Former Allegany Bitumens
Belmont Asphalt Plant
ALLEGANY COUNTY, NEW YORK

Site Management Plan

NYSDEC Site Number: C902019

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Revisions to Final Approved Site Management Plan:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

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OCTOBER 2012

CERTIFICATIONS

I, Peter Nielsen, certify that I am currently a NYS registered professional engineer and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

PETER NIELSEN
No. 061499-1

Signature

10/22/12
Date

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SITE MANAGEMENT PLAN

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This document is required as an element of the remedial program at the Former Allegany Bitumens Belmont Asphalt Plant (hereinafter referred to as the “Site”) under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index# C902019, which was executed on October 12, 2010 and last amended on May 30, 2012.

1.1.1 General

Blades Holding Company, Inc. (Blades) entered into a BCA with the NYSDEC to remediate a 5.44± acre property located in the Town of Amity, Allegany County, New York (Figure 1). This BCA required the Remedial Party, Blades, to investigate and remediate contaminated media at the site. A figure showing the site location and boundaries of this “site” is provided in Figure 2. The boundaries of the site are more fully described in the metes and bounds site description (see Appendix B) that is part of the Environmental Easement (see Appendix C).

After completion of the remedial work described in the Remedial Action Work Plan, some contamination was left in the subsurface at this site, which is hereafter referred to as ‘remaining contamination.” This Site Management Plan (SMP) was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by Stantec Consulting Services Inc., on behalf of Blades, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the site.

1.1.2 Purpose

The site contains contamination left after completion of the remedial action. Engineering Controls have been incorporated into the site remedy to control exposure to remaining contamination during the use of the site to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Allegany County Clerk, will require compliance with this SMP and all ECs and ICs placed on the site. The ICs place restrictions on site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) operation and maintenance of all treatment, collection, containment, or recovery systems; (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes two plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; and (2) a Monitoring Plan for implementation of Site Monitoring. If future development warrants implementation of mitigation or remedial collection, containment, treatment, and recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual for complex systems) an Operation and Maintenance Plan will be developed with approval from NYSDEC.

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA (Site #C902019) for the site, and thereby subject to applicable penalties.

1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The site is located in the Town of Amity in Allegany County, New York and is identified as Parcel No. 171-1-60 on the Allegany County Tax Map. The site is an approximate 5.424-acre area. Land use in the surrounding area is dominated by agricultural uses. Agricultural fields occupy the adjacent property to the east. Houses, barns and single-family non-farm residences are located along Route 19 to the north and southeast of the property and along Friendship Hill Road (Tuckers Corner Road) to the west of the property. The property located immediately opposite the Site on the west side of Route 19 is also owned by Blades, and is the site of a vehicle and equipment maintenance shop and small office building which are currently not in use (see Figure 3). The boundaries of the site are more fully described in Appendix B – Metes and Bounds.

1.2.2 Site History

1.2.2.1 Past Uses and Ownership

The Site was used for agricultural purposes or was undeveloped prior to 1960. In March 1960, A.L. Blades and Sons, Inc. (now known as Blades Holding Company, Inc.) acquired the property and then conveyed the property to its affiliate Allegany Bitumens, Inc.

An asphalt plant was constructed at the Site by Allegany Bitumens, Inc. circa 1960 and was operated by Allegany Bitumens, Inc. and, after a 1995 merger, by A.L. Blades and Sons, Inc. until A.L. Blades and Sons, Inc. discontinued the asphalt plant operations in 2005. Since 2005, the facility has been unoccupied, and the buildings and stationary asphalt manufacturing equipment were recently demolished or dissembled.

1.2.2.2 Former Structures, Processes and Activities

Industrial Processes and Chemical Uses Associated with Former Asphalt Plant Operations at the Site

The Site was used as a hot mix asphalt manufacturing plant, and ancillary operations such as maintenance of plant equipment and as a laboratory for asphalt and aggregate testing.

Asphalt plant operations that involved the storage or use of significant quantities of petroleum products and asphalt materials included the following:

- hot-mix asphalt production, and
- operational equipment maintenance and related petroleum storage (motor oil, lubricating oil, and grease).

Ancillary operations involving the on-Site use of de minimis quantities of petroleum products or asphalt included:

- aggregate storage and handling,
- truck and heavy equipment parking,
- facility maintenance,
- laboratory testing operations, and
- office and administrative operations.

The primary heating fuel for plant operations was natural gas. A gas company metering and valve building was located between the western property boundary and the Route 19 roadway. This building has since been removed by the gas company.

Asphalt Production

One “batch” hot-mix asphalt production plant was formerly located on-Site. The manufacturing equipment was installed on reinforced concrete slabs, with independent structural footings for stationary equipment.

The former operational equipment included the following:

- a heater used to maintain heat in the plant’s liquid asphalt piping,
- two 20,000 gallon aboveground asphalt tanks,
- one 15,000 gallon aboveground asphalt tank,
- an electric heating system for the asphalt tanks,
- an aggregate dryer, fueled by a burner using natural gas,
- a dust collector for the aggregate dryer,
- material handling and conveyance systems,
- a heated asphalt mixing drum,
- a truck loading station,
- a scale house, and
- a control tower.

The only remaining features include the concrete slab floors for the control tower and maintenance garage (discussed below), and some of the subsurface re-enforced concrete foundations of the asphalt plant.

Aggregate materials (sand and gravel) obtained from NYSDOT-approved quarries were stockpiled to the south of the asphalt plant. The aggregate was sorted, weighed and mixed in accordance with NYSDOT or customer specifications. The aggregate was dried in a natural-gas-fired rotary dryer. The dryer was equipped with a fabric filter (“baghouse”) air emission control system. The baghouse dust was recycled into the production process. No waste dust was generated that required off-Site disposal. The dried aggregate was weighed and conveyed to the mixing drum.

Pre-heated liquid asphalt was dosed and applied to the aggregate via spray nozzles inside the rotating mixing drum. The hot asphalt mix was conveyed from the drum to the truck loading hopper. The loaded trucks were tarped and weighed prior to leaving the Site. All waste asphalt was either recycled back into the production process or placed on site.

The asphalt tanks had internal coils and external insulation utilizing individual electric heaters on each tank. The asphalt piping between the tanks and the plant was heated by a separate system including a stand-alone heater and circulating hot oil enclosed in insulated jacketing around the asphalt piping. The hot oil heater utilized fuel oil and/or natural gas. For a time it was disconnected and staged at the northern end of the property, but has since been removed from the property.

The three horizontal steel asphalt tanks formerly at the plant were essentially empty since the plant operations were discontinued in 2005. The asphalt tanks were located on concrete slabs and footings. The concrete slabs and base provided an impermeable barrier under the tanks, but no other engineered secondary containment was provided.

Maintenance Operations

Routine maintenance and minor repair of facility equipment was performed in a maintenance garage located east of the asphalt mixing operation equipment. The building was also utilized for garaging the asphalt plant loader and for storing construction-related equipment.

The maintenance garage was a single-story metal-sided building with a concrete slab-on-grade floor. There was no basement. The maintenance garage floor was in good structural condition with minor surficial oil staining. The floor is the only part of the structure remaining.

Small quantities of motor oil, hydraulic oil and used oil were stored in and dispensed from drums or 5-gallon containers stored in the oil product storage shed, which was adjacent to the northwest corner of the maintenance garage.

The maintenance garage restroom was located at the southwest corner of the garage building. The septic system for the restroom was located just south of the restroom.

Laboratory Operations

A former on-Site laboratory was present in the northwest corner of the property northwest of the asphalt manufacturing area. The laboratory had not been used since 2005. When the plant was operational, the laboratory was utilized for testing asphalt products for compliance with NYSDOT or client specifications.

Trichloroethylene (TCE) was used as a solvent in the testing operations. The solvent was used to remove asphalt from blacktop samples to allow for testing of the sand and gravel components of the blacktop. A NYSDOT test specification required the use of TCE for this purpose. Solvent use in the laboratory was largely replaced by an ignition oven process in the laboratory in the early 1980s, and thereafter the test process that involved TCE was very rarely used.

The minor amount of asphalt residue from each test that involved use of solvent was accumulated in a 5-gallon pail which when full was removed from the Site for off-Site disposal by an environmental services firm, which also removed and disposed of spent solvent. Blades installed a TCE distillation system in the lab in 1987, and thereafter no waste solvent material was generated from the use of TCE.

The laboratory building had its own septic system which reportedly received domestic sanitary waste from the sinks and toilet in the laboratory and from a bathroom in the adjacent scale house. The septic system was located in the area south of the lab building and east of the scale house.

1.2.2.3 Historical Environmental Activities and Reports

Historical environmental studies and reports prepared by Stantec include:

- Phase I/Phase II Environmental Site Assessment (performed December 2009 and reported July 2010);
- Remedial Investigation Work Plan (October 11, 2010);
- Monthly Progress Reports, starting November 2010;
- Interim Remedial Measures Work Plan (October 24, 2011);
- Remedial Investigation Report and Interim Remedial Measures Construction Completion Report (September, 2012);
- Remedial Alternative Analysis Report and Remedial Action Work Plan (Draft, August 27, 2012); and

- Final Engineering Report (to be completed).

Phase I Environmental Site Assessment

A Phase I ESA was completed by Stantec in December 2009 in connection with real estate due diligence activities. The Phase I ESA identified one recognized environmental condition (REC) at the Site:

- No records or knowledge of releases were identified during the Phase I ESA. However, given the potential for historic releases of TCE in the area of the laboratory building septic system and outdoor asphalt-paved pad attached to the east end of the laboratory building, that area was identified as an REC, and it was recommended that a soil boring program be conducted in that area.

Phase II Environmental Site Assessment

Based on the findings of the Phase I ESA, Stantec conducted a Phase II ESA in December 2009. Four soil test borings, one temporary monitoring well (BS-1) and three permanent monitoring wells (BS-2 through BS-4) were installed for the purposes of collecting soil and groundwater samples adjacent to, and downgradient from, the laboratory building and its septic system. The Phase II ESA test boring and monitoring locations are shown on Figure 2. Results indicated the presence of TCE and related VOCs in soil and groundwater at levels above NYSDEC's soil cleanup objectives and groundwater standards in an area northeast of the laboratory building.

Remedial Investigation

The RI investigation included subsurface explorations and soil and groundwater sampling and analysis in the laboratory area as well as other areas of the site (see Figure 2). The primary findings of the RI were as follows:

Laboratory Building Area

Chlorinated volatile organic compound (CVOC) impacts were further characterized and delineated in subsurface soil and shallow groundwater in the vicinity of the laboratory building. Exceedences of SCOs were reported for CVOCs in subsurface soil samples to the east and southeast of the laboratory building. TCE concentrations in soils ranged up to 35 ppm. The area of groundwater impacts extended beyond the limits of the soil impacts, and extended slightly beyond the northern property line. TCE concentrations in groundwater ranged up to 12 ppm.

West of the Asphalt Storage Tanks (MW-27 and B-31 area)

Low-level detections of petroleum VOCs were found in shallow soils in two test borings. Although the laboratory detections of contaminant compounds were below SCOs, elevated PID readings and significant “nuisance” petroleum odors were observed; accordingly, remedial action was also deemed warranted for this area. Groundwater samples from monitoring wells installed closest to this area did not indicate impacts.

Asphalt Tank Area (Test Pit TP-14 area)

Petroleum impacts were identified in shallow soil in the vicinity of the asphalt tanks. Low-level petroleum VOC detections below SCOs were observed immediately west of the asphalt tanks, where asphalt materials and soil with an oily appearance were observed at shallow depths accompanied by elevated PID readings. Due to significant “nuisance” petroleum odors and the presence of oil staining, this area was deemed to require remedial action. Groundwater impacts were not observed.

North and East Perimeter Berms

Portions of the perimeter soil berms or slopes along the east and north property lines were found to contain waste asphalt and asphalt/fill soil mixtures, as well as miscellaneous debris consisting of a variety of large and small pieces of wood, metal, plastic and rubber objects. A notable “lobe” of waste asphalt is present near the center of the eastern berm and extends westward toward the interior of the site.

Analysis of soil samples from test pits excavated in the berms did not detect Contaminants of Concern (COCs) at levels in excess of SCOs, with one exception: benzo(a)pyrene was detected in a sample from TP-10 at 4.1 part per million (ppm), versus the Commercial SCO of 1 ppm.

Interim Remedial Measures

Based on the RI findings, Blades performed Interim Remedial Measures (IRMs) to: 1) provide a timely response to the findings of the RI; 2) minimize the potential for further spread of contaminants; and 3) expedite preparation of the site for potential sale and re-development. An IRM Work Plan (IRM WP) was submitted to and approved by NYSDEC. The IRM WP designated the first three areas described above to be Remedial Areas of Concern (RAOCs), as follows:

- RAOC-1: Former Laboratory Area;
- RAOC-2: MW-27 and B-31 Area; and

- RAOC-3: Asphalt Tank Area.

The fourth area (North and East Perimeter Berms) was not designated to be an RAOC at that time. IRMs were not proposed for this area due to the lack of a threat to health or the environment. Nonetheless, this portion of the site was ultimately designated RAOC-4.

