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Final Engineering Report

1501 College Avenue Site
BCP Site No. C932134
Niagara Falls, New York

November 2012 0140-001-105

Prepared For:

Santarosa Holdings, Inc.

Prepared By:

TurnKey Environmental Restoration, LLC

2558 Hamburg Turnpike, Suite 300, Buffalo, New York 14218 | phone: (716) 856-0635 | fax: (716) 856-0583

BROWNFIELD CLEANUP PROGRAM

FINAL ENGINEERING REPORT

1501 COLLEGE AVENUE SITE
NYSDEC SITE NUMBER: C932134
NIAGARA FALLS, NEW YORK

November 2012 0140-001-105

Prepared for:

Santarosa Holdings, Inc.
4870 Packard Road
Niagara Falls, New York, 14304

Prepared By:

TurnKey Environmental Restoration, LLC

In association with

Benchmark Environmental Engineering & Science, PLLC

TurnKey Environmental Restoration, LLC
Buffalo, NY 14218
(716)856-0635

CERTIFICATIONS

I, Paul H. Werthman, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Investigation/Interim Remedial Measures Work Plan and IRM Work Plan were implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Investigation/Interim Remedial Measures Work Plan and IRM Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Investigation/Interim Remedial Measures Work Plan and IRM Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that all use restrictions, Institutional Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Paul H. Werthman, of 2558 Hamburg Turnpike, Buffalo NY 14218, am certifying as Owner's Designated Site Representative for the site.

Date: _____

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APPENDICES

1.0 BACKGROUND AND SITE DESCRIPTION

Santarosa Holdings, Inc. (Santarosa) entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in December 2007 and last amended in January 2011, to investigate and remediate an approximately 12.4-acre property located in Niagara Falls, Niagara County, New York. The property was remediated to NYSDEC Part 375 Industrial Soil Cleanup Objectives (SCOs) (Track 4), and will be used for industrial use.

1.1 Site Description

The 1501 College Avenue Site is located in the City of Niagara Falls, Niagara County, New York. The approximate 12.4-acre Site is comprised of two adjoining parcels as identified below.

- 1501 College Avenue - SBL 130-18-2-3.211 (12.25-acre portion of a larger 15.0 acre parcel)
- 1655 College Avenue - SBL 130.18-2-3.212 (0.16-acre parcel)

The Site is bordered by a railroad, College Avenue and industrial property to the north, and commercial/industrial property to the south, east, and west (see Figures 1 and 2). The boundaries of the site are more fully described in the Metes and Bounds description included in Appendix A. An electronic copy of this FER with all supporting documentation is included as Appendix B.

1.2 Environmental History

The Site was used for heavy industrial manufacturing from at least 1910 to the mid-1980s, and at one time was part of a larger former Union Carbide Co. manufacturing complex.

In August 2007, Benchmark conducted a Phase I Environmental Site Assessment (ESA) of the subject property. Benchmark identified several areas of concern: evidence of illegal dumping is obvious across the site; various debris piles, automobile parts, abandoned automobiles, abandoned tanker trucks, drums of unknown liquid and solid contents, sacks of unknown granular or solid materials, aboveground storage tanks (ASTs), and household debris were located throughout the interior and exterior the site.

Benchmark conducted a limited Preliminary Environmental Investigation at the 1501 College Avenue Site in August 2007. The Limited Preliminary Environmental Investigation involved collecting four surface soil samples, one galbestos roof-covering sample and two debris pile samples. The samples indicated that polycyclic aromatic hydrocarbons (PAHs), metals, and PCBs were present on-site above the NYSDEC 375 Industrial SCOs.

Santarosa Holdings, Inc. elected to pursue cleanup and redevelopment of the Site under the New York State Brownfield Cleanup Program (BCP), and executed a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) on December 13, 2007, and amended December 17, 2010 (BCP Site No. C932134). A Remedial Investigation/Alternatives Analysis Report (RI/AAR) Work Plan dated December 2007 was approved by the NYSDEC, with concurrence of the New York State Department of Health (NYSDOH), on January 4, 2008. An IRM Work Plan dated March 2008 was approved by the NYSDEC on June 11, 2008. TurnKey performed initial RI soil and groundwater sampling activities at the Site in September and October 2010.

Based on the findings of the RI activities, TurnKey and Santarosa met with the NYSDEC and NYSDOH in November 2010 and prepared an IRM Work Plan letter dated November 12, 2010 further describing the planned IRM activities. The IRM Work Plan letter was approved by NYSDEC on November 18, 2010. IRM activities were conducted at the Site from November 2010 through November 2012.

The RI was completed to characterize the nature and extent of contamination at the Site. Remedial investigation field activities included: advancement of soil borings and monitoring well installation; excavation of test pits; and surface soil, subsurface soil and groundwater sampling. The IRM fieldwork generally included: excavation and off-Site disposal of impacted soil/fill; backfill/Site restoration; demolition of all former buildings; removal and off-site disposal of galbestos roofing material; loading and off-Site disposal of a soil/fill/debris piles; removal of multiple drums and product containers; reutilization of approved building material for backfill and surface grading; and placement of a composite cover system across the Site.

Based on the Alternatives Analysis evaluation, it was concluded that the completed IRMs, together with implementation of this Site Management Plan, satisfies the remedial

action objectives and is protective of human health and the environment, and the IRM was selected as the final remedial approach for the 1501 College Avenue Site.

2.0 SUMMARY OF SITE REMEDY

2.1 Remedial Action Objectives

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site.

2.1.1 Groundwater RAOs

RAOs for groundwater include:

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.

2.1.2 Soil RAOs

Soil RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

Soil RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

2.2 Description of selected remedy

The site was remediated in accordance with the approved Interim Remedial Measures Work Plan dated March 2008, and revised Interim Remedial Measures Work Plan dated November 2010. The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8.

The following are the components of the selected remedy:

1. Collection and removal of historic drums, containers, and former carbon electrode manufacturing wastes;
2. Removal and disposal of asbestos containing materials (ACMs);
3. Collection and off-site disposal of galbestos building material;

4. Removal and disposal of construction and demolition (C&D) debris;
5. Excavation and off-site disposal of impacted soil/fill;
6. Extraction and off-site disposal of excavation water;
7. Collection and off-site disposal/recycling of petroleum-product from abandoned tanker trailers;
8. Placement of approved backfill; and,
9. Placement of cover system.

Based on the Alternatives Analysis Report (AAR), the final selected remedy includes:

1. No additional remedial work beyond that which was completed as an IRM;
2. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site;
3. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional Controls, (2) monitoring, and (3) reporting; and,
4. Periodic certification of the institutional controls.

3.0 INTERIM REMEDIAL MEASURES

The following NYSDEC-approved remedy was completed as an IRM:

- Approximately 153.04-tons of galbestos roofing and building materials was collected and transported off-site by Buffalo Fuel Corp. (BFC) for disposal at Chemical Waste Management (CWM) landfill, located in Model City, New York
- Collection and removal of seven (7) roll-off containers of abandoned drums and containers of off-spec former carbon electrode manufacturing materials. Four roll-offs were transported by BFC for disposal at Modern Landfill , located in Model City, NY; and, three roll-offs were transported by BFC for disposal at Allied Waste (Republic), located in Niagara Falls, NY;
- Approximately 7,851.2 gallons of waste petroleum oil was vacuumed out of two abandoned tanker trucks by Green Environmental Specialists, Inc. (GES), and transported for stabilization at Environmental & Industrial Contracting Services, Inc. (EICS) in Niagara Falls, New York, prior to final disposal at Modern Landfill in Model City, NY;
- Cleaning and collection of steel ASTs, empty drums and two (2) abandoned tanker trucks and transported off-site with other on-Site scrap metals (i.e. building demolition metals), by BFC for recycling as scrap at Niagara Metals, located in Niagara Falls, NY;
- Approximately 2,607.05-tons of non-friable ACMs C&D debris was collected and transported off-site by BFC for disposal, including: 735.59-tons was disposed of at Waste Management, Chaffee Landfill, located in Chafee, New York; 854.95-tons was disposed at Minerva Enterprises, LLC landfill located in Waynesburg, Ohio; and 1,016.51-tons was disposed at Modern Landfill, located in Model City, New York;
- Approximately 1,340.07-tons of C&D debris and intermingled soil/fill was removed from the former Bldg. 49 and transported off-site by BFC for disposal at Minerva Enterprises, LLC landfill located in Waynesburg, Ohio;
- Excavation of approximately 2,975.5-tons of non-hazardous petroleum-impacted soil/fill from the TP-15 area. Excavated material was transported off-site by BFC for disposal at Allied Waste (Republic) landfill located in Niagara Falls, New York. Confirmatory samples were collected and analytical results were below Part 375 Industrial SCOs with exception of several PAHs, of which the majority are located along the southern property boundary;
- Excavation of approximately 645-tons of non-hazardous petroleum stained soil/fill from the TP-5 area. The excavation continued until limited by former concrete foundations. Excavated material was transported off-site by BFC for

disposal at Allied Waste (Republic) landfill located in Niagara Falls, New York. Confirmatory samples were collected and analytical results were below Part 375 Industrial SCOs with the minor exception;

- Excavation of approximately 411.63-tons of PCB-impacted soil/fill from the SS-6 area. Excavated soil/fill was transported off-site by BFC for disposal at CWM, located in Model City, New York;
- Extraction and temporary storage of approximately 20,000-gallons of excavation related water. The collected excavation water was subsequently analyzed, and transported off-site by GES to EICS in Niagara Falls, NY for solidification and final disposal at Modern Landfill, in Model City, NY;
- Completion of a subgrade manhole, electrical vault and former factory sump/pit investigation was conducted during the RI. No evidence of impacts was noted during the investigation. During demolition and remedial activities, it was noted that sporadic C&D debris (i.e., brick and concrete) had entered several manholes/sumps. The accumulated C&D debris was removed by Santarosa and placed beneath the demarcation layer within the on-Site berms. Sumps and manholes were then decommissioned and covered in accordance with the cover system; and/or surface covers were restored or replaced;
- Placement of approved on-Site reuse of concrete block and brick building materials for sub-grade backfill. Backfill materials were analyzed to confirm they met NYSDEC on-Site re-use criteria and/or were pre-approved by NYSDEC; and,
- Construction of a composite cover system, including areas of the Site covered by existing concrete and asphalt areas, and placement of a minimum 12-inch thick approved soil and/or recycled concrete over the orange plastic mesh demarcation layer. Soil covered berms were constructed along the Site boundaries utilizing on-Site material, with NYSDEC approval, with a minimum 12-inchs of approved soil placed above the demarcation layer. No soil/fill from the BCP Site was utilized as material for berms constructed on the adjacent redevelopment parcel (former Hazorb Site).Approximately 4,800.48-tons of recycled concrete from Swift River Associates, Inc. – Tonawanda (Facility ID 15W01) was transported on-Site by BFC and placed by Santarosa; and approximately 7,896 tons of approved off-site borrow source soil from the Lewiston Road (Rt. 104) and Witmer Road projects was transported on-Site by BFC and placed by Santarosa across the Site as a component of the cover system including berm surface cover material.

Additional details of the IRM activities are included in Section 4.0.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC- approved Interim Remedial Measures Work Plan dated March 2008, and revised IRM Work Plan dated November 2010 for the 1501 College Avenue Site, as summarized above. Any deviations from the approved work plans are noted below.

4.1 Governing Documents

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

4.1.2 Quality Assurance Project Plan (QAPP)

The QAPP was prepared as a stand-alone document for the Department-approved RI/AAR Work Plan and IRM Work Plan. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives.

The QAPP was prepared in accordance with USEPA's Requirements for Quality Assurance Project Plans for Environmental Data Operations; the EPA Region II CERCLA Quality Assurance Manual; and NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation.

4.1.3 Soil/Fill Management Plan (SFMP)

A Soil/Fill Management Plan (SFMP) was included in Appendix A of the IRM Work Plan, dated March 2008. The SFMP outlines the procedures to be followed on the BCP Site during intrusive activities including:

- Excavation, grading, sampling and handling of Site soils;
- Acceptability of soil/fill from off-site sources for backfill or sub-grade fill;

- Erosion and dust control measures;
- Fencing and other access controls;
- Health and safety procedures for subsurface construction work and the protection of the surrounding community; and,
- Acceptability and placement of final cover.

4.1.4 Community Air Monitoring Plan (CAMP)

A Community Air Monitoring Plan (CAMP) was included with TurnKey's HASP. Particulate monitoring was performed by Santarosa Holdings, Inc. during remedial activities. The prepared CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the NYSDOH and NYSDEC when submitted.

CAMP results are discussed in section 4.2.5 below and CAMP data is included in Appendix F.

4.1.5 Citizen Participation Plan

The NYSDEC has coordinated and led community relations throughout the course of the BCP project. TurnKey has supported the NYSDEC's community relation activities as necessary. A Citizen Participation (CP) Plan was included as Appendix C of the Department-approved RI/AAR Work Plan (December 2007). The CP Plan followed the NYSDEC's template for BCP sites.

As required for BCP sites, copies of the BCP application, RI/AAR Work Plan including the HASP and CP Plan, QAPP, and IRM Work Plan for the Site were provided to the Niagara Falls Public Library, Earl W. Brydges Building, 1425 Main Street, Niagara Falls, New York, for public review.

Fact Sheets were prepared and mailed to the Department's approved BCP Site contact list. A summary of the project's fact sheets is presented below. Copies of the fact sheets issued to date are provided in Appendix L.

- October 2007 – Public Notice Fact Sheet Brownfield Cleanup Program. BCP Application and RI/AAR Work Plan were available for public review from October 15 through November 16, 2007. Public Notice was published in the Niagara Gazette on October 15, 2007.

- April 2008 – Environmental Cleanup Plan Available for Public Comment at the 1501 College Avenue Site. Work Plan comments were accepted during the 45-day public comment period between April 17, 2008 and May 31, 2008.
- September 2010 – Investigation and Cleanup Activities to Begin at 1501 College Avenue Site in Niagara Falls.
- November 2012 – College Ave Update: Interim Remedial Measures Report, Alternatives Analysis Report, No Further Action Decision Document – 45 Day Comment Period, November 8 to December 22, 2012.

Once the NYSDEC approves the Final Engineering Report, a final Fact Sheet will be prepared and distributed to announce that (1) remedial construction has been completed; and (2) the Certificate of Completion (COC) has been issued.

At the request of the NYSDEC, Santarosa completed the public outreach initiative related to the Department's county listserv. As requested, the mailing list was updated, and printing and mailing of two postcards to inform the contact list of the Department's county email listservs. Certificate of Mailings for both postcard #1 and postcard #2 was submitted to the Department on May 2, 2011; and acknowledged as complete by the Department.

4.2 Remedial Program Elements

4.2.1 Contractors and Consultants

TurnKey Environmental Restoration, LLC, in conjunction with, Benchmark Environmental Engineering and Science, PLLC served as the Environmental Consultant and Engineer of Record, respectively. The following contractors also completed various tasks as noted:

- Buffalo Fuel Corporation (BFC) (Permit No. 9A-545; NYR000045724) performed off-site transportation for disposal materials including soil/fill, scrap metal, galbestos, ACM, and C&D to disposal facilities; and community air monitoring, completion of remedial excavation, backfilling, and placement of cover system;

- Data Validation Services reviewed and validated analytical data packages from Test America Laboratories;
- Test America Laboratories, Inc. performed all analytical analysis related to the RI and IRM activities, including soil and groundwater samples;
- TREC Environmental, Inc. provided drilling services related to the remedial investigation; and,
- Green Environmental Specialists, Inc. (GES) (Permit No. (9A-520) provided services related to: removal and off-site transportation of waste petroleum oil from abandoned tanker trailers; for solidification at Environmental & Industrial Contracting Services, Inc. (EICS) in Niagara Falls, NY.

4.2.2 Site Preparation

A meeting was held on-Site with NYSDEC, Santarosa and TurnKey personnel prior to commencement of the investigation and cleanup activities.

Documentation of agency approvals is included in Appendix C. A NYSDEC-approved project sign was erected at the project entrance along College Avenue.

4.2.3 General Site Controls

The entire site is secured by fencing. Access to the Site is restricted by a gated entrance along 15th Street.

4.2.4 Nuisance controls

Nuisance controls were not required during RI/IRM activities.

4.2.5 CAMP results

CAMP particulate monitoring was completed by Santarosa Holdings, Inc. during remedial excavation activities between March 2010 and May 2011, and August 2012. A summary of the dust monitoring results, provided by Santarosa is included in Appendix F. Santarosa provided a water truck on-Site during remedial activities and was utilized to spray water on roadways and open excavation areas for dust suppression.

VOC monitoring was completed with hand-held photoionization detector (PID) during remedial excavation activities to direct excavation activities by TurnKey. Based on the RI results, site-perimeter VOC monitoring was not conducted.

CAMP documentation is provided in Appendix F.

