMEC (716) 565-0624

APPENDIX 3

Data Usability Summary Report

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

March 18, 2013

Christopher Kibler
Labella Associates, PC
300 State St Suite 201
Rochester, NY 14614

RE: **Data Usability Summary Report for the 2020 River Rd Site**
Chemtech SDG Nos. D4406 and D4953

Dear Mr. Kibler:

Review has been completed for the data packages noted above, generated by Chemtech Laboratories that pertain to samples collected between 09/28/12 and 11/26/12 at the 2020 River Road site. Thirty soil samples and two field duplicates were processed for TCL volatiles, TCL semivolatiles, TCL Pesticides, TCL PCBs, and RCRA metals. The analytical methods utilized are those of the USEPA SW846 6000/7000/8000.

The data packages submitted contain full deliverables for validation, but this usability report is generated from review of the summary form information, with full review of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, using guidance from the USEPA Region 2 validation SOPs, the USEPA National Functional Guidelines for Data Review, the specific laboratory methodologies, and professional judgment, as affects the usability of the data. The following items were reviewed:

- * Laboratory Narrative Discussion
- * Custody Documentation
- * Holding Times
- * Surrogate and Internal Standard Recoveries
- * Matrix Spike Recoveries/Duplicate Correlations
- * Field Duplicate Correlations
- * Preparation/Calibration Blanks
- * Control Spike/Laboratory Control Samples
- * Instrumental Tunes
- * Calibration/Low Level Standards
- * ICP Serial Dilution
- * Instrument IDLs
- * Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

The data review includes evaluation of the specific items noted in The NYS DER-10 Appendix B section 2.0 (c). The items listed above that show deficiencies are discussed within the text of this narrative. The laboratory QC forms illustrating the excursions can be found within the laboratory data package.

In summary, sample analyses were primarily conducted in compliance with the required analytical protocols. Most sample results are usable either as reported or with qualification. However, the following data are rejected.

- pesticide results for one parent sample and its field duplicate
- 1,4-dioxane in all samples due to methodology

Copies of the sample identification summaries are attached to this text, and should be reviewed in conjunction with this report. Also included with the report are client results tables annotated to reflect the qualifications recommended within this report.

Data Package Completeness

Reporting limits for organic analytes provided as the results for non-detects on the report forms and laboratory excel files are lower than the actual by a factor of two. This has been noted on the attached qualified tables.

Metals results forms do not show the required flags to indicate outlying serial dilution correlations.

Chains-of-Custody

Edits to the custody form entries should have been dated and initialed.

The relinquish entry on the third page of the custodies for sample collected 09/28/12 does not include the data and time. Those are present on the other two pages.

The relinquish entries on the first two pages of the custodies for sample collected in November do not include the data and time. It is present on the other page.

The times of collection for all samples collected 09/28/12 are shown as “12 pm”. The times of collection for the samples collected in November are all stated as “8-5 pm”. Those entries should reflect the actual time of collection.

The collection date for samples collected in November should also show the year.

Blind Duplicate Evaluations

The blind field duplicates were collected at SS10 and TP7-2-4. The correlations were within

validation guidelines, with the exceptions of those for the following, results for which are qualified as estimated in the parent sample and its respective duplicate:

- barium (54%RPD) in SS10
- mercury (52%RPD) in TP7-2-4
- Aroclors 1248 and 1260 in TP7-2-4; the parent sample reports the detection as Aroclor 1260, and the field duplicate as Aroclor 1248, with about a fivefold higher concentration in the duplicate than in the parent. The raw data for those samples support the reported results.