The IRMs for RAOCs 1 through 3 were performed between November 2011 and April 2012, with supplemental IRM activities continuing into May 2012. Field modifications to the IRMWP-proposed activities were approved by NYSDEC. The following summarizes the measures taken:

RAOC-1 - Former Laboratory Building Area

CVOC-impacted soil was excavated from the source area and disposed offsite. Confirmatory soil samples indicated that the excavation sufficiently removed impacted soil, i.e. no exceedences of applicable SCOs were observed in the analyzed samples.

Water was pumped from the excavation and treated with a granular activated carbon system and discharged onsite. Analyses of the system effluent indicated that the treatment sufficiently removed VOCs from the water prior to discharge.

To further address residual groundwater impacts, enhanced reductive dechlorination (ERD) was implemented through the application of sodium lactate solution into the source-area excavation prior to backfill.

Subsequent to backfill of the source area excavation, a series of trenches were excavated within the plume footprint beyond the source area to facilitate application of additional sodium lactate solution. The RAOC-1 excavations were backfilled with clean onsite soils.

Periodic groundwater monitoring was commenced with the first sampling event performed in March 2012 and a second event conducted in June 2012. The source-area total VOC concentrations in March and June 2012 were 54 and 36 micrograms per liter (µg/L; equivalent to parts per billion), respectively. These results were significantly lower than the pre-remediation (January 2011) VOC concentrations of 3,947-12,401 µg/L total VOC concentrations reported in source-area wells in January 2011.

VOC levels in groundwater outside the source area were generally found at levels near or below NYSDEC groundwater standards. However, a downgradient well exhibited a slight increase in total VOCs, mostly due to an increase in the concentration cis-1,2-DCE, a "daughter" product of the breakdown of TCE. This is likely indicative of the onset of ERD of TCE downgradient of the source area.

RAOC-2 – MW-27 and B-31 Area (West of Asphalt Tank Area)

Petroleum-impacted soil was excavated from RAOC-2 and disposed offsite. Confirmatory soil samples indicated that the excavation sufficiently removed impacted soil, i.e. no exceedences of SCOs were observed in the analyzed samples, with the exception of acetone, which was attributed to lab contamination.

RAOC-3 - Asphalt Tank Area

During excavation of the impacted soil in RAOC-3, it became evident that two distinct areas of impacted soil existed: a western portion (RAOC-3A) and an eastern portion (RAOC-3B and 3C). Impacts in the western portion included those originally observed at TP-14. Elevated PID readings, staining and petroleum product odors were observed at depths ranging down to approximately 4.5 ft bgs in RAOC-3A. Groundwater was not encountered within this excavation.

As excavation advanced in RAOC-3B, the water table was encountered at approximately 5 ft bgs and apparent petroleum product was observed within a deposit of coarse gravel and cobbles at depths from approximately 5 ft to 8 ft bgs. As the gravel was excavated, a floating layer of light non-aqueous phase liquid (LNAPL) developed on the water surface in the excavation.

IRM activities ceased at that time due in part to the onset of winter weather and because access to the southwestern portion of the excavation was restricted by the presence of the asphalt plant structure and associated concrete slabs and foundation piers. The asphalt plant was subsequently removed in March 2012 and additional excavation was then completed in the southwestern portion (designated RAOC-3C) in April 2012.

Impacted soil excavated from all three sub-areas of RAOC-3 was disposed of offsite. With the exception of one detection of acetone, which is a common laboratory artifact, results from confirmatory soil samples from the RAOC-3 excavations were below SCOs.

Sorbent pads and booms were used to absorb the LNAPL on the water accumulated in the excavation at RAOC-3B and RAOC-3C. A vacuum system was also used to remove product periodically from the surface of the water table; the water/product were containerized. Laboratory analysis of the LNAPL identified the material as motor (lube) oil. The water that accumulated in the excavation underlying the

LNAPL was sampled for VOCs, SVOCs and metals and it did not exhibit contaminants at concentrations in excess of NYSDEC's groundwater standards. Water and LNAPL were pumped from the RAOC-3B and RAOC-3C excavations. The water and product were transported offsite to a permitted treatment facility for treatment/disposal.

Geochemical conditions of a water sample from the RAOC-3B excavation indicated that placement of gypsum in the base of the excavation at the water table would create favorable conditions for anaerobic degradation of remaining petroleum residue by indigenous sulfate-reducing bacteria. Accordingly, granular agricultural-grade gypsum and fertilizer was added to the RAOC-3B and RAOC-3C excavations prior to backfill. The excavations in RAOC-3 were backfilled with non-impacted onsite overburden material and/or onsite aggregate.

RAOC-3B/3C groundwater monitoring commenced with a sampling event in March 2012, followed by a quarterly sampling event in June 2012. Only one VOC was detected in March 2012 and it was found at a concentration below the groundwater standard. No VOCs were detected in June 2012. No target SVOC compounds were detected in either round. The results indicated anaerobic, reducing groundwater conditions, with increased sulfate levels exist; these data are indicative of favorable conditions for continued successful breakdown of residual petroleum hydrocarbons.

Additional Activities

Additional activities were conducted in response to conditions encountered during demolition and dismantling of site structures and buildings. Environmental conditions encountered which warranted remedial action, and the actions taken include:

- The floor slab and bottom course of the masonry block walls of the oil storage shed were oil-stained. No impacts were observed in soil beneath the building. The impacted concrete slab and block materials were segregated and disposed of offsite at a permitted landfill;
- Surface soil beneath a discarded asphalt heater was observed to be oil stained. The soil was excavated and disposed offsite. Excavated soil was disposed offsite. Confirmatory bottom and sidewall samples did not have detections above SCOs. A small amount of water was pumped from the excavation when oil was observed to accumulate on the water surface. The water was sampled and disposed of at the Wellsville wastewater treatment plant; and

- Sampling of the maintenance garage septic system indicated petroleum-related VOCs were present at low levels in sludge contained in the underground septic tank, but no contaminants of concern were detected in a water sample from the adjacent dry well. The VOC concentrations in the sludge were low enough to allow for disposal of the waste at the Wellsville wastewater treatment plant. No impacts to the surrounding soil were observed or indicated by field screening for VOCs.

RAOC-4 Remedial Action

Since no significant impacts were found in soil or groundwater in RAOC-4, necessary remedial action was limited to removal and offsite disposal of surficial debris. This work was performed concurrently with the IRMs, primarily in April and May 2012.

1.2.3 Geologic Conditions

According to mapping prepared by the United States Department of Agriculture (USDA) Soil Conservation Service, as reported by Environmental Data Resources (EDR), the majority of the native soils on the subject property are identified as Chenango gravelly loam. This soil is described as deep, well drained to excessively drained sands and gravels. The Surficial Geologic Map of New York - Niagara Sheet (Cadwell, and others, 1986) indicates the overburden deposits beneath the subject property are fluvial sand and/or gravel along the western property line and recent alluvial deposits of the Genesee River floodplain beneath the eastern two thirds of the property.

Phase II and RI test pit and soil boring data indicate varying thicknesses of fill overlying a few to several feet of brown to yellowish brown silts/fine-grained sands and gravels. Below this are alternating layers of gray to brownish gray clayey silt/fine-grained sand and silty clay that gets finer with depth. A geologic cross-section for RAOC-1 is shown in Figure 4.

According to the Geologic Map of New York (Rickard and Fisher, 1970), bedrock underlying the subject property is identified as shale and siltstone of the Canadaway group. Based on a video survey of the site's water supply well, it appears that the top of bedrock is greater than 180 ft bgs. The video survey showed that the well is cased along its entire depth with the casing apparently driven into gravel, which forms the base of the well.

The water table at and just to the north of the Site is relatively shallow. During the RI, the water table was generally found to occur within 0 to 15 ft of ground surface.

Shallow overburden groundwater was found to flow toward the north, northeast, east and southeast from the northwest portions of the Site. A groundwater contour plan showing flow direction is included as Figure 5. Regional groundwater flow is expected to be toward the Genesee River, which is approximately 1,200 feet to the east of the site.

1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the Remedial Investigation Report and Interim Remedial Measures Construction Completion Report (draft, May 30, 2012).

Generally, the RI determined that there were three areas requiring remedial action. As described in Section 1.2.2.3, these included:

1. CVOC-impacted soil and groundwater in the laboratory building area;
2. Elevated PID readings and significant "nuisance" petroleum odors in shallow subsurface soils west of the asphalt storage tanks near MW-27 and B-31;
3. Elevated PID readings, "nuisance" petroleum odors and the presence of oil staining near the asphalt tanks at TP-14 in shallow subsurface soils; and

Fifteen of the sixteen soil samples analyzed from test pits in the perimeter soil berms did not exhibit exceedences of the Commercial SCOs, and the sixteenth sample exhibited only a single polycyclic aromatic hydrocarbon (PAH) at a level above the SCO. No groundwater impacts were observed. Accordingly no soil or groundwater remediation was deemed warranted for these areas.

Below is a summary of site conditions when the RI was performed in 2010-2011. RI sampling locations are shown on Figure 2. Tables 1-4 display analytical results screening against the appropriate NYSDEC criteria.

Soil Gas

A passive soil gas survey consisting of 28 sampling points was conducted at and downgradient of the laboratory source area and surrounding the oil house and maintenance garage. The PSG survey results showed the presence of CVOCs, especially TCE, centered around an area just northeast of the laboratory building and extending toward the north. These results were used to help refine the positioning of the monitoring wells in the laboratory and downgradient areas.

The PSG results also showed two areas of petroleum related VOCs in the vicinity of the asphalt storage tanks and the maintenance garage. The PSG concentrations near the asphalt storage tanks were likely related to the impacts discovered at test pit TP-14. In the PSG area near the maintenance garage, no surface or subsurface soil impacts were noted based on laboratory analytical sampling results and field screening. For both areas with PSG petroleum VOC results, based on groundwater sampling results at nearby and downgradient monitoring well locations, there were no petroleum related exceedances in groundwater.

Soil

Surface Soil

Fourteen surface soil samples were collected from locations distributed across the Site and from targeted locations. All detections of VOCs, SVOCs, and pesticides were below Commercial SCOs (see Table 1). No PCBs were detected. The only metals detected above Commercial SCOs were calcium, iron and magnesium, which are common naturally-occurring metals whose presence was not considered to be site related.

Subsurface Soil from Test Pits

Twenty-three test pits were excavated across the Site, predominantly along the berms at the northern and eastern property boundaries. Materials encountered included aggregate stockpiles, native soils, solid and non-solidified asphalt materials, asphalt pieces with an oily appearance, PID readings up to 804 ppm and a strong odor (TP-14, 3 ft bgs), remnants of a small fire, and debris. The non-solidified material was not suitable for sale at the time of manufacture as it was identified to be “off-spec.” Nevertheless, it is essentially the same as solidified asphalt pavement that is placed in commerce for public uses or is generated during construction or demolition activities involving asphalt pavement. The material did not elicit a positive response on a PID and no VOC or SVOC groundwater impacts were observed in excavations where this material was present. Twenty-six subsurface soil samples were collected (see Table 2). No VOCs, pesticides, or PCBs were detected above Commercial SCOs. The only metals detected above these SCOs were considered to be naturally occurring and not site-related. The only exceedence of Part 375 Commercial SCOs for SVOCs was at the deepest interval reached (6-6.5 ft bgs) at TP-10, which is along the eastern bermed area. One PAH, benzo(a)pyrene, exceeded its Commercial SCO. Pieces of asphalt were found throughout this test pit. At the base of the test pit, near where the sample was collected, there was an impenetrable hard surface that was most likely asphalt. Therefore, the PAH exceedence is believed to be related to the presence of the asphalt. Asphalt is a chemically- and physically-stable material that does not readily impart chemical constituents to the environment. It's use in construction of roadways, and for parking surfaces and driveways for industrial, commercial and residential applications are indicative of a lack of significant potential for adverse impact to human health, wildlife or the environment. In fact, asphalt is often used on environmental remediation sites as a cap to contain contaminant materials. Accordingly, the presence of asphalt is not considered to be of environmental concern.

Subsurface Soil from Soil Borings

A total of 38 subsurface soil samples were submitted from the RI and Phase II monitoring well and soil boreholes (see Table 3). Low concentrations of SVOCs were detected at samples submitted for SVOC analysis, all of which were below the Part 375 Commercial SCOs. No pesticides or PCBs were detected in the samples submitted for these analyses. Metals were detected in each of the five samples submitted for metals analysis. Exceedances of Part 375 Commercial SCOs were only reported for metals considered to be naturally occurring and not Site-related.

Among the samples analyzed for VOCs, many locations either had no detections or only low levels of methylene chloride, which is a common laboratory contaminant and not considered to be Site related. Among the other locations with detections, low levels of petroleum related VOCs were detected at 8-9 ft bgs in the soil sample from B/MW-10, which was just to the east of the asphalt storage tanks, and near the surface at B/MW-27 and B/MW-31, which were to the west of the asphalt storage tanks. The low level detection at B/MW-10 may have been related to the PSG results discussed above. The detections at B/MW-27 and B-31 reflect the elevated (41 to 58 parts per million [ppm]) PID readings and odors observed during the sampling of these intervals (0.3 to 1.1 ft bgs). All of the petroleum related VOC detections in the boring subsurface soil samples were nevertheless well below Part 375 Commercial SCOs.