4.2.6 Reporting

NYSDEC, Santarosa Holdings, Inc. and TurnKey had continual discussions, including on-Site meetings, electronic and telephone correspondence regarding progress throughout the entire remedial project. Copies of progress reports are included in Appendix D, with routine on-Site meetings beheld from January 2012 through October 2012.

A photolog of remedial activities is included in Appendix G.

4.3 Contaminated Materials Removal

Materials removed from the Site included galbestos roofing and building materials, petroleum contaminated soil/fill, PCB contaminated soil/fill, illegally dumped (prior to Santarosa ownership) C&D soil/fill debris, friable and non-friable ACM containing materials, off-spec abandoned carbon electrode manufacturing materials, impacted groundwater, and waste petroleum oil.

Table 1 presents a list of the Part 375 Industrial SCOs, which were utilized during remedial excavations for the Site. Table 2 shows the total quantities of each category of material removed from the Site and the disposal locations. Figure 3 present the location of remedial excavation activities.

4.3.1 Galbestos Building Materials

Galbestos roofing and building materials from the former factory buildings were collected by Santarosa Holdings. Approximately 153.04 tons of galbestos materials were transported off-site for disposal by Buffalo Fuel Corp. (BFC) (9A-545; NYR000045724) to CWM Chemical Service, LLC (EPA ID No. NYD049836679), located in Model City, NY.

Table 2 shows the total quantities of each category of material removed from the Site, the transporter's name and license number, and the disposal locations. Disposal facility

applications and approvals for disposal facilities are included in Appendix H1. Manifests and disposal receipts are included in Appendix H2.

4.3.2 Construction and Demolition (C&D) Debris Materials

Approximately 1,340.07 tons of illegally dumped (prior to Santarosa's ownership) intermingled C&D debris, wood, and soil/fill from the former Bldg. 49 were transported off-site for disposal at Minerva Enterprises, Inc. (EPA Registry ID. 110009636055) landfill located in Waynesburg, Ohio.

Approximately 2,607.05 tons of non-friable ACM containing C&D debris was collected and removed from the Site, including: approximately 735.59 tons was transported off-site for disposal at Waste Management of New York, LLC Chaffee Landfill (NYD0005517458), located in Chaffee, NY; approximately 854.95 tons was transported off-site for disposal at Minerva Enterprise, Inc. landfill in Waynesburg, OH; and, approximately 1,016.51 tons was transported off-site for disposal at Modern Landfill, located in Model City, NY.

Approximately 468.68 tons of friable ACM containing C&D debris was transported off-Site for disposal at Minerva Enterprise, Inc. landfill located in Waynesburg, OH.

Table 2 shows the total quantities of each category of material removed from the Site, the transporter's name and the disposal locations. Disposal facility applications and approvals for disposal are included in Appendix H1. Manifests and disposal receipts are included in Appendix H2.

4.3.3 Former Manufacturing Materials

During remedial activities, seven roll-off containers were disposed off-site containing abandoned drums and containers of former carbon electrode manufacturing materials, including four (4) roll-offs dumpsters transported off-site by BFC for disposal at Waste Management of New York, LLC landfill located in Chaffee, NY; and, three (3) roll-off dumpsters transported off-site by BFC for disposal at Allied Waste Niagara Falls Landfill, LLC (NYD080336241) landfill located in Niagara Falls, NY.

Table 2 shows the total quantities of each category of material removed from the Site, the transporter's name and the disposal locations. Disposal facility applications and

approvals for disposal are included in Appendix H1. Manifests and disposal receipts are included in Appendix H2.

4.3.4 Remedial Soil/Fill Excavation

During IRM excavation activities non-hazardous petroleum-impacted soil/fill from the TP-15 area, TP-5 area, and PCB-impacted soil/fill from the SS-6 area (see Figure 3) was excavated by Santarosa Holdings, Inc., and transported off-site for disposal by Buffalo Fuel Corp.

Approximately 2,975.5 tons of petroleum-impacted soil/fill was excavated from the TP-15 area, loaded and transported off-site for disposal at Allied Waste Niagara Falls Landfill, LLC landfill located in Niagara Falls, NY.

Approximately 645 tons of non-hazardous petroleum-impacted soil/fill was excavated from the TP-5 area by Santarosa Holding, Inc. and transported off-site by BFC for disposal at Allied Waste Niagara Falls Landfill, LLC, located in Niagara Falls, NY.

Approximately 411.63 tons of PCB-impacted soil/fill was excavated from the SS-6 area, loaded and transported off-site for disposal at CWM Chemical Service, LLC located in Model City, NY. During the SS-6 excavation, an abandoned sump was located to the east. Contents of the sump were removed and disposed off-site with the SS-6 material.

Table 2 shows the total quantities of each category of material removed from the Site, the transporter's name and the disposal locations. Disposal facility applications and approvals for disposal are included in Appendix H1. Manifests and disposal receipts are included in Appendix H2.

4.3.5 Waste Petroleum Oil

Two (2) approximate 4,000-gallon tanker trailers, were illegally abandoned on-Site prior to Santarosa's ownership of the Site. Approximately 7,851.2 gallons of waste petroleum oil was vacuumed out and transported off-site by Green Environmental Specialists, Inc. (Permit No. 9A-520) for disposal at Environmental & Industrial Contracting Services, Inc. (EICS) (EPA ID No. NY0001037605) located in Niagara Falls, NY. EICS consolidates solidified wastes from multiple sources and the material is ultimately disposed of at Modern Landfill, located in Model City, NY.

Table 2 shows the total quantities of each category of material removed from the Site, the transporter's name and the disposal locations. Disposal facility applications and approvals for disposal are included in Appendix H1. Manifests and disposal receipts are included in Appendix H2.

4.3.6 Excavation Waters

During remedial excavation, precipitation and near-surfaces water accumulated within the excavation. The accumulated waters were pumped into temporary holding tanks, analyzed, and disposed off-site. Green Environmental Specialists, Inc. vacuumed out the approximately 20,000-gallons of excavation water, cleaned the holding tanks of residual sediments, and transported the water/sediment mixture off-Site for solidification/disposal at Environmental & Industrial Contracting Services, Inc., located in Niagara Falls, NY.

Table 2 shows the total quantities of each category of material removed from the Site, the transporter's name and the disposal locations. Disposal facility applications and approvals for disposal are included in Appendix H1. Manifests and disposal receipts are included in Appendix H2.

4.4 Remedial Performance/Documentation Sampling

Remediation excavation activities were completed between November 2010 and February 2012. When the excavations were deemed complete, a total of 54 post-excavation confirmatory samples were collected from the remedial excavations, including the TP-15 area, TP-5 area and SS-6 area. Approximate locations of the sidewall and bottom samples, and wipe samples of impervious surfaces are shown on Figure 3. Tables 3a through 3c present the analytical results for the confirmatory samples with comparison to the Site SCOs.

All samples were collected and analyzed in accordance with USEPA SW-846 methodology with equivalent NYSDEC Category B deliverables to allow for independent third-party data usability assessment. Appendix I includes a copy of the laboratory analytical data package. The Data Usability Summary Reports (DUSRs), completed by Data Validation Services (DVS)(see Appendix J), indicate that most results for the samples are usable as reported, or usable with minor qualification.

4.5 On-Site Reuse and Imported Backfill Materials

Approved on-Site reuse of brick and block from the former factory were characterized and approved by the Department for use as subgrade backfill. Off-site backfill and recycled concrete source material was characterized in accordance with the approved work plan, DER-10 and/or correspondence with the Department. Table 5 presents analytical results for the off-site borrow source material. In total, approximately 7,896 tons of off-site borrow source soil and 4,800 tons of recycled concrete was utilized in the 12-inch thick cover system across the Site. Backfill soil originated from multiple road upgrade projects, including the Lewiston Road (Rt. 104) project, and the Witmer Road project. Recycled concrete originated from Center Court Project located on Beech Avenue in Niagara Falls, and Swift River's 47th Street recycled concrete yard. Tables 4 and 5 present analytical results for on-Site reuse and off-site borrow source, respectively. Figure 5 identifies the approximate location and composition of the Site's cover system. Sieve analysis is provided in Appendix K.

4.6 Contamination Remaining at the Site

The 1501 College Avenue Site was remediated to achieve an Industrial (Track 4) cleanup. The achieved cleanup is consistent with the intended use of the Site. Residual contamination remaining at the Site above Unrestricted SCOs and GWQS, includes select VOCs, SVOCs (primarily PAHs), PCBs, metals and select pesticides and herbicides, located beneath the cover system demarcation layer to varying depth down to 11.5 ft below the demarcation layer.

In areas of the Site which were not covered by impermeable cover (i.e., concrete or asphalt), a demarcation layer was placed to identify the required one-foot thick clean topsoil / crushed concrete from the underlying in-place material.

Concentrations of residual contaminants on-Site are summarized on Tables 6a and 6b for surface and subsurface soil/fill, and Table 7 for groundwater, respectively. Location of the RI sample locations remaining above Unrestricted SCOs are presented on Figure 6.

Since there are some constituents of concern remaining beneath the cover system in subgrade soil/fill above Unrestricted SCOs and groundwater above GWQS at the Site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These ECs/ICs are described below. Long-

term management of these EC/ICs will be performed under the SMP approved by the NYSDEC.

4.7 Cover System

The Site cover system includes areas of the Site covered by former building concrete and asphalt areas. Areas of the Site not covered by impermeable cover (i.e., concrete and asphalt), are covered by a minimum 12-inches of approved gravel, recycled concrete, and/or soil.

In excavated areas of the Site, approved on-Site material was used for backfill to approximately 1-ft below final surface grade. A orange plastic mesh demarcation layer was then installed, and a minimum of 12-inches of approved off-site borrow source material, and/or recycled concrete was placed for final cover.

In areas of the site not excavated during remediation, an orange plastic mesh demarcation layer was installed in preparation for the 12-inch thick surface cover system installation, as described above. Figure 5 present cross section details for the different cover system types and the composition of the surface cover system across the Site. A pre-post elevation survey, completed by Advanced Survey Group, LLC, is included Appendix A.

Based on correspondence with the NYSDEC Division of Materials Management, impacted on-Site material was utilized in conformance with 6 NYCRR Part 360, Subpart 1.15, to complete perimeter berms. The underlying on-Site berm material was placed, an orange plastic mesh demarcation layer was then laid down to differentiate the in-place subgrade material, and a minimum of 12-inches of approved cover material placed across the berm. NYSDEC correspondence is included in Appendix D.

An Excavation Work Plan, which outlines the procedures required in the event the cover system and/or underlying soil/fill are disturbed, is provided in the SMP.

4.8 Other Engineering Controls

The remedy for the site did not require the construction of any other engineering control systems, beyond the cover system. Procedures for monitoring and maintaining the 1501 College Avenue Site are provided in the Monitoring Plan in Section 4 of the SMP, which also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site ECs.

4.9 Institutional Controls

The site remedy requires that an environmental easement be placed on the property to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to industrial uses only.

The environmental easement for the site was executed by the Department on [date], and filed with the [County] County Clerk on [date]. The County Recording Identifier number for this filing is [number]. A copy of the easement and proof of filing is provided in Appendix A.

4.10 Deviations from the Remedial Action Work Plan

The IRMs and remedial activities were completed in general accordance with the approved IRM Work Plan.

Though not a deviation from the work plan, the final remedial activities included additional area of surface cover due to the delay in Site redevelopment, and the inclusion of site boundary berms which were completed in accordance with the approved cover system.

5.0 REFERENCES

1. Benchmark Environmental Engineering & Science, PLLC. *Phase I Environmental Site Assessment Report. 1501 College Avenue, Niagara Falls, NY.* September 2007.

2. Benchmark Environmental Engineering and Science, PLLC. *Remedial Investigation/Alternative Analysis Report Work Plan, 1501 College Avenue Site, Niagara Falls, New York.* September 2007, revised December 2007.

3. Benchmark Environmental Engineering and Science, PLLC. *IRM Work Plan, 1501 College Avenue Site, Niagara Falls, New York.* March 2008.

4. Benchmark Environmental Engineering and Science, PLLC. *IRM Work Plan letter, 1501 College Avenue Site, Niagara Falls, New York.* November 2010.

5. New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation.* May 2010.

TABLES

TABLE 1

INDUSTRIAL SOIL CLEANUP OBJECTIVES

1501 COLLEGE AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER	Industrial SCOs [1]
Volatile Organic Compounds (VOCs) - mg/Kg	
1,1,1-Trichloroethane	**1,000**
1,1-Dichloroethane	**480**
1,1-Dichloroethene	**1,000**
1,2-Dichlorobenzene	**1,000**
1,2-Dichloroethane	**60**
cis-1,2-Dichloroethene	**1000**
trans-1,2-Dichloroethene	**1,000**
1,3-Dichlorobenzene	**560**
1,4-Dichlorobenzene	**250**
1,4-Dioxane	**250**
Acetone	**1,000**
Benzene	**89**
Butylbenzene	**1000**
Carbon tetrachloride	**44**
Chlorobenzene	**1000**
Chloroform	**700**
Ethylbenzene	**780**
Hexachlorobenzene	**12**
Methyl ethyl ketone	**1000**
Methyl tert butyl ether	**1,000**
Methylene chloride	**1,000**
n-Propylbenzene	**1,000**
sec-Butylbenzene	**1,000**
tert-Butylbenzene	**1000**
Tetrachloroethene	**300**
Toluene	**1,000**
Trichloroethene	**400**
1,2,4-Trimethylbenzene	**380**
1,3,4-Trimethylbenzene	**380**
Vinyl chloride	**27**
Xylene	**1,000**

TABLE 1

INDUSTRIAL SOIL CLEANUP OBJECTIVES

1501 COLLEGE AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER	Industrial SCOs [1]
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg	
Acenaphthene	**1,000**
Acenaphthylene	**1,000**
Anthracene	**1,000**
Benzo(a)anthracene	**11**
Benzo(a)pyrene	**1.1**
Benzo(b)fluoranthene	**11**
Benzo(g,h,i)perylene	**1,000**
Benzo(k)fluoranthene	**110**
Chrysene	**110**
Dibenzo(a,h)anthracene	**1.1**
Fluoranthene	**1,000**
Fluorene	**1,000**
Indeno(1,2,3-cd)pyrene	**11**
m-Cresol	**1,000**
Naphthalene	**1,000**
o-Cresol	**1,000**
p-Cresol	**1,000**
Pentachlorophenol	**55**
Phenanthrene	**1,000**
Phenol	**1,000**
Pyrene	**1,000**
Metals - mg/Kg	
Arsenic	**16**
Barium	**10,000**
Beryllium	**2,700**
Cadmium	**60**
Chromium, trivalent	**800**
Chromium, hexavalent	**6,800**
Copper	**10,000**
Cyanide	**10,000**
Lead	**3,900**
Manganese	**10,000**
Mercury	**5.7**
Nickel	**10,000**
Selenium	**6,800**
Silver	**6,800**
Zinc	**109**

TABLE 1

INDUSTRIAL SOIL CLEANUP OBJECTIVES

1501 COLLEGE AVENUE SITE

NIAGARA FALLS, NEW YORK

PARAMETER	Industrial SCOs [1]
Pesticides/Herbicides and PCBs - mg/Kg	
Silvex (2,4,5-TP)	**1,000**
4,4'-DDE	**120**
4,4'-DDT	**94**
4,4'-DDD	**180**
Aldrin	**1.4**
alpha-BHC	**6.8**
beta-BHC	**14**
alpha-Chlordane	**47**
delta-BHC	**1,000**
Dibenzofuran	**1,000**
Dieldrin	**2.8**
Endosulfan I	**920**
Endosulfan II	**920**
Endosulfan sulfate	**920**
Endrin	**410**
Heptachlor	**29**
Lindane	**23**
Polychlorinated biphenyls (PCBs)	**25**

Notes:

1. Values per 6NYCRR NYSDEC Part 375 Soil Cleanup Objectives (SCOs).

TABLE 2

SUMMARY OF MATERIALS RECYCLED/DISPOSED OFF-SITE

1501 College Avenue Site

Niagara Falls, New York

Material / Item	Quantity	Units	Responsible Company	Disposal Location
Galbestos building materials	153.04	tons	Santarosa Holdings	Chemical Waste Management
PCB-contaminated C&D debris & Soil-Fill (SS-6)	411.63	tons	Santarosa Holdings	Chemical Waste Management
Recycled scrap metal (building materials, steel AST, steel tanker trucks)	--	--	Santarosa Holdings	Niagara Metals
Non-friable asbestos containing materials (ACMs) construction and demolition (C&D) debris	735.59	tons	Santarosa Holdings	Waste Management
Non-friable ACMs C&D debris	854.95	tons	Santarosa Holdings	Minerva Landfill
Non-friable ACMs C&D debris	1,016.51	ton	Santarosa Holdings	Modern Landfill
Friable ACMs C&D debris	468.68	tons	Santarosa Holdings	Minerva Landfill
Building C&D debris/soil (Building 49)	1,340.07	tons	Santarosa Holdings	Minerva Landfill
Petroleum-Impacted Soil/Fill (non-haz) (TP-5 and TP-15 areas)	3,620.50	ton	Santarosa Holdings	Allied Waste Landfill
Roll-off containers with miscellaneous waste and drums (non-haz)	3	roll-offs	Santarosa Holdings	Allied Waste Landfill
Roll-off containers with miscellaneous waste and drums (non-haz)	4	roll-offs	Santarosa Holdings	Waste Management
Oil from tanker trucks	7,851.20	gallons	Green Environmental Specialists, Inc.	Environmental & Industrial Contracting Services, Inc. (EICS)
Frac tank water	20,000	gallons	Green Environmental Specialists, Inc.	Environmental & Industrial Contracting Services, Inc. (EICS)