TCL Volatile Analyses by EPA 8260B

Eighteen of the samples show low response for the internal standard d4-1,4-dichlorobenzene. One of those samples (TP18-2-4) also produced a low response for internal standard d5-chlorobenzene. Another of those samples (SS8) shows low responses for all four of the internal standards, and the response for 1,4-dichlorobenzene is so low (12%) in that sample, that the results for eight associated compounds are rejected, and not usable. Results for the remaining analytes in SS-8, for fifteen analytes in TP18-2-4, and for eight analytes in SS1, SS6, SS9, SS10, SS16, SS17, SS18, SS24, SS27, TP8-3-5, TP14-5-7, TP16-3-5, TP17-2-4, TP20-2-4, TP22-1-3, and TP24-5-7 are qualified as estimated in value. Initial analyses are used for all samples except TP18-2-4; the reanalysis is used for that sample.

Due to poor instrument response inherent with the methodology, the results for 1,4-dioxane in the samples are to be rejected, and are not usable. Other calibration standards showed acceptable responses, with the following exceptions, results for which are to be qualified as estimated in the indicated sample:

- acetone (22%D) and 1,2-dibromo-3-chloropropane (low RRF) in TP11-2-4

Matrix spikes of SS1 and TP17-2-4 show acceptable recoveries and duplicate correlations.

Holding times were met, surrogate recoveries are within required ranges, and blanks show no contamination.

TCL Semivolatiles by EPA 8270C

Final results for analytes initialed reported with the “E” flag are derived from the dilution analyses, thus reflecting responses within the linear range of the instrument.

The detection of benzo(g,h,i)perylene in TP8-3-5 is qualified as tentatively identified and estimated in value due to poor mass spectral quality:

The matrix spikes of TP17-2-4 and SS1 show acceptable recoveries and duplicate correlations

Calibration standards showed acceptable responses, with the following exception, results for which are to be qualified as estimated in the indicated samples:

- 2,4-dinitrophenol (low RRF) in the samples and equipment blank reported in SDG D4953

Tentatively Identified Compounds (TICs) reported with a CAS number should have been flagged by the laboratory as “N” to indicate a tentative identification.

TICs reported with the laboratory “A” or “B” flags are extraction/analysis artifacts, and are removed from consideration as sample components.

Some of the samples were analyzed at dilution due to either target or non-target analyte responses. Reporting limits for undetected analytes in those samples are elevated in proportion to the dilution factor. TP22-1-3 appears to have been excessively diluted.

TCL PCB and TCL Pesticide Analyses by EPA 8081A and 8082

The pesticide analyses of TP7-2-4 and TP7-2-4FD show a very large background response that dwarfs surrogate responses to where they are barely discernible, and would mask responses of target analytes as well. Therefore, the results for pesticides in those two samples (parent and field duplicate) are rejected, and are not usable.

The results for pesticides in TP9-3-5 are qualified as estimated due to interfering background responses.

Final results for analytes initialed reported with the “E” flag are derived from the dilution analyses, thus reflecting responses within the linear range of the instrument.

All detected results for pesticides in samples reported in SDG D4406 are qualified as estimated due to consistently outlying elevated responses for all analytes in the continuing calibration standards.

The PCB analyses are numerous samples show outlying low recoveries for surrogate standard DCB on both analytical columns. Low recoveries are typically a matrix effect, but it is observed that the pesticide analyses of the samples, which are similarly extracted and analyzed, did not exhibit low recoveries. Due to the outlying DCB responses, all Aroclor results for the following samples have been qualified as estimated in value, and may have a low bias: SS6, SS8, SS9, SS10, SS11, SS16, and all samples reported in SDG D4953 **except** TP5-4-6, TP11-2-4, TP16-3-5, TP17-2-4, TP18-2-4, and TP20-2-4

The laboratory should have processed a continuing calibration standard of the Aroclor mixtures 1254 and 1248. Because they did not, the detected results for those mixtures have been qualified as estimated in the samples.

Matrix spikes of Aroclors 1016 and 1260 and pesticides in SS1 and TP17-2-4 show acceptable recoveries and duplicate correlations, with the exception of two elevated recoveries in TP17-2-4 that are a result of the Aroclor 1248 present in the parent sample. No qualification is indicated.