Other locations with detections were predominantly CVOCs and these locations were in the vicinity of the laboratory building. The CVOCs reported at or near the water table are contoured on Figure 6 in plan view. Figure 4 shows a cross-section of the laboratory building area, including lithology, the water table, PID readings and soil sampling results. All subsurface soil sample results from the wells and soil borings were well below the Commercial SCOs. The locations with the highest detections were on the east and southeast sides of the laboratory building and correspond to locations where elevated PID readings were observed and exceedances of Part 375 POGW SCOs occurred. These exceedances included: TCE at BS-2, BS-4, B-16, B/MW-23, and B-24; 1,1,1-trichloroethane (1,1,1-TCA) at B-24; and 1,1-dichloroethane (1,1-DCA) at B-16. In the laboratory source area, TCE concentrations ranged up to 35 ppm. Concentrations diminished significantly away from the vicinity of the laboratory building source area. The area with known exceedances was estimated to be approximately 55 ft in the north to south direction and 30 ft in the east to west direction. Based on PID readings and soil sampling results the estimated depth of the contaminated interval was approximately 4 to 15 ft bgs.

Site-Related Groundwater

A total of 34 Phase II ESA and RI groundwater samples were submitted for laboratory analysis. Results of laboratory analyses of groundwater samples from the Phase II ESA and RI are summarized in Table 4.

VOCs were detected in 18 of the 34 groundwater samples collected during the Phase II and RI, with exceedances in 11 samples. Detections were primarily for chlorinated ethenes and ethanes in samples collected from the vicinity of the laboratory building. In addition to chlorinated ethenes and ethanes, toluene was detected at low levels in BS-2 and BS-4; carbon disulfide was detected at a low level in deep overburden well MW-28D; and acetone and methylene chloride, which are common laboratory contaminants, were detected at MW-13. However, the only exceedances of Class GA standards were for the CVOCs.

During the December 2009 Phase II ESA, four locations were sampled in the vicinity of the laboratory building for VOCs. Three of these locations had exceedances for chlorinated ethenes and ethanes, with total chlorinated VOC concentrations ranging from 0.001 ppm to 2.2 ppm.

The first RI round of groundwater sampling was conducted in December 2010 for the on-Site water supply well and in January to February 2011 for the 18 shallow and one deep overburden monitoring wells. Chlorinated ethenes and ethanes were detected in six shallow overburden wells in the vicinity of the laboratory building, with exceedances at four of these locations (BS-2, BS-4, MW-23, and MW-25). Total chlorinated ethene and ethane concentrations ranged up to 12.4 ppm, with TCE comprising the majority of this total at 12 ppm. Figure 7 presents interpolated contours of these chlorinated VOC data in the shallow overburden wells. Similar to the soils, the highest concentrations were east and southeast of the laboratory building. Concentrations diminished rapidly beyond the vicinity of the laboratory building. Downgradient concentrations to the north and downgradient along the eastern property line were low or non-detect.

As described above, the only VOC detected in the deep overburden well was a low level of carbon disulfide. No chlorinated VOCs were detected; therefore, the contamination existing in the shallow overburden had not migrated to the deep (40 ft bgs) overburden.

No VOCs were detected in the on-Site water supply well, which is cased to its open hole base at about 180 ft bgs.

The second RI round of groundwater sampling was conducted on April 20-21, 2011. Ten shallow overburden wells were sampled. Chlorinated VOCs were detected in six of the wells, with exceedances at four of these locations (BS-2, BS-4, MW-8, and MW-25). Total chlorinated ethene and ethane concentrations ranged up to 0.1 ppm, with TCE comprising the majority of this total at 0.091 ppm. Figure 8 presents interpolated contours of the chlorinated VOCs in shallow overburden wells. As with the first round of sampling, concentrations were highest east and southeast of the laboratory building. Downgradient concentrations in the area to the north and to the east diminished rapidly. VOC concentrations during the second round of sampling were generally lower than those observed during the first round of sampling. It was presumed that the reduction of VOC concentrations was related to the high water table at the time of sampling.

No SVOCs were detected among the eight wells sampled for these constituents.

No pesticides or PCBs were detected among the four wells sampled for these parameters.

Metals were detected in each of the four wells sampled for metals. Exceedances of metals standards were found for arsenic, iron, manganese, and sodium. The later three metals are considered common naturally occurring metals and are thus not considered to be of concern. Arsenic, in this case, is also considered to be naturally occurring and not Site related. Since arsenic was only detected in the site’s water supply well, it was suspected that this is the result of a naturally occurring condition at depth. The Village of Belmont presents their public water supply sampling data on the internet at http://www.belmontny.org/html/bforms.htm. Review of their data indicates the Village reported arsenic at 50 parts per billion (ppb) in both 2005 and 2009 and they attributed their elevated arsenic levels to "Bedrock Minerals". Given this information, it was concluded that the arsenic in the production well is a naturally occurring condition and that no further investigation was necessary.

Site-Related Soil Vapor Intrusion

Soil vapor intrusion sampling was not conducted because the site's buildings were unoccupied at the time that the RI was conducted. All site structures have since been demolished and removed from the site. Soil vapor intrusion sampling was not warranted at structures on neighboring properties because groundwater sampling results indicated that VOCs are not present in groundwater in the vicinity of these structures.

1.4 SUMMARY OF REMEDIAL ACTIONS

The site was remediated in accordance with the NYSDEC-approved Interim Remedial Measures Work Plan dated October 2011. The activities conducted during the IRM are described in detail in the Remedial Investigation Report and Interim Remedial Measures Construction Completion Report (draft, May 30, 2012). . Section 1.2.2.3 of this report also provides an overview of these activities.

The following is a summary of the Remedial Actions performed at the site:

1. Excavation of soil/fill at RAOCs 1 through 3 and the Heater Area, including soil/fill:
    - At RAOC-1 exceeding POGW SCOs listed in Table 3 to maximum depths ranging from approximately 10 to 14.5 ft bgs;
    - At RAOC-2 which exhibited nuisance characteristics to a depth of approximately 2 ft bgs;
    - At RAOC-3A which exhibited elevated PID readings and staining and petroleum odors to a depth of approximately 4.5 ft bgs;
    - At RAOC-3B and -3C where petroleum product was observed from approximately 5 to 8 ft bgs; and
    - At the Heater Area where petroleum odor, visual staining, and a sheen were observed to a depth of approximately 5 ft bgs.

2. Removal of groundwater in source areas, including:

    - At RAOC-1, de-watering of the source area groundwater during excavation with ex-situ treatment via on-site carbon drums and subsequent on-site treatment;
    - At RAOC-3B and -3C, dewatering of the source area groundwater and LNAPL during excavation, and off-site disposal; and
    - At the Heater Area, a small quantity of groundwater with a thin layer of oil, and off-site disposal.

3. In-situ biological treatment of groundwater, including:

    - Application of sodium lactate to the groundwater in the open excavation at RAOC-1 and to downgradient trenches within the plume area;
    - Placement of agricultural-grade gypsum and fertilizer in the RAOC-3B and -3C source area to enhance breakdown of petroleum compounds by sulfate-reducing bacteria; and
    - Groundwater monitoring;

4. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site;

5. Institutional Controls as detailed in Section 2.3; and

6. 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 and Engineering Controls, (2) monitoring, (3) operation and maintenance (if remedial or mitigation systems are warranted in the future) and (4) reporting.

1.4.1 Removal of Contaminated Materials from the Site

A list of the soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) and applicable land use for this site is provided in Tables 1 through 3. Commercial SCOs are applicable for this site.

A figure showing areas where excavation was performed is shown in Figure 9. These areas include:

- RAOC-1: Materials removed from RAOC-1 included soils and fill with PID readings above 5 ppm. The depth of the excavation ranged from 10 to 14.5 ft bgs. The excavation was approximately 4,800 square feet with an approximate sidewall length of 275 ft. In total, approximately 1,635 tons of impacted soil and fill excavated from RAOC-1 were transported off-site for proper disposal. The excavation was backfilled with clean shallow soils and clean on-site aggregate, with the approval of NYSDEC;
- RAOC-2: Materials removed from RAOC-2 included soils and fill with nuisance characteristics and elevated PID readings. The depth of the excavation was approximately 2 ft bgs. The excavation was approximately 628 square feet with an approximate sidewall length of 116 ft. In total, approximately 75 tons of impacted soil and fill excavated from RAOC-2 were transported off-site for proper disposal. The excavation was backfilled with clean on-site aggregate, with the approval of NYSDEC;
- RAOC-3:
    - Materials removed from RAOC-3A included soils and fill with elevated PID readings, staining, and petroleum product odors. The depth of the excavation was approximately 4.5 ft bgs.
    - Materials removed from RAOC-3B and -3C included LNAPL-impacted coarse gravel and cobbles at approximately 5 to 8 ft bgs.
    - In total, the excavation at RAOC-3 was approximately 3,400 square feet with an approximate sidewall length of 490 ft. Approximately 1,200 tons of impacted soil and fill excavated from RAOC-3 were transported off-site

for proper disposal. The excavation was backfilled with clean shallow soils and clean on-site aggregate, with the approval of NYSDEC.

- Heater Area:
    - Materials removed from the Heater Area included soils and fill with elevated PID readings, staining, and petroleum product odors. The depth of the excavation was approximately 5 ft bgs.
    - The excavation was approximately 410 square feet with an approximate sidewall length of 105 ft. In total, approximately 87 tons of impacted soil and fill excavated from the Heater Area were transported off-site for proper disposal. The excavation was backfilled with clean shallow soils and clean on-site aggregate, with the approval of NYSDEC.

1.4.2 Site-Related Treatment Systems

During the excavation programs at RAOC-1, RAOC-3B and -3C, and the Heater Area (see Figure 9), short-term groundwater and LNAPL recovery was conducted. This included:

- At RAOC-1, dewatering of the source area groundwater during excavation with ex-situ, on-site treatment using carbon drums, and subsequent on-site discharge after treatment;
- At RAOC-3B and -3C, dewatering of the source area groundwater and LNAPL during excavation, and off-site disposal; and
- At the Heater Area, dewatering of the source area groundwater and LNAPL during excavation, and off-site disposal.

Following the IRM excavation programs at RAOC-1 and RAOC-3B and -3C (see Figure 9), in-situ biological treatment of groundwater, included:

- Application of sodium lactate to the groundwater in the open excavation at RAOC-1 (110 gallons of 60% sodium lactate solution) and to downgradient trenches within the plume area (55 gallons of 60% sodium lactate solution); and

- Placement of 28 tons of agricultural grade gypsum and 100 pounds of 10:10:10 fertilizer in RAOC-3B and -3C excavations to enhance breakdown of petroleum compounds by sulfate-reducing bacteria.

The effectiveness of these treatments has been assessed through a quarterly groundwater monitoring program using seven site monitoring wells (see Figure 9). At RAOC-1, monitoring wells BS-2R, BS-3, MW-8, MW-25, MW-27, and MW-28D were sampled after application of sodium lactate on a quarterly basis, in late March and late June 2012. Data are presented in Table 5 and total CVOC concentrations are contoured in Figure 10. The respective March and June 2012 source area concentrations of 54 and 36 µg/L total VOCs in BS-2R are significantly lower than the 3,947 - 12,401 µg/L total VOC concentrations that were reported in source area wells in January 2011. VOCs were generally found at low levels that are near or below standards outside the source area. However, at downgradient well MW-8, the concentration of total VOCs increased from 8.5 µg/L pre-treatment to 19 µg/L post-treatment; most of the increase was accounted for by the detection of cis-1,2-DCE at approximately 10 µg/L. The increase in concentration of cis-1,2-DCE, which is a breakdown product of TCE, likely indicates that the sodium lactate has been successful at enhancing reductive dechlorination of TCE downgradient of the source area. Over time as the reductive dechlorination progresses, total VOC concentrations are expected to decrease.

At RAOC-3, monitoring well MW-65 was also sampled in March and June 2012. The March sampling results showed a low level detection of one CVOC below its standard. No target compounds were detected in June. SVOC TICs were detected in both rounds, but at decreasing overall concentrations. These results indicate the gypsum application has been effective in remediating the groundwater in RAOC-3.

1.4.3 Remaining Contamination

Soils at the side and bottom of the RAOC-1 through RAOC-3 and Heater Area excavations met Commercial SCOs as demonstrated by the confirmatory sampling results presented in the IRM CCR. At RAOC-3, 2 to 3 cubic yards of impacted material was left in place surrounding the site’s water supply well (see Figure 9) in order to avoid potentially damaging the well’s casing. This impacted material consists of LNAPL-impacted coarse gravel and cobbles at approximately 5 to 8 ft bgs. A confirmatory sample of similar material from a nearby sidewall (which was later excavated) did not show exceedances of Commercial SCOs. Thus, the 2-3 cubic yards of impacted material left in place surrounding the water supply well is not considered to be a concern, since the contaminant levels are anticipated to be at levels well below SCOs. In addition, the gypsum applied to the excavation should assist the biodegradation of the residual contaminants.