TABLE 3a

Summary of Post Excavation Confirmatory Sample Results for the TP-15 Area

1501 College Avenue Site

Niagara Falls, New York

PARAMETER[1]	Industrial SCOs[2]	Sample Location																								
		F-1 (3.5)	F-2 (3.5)	F-3 (3)	F-4 (3.5)	F-5 (3.5)	F-6 (3.5)	F-7 (5-7)	F-8 (5-7)	F-9 (10)	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10	SW-11	SW-12	SW-13	SW-14	SW-15	SW-16
		3/21/2011	3/23/2011		3/30/2011		3/31/2011	4/12/2011		4/15/2011	3/21/2011	3/23/2011				3/24/2011		3/30/2011		3/31/2011	4/13/2011		4/15/2011		4/22/2011	
Volatile Organic Compounds (VOCs) - mg/Kg																										
1,2,4-Trimethylbenzene	**380**	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.0039 J	ND	ND	NA
1,3,5-Trimethylbenzene	**380**	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.0019 J	ND	0.00053 J	NA
2-Butanone (MEK)	**1000**	NA	NA	NA	NA	NA	0.0034 J	NA	NA	0.0031 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.0096 J	ND	0.0099 J	NA
p-Cymene (p-isopropyltoluene)	**--**	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.0015 J	ND	ND	NA
Acetone	**1000**	NA	NA	NA	NA	NA	0.041	NA	NA	0.02 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.044	0.029 J	0.07	NA
Ethylbenzene	**780**	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.0051 J	ND	ND	NA
Isopropylbenzene (Cumene)	**--**	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.0051 J	ND	ND	NA
Methylcyclohexane	**--**	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.03	ND	0.001 J	NA
Methylene chloride	**1000**	NA	NA	NA	NA	NA	0.0075	NA	NA	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0046 J	NA	NA	0.014 J	0.015	0.0053 J	NA
Naphthalene	**1000**	NA	NA	NA	NA	NA	0.00091 J	NA	NA	0.017 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0075	NA	NA	0.016 B	0.0014 J,B	0.0012 J	NA
n-Butylbenzene	**1000**	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.017	ND	0.002 J	NA
n-Propylbenzene	**1000**	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.02	ND	0.0033 J	NA
Total Xylene	**1000**	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	0.0041 J	ND	ND	NA
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg																										
2-Methylnaphtalene	**--**	ND	ND	ND	ND	ND	ND	ND	ND	0.0074 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	0.058 J	ND	ND	ND
Acenaphthene	**1000**	0.026 J	0.0052 J	0.012 J	0.036 J	0.22 J	ND	0.11 J	ND	ND	0.9	0.25	50	6 J	4.2 J	28	2.1 J	19 J	5 J	5.8 J	2.4	0.99 J	0.0027 J	ND	0.017 J	0.15 J
Acenaphthylene	**1000**	0.04 J	ND	ND	ND	0.1 J	ND	0.028 J	ND	ND	0.3	0.011 J	ND	0.9 J	ND	2.7 J	4.5 J	ND	4.3 J	12	0.14 J	0.094 J	ND	ND	ND	0.5
Anthracene	**1000**	0.15 J	0.013 J	0.014 J	0.0099 J	0.36 J	ND	0.12 J	ND	ND	1.5	0.56	68	9.5 J	7 J	35	ND	48	13	19	5.7	4.2	0.0092 J	ND	ND	0.67
Benzo(a)anthracene	**11**	0.31	0.052 J	0.055 J	0.014 J	1	ND	0.3	0.018 J	ND	4.9	2	**190**	**33**	**24**	**93**	**19**	**120**	**35**	**70**	**21**	**23**	0.029 J	0.012 J	0.051 J	2.3
Benzo(a)pyrene	**1.1**	0.31	0.064 J	0.074 J	0.012 J	1	ND	0.55	0.022 J	ND	**6**	**2.5**	**230**	**46**	**30**	**120**	**30**	**140**	**42**	**87**	**25**	**25**	0.018 J	0.013 J	0.043 J	**2.5**
Benzo(b)fluoranthene	**11**	0.34	0.066 J	0.077 J	0.012 J	1.2	ND	0.65	0.029 J	ND	6.9	2.7	**240**	**44**	**32**	**140**	**32**	**150**	**39**	**86**	**26**	**28**	0.022 J	0.014 J	0.06 J	2.8
Benzo(ghi)perylene	**1000**	0.2 J	0.057 J	0.053 J	ND	0.78	ND	0.38	0.018 J	ND	4.1	2	160	37	23	82	29	110	31	49	19	18	0.013 J	0.0091 J	0.047 J	2
Benzo(k)fluoranthene	**110**	0.16 J	0.037 J	0.029 J	0.0067 J	0.35 J	ND	0.25	0.013 J	ND	2.8	1.3	**110**	24	15	46	15	66	21	40	12	13	0.014 J	0.0081 J	0.028 J	1.4
Chrysene	**110**	0.3	0.062 J	0.056 J	0.0097 J	0.87	ND	0.29	0.013 J	ND	5.2	2.3	**200**	33	26	100	23	**130**	33	66	23	23	0.027 J	0.011 J	0.056 J	2.2
Dibenzo(a,h)anthracene	**1.1**	0.051 J	ND	ND	ND	0.23 J	ND	0.095 J	0.0044 J	ND	**1.5**	0.45	**42**	**7.7 J**	**5.6 J**	**24**	**5.6 J**	**23 J**	**8.6 J**	**13**	**5.5**	**5**	ND	ND	ND	0.56
Fluoranthene	**1000**	0.94	0.13 J	0.09 J	0.017 J	2	ND	0.48	0.024 J	0.0048 J	9.6	4.1	360	60	48	190	39	310	66	110	40	40	0.067 J	0.019 J	0.14 J	4.7
Fluorene	**1000**	0.16 J	ND	ND	0.035 J	0.28	ND	0.16 J	ND	ND	1.1	0.18 J	33	3.6 J	2.4 J	19	1.5 J	21 J	7.3 J	6.5 J	2.4	0.89 J	0.0064 J	ND	0.022 J	0.29
Indeno(1,2,3-cd)pyrene	**11**	0.17 J	0.037 J	0.042 J	0.0076 J	0.68	ND	0.3	0.015 J	ND	3.7	1.4	**120**	**28**	**17**	**74**	**20**	**78**	**26**	**44**	**15**	**16**	0.011 J	0.0082 J	0.041 J	1.7
Naphthalene	**1000**	0.14 J	ND	ND	0.031 J	0.11 J	ND	0.17 J	ND	0.017	0.34	0.14 J	53	5.4 J	2.4 J	29	ND	6.4 J	3.5 J	3.5 J	1.1 J	0.27 J	0.02 J	ND	0.12 J	0.055 J
Phenanthrene	**1000**	0.83	0.083 J	0.063 J	0.021 J	1.3	ND	0.53	0.02 J	ND	6.3	2.8	300	41	31	150	20	250	28	56	20	19	0.043 J	0.0092 J	0.075 J	1.9
Pyrene	**1000**	0.73	0.11 J	0.082 J	0.02 J	1.6	ND	0.51	0.026 J	0.0037 J	8.2	3.4	280	55	39	160	36	230	52	100	32	33	0.055	0.016 J	0.12 J	3.4

PARAMETER[1]	Industrial SCOs[2]	Sample Location										
		Bottom 1R Pipe Trench	Bottom 2 Pipe Trench	Bottom 3 Pipe Trench	Bottom 4 Pipe Trench	Bottom 5 Pipe Trench	Bottom 6 Pipe Trench	Bottom 7 Pipe Trench	Bottom 8 Pipe Trench	Bottom 9 Pipe Trench	Northwall Pipe Trench	Southwall Pipe Trench
		6/10/2011	5/17/2011			6/10/2011					5/13/2011	
Volatile Organic Compounds (VOCs) - mg/Kg												
1,2,4-Trimethylbenzene	**380**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	**380**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone (MEK)	**1000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Cymene (p-isopropyltoluene)	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	**1000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	**780**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene (Cumene)	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	**1000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	**1000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	**1000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	**1000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene	**1000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg												
2-Methylnaphtalene	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	**1000**	0.028 J	0.018 J	ND	ND	ND	0.01 J	ND	0.05 J	ND	0.44 J	0.27
Acenaphthylene	**1000**	0.031 J	ND	ND	ND	ND	ND	ND	ND	ND	0.44 J	0.15 J
Anthracene	**1000**	0.049 J	0.029 J	ND	ND	0.023 J	0.04 J	0.011 J	0.076 J	ND	1.9	0.28
Benzo(a)anthracene	**11**	0.12 J	0.092 J	0.016 J	ND	0.094 J	0.077 J	0.035 J	0.22	ND	3.9	0.49
Benzo(a)pyrene	**1.1**	0.11 J	0.091 J	0.013 J	ND	0.053 J	0.089 J	0.03 J	0.22	ND	**4.1**	0.48
Benzo(b)fluoranthene	**11**	0.12 J	0.11 J	0.017 J	ND	0.05 J	0.091 J	0.037 J	0.2	ND	5.1	0.64
Benzo(ghi)perylene	**1000**	0.068 J	ND	ND	ND	0.029 J	0.067 J	0.021 J	0.15 J	ND	2.3	0.27
Benzo(k)fluoranthene	**110**	0.065 J	0.068 J	0.027 J	ND	0.065 J	0.053 J	0.018 J	0.12 J	ND	1.9	0.21 J
Chrysene	**110**	0.11 J	0.1 J	0.013 J	ND	0.081 J	0.094 J	0.036 J	0.23	ND	3.5	0.45
Dibenzo(a,h)anthracene	**1.1**	0.02 J	0.02 J	ND	ND	ND	0.02 J	ND	0.043 J	ND	**1.1**	0.15 J
Fluoranthene	**1000**	0.29	0.17 J	0.02 J	ND	0.17 J	0.14 J	0.068 J	0.37	ND	8.5	1.2
Fluorene	**1000**	0.048 J	ND	ND	ND	ND	ND	ND	0.032 J	ND	1.7	0.53
Indeno(1,2,3-cd)pyrene	**11**	0.064 J	0.051 J	ND	ND	0.026 J	0.056 J	0.019 J	0.13 J	ND	2.3	0.26
Naphthalene	**1000**	ND	ND	ND	ND	ND	ND	ND	0.058 J	ND	0.52 J	0.32 J
Phenanthrene	**1000**	0.26	0.01 J	ND	ND	0.021 J	0.087 J	0.033 J	0.25	ND	7.4	1.2
Pyrene	**1000**	0.21	0.14 J	0.019 J	ND	0.18 J	0.11 J	0.059 J	0.36	ND	5.8	0.8

Definitions:

ND = Parameter not detected above laboratory detection limit.

"--" = Sample not analyzed for parameter or no SCO available for the parameter.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

Bold

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Industrial Soil Cleanup Objectives (December 2006)

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 3b

Summary of Post Excavation Sample Results for Test Pit-5 Area

1501 College Avenue Site

Niagara Falls, New York

PARAMETER[1]	Industrial SCOs[2]	Sample Locations							
		Northwall 1	Southwall 1	Southwall 2	Eastwall 1	Westwall 1	Bottom 1	Bottom 2	Bottom 3
		5/27/2011	5/6/2011	5/9/2011	5/6/2011	5/9/2011	5/6/2011	5/6/2011	5/9/2011
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg									
2-Methylnaphthalene	--	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	**1000**	ND	30	0.01 J	0.29 J	0.096 J	2.8	0.033 J	ND
Acenaphthylene	**1000**	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	**1000**	ND	4.9	ND	0.34 J	0.031 J	0.39 J	0.017 J	ND
Benzo(a)anthracene	**11**	ND	3.8	ND	1 J	0.11 J	0.52 J	0.08 J	ND
Benzo(a)pyrene	**1.1**	ND	**2.5**	ND	**1.2**	0.092 J	0.21 J	0.07 J	ND
Benzo(b)fluoranthene	**11**	ND	3.1	ND	1.4	0.1 J	0.32 J	0.072 J	ND
Benzo(ghi)perylene	**1000**	ND	1.6 J	ND	1 J	0.06 J	ND	0.045 J	ND
Benzo(k)fluoranthene	**110**	ND	0.84 J	ND	0.68 J	0.044 J	0.072 J	0.042 J	ND
Chrysene	**110**	ND	3.7	ND	1.2	0.1 J	0.39 J	0.11 J	ND
Dibenzo(a,h)anthracene	**1.1**	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	**1000**	ND	23	0.0088 J	2 J	0.25	4.4	0.12 J	ND
Fluorene	**1000**	ND	15	ND	0.16 J	0.025 J	1.7	ND	ND
Indeno(1,2,3-cd)pyrene	**11**	ND	1.3 J	ND	0.78 J	0.053 J	ND	0.037 J	ND
Naphthalene	**1000**	ND	5.5	ND	ND	ND	ND	ND	ND
Phenanthrene	**1000**	ND	60	ND	1.7	0.088 J	9.4	0.058 J	ND
Pyrene	**1000**	ND	19	0.0068 J	1.8 J	0.26	3.2	0.14 J	ND

Definitions:

ND = Parameter not detected above laboratory detection limit.

"--" = Sample not analyzed for parameter or no SCO available for the parameter.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold = Result exceeds 6NYCRR Part 375 Industrial SCO.

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Industrial Soil Cleanup Objectives (December 2006)

TABLE 3c

Sumary of Post Excavation Sample Results for SS-6 Area

1501 College Avenue Site

Niagara Falls, New York

PARAMETER[1]	Industrial SCOs[2]	Sample Location							
		SS-6-S1	SS-6-S2	SS-6-3E	SS-6-3W	SS-6-W-7	SS-6-W-8	SS-6-N-16	SS-6-N-17
		5/27/2011		5/13/2011		6/13/2011		6/13/2011	
Polychlorinated Biphenyls (PCBs) - mg/Kg									
Aroclor 1268	**25**	24	23	8.9	23	1.2	1.8	6.8	5.9
Aroclor 1254	**25**	--	--	--	--	--	--	--	--

PARAMETER[1]	Industrial SCOs[2]	Sample Location													
		SS-6 Confirmatory Sample 1	SS-6 Confirmatory Sample 2	SS-6 Confirmatory Sample 3	SS-6 Confirmatory Sample 4	SS-6 Confirmatory Sample 5	SS-6 Confirmatory Sample 6	SS-6 Confirmatory Sample 7	SS-6 Confirmatory Sample 8	SS-6 Confirmatory Sample 9	SS-6 Confirmatory Sample 10R	SS-6 Confirmatory Sample 11R	SS-6 Confirmatory Sample 12	SS-6 Confirmatory Sample 13	SS-6 Confirmatory Sample 14
		7/15/2011								7/25/2011	8/15/2011		7/25/2011		
Polychlorinated Biphenyls (PCBs) - mg/Kg															
Aroclor 1268	**25**	ND	12	6.7	1.8	ND	1.7	9.4	1.9	1.1	8.7	5.3	4.5	0.26	0.21
Aroclor 1254	**25**	--	--	--	--	--	--	--	--	--	--	0.22	--	--	--

Definitions:

ND = Parameter not detected above laboratory detection limit.

"--" = Sample not analyzed for parameter or no SCO available for the parameter.