The PCB analyses of samples SS9 and S11 exhibit very large single component responses that, due to the scaling of the chromatograms, dwarf the surrogate responses and prevent independent evaluation of the reported non-detection results of those samples. The pesticide analyses of those samples do not show the same component, and can be used to verify that no Aroclor mixtures were present in those samples.

The chromatograms of TP17-2-4 and SS20 show numerous responses, some of them from the PCB congeners present in the samples. The pesticide integration outputs do not list the responses, and

therefore the reported non-detected pesticide results cannot be independently verified. There are no specific requirements in the ASP deliverables that request unedited integration output.

Surrogate recoveries are within laboratory acceptance ranges/validation action limits. However, it is noted that those ranges are unusually large, with both aqueous and one of the two soil lower limits at only 10%. Actual sample recoveries are generally greater than 60%.

RCRA Metals Analyses by EPA 6010B and 7470/7471

Due to presence in the associated equipment blank, the detections of chromium in all samples except TP5-4-6, TP11-2-4, TP14-5-7, TP16-3-5, TP17-2-4, TP18-2-4, and TP24-5-7 are considered external contamination, and edited to reflect non-detection.

The matrix spikes for RCRA metals on the following samples show recoveries for the following elements that are outside the validation action limits, and results for the affected elements are qualified as estimated in the samples reported in the indicated associated SDGs:

<u>Parent Sample</u>	<u>Element</u>	<u>Outlying %Recoveries</u>	<u>Associated Samples</u>
SS1	Chromium	33 and 38	D4406
	Lead	66	
TP17-2-4	Silver	74.7	D4953

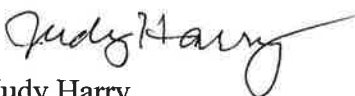
The ICP serial dilution correlations for the following elements are above the recommended limit, and detected results for the affected elements are qualified as estimated in the indicated associated samples (all detections within the given delivery groups):

<u>Parent Sample</u>	<u>Element</u>	<u>%Difference</u>	<u>Associated Samples</u>
SS1	Chromium	30	D4406
	Barium	23	
TP17-2-4	Chromium	53	D4953
	Barium	45	

Instrument processing was compliant.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,


Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

- U** The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
- J** The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
- UJ** The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
- NJ** The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
- R** The data are unusable. The analyte may or may not be present.
- EMPC** The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-I

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
SS1	D4406-01	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS6	D4406-04	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS8	D4406-05	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS9	D4406-06	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS11	D4406-07	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS10	D4406-08	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS12	D4406-09	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS16	D4406-10	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS17	D4406-11	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS19	D4406-12	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS20	D4406-13	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS24	D4406-14	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS27	D4406-15	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS29	D4406-16	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
SS10DUP	D4406-17	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
EQUIPMENTBLANK	D4406-18	8260C	8270D		8081B, 8082A	6010B, 7471A, 7470A	Chemtech -SOP
SS18	D4406-19	8260C	8270D		8081B, 8082A	6010B, 7471A, 7470A	Chemtech -SOP

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-I

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sampl ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
TP1-2-4	D4953-01	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP5-4-6	D4953-02	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP7-2-4	D4953-03	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP7-2-4(FD)	D4953-04	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP8-3-5	D4953-05	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP9-3-5	D4953-06	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP10-6-8	D4953-07	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP11-2-4	D4953-08	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP12-4-6	D4953-09	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP14-5-7	D4953-10	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP16-3-5	D4953-11	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP17-2-4	D4953-12	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP18-2-4	D4953-15	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP20-2-4	D4953-16	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP22-1-3	D4953-17	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
TP24-5-7	D4953-18	8260C	8270D		8081B, 8082A	6010B, 7471A	Chemtech -SOP
EB	D4953-19	8260C	8270D		8081B, 8082A	6010B, 7471A, 7470A	Chemtech -SOP