Groundwater at RAOC-1 has been shown to be impacted with chlorinated VOCs, especially TCE, at levels above NYSDEC standards (see Figure 10 and Table 5). However, it is anticipated that concentrations will decrease due to source removal and application of sodium lactate. Groundwater at RAOC-3 and the Heater Area has not been shown to exceed standards.

The only soils demonstrated to be in exceedence of the Commercial SCOs were from a sample taken at 6-6.5 ft bgs at TP-10 from beneath the berms along the eastern perimeter of the site (see Figure 11). In this sample, a single PAH, benzo(a)pyrene, was detected at 4.1 ppm, which exceeded the Commercial SCO of 1.0 ppm. Pieces of asphalt were found throughout this test pit. At the base of the test pit, near where the sample was collected, there was an impenetrable hard surface that was most likely asphalt pavement. Therefore, the PAH exceedence is believed to be related to the presence of the asphalt.

During the RI, portions of the perimeter soil berms or slopes along the east and north property lines as well as a “lobe” near the center of the eastern berm that extends westward toward the interior of the site were found to contain waste asphalt and asphalt/fill soil mixtures, as well as miscellaneous debris consisting of a variety of large and small pieces of wood, metal, plastic and rubber objects. These materials, where encountered were generally found at depths ranging from ground surface (i.e. just under the base of the berm) down to the deepest reach of the excavator (approximately 12 ft bgs); however the lack of SCO exceedences in every sample except one indicates that berm soils are largely devoid of COCs at levels in excess of cleanup standards.

Table 6 and Figure 11 summarize the results for soil sample locations where COCs may remain at levels that exceed the Commercial and Industrial SCOs after completion of Remedial Action.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

Since remaining contaminated soil, groundwater and potentially soil vapor exists beneath the site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all EC/ICs on the site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the site remedy, as determined by the NYSDEC.

2.2 ENGINEERING CONTROLS

2.2.1 Sub-slab Depressurization Systems

Investigation or mitigation may be required for future structures to minimize the potential for VOC vapors associated with residual impacted groundwater, to enter the building, in accordance with NYSDOH Guidance (*Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006*).

Three approaches may be employed to address this requirement:

1) prior to the construction of any enclosed structures, an SVI evaluation may be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure;

2) a sub-slab depressurization system, of a design approved by the NYSDEC and NYSDOH, may be installed during the construction of any proposed building or structure; or

3) if a SVI is not conducted prior to construction and a sub-slab depressurization system is not installed during construction of a new building or structure, then a soil vapor intrusion evaluation needs to be conducted at the newly-constructed building or structure.

Soil vapor intrusion evaluations conducted at newly-constructed buildings should be conducted in accordance with the most recently-updated Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Procedures and methods for conducting a soil vapor intrusion evaluation should be submitted in a work plan for State Agency review and approval. The results of a soil vapor intrusion evaluation should be provided to the State Agencies for data review and interpretation. The State Agencies will provide a determination based on the review of the data and will make appropriate recommendations to address exposures, if any.

If a sub-slab depressurization system is recommended based on the results of a soil vapor intrusion evaluation either prior to or after construction of any structures in the specified area, the design of this system will be the responsibility of the owner. Generally, a typical system for new construction would consist of:

- a clean stone layer with slotted piping to facilitate collection of sub-slab vapors;
- a vapor retarding liner (such as 6 mil polyethylene sheeting or a spray-on liner such as Liquid Boot) to trap vapors in the stone layer and to prevent vapors from entering the structure through cracks and joints in the floor;
- header piping to connect horizontal piping to a depressurization fan; and
- a vent to the exterior above the building roof elevation/air intakes (see Figure 13 – schematic diagram of a typical system).

Post-installation sampling should be conducted to ensure that the system is operating effectively and reducing/minimizing exposures. System installation, post confirmation sampling, and monitoring shall be conducted in accordance with the NYSDOH Guidance .

Typical procedures for operating and maintaining a sub-slab depressurization system will be documented in the Operation and Maintenance Plan that will be developed if the design and construction of a SSDS become necessary. Procedures for monitoring the system will be included in the Monitoring Plan (Section 3 of this SMP) should the design and construction of a SSDS become necessary. The Monitoring Plan would also address severe condition inspections in the event that a severe condition, which may affect controls at the site, occurred.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the NYSDEC's Decision Document for the site. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

2.2.2.1 Sub-slab Depressurization System (SSDS)

If a SSDS is installed, operation will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the

SSD system is no longer required, a proposal to discontinue the SSD system will be submitted by the property owner to the NYSDEC and NYSDOH.

2.2.2.2 Monitored Natural Attenuation for Groundwater

Groundwater monitoring activities to assess natural attenuation will continue on a quarterly basis for up to one year post-remediation, and potentially semi-annually or annually after that point, as needed with NYSDEC approval (See table 9), until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (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 Commercial or Industrial uses only. Adherence to these Institutional Controls on the site is required by the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor’s successors and assigns;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected annually as required for the Periodic Review Reports and after all severe weather conditions that may affect Engineering Controls and in a manner defined in Section 3.3 of this SMP.

- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP; and
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or legal extinguishment of the Environmental Easement.

The site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for Commercial or Industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as Unrestricted Residential or Restricted Residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of groundwater underlying the property for potable or process water is prohibited without necessary water quality treatment as determined by NYSDOH of County DOH.
- The potential for vapor intrusion must be evaluated for any future buildings constructed on the site, and any potential impacts that are identified must be monitored or mitigated. Alternatively, in lieu of performing investigation, a vapor mitigation system could be pre-emptively installed at the time of building construction.
- Vegetable gardens and farming on the property are prohibited;
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has

occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Excavation Work Plan

The site has been remediated to a degree that will allow for Restricted Commercial or Industrial use. Any future intrusive work that would potentially encounter or disturb the remaining contamination will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix A to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the site. A sample HASP is attached as Appendix D to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and Federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section A-1 of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

The site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The site owner will ensure that site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

2.3.2 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures an SVI evaluation will be performed either prior to or after construction to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York." Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (non-validated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

2.4 INSPECTIONS AND NOTIFICATIONS

2.4.1 Inspections

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;

- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the site by a qualified environmental professional as determined by NYSDEC.

2.4.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Brownfield Cleanup Agreement (BCA), 6NYCRR Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Brownfield Cleanup Agreement (BCA), and all approved work plans and reports, including this SMP
- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance, the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. These emergency contact lists must be maintained in an easily-accessible location at the site.

Table 7: Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3-day notice required for utility mark-out)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 8: Contact Numbers

Mr. Michael P. Storonsky, Stantec Consulting Project Manager	(585) 413-5266
Mr. Robert Blades, Blades Holding Company, Site Owner	(607) 382-6069
Mr. Christopher Blades, Blades Holding Company, Site Owner	(607) 968-0090
Mr. Thomas Tuori, Harter Secrest & Emery	(585) 231-1449
Mr. Anthony Lopes, NYSDEC Project Manager	(716) 851-7220
Mr. Nathan Freeman, NYSDOH Project Manager	(518) 402-7860

* Note: Contact numbers are subject to change and should be updated as necessary

2.5.2 Map and Directions to Nearest Health Facility

Site Location: 5392 State Route 19, Belmont, NY

Nearest Hospital Name: Jones Memorial Hospital

Hospital Location: 191 N Main St, Wellsville, NY 14895

Hospital Telephone: (585) 593-1100

Directions to the Hospital:

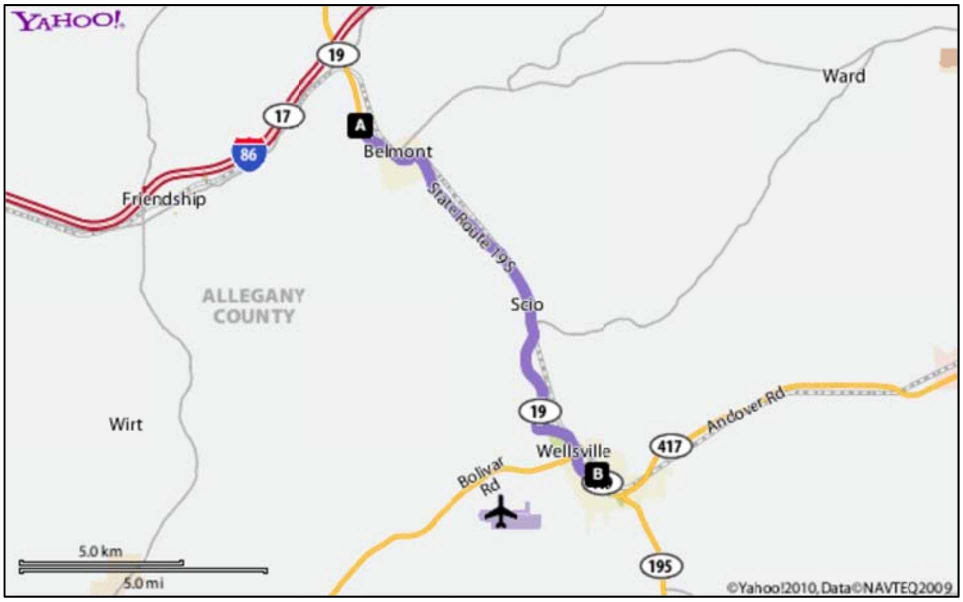
1. Exiting site, turn right (south) onto Route 19 (go 10.1 mi.)
2. Turn left onto W. Madison St (go 75 ft)
3. Turn left onto Park Ave (go 0.12 mi)
4. Continue on W. Pearl St (go 197 ft)
5. Turn left on N. Main St (go 125 ft)
6. Arrive at 191 North Main St, Wellsville, NY on left

Total Distance: 11.03 miles

Total Estimated Time: 19 minutes

(see map next page)

Map Showing Route from the site to the Hospital:



2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 7). The list will also be made readily available to all personnel at all times.

3.0 SITE MONITORING PLAN

3.1 INTRODUCTION

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, and all affected site media identified below. Monitoring of other Engineering Controls is described as needed in Chapter 4, Operation, Monitoring and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil;
- Assessing achievement of the remedial performance criteria.
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and

- Annual inspection and periodic certification.

Quarterly monitoring of the groundwater remedy performance and overall reduction in on-site and off-site contamination will be conducted for up to the first year post-remediation. If four consecutive samples at a particular well show no unacceptable contraventions of standards/guidance, sampling will be discontinued. The frequency of sampling at impacted wells after the first year post-remediation is recommended to be semi-annual, but will be determined by NYSDEC. Note that wells BS-3 and MW-28D have been moved to an annual frequency as of September 2012 with NYSDEC approval. Trends in contaminant levels in air, soil, and/or groundwater in the affected areas, will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Monitoring programs are summarized in Table 9 and outlined in detail in Sections 3.2 and 3.3 below.

Table 9: Monitoring/Inspection Schedule

Monitoring Program	**Frequency***	**Matrix**	**Analysis**
RAOC-1 Groundwater monitoring (wells BS-2R, , MW-8, MW-25, MW-27,)	Quarterly sampling for up to one year post-remediation. If four consecutive samples show no unacceptable contravention of standards/guidance, sampling will be discontinued. Semi-annual sampling after one year post-remediation (with NYSDEC approval) for wells that continue to show impacts.	Groundwater	TCL VOCs + TICs (Method 8260),
(Wells BS-3, MW-28D)	Annual post-remediation frequency for wells BS-3 and MW-28D based on results to date.		

Table 9: Monitoring/Inspection Schedule (continued)

RAOC-3 Groundwater monitoring (well MW-65)	Quarterly sampling for up to one year post-remediation. If four consecutive samples show no unacceptable contravention of standards/guidance, sampling will be discontinued. Semi-annual sampling after one year post-remediation (with NYSDEC approval) if the well continues to show impacts.	Groundwater	TCL VOCs + TICs (Method 8260); TCL SVOCs + TICs (Method 8270);

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.

3.2 MEDIA MONITORING PROGRAM

3.2.1 Groundwater Monitoring

Groundwater monitoring in the vicinity of RAOC-1 and RAOC-3 will be performed on a periodic basis to assess the performance of the remedies.

The network of monitoring wells has been installed to monitor up-gradient, source area, and down-gradient groundwater conditions at the site as appropriate. The network of on-site and off-site wells has been designed based on proximity to the former RAOC-1 and RAOC-3 source areas. Well locations are displayed on Figure 9. Monitoring well construction logs are included in Appendix E. Six of the wells (BS-2R, BS-3, MW-8, MW-25, MW-27, and MW-65) are shallow overburden monitoring wells that have a range in screen placement from 3 to 16 ft bgs. One well (MW-28D) is a deeper overburden well that is screened from 30 to 40 ft bgs (see Figure 4). A typical groundwater flow pattern is displayed on Figure 5. Table 10 contains numerous rounds of water level data. Figure 10 displays contouring of the first round of post-remediation groundwater sampling for shallow CVOCs.

The monitoring wells to be sampled, the analytes to be tested for, and the frequency of sampling are listed in Table 9. The sampling frequency may be modified with the approval NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC.

Deliverables for the groundwater monitoring program are specified below.

3.2.1.1 Sampling Protocol

All monitoring well sampling activities will be recorded in a field book and a groundwater-sampling log presented in Appendix F. Other observations (e.g., well integrity, etc.) will be noted on the well sampling log. The well sampling log will serve as the inspection form for the groundwater monitoring well network.