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Industrial Soil Cleanup Objectives (December 2006)

Table 4

Summary of On-Site Material Re-Use Analytical Results

1501 College Avenue Site

Niagara Falls, New York

Parameter [1]	Industrial SCOs [2]	Sample Locations													
		Brick 1	Brick 1A	Brick 2	Brick 3	Brick 4	Brick 5	Brick 6	Brick 7	Brick 8	Concrete 1	Concrete 1	Concrete 2	Concrete 3	Concrete 4
		2/16/2011		3/18/2011				4/1/2011		5/5/2011	2/16/2011	5/11/2012			
Volatile Organic Compounds (VOCs) - mg/kg															
Acetone	**1000**	ND	NA	0.0059 J	ND	ND	ND	ND	ND	ND	0.0094 J	0.053	0.022 J	0.0059 J	0.0089 J
2-Butanone (MEK)	**1000**	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.0044 J	ND	ND	ND
Methylene chloride	**1000**	0.0069 B	NA	0.023	0.0051	0.0036 J	0.016	0.0051 J	0.0036 BJ	0.0024 J	0.0059 B	ND	ND	ND	ND
Toluene	**1000**	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.00057 BJ	ND	ND	ND
1,2,4-Trimethylbenzene	**380**	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.0015 J	ND	ND	ND
1,3,5-Trimethylbenzene	**380**	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.00063 J	ND	ND	ND
Total Xylene	**1000**	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.0013 J	ND	ND	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/kg															
Acenaphthene	**1000**	0.046 J	2.7 J	0.41 J	0.081 J	ND	0.47	0.81	0.58 J	ND	1.8 J	ND	ND	ND	3.4
Acenaphthylene	**1000**	0.019 J	0.57 J	0.17 J	0.032 J	ND	0.078 J	0.23	0.15 J	ND	0.15 J	ND	ND	ND	ND
Anthracene	**1000**	0.13 J	5.6	1.5	0.23	0.041 J	0.94	1.8	1.4 J	0.1 J	5	ND	ND	ND	6.6
Benzo(a)anthracene	**11**	0.42	12	2.8	0.68	0.098 J	1.8	4.2	6	0.51 J	6.1	1.1 J	1.1 J	ND	13
Benzo(b)fluoranthene	**11**	0.44	11	2.8	0.81	0.12 J	2.2	5.6 B	10 B	0.96	3.9	1.9 J	2.1 J	0.0084 J	18
Benzo(k)fluoranthene	**110**	0.25	5	0.96	0.32	0.049 J	0.82	2.6 B	3.5 BJ	0.095 J	2.1 J	1 J	0.68 J	0.0035 J	5.5
Benzo(g,h,i)perylene	**1000**	0.29	6.1	1.3	0.42	0.065 J	1.2	2.2 B	4 B	0.51 J	1.9 J	0.8 J	ND	ND	9.9
Benzo(a)pyrene	**1.1**	0.4	10	2.1	0.63	0.093 J	2	4.8	5.2	0.64 J	4.3	ND	1.1 J	ND	13
Biphenyl	--	ND	0.27 J	0.071 J	0.017 J	ND	0.083 J	0.11 J	ND	ND	0.39 J	ND	ND	ND	0.35 J
bis(2-Ethylhexyl)phthalate	--	ND	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	--	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	--	0.087 J	3.5 J	0.84 J	0.16 J	0.023 J	0.51	1.4	1 J	ND	2.7 J	ND	ND	0.095 J	4.8
Chrysene	**110**	0.5	12	2.5	0.67	0.098 J	1.8	5	15	0.57 J	6.5	1.7 J	1.3 J	0.07 J	13
Dibenzo(a,h)anthracene	**1.1**	ND	ND	ND	ND	ND	ND	0.26 B	1.4 BJ	ND	ND	ND	ND	ND	2.8 J
Fluoranthene	**1000**	1	31	8.2	1.5	0.24	4.1	12	11	0.8 J	15	3 J	1.6 J	1.6	32
Fluorene	**1000**	0.05 J	3.7	0.4 J	0.1 J	0.015 J	0.64	0.77	0.53 J	0.046 J	3.7	ND	ND	ND	2.1 J
Indeno(1,2,3-cd)pyrene	**11**	0.23	4.8	1.2	0.38	0.054 J	1.1	2.1 B	3.3 BJ	0.39 J	1.7 J	ND	0.43 J	ND	7.9
2-Methylnaphthalene	--	0.022 J	1.4 J	0.22 J	0.046 J	ND	0.33	0.43	0.28 J	ND	1.5 J	ND	ND	0.0084 J	1.3 J
4-Methylphenol	--	ND	ND	ND	ND	ND	0.034 J	0.026 J	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**1000**	0.049 J	3.6	0.41 J	0.1 J	ND	1.1	0.97	0.87 J	ND	3.9	ND	ND	0.033 J	3.4
4-Nitroaniline	--	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	**55**	ND	ND	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	**1000**	0.73	26	9.2	1.2	0.19	3.8	8.1	5.8	0.5 J	20	2.3 J	1.1 J	1.7	38
Pyrene	**1000**	0.9	26	6.2	1.2	0.18	3.1	8	7.8	0.94	12	2.4 J	1.7 J	0.47	27
PCBs/Pesticides- mg/kg															
4,4'-DDT	**94**	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.0048 J	0.001 J	ND	ND
Endrin Ketone	**--**	ND	NA	ND	ND	ND	ND	320 J	ND	ND	0.045 J	ND	0.0015 J	ND	ND
Aroclor 1242	**25**	ND	NA	0.031	ND	ND	ND	0.11 J	ND	ND	0.031	ND	ND	ND	ND
Aroclor 1248	**25**	ND	NA	ND	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND
Aroclor 1254	**25**	ND	NA	ND	ND	ND	ND	0.042 J	0.0076 J	ND	ND	ND	ND	ND	ND
Aroclor 1268	**25**	0.13	NA	ND	0.011 J	0.091	0.81	0.18 J	0.061	ND	0.067	0.31	ND	ND	ND
Metals - mg/kg															
Arsenic	**16**	5.1	6.5	6.7	5.3	5.4	3.4	8.9	6.9	2.3	3.9	4	8.3	2.9	3.5
Cadmium	**60**	0.11 J	0.73	0.37	0.24	0.23	0.26	1.1	2.8	0.14 J	0.15 J	0.18	0.2 J	0.14 J	0.21 J
Chromium	**6800**	5.5	14.7	10.9	11.5	2.5	6.1	21.8	26.3	19	8.5	7.8	7.4	8	8.6
Lead	**3900**	4.9	202	70.3	120	5.4	30.4	1450	143	9	10.9	10.9	12.6	3.8	4.9
Mercury	**5.7**	ND	ND	0.03	0.014 J	0.261	ND	0.025	0.025	ND	ND	ND	0.011 J	0.0082 J	ND
Aluminum	--	10800	11100	20900	16200	3100	11500	14600	21100	ND	8110	6220	ND	6870	8070
Barium	**10000**	58.7	738	160	163	27.7	162	415	287	87.2	55.2	53.1	109	48.8	41.8
Beryllium	**2700**	0.41	0.45	1.2	0.66	0.19 J	0.44	0.58	0.77	ND	0.29	0.24	0.66	0.25	0.34
Calcium	--	51400	77400	80300 B	65600 B	34100 B	34800 B	81700 B	47200 B	ND	113000	143000 B	89900 B	161000 B	155000 B
Cobalt	--	2.2	6.1	4.0	4.8	0.69	1.8	8.9	6.7	ND	3.6	3.4	3	3.2	3.2
Copper	**10000**	6.3	220	16.5	12.4	5.3	8.8	31.9	35.5	ND	7.8	18	11.3	9.8	12.3
Iron	--	3780	9000	7450 B	8520 B	1950 B	4020 B	12900	15900	ND	8710	8600 B	8810 B	6990 B	7300 B
Magnesium	--	10300	7950	11900	12100	12000	7220	12000	11100	ND	11400	30500	7690	8370	16500
Manganese	**10000**	161	271	404 B	410 B	146 B	209 B	359 B	355 B	ND	235	618	495	240	334
Nickel	**10000**	5.9	14.3	11.3	12.1	2 J	4.6 J	16.3	26.5	ND	9.2	8.9	9.8	9.6	9.2
Potassium	--	1100	1440	1920	2080	351	1780	2020	2220	ND	1230	937 B	495 B	857 B	1300 B
Sodium	--	879	770	2150	1400	192	447	1270	2230	ND	475	248	199	236	623
Vanadium	--	13	21.1	25.7	26.6	7	16	56.2	49	ND	10.4	12.5	10.9	11.1	11
Zinc	**10000**	18.6	922	101	118	27.2	29.8	199	224	ND	19.2	33.9 B	35.3 B	25 B	26.8

Definitions:

ND = Parameter not detected above laboratory detection limit.

"--" = Sample not analyzed for parameter or no SCO available for the parameter.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

Bold = Result exceeds 6NYCRR Part 375 Industrial SCOs

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Industrial Soil Cleanup Objectives (December 2006)
3. Lab data collected in ug/Kg and converted to mg/Kg

Table 5

Summary of Imported Material Analytical Results

1501 College Avenue Site

Niagara Falls, New York

Parameter [1]	Criteria for Imported Soil Fill	Sample Locations																		
		10th St Soil - Grab 1	10th St Soil - Grab 2	10th St Soil - Grab 3	10th St Soil - Grab 4	10th St Soil - Comp 1	Lewiston Soil - Grab 1	Lewiston Soil - Grab 2	Lewiston Soil - Grab 3	Lewiston Soil - Grab 4	Lewiston Soil - Comp 1	Lewiston St Soil - Grab 2	Lewiston St Soil - Comp 2	Lewiston St Soil - Grab 3	Lewiston St Soil - Comp 3	Lewiston St Soil - Grab 4	Lewiston St Soil - Comp 4	Witmer Rd Waste Char 1	104 Lewiston Rd Waste Char 2	104 Lewiston Rd Waste Char 3
		9/1/2011										9/13/2011						1/9/2012		
Volatile Organic Compounds (VOCs) - mg/kg																				
Methylene chloride	**0.05**	0.0026 J	0.0027 J	0.0026 J	0.0028 J	NA	0.0035 J	0.0033 J	0.003 J	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/kg																				
Acenaphthene	**98**	NA	NA	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	0.1 J
Anthracene	**500**	NA	NA	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	ND	NA	0.091 J	ND	ND	0.24 J
Benzo(a)anthracene	**1**	NA	NA	NA	NA	0.025 J	NA	NA	NA	NA	0.017 J	NA	0.23 J	NA	ND	NA	0.63 J	0.27 J	ND	0.64 J
Benzo(b)fluoranthene	**1.7**	NA	NA	NA	NA	0.035 J	NA	NA	NA	NA	0.017 J	NA	ND	NA	ND	NA	0.76 J	0.3 J	ND	0.6 J
Benzo(k)fluoranthene	**1.7**	NA	NA	NA	NA	0.016 J	NA	NA	NA	NA	0.009 J	NA	ND	NA	ND	NA	0.43 J	0.2 J	ND	0.36 J
Benzo(g,h,i)perylene	**500**	NA	NA	NA	NA	0.026 J	NA	NA	NA	NA	0.021 J	NA	ND	NA	0.24 J	NA	0.56 J	0.24 J	ND	0.48 J
Benzo(a)pyrene	**1**	NA	NA	NA	NA	0.028 J	NA	NA	NA	NA	0.016 J	NA	ND	NA	ND	NA	0.78 J	0.29 J	ND	0.6 J
Chrysene	**1**	NA	NA	NA	NA	0.03 J	NA	NA	NA	NA	0.018 J	NA	0.19 J	NA	ND	NA	0.78 J	0.38 J	ND	0.6 J
Dibenzo(a,h)anthracene	**0.56**	NA	NA	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	ND	NA	0.15 J	ND	ND	0.13 J
Diethylphthalate	--	NA	NA	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	ND	0.0074 J	ND
Fluoranthene	**386**	NA	NA	NA	NA	0.053 J	NA	NA	NA	NA	0.022 J	NA	0.25 J	NA	ND	NA	1.4 J	0.53 J	ND	1 J
Indeno(1,2,3-cd)pyrene	**5.6**	NA	NA	NA	NA	0.019 J	NA	NA	NA	NA	0.014 J	NA	ND	NA	0.14 J	NA	0.47 J	0.19 J	0.01 J	0.37 J
Phenanthrene	**500**	NA	NA	NA	NA	0.024 J	NA	NA	NA	NA	0.011 J	NA	ND	NA	ND	NA	0.49 J	0.24 J	ND	1.1 J
Pyrene	**500**	NA	NA	NA	NA	0.046 J	NA	NA	NA	NA	0.017 J	NA	ND	NA	0.25 J	NA	1.2 J	0.39 J	ND	1.1 J
PCBs/Pesticides- mg/kg																				
Aroclor 1254	**1**	NA	NA	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	ND	NA	0.14 J	ND	ND	ND
Metals - mg/kg																				
Arsenic	**16**	NA	NA	NA	NA	2.6	NA	NA	NA	NA	5	NA	5.1	NA	3.9	NA	3.4	4.6	5.5	3.3
Cadmium	**7.5**	NA	NA	NA	NA	0.37	NA	NA	NA	NA	0.16 J	NA	0.49	NA	0.44	NA	0.76	0.47	0.17 J	0.092 J
Chromium	**1500**	NA	NA	NA	NA	14.2	NA	NA	NA	NA	14.3	NA	23.1	NA	12.8	NA	6.1	14.3	22.3	26.6
Lead	**450**	NA	NA	NA	NA	26.7	NA	NA	NA	NA	9.7	NA	13	NA	69.8	NA	42.4	38.3 B	17.2 B	10.5 B
Mercury	**0.73**	NA	NA	NA	NA	0.028	NA	NA	NA	NA	ND	NA	0.026	NA	0.06	NA	0.019 J	0.052	0.02 J	0.019 J
Aluminum	**--**	NA	NA	NA	NA	10400	NA	NA	NA	NA	10200	NA	ND	NA	ND	NA	ND	ND	ND	ND
Barium	**400**	NA	NA	NA	NA	58.2	NA	NA	NA	NA	54.6	NA	102	NA	92.6	NA	20.9	95	134	157
Beryllium	**47**	NA	NA	NA	NA	0.61	NA	NA	NA	NA	0.57	NA	ND	NA	ND	NA	ND	ND	ND	ND
Calcium	**--**	NA	NA	NA	NA	18900 B	NA	NA	NA	NA	15200 B	NA	ND	NA	ND	NA	ND	ND	ND	ND
Cobalt	**--**	NA	NA	NA	NA	9.5	NA	NA	NA	NA	9.9	NA	ND	NA	ND	NA	ND	ND	ND	ND
Copper	**270**	NA	NA	NA	NA	22	NA	NA	NA	NA	21.1	NA	ND	NA	ND	NA	ND	ND	ND	ND
Iron	**--**	NA	NA	NA	NA	17300 B	NA	NA	NA	NA	18200 B	NA	ND	NA	ND	NA	ND	ND	ND	ND
Magnesium	**--**	NA	NA	NA	NA	14200	NA	NA	NA	NA	5660	NA	ND	NA	ND	NA	ND	ND	ND	ND
Manganese	**2000**	NA	NA	NA	NA	488 B	NA	NA	NA	NA	661 B	NA	ND	NA	ND	NA	ND	ND	ND	ND
Nickel	**130**	NA	NA	NA	NA	21.8	NA	NA	NA	NA	22.1	NA	ND	NA	ND	NA	ND	ND	ND	ND
Potassium	**--**	NA	NA	NA	NA	1390	NA	NA	NA	NA	1420	NA	ND	NA	ND	NA	ND	ND	ND	ND
Selenium	**4**	NA	NA	NA	NA	ND	NA	NA	NA	NA	ND	NA	ND	NA	ND	NA	ND	0.96 J	1.9 J	1.1 J
Sodium	**--**	NA	NA	NA	NA	674	NA	NA	NA	NA	1170	NA	ND	NA	ND	NA	ND	ND	ND	ND
Vanadium	**--**	NA	NA	NA	NA	22.3	NA	NA	NA	NA	21	NA	ND	NA	ND	NA	ND	ND	ND	ND
Zinc	**2480**	NA	NA	NA	NA	125	NA	NA	NA	NA	47.8	NA	ND	NA	ND	NA	ND	ND	ND	ND

Definitions:

ND = Parameter not detected above laboratory detection limit.

"--" = Sample not analyzed for parameter or no SCO available for the parameter.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

Bold = Result exceeds 6NYCRR Part 375 Industrial SCOs

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Industrial Soil Cleanup Objectives (December 2006)
3. Lab data collected in ug/Kg and converted to mg/Kg

TABLE 6a

Summary of Remaining On-Site Soil Analytical Data Above Unrestricted SCOs

1501 College Avenue Site

Niagara Falls, New York

PARAMETER[1]	Unrestricted SCOs[2]	Sample Location															
		August 2007				September 2010											
		SS-1	SS-2	SS-3	SS-4	SS-1	SS-2	SS-4	SS-7A	SS-10	SS-11	SS-12	SS-13	SS-14	SS-18	SS-19	SS-23
Volatile Organic Compounds (VOCs) - mg/Kg																	
1,2,4-Trimethylbenzene	**3.6**	--	--	--	--	--	ND	--	--	--	--	--	--	0.055	--	--	--
1,3,5-Trimethylbenzene	**8.4**	--	--	--	--	--	ND	--	--	--	--	--	--	0.014 J	--	--	--
p-Cymene (p-isopropyltoluene)	**--**	--	--	--	--	--	ND	--	--	--	--	--	--	0.012 J	--	--	--
Methylene chloride	**0.05**	--	--	--	--	--	0.0024 J	--	--	--	--	--	--	0.019 J	--	--	--
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg																	
2-Methylnaphthalene	**--**	ND	0.13 J	43	1.8	ND	ND	0.28 D,J	0.25 D,J	0.59 D,J	2.7 D,J	ND	0.59 D,J	8.7 D,J,T	ND	1.2 D,J	0.038 D,J
Acenaphthene	**20**	ND	2.5	36	6.9	0.47 D,J	0.087	1.6 D,J	1.2 D,J	2.8 D	5.5 D	3.5 D,J	3.1 D,J	6.1 D,J,T	4 D	3.1 D,J	0.28 D,J
Acenaphthylene	**100**	ND	0.33 J	39	0.6	0.39 D,J	ND	0.86 D,J	ND	0.6 D,J	3.4 D,J	0.57 D,J	1.3 D,J	2.6 D,J,T	ND	0.37 D,J	ND
Anthracene	**100**	ND	3.1	140	12	1.1 D,J	130	4.4 D	1.2 D,J	3.9 D	6 D	5 D	4.6 D	7.3 D,J,T	3.5 D	5.3 D	0.4 D,J
Benzo(a)anthracene	**1**	**1.5 J**	**28**	**340**	**28**	**4.6 D**	0.72	**13 D**	**5.6 D**	**24 D**	**21 D**	**28 D**	**21 D**	**22 D,T**	**22 D**	**28 D**	**3 D**
Benzo(a)pyrene	**1**	**2.2 J**	**38**	**210**	**28**	**7 D**	**1.4 D**	**17 D**	**9.8 D**	**20 D**	**41 D**	**48 D**	**29 D**	**30 D,T**	**38 D**	**39 D**	**4.3 D**
Benzo(b)fluoranthene	**1**	**3.2 J**	**48**	**360**	**41**	**7.4 D**	**1.5 D**	**16 D**	**9.9 D**	**39 D**	**43 D**	**51 D**	**29 D**	**29 D,T**	**38 D**	**41 D**	**5.4 B,D**
Benzo(ghi)perylene	**100**	1.6 J	24	96	15	5.1 D	1.5 D	12 D	8.8 D	9.1 D	32 D	40 D	22 D	20 D,T	40 D	26 D	2.7 B,D
Benzo(k)fluoranthene	**0.8**	**0.92 J**	**17**	**120**	**13**	**3 D,J**	0.52	**8.1 D**	**3.5 D**	**9.5 D**	**18 D**	**14 D**	**13 D**	**12 D,T**	**11 D**	**13 D**	**1.4 B,D**
Biphenyl	**--**	--	--	--	--	ND	ND	0.11 D,J	ND	ND	0.28 D,J	ND	ND	1.6 D,J,T	ND	ND	ND
Bis(2-ethylhexyl) phthalate	**--**	ND	ND	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND UJ
Butyl benzyl phthalate	**--**	ND	ND	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	**--**	--	--	--	--	0.7 D,J	0.065 D,J	1.9 D	0.77 D,J	2 D	3.7 D	3.1 D,J	2.8 D,J	ND	2.3 D,J	3.9 D	0.36 D,J
Chrysene	**1**	**1.8 J**	**27**	**340**	**29**	**4.7 D**	0.76 D,J	**13 D**	**5.5 D**	**38 D**	**22 D**	**28 D**	**21 D**	**20 D,T**	**21 D**	**27 D**	**3.6 D**
Dibenzo(a,h)anthracene	**0.33**	ND	**6.1**	**35**	**4.2**	ND	ND	ND	ND	2.4 D	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	**7**	ND	0.4 J	**36**	4.8	ND	ND	0.7 D,J	0.47 D,J	1.1 D,J	1.7 D,J	0.8 D,J	1.3 D,J	2.8 D,J,T	0.6 D,J	1.5 D,J	0.064 D,J
Fluoranthene	**100**	1.7 J	34	780 D	57	7.7 D	1 D	22 D	9.7 D	31 D	33 D	43 D	37 D	37 D,T	30 D	42 D	5 D
Fluorene	**30**	ND	0.97 J	**65**	5.4	0.35 D,J	ND	1.3 D,J	0.71 D,J	1.4 D,J	2.2 D,J	1.6 D,J	2 D,J	5.3 D,J,T	1.2 D,J	2.1 D,J	0.11 D,J
Indeno(1,2,3-cd)pyrene	**0.5**	**2.4 J**	**22**	**96**	**14**	**4.3 D**	**1.1 D**	**9.7 D**	**6.9 D**	**8.2 D**	**27 D**	**34 D**	**18 D**	**17 D,T**	**30 D**	**22 D**	**2.5 B,D**
Naphthalene	**12**	ND	0.24 J	**26**	3.6	ND	ND	0.53 D,J	0.94 D,J	1.3 D,J	3.2 D,J	0.75 D,J	0.97 D,J	2.1 D,J,T	0.63 D,J	2.7 D,J	ND
Phenanthrene	**100**	1 J	12	**920 D**	52	4.8 D	0.52 D,J	14 D	5.8 D	17 D	21 D	21 D	22 D	28 D,T	14 D	25 D	1.9 D
Phenol	**0.33**	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	**100**	1.9 J	27	**480**	37	7.1 D	0.94 D	19 D	8.9 D	25 D	29 D	42 D	33 D	31 D,T	31 D	41 D	4 D
Polychiorinated biphenyls (PCBs) - mg/Kg																	
Aroclor 1242	**0.1**	ND	ND	ND	ND	ND	ND	ND	**0.12**	**0.24 D,J**	ND	**1.1 D**	**0.33 D**	**0.22 D,J**	ND	ND	ND
Aroclor 1248	**0.1**	ND	**0.11**	**7.1**	ND	ND	ND	0.025 J	ND	ND	ND	ND	ND	ND	ND	**6.3 D**	ND
Aroclor 1254	**0.1**	ND	0.089	ND	ND	0.081 D,J	0.01 J	0.086 J	ND	ND	ND	ND	ND	ND	ND	ND	0.048 D,N,J
Aroclor 1260	**0.1**	ND	ND	ND	ND	**0.52 D**	0.056	ND	**0.28**	ND	**0.34**	**1.1 D**	**4.9 D**	ND	ND	ND	**0.11 D,N,J**
Aroclor 1268	**0.1**	**8.4 B**	**0.12 B**	**1.4 B**	**0.34 B**	**0.39 D**	0.035	0.074 J	**0.16**	**7.6 D**	**0.1**	**0.64 D**	**2.4 D**	**2.9 D**	**0.19 D,J**	**13 D**	**0.1 D,N,J**
Total Metals - mg/Kg																	
Aluminum	**--**	--	--	--	--	5290 B	5850 B	5460 B,J	10500 B	6600 B	5110 B	8310 B	6490 B	5020 B	9900 B,J	2010 B	5500 B
Antimony	**--**	--	--	--	--	3.4 J	1.1 B,J	ND UJ	ND	1.8 J	2.5 J	0.6 J	1.9 J	2.1 J	ND UJ	1.6 J	ND UJ
Arsenic	**13**	**89**	2.8	**23.9**	8.1	11.7	1.7 B,J	3.1 B	4.5	7.1	**21.8**	9.9	6.9	11.2	3.1 B	10.6	2.8
Barium	**350**	127	75.8	**2520**	81.2	**334 B**	51.8 B	57.4 B,J	75.1 B	110 B,J	87.2 B	86.6 B	167 B	260 B	76.8 B,J	63.1 B,J	75.7 B,J
Beryllium	**7.2**	--	--	--	--	0.353	0.728 B	0.253	0.493	0.671	0.459	0.518	0.418	0.318	0.342	0.368	0.377
Cadmium	**2.5**	**30.8**	1.8	**12.6**	0.96	**4.14**	1.13	0.642	0.714	1.77	1.22	**3.13**	1.9 J	**8.56 J**	0.906	**3.05**	1.01
Calcium	**--**	--	--	--	--	57400 B	18300 B	1E+05 B,D,J	21500 B	85100 B,D	27200 B	26100 B	46200 B	63900 B	40400 B,J	19300 B	6910 B
Chromium	**1**	**73.2**	**38**	**297**	**66.1**	**173**	**22.4**	**10.4 J**	**25.5**	**27.7**	**41.7**	**44.8**	**35.3**	**118**	**41.4 J**	**80.3**	**25.2**
Cobalt	**--**	--	--	--	--	6.54	2.87 B	2.74	6.13	7.46	5.97	12.2	6.31	9.85	4.52	6.22	6.38
Copper	**50**	--	--	--	--	497 B	25.9	16.6 J	19.5 B	82.1	122 B	2770 B	150 B	163 B	28.6 J	83.4	26.4
Iron	**2000**	--	--	--	--	26200	3650 B	10200 J	16500	26600 B	10700	64500 D	18200	4910	21400 J	12300 B	10.3 B
Lead	**63**	**171**	**208**	**3310**	**232**	**465 B**	60.2	**117 J**	49.6 B	**325**	**211 B**	**2060 B**	**549 B,J**	**591 B,J**	**156 J**	**156**	43.4
Magnesium	**--**	--	--	--	--	25800 B	7560	23000 J	9580 B	17300	15000 B	6970 B	16500 B	25000 B	9510 J	9890	11400
Manganese	**1600**	--	--	--	--	633	403 B	353 J	371	1210 B	404	653	695	1240	2010 J	794 B	211 B
Nickel	**30**	--	--	--	--	**73.5**	19.7	8.07 J	14.7	**30.1 J**	**30.4**	**58.1**	**54.7**	**55.2**	14.1 J	**120 J**	18.9 J
Potassium	**--**	--	--	--	--	913 B	141	665	1310 B	821 B	461 B	627 B	1120 B	656 B	530	308 B	3400 B
Selenium	**3.9**	ND	ND	ND	ND	1.7 J	0.6 J	0.9 J	1.5 J	1.2 J	1.1 J	**5.7**	1.5 J	3.4 J	1.4 J	1.6 J	**4.4 J**
Silver	**2**	ND	ND	1.1	ND	0.467 J	ND	ND	0.071 J	0.154 J	0.212 J	0.338 J	0.144 J	0.168 J	0.17 J	0.221 J	0.29 J
Sodium	**--**	--	--	--	--	286	110 J	191 J	109 J	283	113 J	169	314	21	92.2 J	143 J	16400
Vanadium	**--**	--	--	--	--	**141**	**221**	**130 J**	21.9	31.6	21.6	66.7	**130**	62.5	**512 J**	25.3	80.5
Zinc	**109**	--	--	--	--	**955 B**	54.6	**136 B,J**	93.9 B	**804 B**	**182 B**	**365 B**	**462 B,J**	**797 B,J**	**164 B,J**	**322 B**	**250 B**
Mercury	**0.18**	0.086	0.035	**3.1**	0.046	**5.25 D**	0.0078 J	0.0417	0.164	**0.226**	**0.945**	**0.481**	0.177	0.115	0.168	**0.366**	ND
Pesticides and Herbicides - mg/Kg																	
4,4'-DDT	**0.0033**	--	--	--	--	--	**0.0084 D,J**	--	--	**0.058 D,J**	0.0084 D,J	--	--	--	--	--	--
Dieldrin	**0.005**	--	--	--	--	--	**0.016 D,J**	--	--	ND	**0.016 D,J**	--	--	--	--	--	--
Endrin	**0.014**	--	--	--	--	--	ND	--	--	**0.029 D,J**	ND	--	--	--	--	--	--

Definitions:

ND = Parameter not detected above laboratory detection limit.

"--" = Sample not analyzed for parameter or no SCO available for the parameter.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

D = Compounds were identified in an analyisis at the secondary dilution factor.

NJ = Estimated value; potential false positive and/or elevated quantitative value.

Bold = Result exceeds Unrestricted SCOs.