Prior to purging and sampling, the static water level will be measured in each well. The water level measurements will be used to develop a groundwater table contour map and provide groundwater flow directions. Water levels will be measured from surveyed PVC well risers using an audible water level indicator.

The monitoring wells will be purged and sampled utilizing EPA Region 2 low stress/low flow methods and a flow-through cell, provided there is enough water in the wells to carry out these procedures. General water quality field parameters (i.e., pH, temperature, specific conductance, oxidation reduction potential, dissolved oxygen and turbidity) will be monitored during purging. If there is not sufficient water in a well for low flow sampling procedures, the well will be purged and sampled with a dedicated polyethylene bailer. The well will be purged until three well volumes are removed, or until the well goes dry. Specific conductance, temperature and pH will be monitored and stabilized (10% over three well volumes) prior to sampling. Turbidity need not be stable, but a value of 50 NTU or less will be attempted. The wells will be sampled for the analytes listed in Table 9 by the analytical methods listed therein. The samples will be analyzed by a laboratory accredited pursuant to the New York State Department of Health Environmental Laboratory Accreditation Program (ELAP). Analytical reports will be prepared in accordance with the NYSDEC Analytical Services Protocol (ASP) Category B requirements. All analytical data will undergo a data usability evaluation (DUSR).

3.2.1.2 Monitoring Well Repairs, Replacement And Decommissioning

If biofouling or silt accumulation occurs in the on-site and/or off-site monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced (as per the Monitoring Plan), if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well abandonment will be performed in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC.

3.3 SITE-WIDE INSPECTION

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed (Appendix G). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that site records are up to date.

3.4 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the site (Appendix H). Main Components of the QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
    - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
    - Sample holding times will be in accordance with the NYSDEC ASP requirements.
    - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
    - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
    - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method.
- Internal QC and Checks;
- QA Performance and System Audits;

- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures.

3.5 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in Section 5.3 of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. A letter report will also be prepared [if required by NYSDEC], subsequent to each sampling event. The report (or letter) will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether groundwater conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 11 below.

Table 11: Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Annual Inspection/Periodic Review Report	Annual
Groundwater Monitoring	Quarterly

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC

TABLES

Table 1
Summary of RI Analytical Results in Surface Soil
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**SS-13**	**SS-14**	**SS-15**
Sample Date			**28-Oct-10**	**28-Oct-10**	**28-Oct-10**
Sample ID			**BA-SS13-S**	**BA-SS14-S**	**BA-SS15-S**
Sample Depth			**0 - 2 in**	**0 - 1 in**	**0 - 2 in**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTJ1956**	**RTJ1956**	**RTJ1956**
Laboratory Sample ID			**RTK0340-01**	**RTK0340-02**	**RTK0340-03**
Sample Type	**Units**	**6NYCRR**			
General Chemistry					
Total Solids	%	n/v	**80**	**94**	**90**
Volatile Organic Compounds					
Acetone	µg/kg	500000_c^A	31 U	27 U	28 U
Benzene	µg/kg	44000^A	6.2 U	5.3 U	5.5 U
Bromodichloromethane	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Bromoform (tribromomethane)	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Bromomethane (Methyl bromide)	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Carbon Disulfide	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000^A	6.2 U	5.3 U	5.5 U
Chlorinated Fluorocarbon (Freon 113)	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Chloroethane (Ethyl Chloride)	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Chloroform	µg/kg	350000^A	6.2 U	5.3 U	5.5 U
Chloromethane	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Cyclohexane	µg/kg	n/v	6.2 U	5.3 U	5.5 U
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/kg	n/v	6.2 U	5.3 U	5.5 U
Dibromochloromethane	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Dichlorobenzene, 1,2-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Dichlorobenzene, 1,3-	µg/kg	280000^A	6.2 U	5.3 U	5.5 U
Dichlorobenzene, 1,4-	µg/kg	130000^A	6.2 U	5.3 U	5.5 U
Dichlorodifluoromethane	µg/kg	n/v	6.2 U	5.3 U	5.5 U
Dichloroethane, 1,1-	µg/kg	240000^A	6.2 U	5.3 U	5.5 U
Dichloroethane, 1,2-	µg/kg	30000^A	6.2 U	5.3 U	5.5 U
Dichloroethylene, 1,1-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Dichloroethylene, cis-1,2-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Dichloroethylene, trans-1,2-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Dichloropropane, 1,2-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Dichloropropene, cis-1,3-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Dichloropropene, trans-1,3-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Ethylbenzene	µg/kg	390000^A	6.2 U	5.3 U	5.5 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	6.2 U	5.3 U	5.5 U
Hexanone, 2-	µg/kg	500000_c^A	31 U	27 U	28 U
Isopropylbenzene	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Methyl Acetate	µg/kg	n/v	6.2 U J	5.3 U J	5.5 U J
Methyl Ethyl Ketone (MEK)	µg/kg	500000_c^A	31 U	27 U	28 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000_c^A	31 U	27 U	28 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Methylcyclohexane	µg/kg	n/v	6.2 U	5.3 U	5.5 U
Methylene Chloride (Dichloromethane)	µg/kg	500000_c^A	**7.5**	**9.0**	**8.2**
Styrene	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Tetrachloroethane, 1,1,2,2-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Tetrachloroethylene (PCE)	µg/kg	150000^A	6.2 U	5.3 U	5.5 U
Toluene	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Trichlorobenzene, 1,2,4-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Trichloroethane, 1,1,1-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Trichloroethane, 1,1,2-	µg/kg	500000_c^A	6.2 U	5.3 U	5.5 U
Trichloroethylene (TCE)	µg/kg	200000^A	6.2 U	5.3 U	5.5 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	6.2 U	5.3 U	5.5 U
Vinyl chloride	µg/kg	13000^A	6.2 U	5.3 U	5.5 U
Xylenes, Total	µg/kg	500000_c^A	12 U	11 U	11 U
Total VOCs	µg/kg	500000_c^A	**7.5**	**9.0**	**8.2**

Notes:

6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
^{A}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_c$	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
J	Indicates estimated value.
TALBU	Test America Laboratories Inc., Buffalo New York
in	inches

Table 1
Summary of RI Analytical Results in Surface Soil
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**SS-3**	**SS-4**	**SS-5**	**SS-6**		**SS-7**	**SS-8**	**SS-9**	**SS-10**	**SS-11**	**SS-12**	**SS-13**	**SS-14**	**SS-15**	**SS-16**
Sample Date			**26-Oct-10**	**26-Oct-10**	**27-Oct-10**	**25-Oct-10**	**25-Oct-10**	**25-Oct-10**	**25-Oct-10**	**26-Oct-10**	**25-Oct-10**	**25-Oct-10**	**25-Oct-10**	**28-Oct-10**	**28-Oct-10**	**28-Oct-10**	**3-Feb-11**
Sample ID			**BA-SS3-S**	**BA-SS-4-S**	**BA-SS5-S**	**BA-SS-6-S**	**BA-SS-6-S/D**	**BA-SS-7-S**	**BA-SS-8-S**	**BA-SS-9-S**	**BA-SS-10-S**	**BA-SS-11-S**	**BA-SS-12-S**	**BA-SS13-S**	**BA-SS14-S**	**BA-SS15-S**	**BA-SS16-S**
Sample Depth			**6 - 7 ft**	**0 - 2 in**	**1.4 - 1.4 ft**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**1 - 3 in**	**0 - 2 in**	**0 - 1 in**	**0 - 2 in**	**0 - 2 in**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**480-1342-1**
Laboratory Sample ID			**RTJ2031-01**	**RTJ1956-11**	**RTJ2031-02**	**RTJ1956-01**	**RTJ1956-02**	**RTJ1956-04**	**RTJ1956-03**	**RTJ1956-12**	**RTJ1956-09**	**RTJ1956-07**	**RTJ1956-08**	**RTK0340-01**	**RTK0340-02**	**RTK0340-03**	**480-1409-5**
Sample Type	**Units**	**6NYCRR**					**Field Duplicate**										
General Chemistry																	
Total Solids	%	n/v	**82**	**93**	**83**	**89**	**89**	**91**	**93**	**90**	**91**	**88**	**92**	**80**	**94**	**90**	-
Semi-Volatile Organic Compounds																	
Acenaphthene	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Acenaphthylene	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Acetophenone	µg/kg	n/v	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Anthracene	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Atrazine	µg/kg	n/v	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Benzaldehyde	µg/kg	n/v	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Benzo(a)anthracene	µg/kg	5600^A	200 U	910 U D	**110 JD**	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	***8900 U D***	***18000 U D***	170 U
Benzo(a)pyrene	µg/kg	1000_g^A	200 U	910 U D	**100 JD**	950 U D	930 U D	180 U	***3600 U D***	***1900 U D***	190 U	***3800 U D***	180 U	***4200 U D***	***8900 U D***	***18000 U D***	170 U
Benzo(b)fluoranthene	µg/kg	5600^A	200 U	910 U D	**120 JD**	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	***8900 U D***	***18000 U D***	170 U
Benzo(g,h,i)perylene	µg/kg	500000_c^A	200 U	910 U D	**72 JD**	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Benzo(k)fluoranthene	µg/kg	56000^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Bis(2-Chloroethoxy)methane	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Bis(2-Chloroethyl)ether	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Butyl Benzyl Phthalate	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Caprolactam	µg/kg	n/v	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Carbazole	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Chloro-3-methyl phenol, 4-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Chloroaniline, 4	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Chloronaphthalene, 2-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Chlorophenol, 2-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Chrysene	µg/kg	56000^A	200 U	910 U D	**97 JD**	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	**34 J**	4200 U D	8900 U D	18000 U D	170 U
Cresol, o- (Methylphenol, 2-)	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Cresol, p- (Methylphenol, 4-)	µg/kg	500000_c^A	400 U	1800 U D	2000 U D	1800 U D	1800 U D	350 U	7000 U D	3600 U D	360 U	7300 U D	350 U	8100 U D	17000 U D	36000 U D	330 U
Dibenzo(a,h)anthracene	µg/kg	560^A	200 U	***910 U D***	***1000 U D***	***950 U D***	***930 U D***	180 U	***3600 U D***	***1900 U D***	190 U	***3800 U D***	180 U	***4200 U D***	***8900 U D***	***18000 U D***	170 U
Dibenzofuran	µg/kg	350000^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Dichlorobenzidine, 3,3'-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	200 U
Dichlorophenol, 2,4-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Diethyl Phthalate	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Dimethyl Phthalate	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Dimethylphenol, 2,4-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Di-n-Butyl Phthalate	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Dinitro-o-cresol, 4,6-	µg/kg	500000_c^A	400 U	1800 U D	2000 U D	1800 U D	1800 U D	350 U	7000 U D	3600 U D	360 U	7300 U D	350 U	8100 U D	17000 U D	36000 U D	330 U

See next page for notes.

Table 1
Summary of RI Analytical Results in Surface Soil
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			SS-3	SS-4	SS-5	SS-6		SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	SS-13	SS-14	SS-15	SS-16
Sample Date			**26-Oct-10**	**26-Oct-10**	**27-Oct-10**	**25-Oct-10**	**25-Oct-10**	**25-Oct-10**	**25-Oct-10**	**26-Oct-10**	**25-Oct-10**	**25-Oct-10**	**25-Oct-10**	**28-Oct-10**	**28-Oct-10**	**28-Oct-10**	**3-Feb-11**
Sample ID			**BA-SS3-S**	**BA-SS-4-S**	**BA-SS5-S**	**BA-SS-6-S**	**BA-SS-6-S/D**	**BA-SS-7-S**	**BA-SS-8-S**	**BA-SS-9-S**	**BA-SS-10-S**	**BA-SS-11-S**	**BA-SS-12-S**	**BA-SS13-S**	**BA-SS14-S**	**BA-SS15-S**	**BA-SS16-S**
Sample Depth			**6 - 7 ft**	**0 - 2 in**	**1.4 - 1.4 ft**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**0 - 2 in**	**1 - 3 in**	**0 - 2 in**	**0 - 1 in**	**0 - 2 in**	**0 - 2 in**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**480-1342-1**
Laboratory Sample ID			**RTJ2031-01**	**RTJ1956-11**	**RTJ2031-02**	**RTJ1956-01**	**RTJ1956-02**	**RTJ1956-04**	**RTJ1956-03**	**RTJ1956-12**	**RTJ1956-09**	**RTJ1956-07**	**RTJ1956-08**	**RTK0340-01**	**RTK0340-02**	**RTK0340-03**	**480-1409-5**
Sample Type	**Units**	**6NYCRR**					**Field Duplicate**										
Semi-Volatile Organic Compounds (cont'd)																	
Dinitrophenol, 2,4-	µg/kg	500000_c^A	400 U	1800 U D	2000 U D	1800 U D	1800 U D	350 U	7000 U D	3600 U D	360 U	7300 U D	350 U	8100 U D	17000 U D	36000 U D	330 U
Dinitrotoluene, 2,4-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Dinitrotoluene, 2,6-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Di-n-Octyl phthalate	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Fluoranthene	µg/kg	500000_c^A	200 U	910 U D	**170 JD**	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Fluorene	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Hexachlorobenzene	µg/kg	6000^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	***8900 U D***	***18000 U D***	170 U
Hexachlorobutadiene	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Hexachlorocyclopentadiene	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Hexachloroethane	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Indeno(1,2,3-cd)pyrene	µg/kg	5600^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	***8900 U D***	***18000 U D***	170 U
Isophorone	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Methylnaphthalene, 2-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Naphthalene	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Nitroaniline, 2-	µg/kg	500000_c^A	400 U	1800 U D	2000 U D	1800 U D	1800 U D	350 U	7000 U D	3600 U D	360 U	7300 U D	350 U	8100 U D	17000 U D	36000 U D	330 U
Nitroaniline, 3-	µg/kg	500000_c^A	400 U	1800 U D	2000 U D	1800 U D	1800 U D	350 U	7000 U D	3600 U D	360 U	7300 U D	350 U	8100 U D	17000 U D	36000 U D	330 U
Nitroaniline, 4-	µg/kg	500000_c^A	400 U	1800 U D	2000 U D	1800 U D	1800 U D	350 U	7000 U D	3600 U D	360 U	7300 U D	350 U	8100 U D	17000 U D	36000 U D	330 U
Nitrobenzene	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Nitrophenol, 2-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Nitrophenol, 4-	µg/kg	500000_c^A	400 U	1800 U D	2000 U D	1800 U D	1800 U D	350 U	7000 U D	3600 U D	360 U	7300 U D	350 U	8100 U D	17000 U D	36000 U D	330 U
N-Nitrosodi-n-Propylamine	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
n-Nitrosodiphenylamine	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Pentachlorophenol	µg/kg	6700^A	400 U	1800 U D	2000 U D	1800 U D	1800 U D	350 U	***7000 U D***	3600 U D	360 U	***7300 U D***	350 U	***8100 U D***	***17000 U D***	***36000 U D***	330 U
Phenanthrene	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Phenol	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Pyrene	µg/kg	500000_c^A	200 U	910 U D	**150 JD**	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	**18 J**	4200 U D	8900 U D	18000 U D	170 U
Trichlorophenol, 2,4,5-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U
Trichlorophenol, 2,4,6-	µg/kg	500000_c^A	200 U	910 U D	1000 U D	950 U D	930 U D	180 U	3600 U D	1900 U D	190 U	3800 U D	180 U	4200 U D	8900 U D	18000 U D	170 U

Notes:

6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
^{A}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_c$	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
$_g$	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
D	Reported result taken from diluted sample analysis.
J	Indicates estimated value.
TALBU	Test America Laboratories Inc., Buffalo New York
in	inches
ft	feet

Table 1
Summary of RI Analytical Results in Surface Soil
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location **Sample Date** **Sample ID** **Sample Depth** **Sampling Company** **Laboratory** **Laboratory Work Order** **Laboratory Sample ID** **Sample Type**	**Units**	**6NYCRR**	**SS-6** **25-Oct-10** **BA-SS-6-S** **0 - 2 in** **STANTEC** **TALBU** **RTJ1956** **RTJ1956-01**	**SS-8** **25-Oct-10** **BA-SS-8-S** **0 - 2 in** **STANTEC** **TALBU** **RTJ1956** **RTJ1956-03**	**SS-12** **25-Oct-10** **BA-SS-12-S** **1 - 3 in** **STANTEC** **TALBU** **RTJ1956** **RTJ1956-08**	**SS-13** **28-Oct-10** **BA-SS13-S** **0 - 2 in** **STANTEC** **TALBU** **RTJ1956** **RTK0340-01**	**SS-16** **3-Feb-11** **BA-SS16-S** **0 - 2 in** **STANTEC** **TALBU** **480-1342-1** **480-1409-5**
Metals							
Aluminum	mg/kg	10000_e^A	**3720 J**	**2540 J**	**1110 J**	**-**	**9640**
Antimony	mg/kg	10000_e^A	16.5 U	15.7 U	16.1 U	-	15.0 U
Arsenic	mg/kg	16_g^A	**3.9**	**2.5**	**2.1**	**-**	**10.2**
Barium	mg/kg	400^A	**24.7**	**17.3**	**5.52**	**-**	**133**
Beryllium	mg/kg	590^A	**0.168 J**	**0.116 J**	**0.059 J**	**-**	**0.47**
Cadmium	mg/kg	9.3^A	**0.135 J**	**0.096 J**	**0.076 J**	**-**	**0.27**
Calcium	mg/kg	10000_e^A	**78900 BD**^{A}	**40600 B**^{A}	**208000 BD**^{A}	**-**	**6740**
Chromium (Total)	mg/kg	NS,q^A	**5.85**	**3.80**	**3.94**	**-**	**11.5**
Cobalt	mg/kg	10000_e^A	**3.46**	**2.15**	**1.01**	**-**	**8.4**
Copper	mg/kg	270^A	**12.0 B**	**7.5 B**	**3.9 B**	**-**	**19.3**
Iron	mg/kg	10000_e^A	**9190 B**	**5950 B**	**2760 B**	**-**	**21800**^{A}
Lead	mg/kg	1000^A	**8.4 B**	**4.5 B**	2.5 U	-	**49.0**
Magnesium	mg/kg	10000_e^A	**25500 B**^{A}	**6710 B**	**6830 B**	**-**	**3420**
Manganese	mg/kg	10000_e^A	**541 B**	**288 B**	**128 B**	**-**	**1020**
Mercury	mg/kg	2.8_k^A	0.0228 U	0.0219 U	0.0218 U	-	**0.12**
Nickel	mg/kg	310^A	**9.23**	**5.80**	**5.36**	**-**	**19.1**
Potassium	mg/kg	10000_e^A	**569**	**468**	**452**	**-**	**1570**
Selenium	mg/kg	1500^A	4.4 U	4.2 U	**0.7 J**	**-**	4.0 U
Silver	mg/kg	1500^A	0.549 U	0.523 U	0.536 U	-	0.50 U
Sodium	mg/kg	10000_e^A	**86.3 J**	**77.2 J**	**116 J**	**-**	140 U
Thallium	mg/kg	10000_e^A	6.6 U	6.3 U	6.4 U	-	6.0 U
Vanadium	mg/kg	10000_e^A	**7.25**	**5.11**	**3.64**	**-**	**13.3**
Zinc	mg/kg	10000_e^A	**38.9 B**	**30.3 B**	**9.5 B**	**-**	**85.1**
Pesticides							
Aldrin	µg/kg	680^A	91 U DJ	87 U DJ	1.8 U J	-	2.7 U
BHC, alpha-	µg/kg	3400^A	91 U DJ	87 U DJ	1.8 U J	-	2.0 U
BHC, beta-	µg/kg	3000^A	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
BHC, delta-	µg/kg	500000_c^A	91 U DJ	87 U DJ	**1.0 J**	-	**6.5**
Camphechlor (Toxaphene)	µg/kg	500000_c^A	910 U DJ	870 U DJ	18 U J	-	65 U
Chlordane (Total)	µg/kg	500000_c^A	910 U DJ	870 U DJ	**18 JN**	-	**18 JN**
Chlordane, alpha-	µg/kg	24000^A	91 U DJ	87 U DJ	1.8 U J	-	5.5 U
Chlordane, gamma-	µg/kg	500000_c^A	91 U DJ	87 U DJ	**1.7 JN**	-	3.5 U
DDD (p,p'-DDD)	µg/kg	92000^A	91 U DJ	87 U DJ	1.8 U J	-	2.2 U
DDE (p,p'-DDE)	µg/kg	62000^A	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
DDT (p,p'-DDT)	µg/kg	47000^A	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
Dieldrin	µg/kg	1400^A	91 U DJ	87 U DJ	**1.0 JN**	-	2.7 U
Endosulfan I	µg/kg	200000_j^A	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
Endosulfan II	µg/kg	200000_j^A	91 U DJ	87 U DJ	**1.3 JN**	-	2.0 U
Endosulfan Sulfate	µg/kg	200000_j^A	91 U DJ	87 U DJ	1.8 U J	-	**4.9**
Endrin	µg/kg	89000^A	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
Endrin Aldehyde	µg/kg	500000_c^A	91 U DJ	87 U DJ	1.8 U J	-	2.9 U
Endrin Ketone	µg/kg	500000_c^A	91 U DJ	87 U DJ	1.8 U J	-	**5.5**
Heptachlor	µg/kg	15000^A	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
Heptachlor Epoxide	µg/kg	500000_c^A	91 U DJ	87 U DJ	1.8 U J	-	2.9 U
Lindane (Hexachlorocyclohexane, gamma)	µg/kg	9200^A	91 U DJ	87 U DJ	**0.99 J**	-	8.0 U
Methoxychlor (4,4'-Methoxychlor)	µg/kg	500000_c^A	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
See next page for notes.							
Polychlorinated Biphenyls							
Aroclor 1016	µg/kg	1000_o^A	18 U	17 U	18 U	100 U D	17 U
Aroclor 1221	µg/kg	1000_o^A	18 U	17 U	18 U	100 U D	17 U
Aroclor 1232	µg/kg	1000_o^A	18 U	17 U	18 U	100 U D	17 U
Aroclor 1242	µg/kg	1000_o^A	18 U	17 U	18 U	100 U D	17 U
Aroclor 1248	µg/kg	1000_o^A	18 U	17 U	18 U	100 U D	17 U
Aroclor 1254	µg/kg	1000_o^A	18 U	17 U	18 U	100 U D	17 U
Aroclor 1260	µg/kg	1000_o^A	18 U J	17 U J	18 U J	100 U D	17 U
Aroclor 1262	µg/kg	n/v	18 U	17 U	18 U	100 U D	17 U
Aroclor 1268	µg/kg	n/v	18 U	17 U	18 U	100 U D	17 U

Notes:

6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
^{A}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_{NS,q}$	No SCO has been established for this compound. No SCO has been established for total chromium; however, see standards for trivalent and hexavalent chromium. For commercial use, these are 1500 and 400 mg/kg respectively.
$_e$	The SCOS for metals were capped at a maximum value of 10,000 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3.
$_j$	This SCO is the sum of endosulfan I, endosulfan II, and endosulfan sulfate.
$_o$	The criterion is applicable to total PCBs, and the individual aroclors should be added for comparison.
B	Analyte was detected in the associated Method Blank.
D	Reported result taken from diluted sample analysis.
J	Indicates estimated value.
JN	Presumptively present at an approximated quantity.
TALBU	Test America Laboratories Inc., Buffalo New York
in	inches