TABLE 6b

Summary of Remaining On-Site Soil Analytical Data Above Unrestricted SCOs

1501 College Avenue Site

Niagara Falls, New York

PARAMETER[1]	Unrestricted SCOs[2]	Sample Location																									
		September 2010					September 2010																			July 2011			
		BCP MW-1 (0-4)	BCP MW-2 (0-4)	BCP MW-3 (0-4)	BCP MW-4 (8-11.5)	BCP MW-5 (4-8)	TP-1 (5-7)	TP-2 (3-5)	TP-3 (1-4)	TP-4 (1-2)	TP-7A (1-2.5)	TP-9 (0.5-1.5)	TP-10 (5-7)	TP-11 (1-2)	TP-12 (1-2.5)	TP-13 (1-3)	TP-14 (1.5-2)	TP-18 (0.5-1.5)	TP-19 (4-6)	TP-20 (2-4)	TP-21 (0.5-2)	TP-22 (0.5-6)	TP-23 (1-5)	TP-24 (1-7)	TP-25 (1-7)	Railroad Siding 1	Railroad Siding 2	Railroad Siding 3	Railroad Siding 4
Volatile Organic Compounds (VOCs) - mg/Kg																											
1,1-Dichloroethane	**0.33**	--	--	--	ND	ND	ND	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**3.6**	--	--	--	ND	0.66	**23 D,W**	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**8.4**	--	--	--	ND	0.22	6.1 D,W	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
2-Butanone (MEK)	**0.12**	--	--	--	ND	ND	ND	0.026 J	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
p-Cymene (p-isopropyltoluene)	**--**	--	--	--	ND	0.048 J	1.3 D,W	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Acetone	**0.05**	--	--	--	ND	ND	ND	0.15	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	0.013 J	ND	ND	ND
Benzene	**0.06**	--	--	--	ND	ND	ND	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Chloroethane	**--**	--	--	--	ND	ND	ND	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Cyclohexane	**--**	--	--	--	ND	ND	0.55 D,J,W	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Ethylbenzene	**1**	--	--	--	ND	0.33	**4 D,W**	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Isopropylbenzene (Cumene)	**--**	--	--	--	ND	0.054	0.88 D,J,W	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Methylcyclohexane	**--**	--	--	--	ND	ND	2.6 D,W	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Methylene chloride	**0.05**	--	--	--	ND	ND	ND	0.0033 J	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	**8.9**	0.0031 J	0.0026 J	0.0075
n-Butylbenzene	**--**	--	--	--	ND	1	5 D,W	ND	--	--	--	--	0.014 J	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
n-Propylbenzene	**3.9**	--	--	--	ND	ND	2.9 D,W	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
sec-Butylbenzene	**11**	--	--	--	ND	ND	1.2 D,W	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Styrene	**--**	--	--	--	ND	ND	ND	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Toluene	**0.7**	--	--	--	ND	0.18	ND	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Total Xylene	**0.26**	--	--	--	ND	**0.76**	**19 D,W**	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg																											
2-Methylnaphthalene	**--**	0.43 D,J	ND	0.57 D,J	0.65 D,J	260 D	110 T,D	ND	ND	0.58 D	ND	0.21 D,J	0.36 D,J	ND	ND	0.35 D,J	ND	ND	0.33 D,J	0.27 D,J	ND	ND	ND	0.093 D,J	ND	ND	2.4	27	7.5 J
Acenaphthene	**20**	0.18 D,J	3.1 D,J	1.3 D,J	0.48 D,J	210 D	6.7 T,D,J	0.51 D,J	0.018 J	2.3 D	6.2 D,J	0.81 D,J	0.63 D,J	ND	ND	0.9 D,J	ND	11 D	1.3 D	0.92 D,J	0.022 J	12 D	ND	1.6 D	ND	3 J	12 J	**46**	**29**
Acenaphthylene	**100**	ND	ND	ND	ND	ND	ND	ND	0.033 J	0.67 D,J	ND	0.26 D,J	0.17 D,J	ND	ND	ND	ND	ND	0.12 D,J	0.12 D,J	ND	ND	ND	0.054 D,J	ND	ND	ND	4.2 J	6.7 J
Anthracene	**100**	0.2 D,J	5.5 D	3.6 D	0.28 D,J	13 D	ND	2.8 D	0.065 J	5.3 D	8.2 D,J	1.7 D	0.78 D,J	ND	0.032 J	2.2 D	ND	14 D	3.5 D	1.9 D	0.024 J	13 D	0.14 D,J	0.81 D,J	0.38 T,D,J	4.6 J	21	98	44
Benzo(a)anthracene	**1**	**1.2 D,J**	**29 D**	**13 D**	**1 D**	**7.4 D**	ND	**8.3 D**	0.49	**17 D**	**39 D**	**4.7 D**	**4 D**	0.055 J	0.19 J	**2.9 D**	0.022 J	**62 D**	**16 D**	**5.5 D**	0.17 J	**83 D**	0.87 D,J	**5.5 D**	**1.9 T,D,J**	**23**	**84**	**170**	**110**
Benzo(a)pyrene	**1**	**1.4 D,J**	**45 D**	**15 D**	**1.3 D**	**12 D**	**12 T,D,J**	**10 D**	0.63	**20 D**	**69 D**	**5.4 D**	**5.8 D**	0.074 J	0.3	**3.2 D**	0.03 J	**83 D**	**19 D**	**5.4 D**	0.27	**110 D**	0.55 D,J	**9.4 D**	**2.1 T,D,J**	**36**	**110**	**140**	**120**
Benzo(b)fluoranthene	**1**	**1.7 D,J**	**44 D**	**16 D**	**1.4 D**	**12 D**	**6.2 T,D,J**	**12 D**	0.67	**21 D**	**61 D**	**6.7 D**	**6.4 D**	0.085 J	0.31	**3.2 D**	0.029 J	**81 D**	**24 D**	**6.6 D**	0.3	**110 D**	**1.2 B,D**	**9.3 B,D**	**2.1 T,D,J,B**	**33**	**110**	**170**	**120**
Benzo(ghi)perylene	**100**	0.96 D,J	28 D	8.9 D	0.84 D,J	4.4 D	ND	7.7 D	0.44	12 D	57 D	1.8 D	3.2 D	0.06 J	0.31	2.1 D	0.023 J	67 D	9.1 D	2.2 D	0.23	81 D	0.48 B,D,J	6.2 B,D	1.5 T,D,J,B	27	82	86	88
Benzo(k)fluoranthene	**0.8**	0.46 D,J	**16 D**	**6.7 D**	0.41 D,J	**2.9 D**	ND	**3.3 D**	0.24	**6.6 D**	**34 D**	**2.9 D**	**2.5 D**	0.034 J	0.083 J	**1 D**	ND	**30 D**	**6.8 D**	**2.6 D**	0.1 J	**49 D**	0.4 B,D,J	**3.8 B,D**	**1.2 T,D,J,B**	**22**	**56**	**72**	**68**
Biphenyl	**--**	ND	ND	ND	0.19 D,J	350 D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.067 D,J	ND	ND	ND	ND	ND	ND	ND	4.8 J	1.9 J
Bis(2-ethylhexyl) phthalate	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.087 J	ND	ND	ND	ND	ND	ND	ND	ND	0.62 D,J	ND	11 J	ND	ND	ND
Butyl benzyl phthalate	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6 D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	**--**	0.14 D,J	3 D,J	1.9 D,J	0.16 D,J	0.93 D,J	ND	0.67 D,J	ND	2.7 D	5.4 D,J	0.78 D,J	0.5 D,J	ND	0.024 J	0.83 D,J	ND	8.7 D,J	2.2 D	0.99 D,J	0.016 J	8.7 D	0.055 D,J	0.6 D,J	ND	2.7 J	13 J	55	22
Chrysene	**1**	**1.1 D,J**	**29 D**	**14 D**	0.99 D,J	**12 D**	**33 T,D,J**	**8.3 D**	0.48	**17 D**	**39 D**	**5.4 D**	**4 D**	0.056 J	0.19 J	**2.6 D**	0.015 J	**57 D**	**16 D**	**5.4 D**	0.18 J	**78 D**	**1.4 D**	**6.2 D**	**1.8 T,D,J**	**26**	**84**	**150**	**110**
Dibenzo(a,h)anthracene	**0.33**	ND	ND	ND	ND	ND	ND	ND	0.11 J	ND	ND	**0.45 D,J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5.9 J**	**18 J**	**29**	**19**
Dibenzofuran	**7**	ND	0.94 D,J	0.78 D,J	0.18 D,J	**400 D**	ND	0.26 D,J	ND	1.3 D,J	ND	0.41 D,J	ND	ND	ND	0.81 D,J	ND	3.4 D,J	0.68 D,J	0.49 D,J	ND	2.1 D,J	0.043 D,J	0.18 D,J	ND	ND	5.1 J	**39**	**14 J**
Fluoranthene	**100**	2 D	39 D	24 D	1.7 D	29 D	6.9 T,D,J	17 D	0.6	28 D	64 D	9.1 D	6.2 D	0.087 J	0.28	6.2 D	0.023 J	94 D	31 D	9.9 D	0.23	97 D	1.7 D	7.3 D	2.7 T,D,J	36	**130**	**350**	**200**
Fluorene	**30**	ND	1.7 D,J	1.3 D,J	0.35 D,J	**290 D**	13 T,D,J	0.68 D,J	0.019 J	2 D,J	2.7 D,J	0.7 D,J	0.42 D,J	ND	ND	1.2 D	ND	4.7 D,J	1.3 D	0.81 D,J	ND	4.7 D,J	ND	0.4 D,J	ND	1.5 J	9.5 J	**54**	22
Indeno(1,2,3-cd)pyrene	**0.5**	**0.79 D,J**	**24 D**	**8 D**	**0.69 D,J**	**4.3 D**	ND	**6 D**	0.38	**10 D**	**46 D**	**1.5 D**	**2.6 D**	0.041 J	0.21 J	**1.7 D**	0.02 J	ND	**7.3 D**	**2 D**	0.19 J	**73 D**	0.43 B,D,J	**5.7 B,D**	**1.2 T,D,J,B**	**21**	**66**	**77**	**77**
Naphthalene	**12**	0.3 D,J	0.62 D,J	0.79 D,J	0.49 D,J	930 D	**40 T,D**	ND	0.073 J	1 D,J	ND	0.5 D,J	0.17 D,J	ND	ND	0.6 D,J	0.1 J	ND	0.73 D,J	0.47 D,J	ND	1.6 D,J	ND	0.12 D,J	ND	ND	7.6	**71**	**23**
Phenanthrene	**100**	1.1 D,J	20 D	15 D	1.3 D	39 D	77 T,D	5.6 D	0.16 J	19 D	35 D	5.4 D	3.4 D	0.053 J	0.19 J	6.8 D	ND	56 D	17 D	7.9 D	0.097 J	48 D	0.73 D,J	3.4 D	1.5 T,D,J	19	86	**380**	**170**
Phenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1 J	ND
Pyrene	**100**	1.8 D,J	40 D	21 D	1.4 D	22 D	29 T,D,J	12 D	0.79	25 D	61 D	5.7 D	5.1 D	0.077 J	0.29	5.4 D	0.023 J	87 D	24 D	7.6 D	0.2 J	95 D	0.94 D,J	6.6 D	2.2 T,D,J	32	**120**	**270**	**190**
Polychlorinated biphenyls (PCBs) - mg/Kg																											
Aroclor 1242	**0.1**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.8 D**	ND	ND	ND	0.0086 J	0.012 J	ND	ND	ND	ND	ND	**0.44 D**	ND	**0.28 D**	0.077	ND	ND	ND	ND
Aroclor 1248	**0.1**	ND	ND	ND	ND	ND	ND	ND	ND	0.029	ND	ND	0.011 J	ND	ND	ND	ND	ND	0.052	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	**0.1**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.26 D**	0.082 J	ND	ND	ND	ND
Aroclor 1260	**0.1**	ND	**0.2 D**	ND	ND	ND	ND	ND	ND	ND	**1.8 D**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014 J	**1.5 D,NJ**	0.16	ND	ND	ND	ND
Aroclor 1262	**0.1**	ND	ND	ND	ND	ND	ND	ND	ND	**0.17**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1268	**0.1**	0.037	0.074 D,J	ND	0.041	ND	ND	ND	ND	0.093	**0.59 D**	**0.7 D**	0.093	ND	0.0066 J	0.068 NJ	ND	0.054 D,J	**0.14**	**7.6 D**	ND	ND	0.03	**1.8 D**	0.099 NJ	**2.7**	**0.85**	**1.4**	**3.4**
Total Metals - mg/Kg																											
Aluminum	**--**	13300 B	3730 B	17800 B	8100 B	14000 B	4500 B	16100 B	15400 B,J	14100 B,J	9690 B	8830 B	5340 B	15900 B	16100 B	7890 B	19800 B	8040 B,J	9980 B	5430 B	11000 B	1880 B	8910 B	8010 B	6100 B	22200	9730	4370	6030
Antimony	**--**	0.8 B,J	1.1 B,J	ND UJ	ND UJ	ND UJ	ND	ND	ND UJ	ND UJ	ND	1.2 J	0.6 J	ND	ND	ND UJ	ND UJ	ND UJ	ND UJ	0.9 J	ND UJ	ND UJ	ND UJ	0.7 J	1.1 J	0.97 J	0.93	4.6 J	2.6
Arsenic	**13**	11.5 B	4 B	5.3 B	2.1 B,J	3.4 B	1.2 J	3.9	6.9 B	4.3 B	5.9	4.5	4.7	3.9	3	7.2	5	3 B	5.8	7.1	12.3	1.4 J	13.8	7.2	5.3	5.6	7.3	6.4	**198**
Barium	**350**	106 B	39.4 B	116 B	55.6 B	66.3 B	15.4 B	104 B	122 B,J	105 B,J	153 B	81.2 B,J	41 B,J	147 B	134 B	85.5 B	77.3 B	48.7 B,J	81.5 B,J	58.9 B,J	115 J	13.9 J	89.6 B,J	71.9 B,J	73.7 B,J	69.9 J	337	32.9	135
Beryllium	**7.2**	0.699 B	0.265 B	0.747 B	0.295 B	0.651 B	0.202 J	0.756	0.749	0.696	0.399	0.491	0.204 J	0.722	0.613	0.593	0.929	0.286	0.506	0.379	0.637	0.072 J	0.476	0.364	0.37	1.9	0.63	0.23	0.52
Cadmium	**2.5**	ND UJ	0.139 J	ND UJ	ND UJ	ND UJ	0.153 J	0.637	0.266	0.304	2.19	0.881 J	ND	0.328	0.225 J	0.904 J	0.565 J	0.739	0.369	0.677	0.071 J	0.154 J	0.329	9.11	0.547	1.4 B	1.4 B	0.97 B	**4 B**
Calcium	**--**	2810 B	98000 B,D	1060 B	26900 B	54800 B	806 B	25900 B	30500 B,J	43800 B,J	15100 B,D	41400 B	19800 B	43000 B	2930 B	7590 B	1870 B	95500 B,D,J	26700 B	44500 B	43000 B	5970 B	31300 B	41300 B	106000 B,D	49200 B	41700 B	10200 B	15600 B
Chromium	**1**	**21**	**35.8**	**20.1**	**17.8**	**18**	**4.37**	**18.3**	**18.9 J**	**19.8 J**	**30.3**	**21.5 J**	**26.8**	**22.8**	**16.4**	**13.2**	**26.9**	**30.9 J**	**68.5**	**14.1**	**17.6**	**18.4**	**30.7**	**40.4**	**31.8**	**62.1**	**32.9**	**52.7**	**143**
Cobalt	**--**	9.45 B	4.06 B	12.6 B	5.92 B	11.7 B	2.9	10.8	12.3	10.9	5.88	9.04	5.38	11.7	3.73	8.54	18.8	3.82	8.03	4.06	3.23	1.49	4.46	7.47	4.96	9	8.8	4.7	**15.8**
Copper	**50**	30.2	**91.8**	29	16.1	21.4	10.8 B	14.3 B	18.1 J	22.5 J	**87.1 B**	34.3	36.4	18.9 B	41.5 B	**1080 B**	21.6 B	26.8 J	**60.9**	18.9	11.5	16.3	16	**55.1**	**170**	**68.9**	**69.6**	**104**	**162**
Iron	**--**	**23800 B**	**30400 B**	**24700 B**	**14700 B**	**23700 B**	**7150**	**35300**	**23600 J**	**22600 J**	**21300**	**26000 B,J**	**28000 B**	**23100**	**14600**	**15200**	**43000**	**10000 J**	**21300 B**	**14100 B**	**26800 B**	**1900 B**	**13600 B**	**28400 B**	**13300 B**	**8020**	**16300**	**12700**	38
Lead	**63**	46.8 J	31 J	13.8 J	8.1 J	4.8 J	3.2 B	21.4 B	11.1 B,J	43.3 B,J	314 B	72.4 J	29.9	7.3 B	13.2 B	78.8 B,J	14 B,J	49 B,J	61	46.8	11.1	9.3	51.6	162	107	**114**	**191**	**170**	**350**
Magnesium	**--**	4450	4120	6670	4660	9660	1370 B	5580 B	6900 J	12600 J	17000 B	13800 J	8820	9610 B	2290 B	2710 B	6380 B	20900 J	8470	11200	2050 B	3060 B	4030	13100	43200	16300	7800	3700	5680
Manganese	**1600**	561 B	371 B	539 B	372 B	775 B	306	869	787 J	670 J	531	562 B	415 B	503	137	339	468	803 J	463 B	293 B	170 B	55.6 B	224 B	580 B	541 B	696	476	259	**2030**
Nickel	**30**	23.8	20.5	26.4	14	26.6	6.38	17	22.3 J	25.3 J	22	25.8 J	21.7 J	25.5	10.6	**48.4**	24.8	11.9 J	21.5 J	14.2 J	9.22 J	15.8 J	16 J	**32.5 J**	**48.5 J**	**34.9**	**32.7**	**48.6**	**154**
Potassium	**--**	1230	510	1730	980	1830	706 B	1580 B	1590	2410	916 B	1240 B	532 B	32320 B	1720 B	837 B	2150 B	669	1190 B	688 B	6630	155	3150 B	1340 B	1180 B	720	904	275	700
Selenium	**3.9**	2 J	1.7 J	2.2 J	1.2 J	1 J	0.5 J	2.4 J	2 J	1.1 J	1.3 J	1.1 J	0.7 J	1.5 J	1 J	1.5 J	2.9 J	ND	0.8 J	0.6 J	3.6 J	ND	2.1 J	1.5 J	0.8 J	0.65 J	ND	0.85 J	1.1 J
Silver	**2**	0.079 J	ND	ND	ND	ND	ND	ND	0.131 J	ND	ND	0.097 J	ND	ND	ND	ND	ND	0.138 J	ND	0.095 J	ND	ND	ND	0.118 J	0.122 J	ND	ND	ND	ND
Sodium	**--**	124 J	96.8 J	118 J	92.7 J	109 J	57.9 J	0.355	460 J	105 J	372	216	106 J	266	94.8 J	111 J	329	148 J	128 J	211	1380	101 J	977	375	361	1380	465	139 J	135
Vanadium	**--**	26.5	72.7	30.2	16	24.8	11.3	31.5	39.8 J	30.8 J	155	26.5	13.6	28.3	19.3	34.9	40.8	193 J	22.4	18.4	25.3	32	30.5	28.7	24.7	**1680**	**264**	**248**	97.1
Zinc	**109**	60 J	128 J	72.2 J	40.2 J	48.3 J	14.6 B	55.8 B	61 B,J	87.9 B,J	**357 B**	**215 B,J**	81.8 B	51.3 B	37.1 B	**212 B,J**	64.2 B,J	**454 B,J**	**199 B**	**212 B**	26.6 B	31.9 B	51.7 B	**195 B**	**218 B**	**214 B**	**283 B**	**112 B**	**511 B**
Mercury	**0.18**	**0.206**	0.0381	0.0413	0.0132 J	0.0157 J	ND	0.0147 J	0.0114 J	0.0498	0.106	0.0385	0.0353	ND	0.0687	0.113	0.0178 J	0.0494	0.171	0.0783	ND	0.0177 J	0.0304	**0.226**	**0.652**	0.036	0.081	0.058	**22.7**
Pesticides and Herbicides - mg/Kg																											
Aldrin	**0.005**	--	--	--	--	--	**0.28 D,J**	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
alpha-BHC	**0.02**	--	--	--	--	--	**0.51 D,J**	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
beta-BHC	**0.036**	--	--	--	--	--	**0.34 D,J**	0.0027 D,J	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
delta-BHC	**0.04**	--	--	--	--	--	**0.47 D,J**	0.0055 D,J	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Dieldrin	**0.005**	--	--	--	--	--	**0.45 D,J**	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Endosulfan I	**2.4**	--	--	--	--	--	ND	0.0052 D,J	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Endosulfan II	**2.4**	--	--	--	--	--	0.36 B,D,J	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Endrin	**0.014**	--	--	--	--	--	**0.3 D,J**	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	**0.44 J**	ND	**0.42**	ND
Endrine ketone	**--**	--	--	--	--	--	ND	ND	--	--	--	--	0.015 D,N,J	--	--	--	--	--	--	--	--	--	--	--	--	ND	1	ND	ND
gamma-BHC (Lindane)	**0.1**	--	--	--	--	--	**0.44 D,J**	ND	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND
Heptachlor	**0.042**	--	--	--	--	--	ND	0.004 B,D,J	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND

Definitions:

ND = Parameter not detected above laboratory detection limit.

"--" = Sample not analyzed for parameter or no SCO available for the parameter.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

Bold = Result exceeds 6NYCRR Part 375 Unrestricted SCO.