Table 2
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**TP-4**	**TP-8**		**TP-13**	**TP-14**			**TP-15**	**TP-17**	**TP-18**	**TP-19**	**TP-20**		**TP-21**
Sample Date			**26-Oct-10**	**27-Oct-10**	**27-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**21-Nov-11**	**21-Nov-11**	**21-Nov-11**	**21-Nov-11**
Sample ID			**BA-TP4-S**	**BA-TP8-S**	**BA-TP8-S/D**	**BA-TP13-S**	**BA-TP14-S**	**BA-TP14-S/D**	**BA-TP14-S2**	**BA-TP15-S**	**BA-TP17-S**	**BA-TP18-S**	**BA-TP19-S**	**BA-TP20-S**	**BA-TP20-S2**	**BA-TP21-S**
Sample Depth			**9 - 9.5 ft**	**2 - 4 ft**	**2 - 4 ft**	**2 - 2.5 ft**	**3 ft**	**3 ft**	**6 ft**	**4 - 4.5 ft**	**3.5 - 4 ft**	**9.5 - 10 ft**	**5 ft**	**0 - 1 ft**	**4 ft**	**0 - 1 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**480-13114-1-rev**	**480-13114-1-rev**	**480-13114-1-rev**	**480-13114-1-rev**
Laboratory Sample ID			**RTJ2029-03**	**RTJ2137-01**	**RTJ2137-02**	**RTK0343-04**	**RTK0343-07**	**RTK0343-08**	**RTK0343-09**	**RTK0343-10**	**RTK0343-11**	**RTK0343-12**	**480-13114-1**	**480-13114-2**	**480-13114-3**	**480-13114-4**
Sample Type	**Units**	**6NYCRR**			**Field Duplicate**			**Field Duplicate**								
General Chemistry																
Total Solids	%	n/v	**86**	**84**	**84**	**79**	**78**	**81**	**81**	**87**	**91**	**93**	**-**	**-**	**-**	**-**
Volatile Organic Compounds																
Acetone	µg/kg	500000_c^A	29 U	30 U	30 U	**15 J**	630 U	290 U	31 U	27 U	27 U	26 U	9.6 U	9.1 U	11 U	**11**
Benzene	µg/kg	44000^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Bromodichloromethane	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Bromoform (tribromomethane)	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U J	59 U J	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Bromomethane (Methyl bromide)	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Carbon Disulfide	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U J	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U J	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Chloroethane (Ethyl Chloride)	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U J	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Chloroform	µg/kg	350000^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Chloromethane	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Cyclohexane	µg/kg	n/v	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/kg	n/v	5.8 U	5.9 U	5.9 U	6.2 U	130 U J	59 U J	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dibromochloromethane	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U J	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichlorobenzene, 1,2-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U J	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichlorobenzene, 1,3-	µg/kg	280000^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichlorobenzene, 1,4-	µg/kg	130000^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichlorodifluoromethane	µg/kg	n/v	5.8 U J	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichloroethane, 1,1-	µg/kg	240000^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichloroethane, 1,2-	µg/kg	30000^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	**2.0**	**1.9**
Dichloroethene, 1,1-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U J	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichloroethylene, cis-1,2-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U J	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichloroethylene, trans-1,2-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U J	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichloropropane, 1,2-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	**1.9**	**1.0**
Dichloropropene, cis-1,3-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Dichloropropene, trans-1,3-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U J	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Ethylbenzene	µg/kg	390000^A	5.8 U	5.9 U	5.9 U	6.2 U J	**5000 D**	**1500 D**	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Hexanone, 2-	µg/kg	500000_c^A	29 U	30 U	30 U	31 U	630 U J	290 U	31 U	27 U	27 U	26 U	9.6 U	9.1 U	11 U	9.5 U
Isopropylbenzene	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	**6700 D**	**2000 D**	**6.8**	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Methyl Acetate	µg/kg	n/v	5.8 U	5.9 U J	5.9 U J	6.2 U	130 U J	59 U J	6.2 U J	5.3 U J	5.4 U J	5.2 U J	0.96 U	0.91 U	1.1 U	0.95 U
Methyl Ethyl Ketone (MEK)	µg/kg	500000_c^A	29 U	30 U	30 U	31 U	630 U	290 U	31 U	27 U	27 U	26 U	9.6 U J	9.1 U J	11 U J	9.5 U J
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000_c^A	29 U	30 U	30 U	31 U	630 U J	290 U	31 U	27 U	27 U	26 U	9.6 U	9.1 U	11 U	9.5 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Methylcyclohexane	µg/kg	n/v	5.8 U	5.9 U	5.9 U	6.2 U	**71000 D**	**16000 D**	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Methylene Chloride (Dichloromethane)	µg/kg	500000_c^A	**3.2 J**	**7.7**	**6.9**	**9.0**	130 U	59 U	**8.7**	**4.8 J**	**5.9**	**6.8**	**4.4**	**2.0**	**8.3**	**12**
Styrene	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Tetrachloroethane, 1,1,2,2-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Tetrachloroethylene (PCE)	µg/kg	150000^A	5.8 U	5.9 U	5.9 U	6.2 U J	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Toluene	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U J	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Trichlorobenzene, 1,2,4-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Trichloroethane, 1,1,1-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Trichloroethane, 1,1,2-	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Trichloroethylene (TCE)	µg/kg	200000^A	5.8 U	5.9 U	5.9 U	6.2 U J	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000_c^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Vinyl chloride	µg/kg	13000^A	5.8 U	5.9 U	5.9 U	6.2 U	130 U	59 U	6.2 U	5.3 U	5.4 U	5.2 U	0.96 U	0.91 U	1.1 U	0.95 U
Xylenes, Total	µg/kg	500000_c^A	12 U	12 U	12 U	12 U J	**300**	**530**	12 U	11 U	11 U	10 U	2.9 U	2.7 U	3.2 U	2.8 U
Total VOC	µg/kg	500000_c^A	**3.2**	**7.7**	**6.9**	**9.0**	**83000**	**20030**	**15.5**	**4.8**	**5.9**	**6.8**	**4.4**	**2.0**	**12.2**	**25.9**

See next page for notes.

Table 2
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Notes:

6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
^{A}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5^{A}	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
^{c}	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
D	Reported result taken from diluted sample analysis.
J	Indicates estimated value.
TALBU	Test America Laboratories, Inc., Buffalo, NY
ft	feet

Sample Location			TP-1		TP-2	TP-3	TP-4	TP-5	TP-7		TP-8				TP-9	TP-10	TP-11	
Sample Date			**26-Oct-10**	**26-Oct-10**	**26-Oct-10**	**26-Oct-10**	**26-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**28-Oct-10**	**28-Oct-10**
Sample ID			**BA-TP-1-S**	**BA-TP-1-S2**	**BA-TP2-S**	**BA-TP3-S**	**BA-TP4-S**	**BA-TP5-S**	**BA-TP7-S**	**BA-TP7-S2**	**BA-TP8-S**	**BA-TP8-S/D**	**BA-TP8-S2**	**BA-TP8-S3**	**BA-TP9-S**	**BA-TP10-S**	**BA-TP11-S**	**BA-TP11-S2**
Sample Depth			**1.4 - 1.8 ft**	**2.5 - 3 ft**	**9.5 - 10 ft**	**10 - 18.5 ft**	**9 - 9.5 ft**	**3.5 - 4 ft**	**0.5 - 2.5 ft**	**2.5 - 3 ft**	**2 - 4 ft**	**2 - 4 ft**	**4.5 - 5 ft**	**5 - 5.5 ft**	**0 - 3 ft**	**6 - 6.5 ft**	**4 - 5 ft**	**5 - 5.5 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTJ1956**	**RTJ1956**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**
Laboratory Sample ID			**RTJ1956-14**	**RTJ1956-15**	**RTJ2029-01**	**RTJ2029-02**	**RTJ2029-03**	**RTJ2029-06**	**RTJ2137-05**	**RTJ2137-06**	**RTJ2137-01**	**RTJ2137-02**	**RTJ2137-03**	**RTJ2137-04**	**RTJ2137-07**	**RTJ2137-08**	**RTK0343-01**	**RTK0343-02**
Sample Type	**Units**	**6NYCRR**										**Field Duplicate**						
General Chemistry																		
Total Solids	%	n/v	**93**	**86**	**79**	**83**	**86**	**79**	**94**	**93**	**84**	**84**	**83**	**95**	**93**	**94**	**97**	**93**
Semi-Volatile Organic Compounds																		
Acenaphthene	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**720 JD**	8600 U D	920 U D
Acenaphthylene	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**2700 JD**	8600 U D	920 U D
Acetophenone	µg/kg	n/v	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Anthracene	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**2000 JD**	8600 U D	920 U D
Atrazine	µg/kg	n/v	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Benzaldehyde	µg/kg	n/v	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Benzo(a)anthracene	µg/kg	5600^A	***9000 U D***	**37 J**	210 U	200 U	190 U	210 U	180 U	***18000 U D***	***44000 U D***	***40000 U D***	***40000 U D***	***1800 U D***	***9000 U D***	**5000 D**	***8600 U D***	920 U D
Benzo(a)pyrene	µg/kg	1000_g^A	***9000 U D***	**35 J**	210 U	200 U	190 U	210 U	180 U	***18000 U D***	***44000 U D***	***40000 U D***	***40000 U D***	***1800 U D***	***9000 U D***	**4100 D^A**	***8600 U D***	920 U D
Benzo(b)fluoranthene	µg/kg	5600^A	***9000 U D***	**48 J**	210 U	200 U	190 U	210 U	180 U	***18000 U D***	***44000 U D***	***40000 U D***	***40000 U D***	***1800 U D***	***9000 U D***	**3700 D**	***8600 U D***	920 U D
Benzo(g,h,i)perylene	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**1900 JD**	8600 U D	920 U D
Benzo(k)fluoranthene	µg/kg	56000^A	9000 U D	**17 J**	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**1500 JD**	8600 U D	920 U D
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Bis(2-Chloroethoxy)methane	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Bis(2-Chloroethyl)ether	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U	44000 U	40000 U	40000 U	1800 U	9000 U D	3500 U	8600 U	920 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Butyl Benzyl Phthalate	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Caprolactam	µg/kg	n/v	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Carbazole	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Chloro-3-methyl phenol, 4-	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Chloroaniline, 4	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Chloronaphthalene, 2-	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Chrysene	µg/kg	56000^A	9000 U D	**35 J**	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**6400 D**	8600 U D	920 U D
Cresol, o- (Methylphenol, 2-)	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Cresol, p- (Methylphenol, 4-)	µg/kg	500000_c^A	17000 U D	370 U	410 U	390 U	380 U	410 U	350 U	35000 U D	86000 U D	78000 U D	78000 U D	3500 U D	17000 U D	6900 U D	17000 U D	1800 U D
Dibenzo(a,h)anthracene	µg/kg	560^A	***9000 U D***	190 U	210 U	200 U	190 U	210 U	180 U	***18000 U D***	***44000 U D***	***40000 U D***	***40000 U D***	***1800 U D***	***9000 U D***	**460 JD**	***8600 U D***	***920 U D***
Dibenzofuran	µg/kg	350000^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Dichlorobenzidine, 3,3'-	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Dichlorophenol, 2,4-	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Diethyl Phthalate	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Dimethyl Phthalate	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Dimethylphenol, 2,4-	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Di-n-Butyl Phthalate	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Dinitro-o-cresol, 4,6-	µg/kg	500000_c^A	17000 U D	370 U	410 U	390 U	380 U	410 U	350 U	35000 U D	86000 U D	78000 U D	78000 U D	3500 U D	17000 U D	6900 U D	17000 U D	1800 U D
Dinitrophenol, 2,4-	µg/kg	500000_c^A	17000 U D	370 U	410 U	390 U	380 U	410 U	350 U	35000 U D	86000 U D	78000 U D	78000 U D	3500 U D	17000 U D	6900 U D	17000 U D	1800 U D
Dinitrotoluene, 2,4-	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Dinitrotoluene, 2,6-	µg/kg	500000_c^A	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D

See last page for notes.

Table 2
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**TP-1**		**TP-2**	**TP-3**	**TP-4**	**TP-5**	**TP-7**		**TP-8**				**TP-9**	**TP-10**	**TP-11**	
Sample Date			**26-Oct-10**	**26-Oct-10**	**26-Oct-10**	**26-Oct-10**	**26-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**27-Oct-10**	**28-Oct-10**	**28-Oct-10**
Sample ID			**BA-TP-1-S**	**BA-TP-1-S2**	**BA-TP2-S**	**BA-TP3-S**	**BA-TP4-S**	**BA-TP5-S**	**BA-TP7-S**	**BA-TP7-S2**	**BA-TP8-S**	**BA-TP8-S/D**	**BA-TP8-S2**	**BA-TP8-S3**	**BA-TP9-S**	**BA-TP10-S**	**BA-TP11-S**	**BA-TP11-S2**
Sample Depth			**1.4 - 1.8 ft**	**2.5 - 3 ft**	**9.5 - 10 ft**	**10 - 18.5 ft**	**9 - 9.5 ft**	**3.5 - 4 ft**	**0.5 - 2.5 ft**	**2.5 - 3 ft**	**2 - 4 ft**	**2 - 4 ft**	**4.5 - 5 ft**	**5 - 5.5 ft**	**0 - 3 ft**	**6 - 6.5 ft**	**4 - 5 ft**	**5 - 5.5 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTJ1956**	**RTJ1956**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**
Laboratory Sample ID			**RTJ1956-14**	**RTJ1956-15**	**RTJ2029-01**	**RTJ2029-02**	**RTJ2029-03**	**RTJ2029-06**	**RTJ2137-05**	**RTJ2137-06**	**RTJ2137-01**	**RTJ2137-02**	**RTJ2137-03**	**RTJ2137-04**	**RTJ2137-07**	**RTJ2137-08**	**RTK0343-01**	**RTK0343-02**
Sample Type	**Units**	**6NYCRR**										**Field Duplicate**						
Semi-Volatile Organic Compounds (cont'd)																		
Di-n-Octyl phthalate	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Fluoranthene	µg/kg	500000$_c^A$	9000 U D	**63 J**	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**8100 D**	8600 U D	920 U D
Fluorene	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**2700 JD**	8600 U D	920 U D
Hexachlorobenzene	µg/kg	6000^A	***9000 U D***	190 U	210 U	200 U	190 U	210 U	180 U	***18000 U D***	***44000 U D***	***40000 U D***	***40000 U D***	1800 U D	***9000 U D***	3500 U D	***8600 U D***	920 U D
Hexachlorobutadiene	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Hexachlorocyclopentadiene	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Hexachloroethane	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Indeno(1,2,3-cd)pyrene	µg/kg	5600^A	***9000 U D***	190 U	210 U	200 U	190 U	210 U	180 U	***18000 U D***	***44000 U D***	***40000 U D***	***40000 U D***	1800 U D	***9000 U D***	**1400 JD**	***8600 U D***	920 U D
Isophorone	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Methylnaphthalene, 2-	µg/kg	500000$_c^A$	**1500 JD**	190 U	210 U	200 U	190 U	210 U	180 U	**7700 JD**	44000 U D	40000 U D	**9400 JD**	**220 JD**	9000 U D	**2100 JD**	8600 U D	920 U D
Naphthalene	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**990 JD**	8600 U D	920 U D
Nitroaniline, 2-	µg/kg	500000$_c^A$	17000 U D	370 U	410 U	390 U	380 U	410 U	350 U	35000 U D	86000 U D	78000 U D	78000 U D	3500 U D	17000 U D	6900 U D	17000 U D	1800 U D
Nitroaniline, 3-	µg/kg	500000$_c^A$	17000 U D	370 U	410 U	390 U	380 U	410 U	350 U	35000 U D	86000 U D	78000 U D	78000 U D	3500 U D	17000 U D	6900 U D	17000 U D	1800 U D
Nitroaniline, 4-	µg/kg	500000$_c^A$	17000 U D	370 U	410 U	390 U	380 U	410 U	350 U	35000 U D	86000 U D	78000 U D	78000 U D	3500 U D	17000 U D	6900 U D	17000 U D	1800 U D
Nitrobenzene	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Nitrophenol, 2-	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Nitrophenol, 4-	µg/kg	500000$_c^A$	17000 U D	370 U	410 U	390 U	380 U	410 U	350 U	35000 U D	86000 U D	78000 U D	78000 U D	3500 U D	17000 U D	6900 U D	17000 U D	1800 U D
N-Nitrosodi-n-Propylamine	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
n-Nitrosodiphenylamine	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Pentachlorophenol	µg/kg	6700^A	***17000 U D***	370 U	410 U	390 U	380 U	410 U	350 U	***35000 U D***	***86000 U D***	***78000 U D***	***78000 U D***	3500 U D	***17000 U D***	***6900 U D***	***17000 U D***	1800 U D
Phenanthrene	µg/kg	500000$_c^A$	9000 U D	370 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**15000 D**	8600 U D	920 U D
Phenol	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Pyrene	µg/kg	500000$_c^A$	9000 U D	**55 J**	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	**12000 D**	8600 U D	920 U D
Trichlorophenol, 2,4,5-	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
Trichlorophenol, 2,4,6-	µg/kg	500000$_c^A$	9000 U D	190 U	210 U	200 U	190 U	210 U	180 U	18000 U D	44000 U D	40000 U D	40000 U D	1800 U D	9000 U D	3500 U D	8600 U D	920 U D
SVOC Tentatively Identified Compounds																		
Total SVOC TICs	µg/kg	500000$_c^A$	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None

See last page for notes.