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives Unrestricted (December 2006)

TABLE 6c

Summary of On-Site Soil Analytical Data Above Unrestricted SCOs

1501 College Avenue Site

Niagara Falls, New York

PARAMETER[1]	Unrestricted SCOs[2]	Sample Locations															
		TP-15 Area														TP-5 Area	
		SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10	SW-11	SW-12	SW-16	Northwall Pipe Trench	Southwall 1	Eastwall 1
Volatile Organic Compounds (VOCs) - mg/Kg																	
1,2,4-Trimethylbenzene	**3.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	**8.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
2-Butanone (MEK)	**0.12**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
p-Cymene (p-isopropyltoluene)	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Acetone	**0.05**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Ethylbenzene	**1**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Isopropylbenzene (Cumene)	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Methylcyclohexane	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Methylene chloride	**0.05**	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0046 J	NA	NA	NA	NA	NA	NA
Naphthalene	**12**	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0075	NA	NA	NA	NA	NA	NA
n-Butylbenzene	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
n-Propylbenzene	**3.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Total Xylene	**0.26**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg																	
2-Methylnaphthalene	**--**	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Acenaphthene	**20**	0.9	0.25	50	6 J	4.2 J	28	2.1 J	19 J	5 J	5.8 J	2.4	0.99 J	0.15 J	0.44 J	**30**	0.29 J
Acenaphthylene	**100**	0.3	0.011 J	ND	0.9 J	ND	2.7 J	4.5 J	ND	4.3 J	12	0.14 J	0.094 J	0.5	0.44 J	ND	ND
Anthracene	**100**	1.5	0.56	68	9.5 J	7 J	35	ND	48	13	19	5.7	4.2	0.67	1.9	4.9	0.34 J
Benzo(a)anthracene	**1**	4.9	2	**190**	**33**	**24**	**93**	**19**	**120**	**35**	**70**	**21**	**23**	**2.3**	**3.9**	**3.8**	**1 J**
Benzo(a)pyrene	**1**	**6**	**2.5**	**230**	**46**	**30**	**120**	**30**	**140**	**42**	**87**	**25**	**25**	**2.5**	**4.1**	**2.5**	**1.2**
Benzo(b)fluoranthene	**1**	6.9	2.7	**240**	**44**	**32**	**140**	**32**	**150**	**39**	**86**	**26**	**28**	**2.8**	**5.1**	**3.1**	**1.4**
Benzo(ghi)perylene	**100**	4.1	2	160	37	23	82	29	110	31	49	19	18	2	2.3	1.6 J	1 J
Benzo(k)fluoranthene	**0.8**	2.8	1.3	**110**	24	15	46	15	66	21	40	12	13	**1.4**	**1.9**	**0.84 J**	0.68 J
Chrysene	**1**	5.2	2.3	**200**	33	26	100	23	**130**	33	66	23	23	**2.2**	**3.5**	**3.7**	**1.2**
Dibenzo(a,h)anthracene	**0.33**	**1.5**	0.45	**42**	**7.7 J**	**5.6 J**	**24**	**5.6 J**	**23 J**	**8.6 J**	**13**	**5.5**	**5**	**0.56**	**1.1**	ND	ND
Fluoranthene	**100**	9.6	4.1	360	60	48	190	39	310	66	110	40	40	4.7	8.5	23	2 J
Fluorene	**30**	1.1	0.18 J	33	3.6 J	2.4 J	19	1.5 J	21 J	7.3 J	6.5 J	2.4	0.89 J	0.29	1.7	15	0.16 J
Indeno(1,2,3-cd)pyrene	**0.5**	3.7	1.4	**120**	**28**	**17**	**74**	**20**	**78**	**26**	**44**	**15**	**16**	**1.7**	**2.3**	1.3 J	**0.78 J**
Naphthalene	**--**	0.34	0.14 J	53	5.4 J	2.4 J	29	ND	6.4 J	3.5 J	3.5 J	1.1 J	0.27 J	0.055 J	0.52 J	5.5	ND
Phenanthrene	**100**	6.3	2.8	300	41	31	150	20	250	28	56	20	19	1.9	7.4	60	1.7
Pyrene	**100**	8.2	3.4	280	55	39	160	36	230	52	100	32	33	3.4	5.8	19	1.8 J

Definitions:

ND = Parameter not detected above laboratory detection limit.

NA = Parameter not analyzed.

"--" = Sample not analyzed for parameter or no SCO available for the parameter.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

Bold = Result exceeds 6NYCRR Part 375 Unrestricted.

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives unrestricted (December 2006)

TABLE 7

Summary of Groundwater Analytical Results

1501 College Avenue Site

Niagara Falls, New York

PARAMETER[1]	GWQS[2]	MW-1	MW-2	MW-3	MW-4	MW-5	Blind [3]
		10/1/2010	10/1/2010	10/1/2010	10/1/2010	10/1/2010	10/1/2010
Volatile Organic Compounds (VOCs) - (ug/L)							
1,2,4-Trimethylbenzene	**5**	ND	ND	ND	0.78 J	ND	ND
Acetone	**50**	3.4 J	ND	ND	4.3 J	4.7 J	ND
Trichlorofluoromethane (Freon-11)	**5**	ND	ND	ND	1.4	ND	ND
Semi-Volatile Organic Compounds (SVOCs) (ug/L)							
2-Methylnaphthalene	**--**	ND	ND	ND	0.58 J	ND	ND
Acenaphthene	**20**	ND	ND	ND	2.8 J	12	ND
Acetophenone	**--**	ND	ND	ND	ND	0.88 J	0.71 J
Anthracene	**50**	ND	ND	ND	0.95 J	ND	ND
Benzo(a)anthracene	**0.002**	ND	ND	ND	**0.71 J**	ND	ND
Benzo(a)pyrene	**ND**	ND	ND	ND	**0.63 J**	ND	ND
Benzo(b)fluoranthene	**0.002**	ND	ND	ND	**0.71 J**	ND	ND
Carbazole	**--**	ND	ND	ND	1.7 J	ND	ND
Chrysene	**0.002**	ND	ND	ND	**0.58 J**	ND	ND
Dibenzofuran	**--**	ND	ND	ND	1 J	ND	ND
Di-n-butyl phthalate	**50**	0.57 B,J	0.53 B,J	0.32 B,J	0.39 B,J	0.49 B,J	0.63 B,J
Fluoranthene	**50**	ND	ND	ND	2 J	ND	ND
Fluorene	**50**	ND	ND	ND	1.8 J	ND	ND
Naphthalene	**10**	ND	ND	ND	1.5 J	ND	ND
Phenanthrene	**50**	0.52 J	ND	ND	0.94 J	ND	ND
Pyrene	**50**	ND	ND	ND	1.4 J	ND	ND
Total Metals (ug/L)							
Aluminum - Total	**--**	585	1590	2410	2250	454	2120
Barium - Total	**1000**	20.1	34.6	32.1	86.1	21	30.2
Cadmium - Total	**5**	0.4 J	ND	ND	ND	ND	ND
Calcium - Total	**--**	103000	77800	108000	121000	224000	105000
Chromium - Total	**50**	1.4 J	1.6 J	3.1 J	2.3 J	ND	2.7 J
Cobalt - Total	**5**	2.5 J	1.7 J	3.8 J	0.9 J	2.7 J	3.6 J
Copper - Total	**200**	4.3 J	3.9 J	4.3 J	3.2 J	2.5 J	4.2 J
Iron - Total	**300**	**565**	**1360**	**2170**	**1610**	**580**	**1920**
Lead - Total	**25**	ND	ND	ND	4.2 J	ND	ND
Magnesium - Total	**35000**	**100000**	**93700**	**114000**	13800	**132000**	**116000**
Manganese - Total	**300**	105	99.6	240	245	**564**	231
Nickel - Total	**100**	5.6 J	5.4 J	6.9 J	3.2 J	4.4 J	6.7 J
Potassium - Total	**--**	3830	3020	6520	11300	4820	6370
Sodium - Total	**20000**	**52400**	**51400**	**48600**	**31000**	**53400**	**46800**
Vanadium - Total	**14**	2.3 J	4.7 J	4.8 J	8	2.4 J	4.1 J
Zinc - Total	**2000**	12.5	12.4	8.2	6.7 J	9.6 J	7 J
Pesticides and Herbicides (ug/L)							
4,4'-DDD	**0.3**	0.22 D,J	0.21 D,J	0.21 D,J	0.071	0.24 D	0.22 D,J
4,4'-DDT	**0.2**	**0.22 D,J**	0.2 D,J	**0.21 D,J**	ND	ND	0.2 D,J
delta-BHC	**--**	ND	ND	ND	0.038 J	ND	ND
Endosulfan I	**--**	ND	ND	ND	ND	0.072 D,J	ND
Endosulfan II	**--**	ND	ND	ND	0.022 J	ND	ND
Endrin	**ND**	**0.17 D,J**	ND	ND	ND	ND	ND
Endrine ketone	**5**	ND	ND	ND	ND	0.082 D,J	ND
gamma-Chlordane	**--**	0.1 D,J	0.095 D,J	0.094 D,J	0.025 J	0.095 D,J	0.11 D,J
Heptachlor epoxide	**0.03**	**0.051**	ND	ND	ND	**0.075 D,J**	ND
Methoxychlor	**35**	0.088	ND	ND	0.025 J	ND	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - GA Class (TOGS 1.1.1)
3. Blind is the blind duplicate for MW-3.

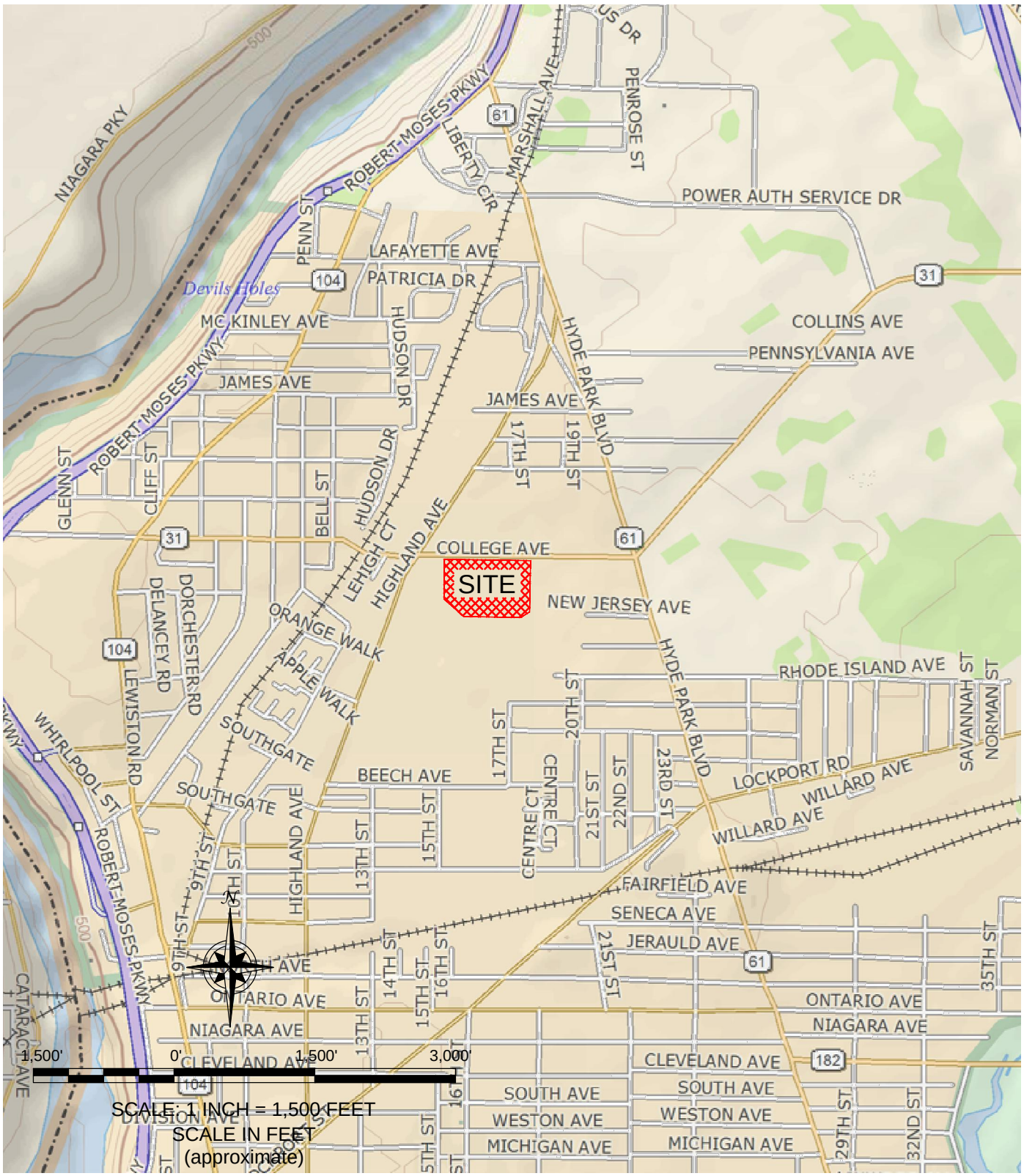
Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No SCO available for the parameter.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
D = Compounds were identified in an analyisis at the secondary dilution factor.
Bold = Result exceeds GWQS.

FIGURES

F:\CAD\TurnKey\Santorosa Holdings\FER\Figure 1; Site Location and Vicinity Map - JGT.dwg

FIGURE 1



TurnKey Environmental Restoration, LLC
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BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: 0140-001-105

DATE: OCTOBER 2012

DRAFTED BY: JGT

SITE LOCATION AND VICINITY MAP

FINAL ENGINEERING REPORT

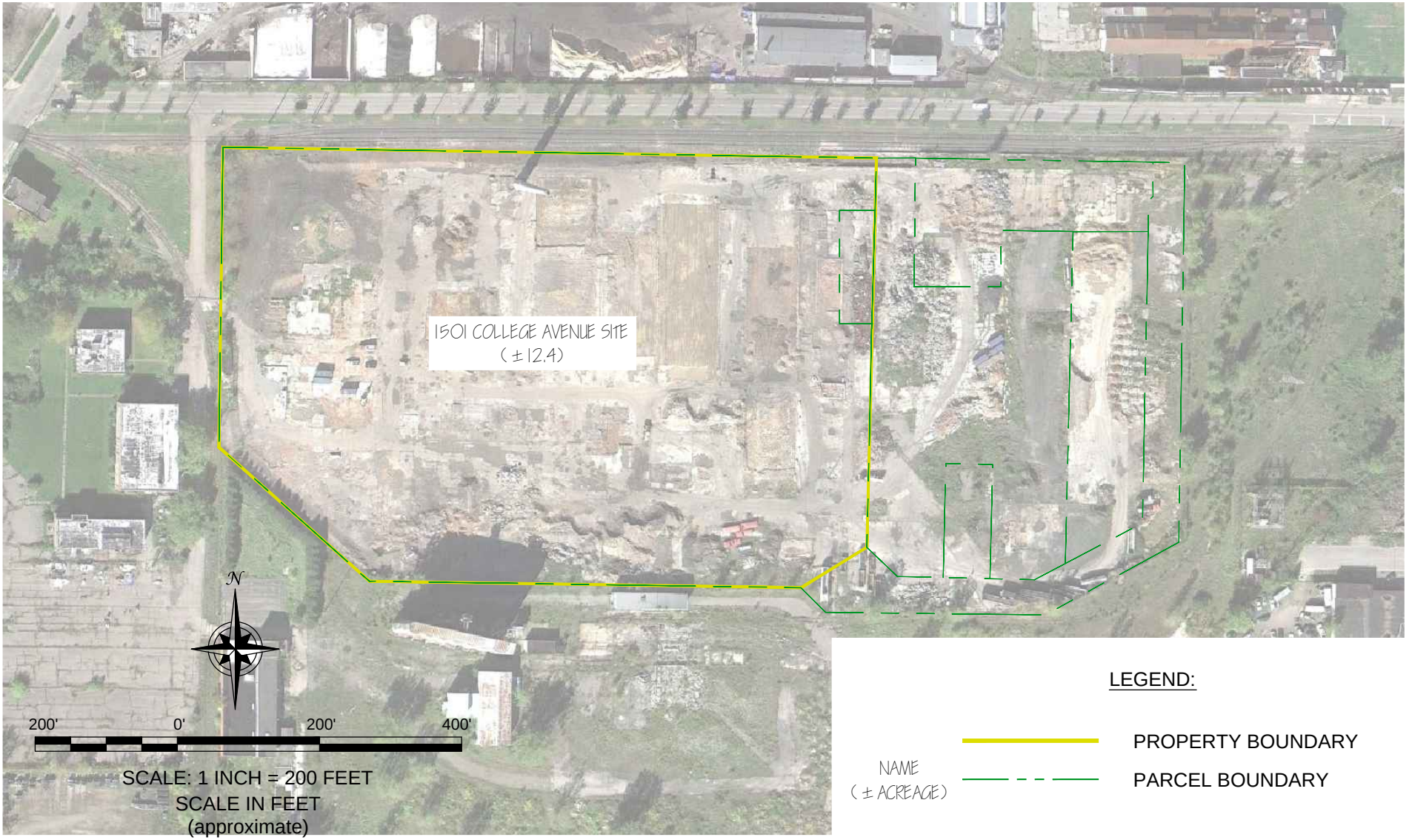
1501 COLLEGE AVENUE SITE

NIAGARA FALLS, NEW YORK

PREPARED FOR

SANTAROSA HOLDINGS, INC

F:\CAD\TurnKey\Santorosa Holdings\FER\Figure 2; Site Plan (Aerial) - JGT.dwg



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SITE PLAN (AERIAL)

FINAL ENGINEERING REPORT

1501 COLLEGE AVENUE SITE

NIAGARA FALLS, NEW YORK

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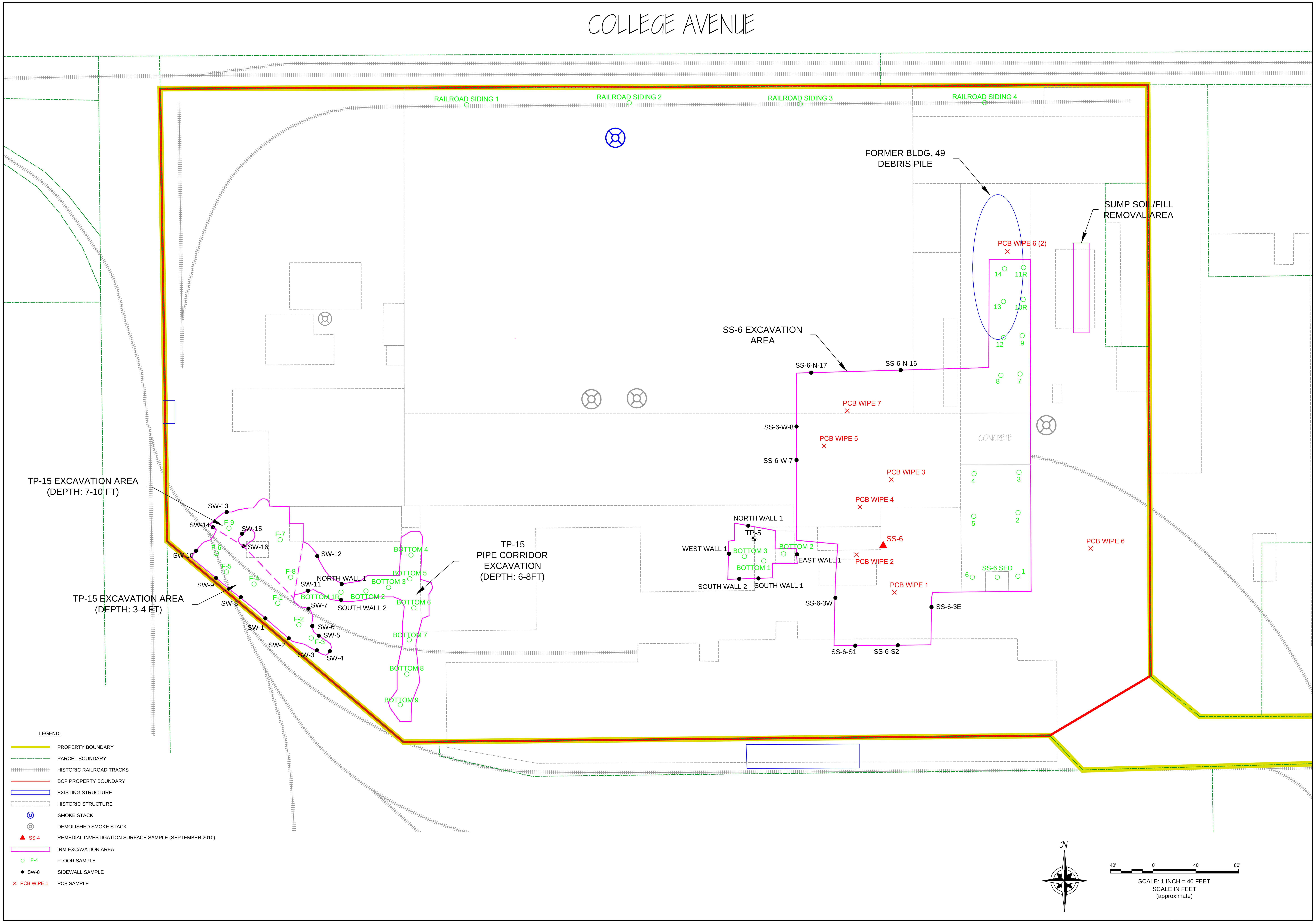
FIGURE 2


COLLEGE AVENUE
RAILROAD SIDING 1
RAILROAD SIDING 2
RAILROAD SIDING 3
RAILROAD SIDING 4
FORMER BLDG. 49
DEBRIS PILE
SUMP SOIL/FILL
REMOVAL AREA
PCB WIPE 6 (2)
SS-6 EXCAVATION
AREA
SS-6-N-17
SS-6-N-16
PCB WIPE 7
SS-6-W-8
PCB WIPE 5
SS-6-W-7
CONCRETE
PCB WIPE 3
PCB WIPE 4
PCB WIPE 6
SS-6
PCB WIPE 2
SS-6 SED
PCB WIPE 1
SS-6-3W
SS-6-3E
SS-6-S1
SS-6-S2
NORTH WALL 1
TP-5
WEST WALL 1
BOTTOM 3
BOTTOM 2
EAST WALL 1
BOTTOM 1
SOUTH WALL 2
SOUTH WALL 1
TP-15 EXCAVATION AREA
(DEPTH: 7-10 FT)
TP-15
PIPE CORRIDOR
EXCAVATION
(DEPTH: 6-8FT)
TP-15 EXCAVATION AREA
(DEPTH: 3-4 FT)
SW-13
SW-14
SW-15
SW-16
SW-10
SW-12
SW-9
SW-11
SW-8
SW-7
SW-1
SW-6
SW-5
SW-2
SW-3
SW-4
NORTH WALL 1
SOUTH WALL 2
BOTTOM 1R
BOTTOM 2
BOTTOM 3
BOTTOM 4
BOTTOM 5
BOTTOM 6
BOTTOM 7
BOTTOM 8
BOTTOM 9
LEGEND:
PROPERTY BOUNDARY
PARCEL BOUNDARY
HISTORIC RAILROAD TRACKS
BCP PROPERTY BOUNDARY
EXISTING STRUCTURE
HISTORIC STRUCTURE
SMOKE STACK
DEMOLISHED SMOKE STACK
SS-4 REMEDIAL INVESTIGATION SURFACE SAMPLE (SEPTEMBER 2010)
IRM EXCAVATION AREA
F-4 FLOOR SAMPLE
SW-8 SIDEWALL SAMPLE
PCB WIPE 1 PCB SAMPLE
N
40' 0' 40' 80'
SCALE: 1 INCH = 40 FEET
SCALE IN FEET
(approximate)

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REVISIONS

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DATE: OCTOBER 2012
CHECKED BY: NTM
APPROVED BY: MAL

IRM EXCAVATION AREAS

FINAL ENGINEERING PLAN

1501 COLLEGE AVENUE SITE
NIAGARA FALLS, NEW YORK
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SANTAROSA HOLDINGS, INC.

FIGURE 3

F:\CAD\TurnKey\Santorosa Holdings\FER\Figure 4; Groundwater Isopotential.dwg

COLLEGE AVENUE

95

97

99

MW-1
(95.3)

MW-5
(99.3)

MW-4
(101.4)

MW-2
(101.6)

MW-3
(100.9)

CONCRETE

101

LEGEND:

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- HISTORIC RAILROAD TRACKS
- BCP PROPERTY BOUNDARY
- EXISTING STRUCTURE
- HISTORIC STRUCTURE
- SMOKE STACK
- MW-1 (100.9) — MONITORING WELL (GROUNDWATER ELEVATION)
- MW- (101.6) — HISTORIC MONITORING WELL (GROUNDWATER ELEVATION)
- 97 — GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

N

100' 0' 100' 200'

SCALE: 1 INCH = 100 FEET
SCALE IN FEET
(approximate)

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GROUNDWATER SAMPLE LOCATIONS & ISOPOTENTIAL MAP

FINAL ENGINEERING REPORT

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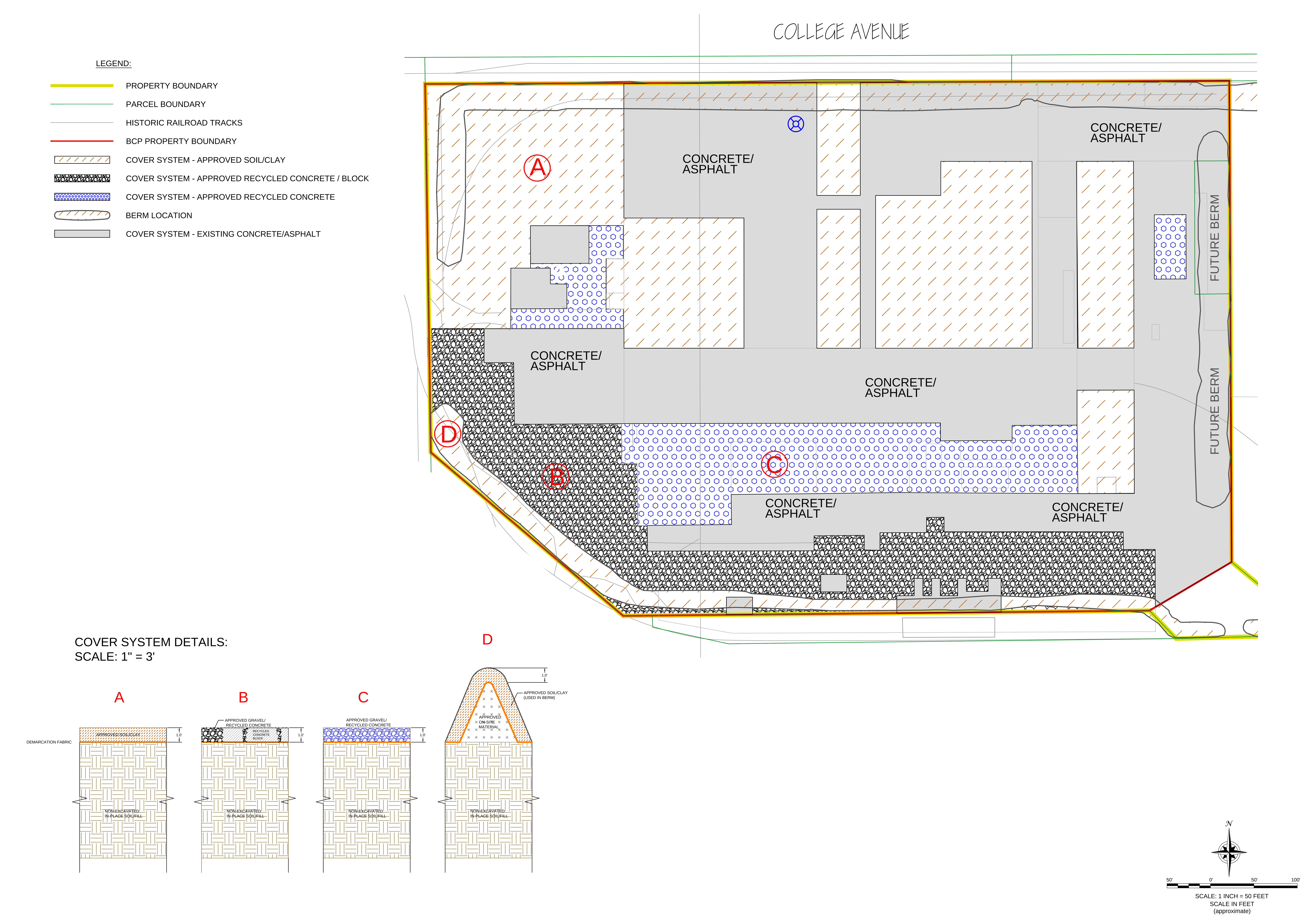
FIGURE 4


COLLEGE AVENUE
LEGEND:
PROPERTY BOUNDARY
PARCEL BOUNDARY
HISTORIC RAILROAD TRACKS
BCP PROPERTY BOUNDARY
COVER SYSTEM - APPROVED SOIL/CLAY
COVER SYSTEM - APPROVED RECYCLED CONCRETE / BLOCK
COVER SYSTEM - APPROVED RECYCLED CONCRETE
BERM LOCATION
COVER SYSTEM - EXISTING CONCRETE/ASPHALT
A
B
C
D
CONCRETE/ ASPHALT
FUTURE BERM
COVER SYSTEM DETAILS:
SCALE: 1" = 3'
APPROVED SOIL/CLAY
DEMARCATION FABRIC
APPROVED GRAVEL/ RECYCLED CONCRETE
APPROVED ON-SITE MATERIAL
APPROVED SOIL/CLAY (USED IN BERM)
NON-EXCAVATED IN-PLACE SOIL/FILL
1.0'
N
50' 0' 50' 100'
SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

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APPROVED BY:	MAL

COVER SYSTEM LAYOUT AND DETAIL

FINAL ENGINEERING PLAN
1501 COLLEGE AVENUE SITE
NIAGARA FALLS, NEW YORK
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SANTAROSA HOLDINGS, INC.

FIGURE 5

F:\CAD\TurnKey\Santorosa Holdings\FER\Figure 6; Remaining On-Site Contamination Above Unrestricted SCOs.dwg

COLLEGE AVENUE

SS-4
MW-5
SS-11
TP-11
MW-1
SS-1
TP-1
SS-23
TP-23
TP-21
SS-19
TP-19
TP-20
TP-24
TP-22
TP-25
SS-10
TP-10
CONCRETE
MW-4
SS-1
TP-9
SS-4
TP-3
TP-4
SS-3
MW-2
SS-18
TP-18
MW-3
SS-2
TP-2
SS-2
SS-7A
TP-7A
SS-12
SS-13
SS-14
TP-12
TP-13
TP-14

LEGEND:

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- HISTORIC RAILROAD TRACKS
- BCP PROPERTY BOUNDARY
- EXISTING STRUCTURE
- HISTORIC STRUCTURE
- SMOKE STACK
- DEMOLISHED SMOKE STACK
- MW-1 GROUNDWATER MONITORING WELL
- TP-16 RI TEST PIT (SEPTEMBER 2010)
- SS-1 RI SURFACE SAMPLE (SEPTEMBER 2010)
- SS-1 PRELIMINARY INVESTIGATION SURFACE SAMPLE (AUGUST 2007)

N

100' 0' 100' 200'

SCALE: 1 INCH = 100 FEET
SCALE IN FEET
(approximate)

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TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0140-001-105

REMEDIAL INVESTIGATION SAMPLE LOCATIONS ABOVE UNRESTRICTED SCOs

FINAL ENGINEERING REPORT
1501 COLLEGE AVENUE SITE
NIAGARA FALLS, NEW YORK
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SANTAROSA HOLDINGS, INC.

FIGURE 6

APPENDIX A

ENVIRONMENTAL EASEMENT AND SURVEY MAPS

COLLEGE (60' WIDE) AVENUE (FORMERLY WHIRLPOOL STREET)

96.05 96.19 96.33 96.48 96.63 96.86 97.10 97.22 97.34 97.48 97.61 97.73 97.88 98.04 98.31 98.79 99.24 99.67 100.13

FIRE HYDRANT
BENCHMARK ELEV. = 100.0 (ASSUMED)

SOUTH STREET LINE

TO HIGHLAND AVENUE

30.00' REC.

SOUTH LINE OF LANDS NOW OR FORMERLY OWNED BY PENN CENTRAL RAILROAD

N 90°00'00" W
922.25' REC. & MEAS.

(NOW OR FORMERLY PENN CENTRAL RAILROAD)

30.0' REC.

N 90°00'00" W
435.44' SUBTR. PER RECORD

30.0'

TO HYDE PARK BLVD.

1357.69' RECORD
N 90°00'00" W

15TH (60' WIDE) STREET

EAST STREET LINE

S 00°06'55" E
422.18' REC. & MEAS.

(SEE TABLE "A")

(SEE TABLE "B")

(SEE TABLE "C")

(SEE TABLE "D")

(SEE TABLE "E")

BERM

CONCRETE AND BLACKTOP

CONCRETE

CONCRETE

CONCRETE

APPENDIX B

DIGITAL COPY OF FER
(CD ENCLOSED)

APPENDIX C

AGENCY APPROVALS

APPENDIX D

PROGRESS REPORTS

APPENDIX E

FACT SHEETS

APPENDIX F

COMMUNITY AIR MONITORING PROGRAM

(ENCLOSED CD)

APPENDIX G

PROJECT PHOTO LOG

APPENDIX H

SOIL/WASTE CHARACTERIZATION DOCUMENTATION

Appendix H1 *Disposal Facility Application and Approval Letters*

Appendix H2 *Waste Manifests, Disposal Receipts and Bills of Lading (CD)*

APPENDIX I

LABORATORY ANALYTICAL DATA REPORTS

(ENCLOSED CD)

APPENDIX J

DATA USABILITY SUMMARY REPORTS (DUSRS)

APPENDIX K

IMPORTED AND BACKFILL MATERIAL DOCUMENTATION

(ENCLOSED CD)