Table 2
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**TP-12**	**TP-13**	**TP-14**			**TP-15**	**TP-17**	**TP-18**	**TP-20**
Sample Date			**28-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**21-Nov-11**
Sample ID			**BA-TP12-S**	**BA-TP13-S**	**BA-TP14-S**	**BA-TP14-S/D**	**BA-TP14-S2**	**BA-TP15-S**	**BA-TP17-S**	**BA-TP18-S**	**BA-TP20-S**
Sample Depth			**4 - 5 ft**	**2 - 2.5 ft**	**3 ft**	**3 ft**	**6 ft**	**4 - 4.5 ft**	**3.5 - 4 ft**	**9.5 - 10 ft**	**0 - 1 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**480-13114-1-rev**
Laboratory Sample ID			**RTK0343-03**	**RTK0343-04**	**RTK0343-07**	**RTK0343-08**	**RTK0343-09**	**RTK0343-10**	**RTK0343-11**	**RTK0343-12**	**480-13114-2**
Sample Type	**Units**	**6NYCRR**				**Field Duplicate**					
General Chemistry											
Total Solids	%	n/v	**92**	**79**	**78**	**81**	**81**	**87**	**91**	**93**	-
Semi-Volatile Organic Compounds											
Acenaphthene	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	**25 J**	1800 U D	900 U D	350 U
Acenaphthylene	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Acetophenone	µg/kg	n/v	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Anthracene	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Atrazine	µg/kg	n/v	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Benzaldehyde	µg/kg	n/v	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U J
Benzo(a)anthracene	µg/kg	5600^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	35 U
Benzo(a)pyrene	µg/kg	1000_{g}^{A}	***3600 U D***	210 U	***1100 U D***	***1100 U D***	210 U	190 U	***1800 U D***	900 U D	35 U
Benzo(b)fluoranthene	µg/kg	5600^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	35 U
Benzo(g,h,i)perylene	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Benzo(k)fluoranthene	µg/kg	56000^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	35 U
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	3600 U D	210 U	**150 JD**	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Bis(2-Chloroethoxy)methane	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Bis(2-Chloroethyl)ether	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	35 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000_{c}^{A}	3600 U	210 U	1100 U	1100 U	210 U	190 U	1800 U	900 U	350 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Butyl Benzyl Phthalate	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Caprolactam	µg/kg	n/v	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Carbazole	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Chloro-3-methyl phenol, 4-	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Chloroaniline, 4	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Chloronaphthalene, 2-	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Chrysene	µg/kg	56000^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Cresol, o- (Methylphenol, 2-)	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Cresol, p- (Methylphenol, 4-)	µg/kg	500000_{c}^{A}	7100 U D	410 U	2100 U D	2000 U D	400 U	370 U	3600 U D	1700 U D	350 U
Dibenzo(a,h)anthracene	µg/kg	560^{A}	***3600 U D***	210 U	***1100 U D***	***1100 U D***	210 U	190 U	***1800 U D***	***900 U D***	35 U
Dibenzofuran	µg/kg	350000^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Dichlorobenzidine, 3,3'-	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Dichlorophenol, 2,4-	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	720 U
Diethyl Phthalate	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Dimethyl Phthalate	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Dimethylphenol, 2,4-	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Di-n-Butyl Phthalate	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Dinitro-o-cresol, 4,6-	µg/kg	500000_{c}^{A}	7100 U D	410 U	2100 U D	2000 U D	400 U	370 U	3600 U D	1700 U D	1100 U
Dinitrophenol, 2,4-	µg/kg	500000_{c}^{A}	7100 U D	410 U	2100 U D	2000 U D	400 U	370 U	3600 U D	1700 U D	1100 U
Dinitrotoluene, 2,4-	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	72 U
Dinitrotoluene, 2,6-	µg/kg	500000_{c}^{A}	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	72 U

See last page for notes.

Table 2
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**TP-12**	**TP-13**	**TP-14**			**TP-15**	**TP-17**	**TP-18**	**TP-20**
Sample Date			**28-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**	**21-Nov-11**
Sample ID			**BA-TP12-S**	**BA-TP13-S**	**BA-TP14-S**	**BA-TP14-S/D**	**BA-TP14-S2**	**BA-TP15-S**	**BA-TP17-S**	**BA-TP18-S**	**BA-TP20-S**
Sample Depth			**4 - 5 ft**	**2 - 2.5 ft**	**3 ft**	**3 ft**	**6 ft**	**4 - 4.5 ft**	**3.5 - 4 ft**	**9.5 - 10 ft**	**0 - 1 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**480-13114-1-rev**
Laboratory Sample ID			**RTK0343-03**	**RTK0343-04**	**RTK0343-07**	**RTK0343-08**	**RTK0343-09**	**RTK0343-10**	**RTK0343-11**	**RTK0343-12**	**480-13114-2**
Sample Type	**Units**	**6NYCRR**				**Field Duplicate**					
Semi-Volatile Organic Compounds (cont'd)											
Di-n-Octyl phthalate	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Fluoranthene	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Fluorene	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Hexachlorobenzene	µg/kg	6000^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	35 U
Hexachlorobutadiene	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	72 U
Hexachlorocyclopentadiene	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Hexachloroethane	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	35 U
Indeno(1,2,3-cd)pyrene	µg/kg	5600^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	35 U
Isophorone	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Methylnaphthalene, 2-	µg/kg	500000_c^A	3600 U D	210 U	**2600 D**	**950 JD**	210 U	**33 J**	1800 U D	900 U D	350 U
Naphthalene	µg/kg	500000_c^A	3600 U D	210 U	**2000 D**	**750 JD**	210 U	**240**	1800 U D	900 U D	350 U
Nitroaniline, 2-	µg/kg	500000_c^A	7100 U D	410 U	2100 U D	2000 U D	400 U	370 U	3600 U D	1700 U D	720 U
Nitroaniline, 3-	µg/kg	500000_c^A	7100 U D	410 U	2100 U D	2000 U D	400 U	370 U	3600 U D	1700 U D	720 U
Nitroaniline, 4-	µg/kg	500000_c^A	7100 U D	410 U	2100 U D	2000 U D	400 U	370 U	3600 U D	1700 U D	720 U
Nitrobenzene	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	35 U
Nitrophenol, 2-	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Nitrophenol, 4-	µg/kg	500000_c^A	7100 U D	410 U	2100 U D	2000 U D	400 U	370 U	3600 U D	1700 U D	1100 U
N-Nitrosodi-n-Propylamine	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	35 U
n-Nitrosodiphenylamine	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Pentachlorophenol	µg/kg	6700^A	***7100 U D***	410 U	2100 U D	2000 U D	400 U	370 U	3600 U D	1700 U D	1100 U
Phenanthrene	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	**21 J**	1800 U D	900 U D	350 U
Phenol	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Pyrene	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Trichlorophenol, 2,4,5-	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
Trichlorophenol, 2,4,6-	µg/kg	500000_c^A	3600 U D	210 U	1100 U D	1100 U D	210 U	190 U	1800 U D	900 U D	350 U
SVOC Tentatively Identified Compounds											
Total SVOC TICs	µg/kg	500000_c^A	None	None	None	None	None	None	None	None	**1420**

Notes:

6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
^{A}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_c$	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
$_g$	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
D	Reported result taken from diluted sample analysis.
J	Indicates estimated value.
TALBU	Test America Laboratories, Inc., Buffalo, NY
ft	feet

Table 2
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**TP-4**	**TP-8**		**TP-13**	**TP-17**	**TP-18**
Sample Date			**26-Oct-10**	**27-Oct-10**	**27-Oct-10**	**29-Oct-10**	**29-Oct-10**	**29-Oct-10**
Sample ID			**BA-TP4-S**	**BA-TP8-S**	**BA-TP8-S/D**	**BA-TP13-S**	**BA-TP17-S**	**BA-TP18-S**
Sample Depth			**9 - 9.5 ft**	**2 - 4 ft**	**2 - 4 ft**	**2 - 2.5 ft**	**3.5 - 4 ft**	**9.5 - 10 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**	**RTJ2029**
Laboratory Sample ID			**RTJ2029-03**	**RTJ2137-01**	**RTJ2137-02**	**RTK0343-04**	**RTK0343-11**	**RTK0343-12**
Sample Type	**Units**	**6NYCRR**			**Field Duplicate**			
Metals								
Aluminum	mg/kg	10000_e^A	**7700 J**	**4290 J**	**3030 J**	**13000 J**^{A}	**5550 J**	**6230 J**
Antimony	mg/kg	10000_e^A	17.1 U J	17.4 U J	18.2 U J	18.9 U J	16.2 U J	15.9 U J
Arsenic	mg/kg	16_g^A	**5.6 J**	**5.8 B**	4.0 U	**7.6**	**5.5**	**4.5**
Barium	mg/kg	400^A	**39.0 J**	**46.7**	**61.2**	**80.5 J**	**35.0**	**29.0**
Beryllium	mg/kg	590^A	**0.357**	**0.203 J**	**0.129 J**	**0.633 J**	**0.219**	**0.265**
Cadmium	mg/kg	9.3^A	**0.204 J**	**0.390**	**0.330**	**0.234 J**	**0.832**	**0.169 J**
Calcium	mg/kg	10000_e^A	**31000 B**^{A}	**120000 BD**^{A}	**69600 BD**^{A}	**31200 B**^{A}	**85300 BD**^{A}	**53100 B**^{A}
Chromium (Total)	mg/kg	NS,q^A	**10.2**	**8.77**	**28.1**	**15.8 J**	**7.08**	**7.56**
Cobalt	mg/kg	10000_e^A	**8.42**	**4.69**	**3.34**	**11.5**	**5.16**	**4.63**
Copper	mg/kg	270^A	**17.1**	**21.5**	**18.9**	**21.4**	**19.6**	**14.4**
Iron	mg/kg	10000_e^A	**16900**^{A}	**13400**^{A}	**12000**^{A}	**25100**^{A}	**21800**^{A}	**13100**^{A}
Lead	mg/kg	1000^A	**10.8**	**47.5**	**149**	**13.0**	**14.0**	**6.7**
Magnesium	mg/kg	10000_e^A	**12400**^{A}	**7560**	**6590**	**13800**^{A}	**11900**^{A}	**13900**^{A}
Manganese	mg/kg	10000_e^A	**486 J**	**421 B**	**348 B**	**563 B**	**787 B**	**375 B**
Mercury	mg/kg	2.8_k^A	0.0227 U	0.0227 U	**0.0112 J**	0.0240 U	**1.22 D**	0.0212 U
Nickel	mg/kg	310^A	**19.0**	**14.1**	**9.48**	**26.5**	**13.1**	**13.4**
Potassium	mg/kg	10000_e^A	**1080 J**	**608**	**535**	**2390 J**	**795**	**910**
Selenium	mg/kg	1500^A	4.6 U	4.6 U	4.8 U	5.1 U	4.3 U	4.3 U
Silver	mg/kg	1500^A	0.570 U	0.580 U	0.606 U	0.631 U	0.539 U	0.532 U
Sodium	mg/kg	10000_e^A	**88.3 J**	**102 J**	**78.8 J**	**130 J**	**97.5 J B**	**114 J B**
Thallium	mg/kg	10000_e^A	6.8 U	7.0 U	7.3 U	7.6 U	6.5 U	6.4 U
Vanadium	mg/kg	10000_e^A	**11.5**	**8.40**	**6.10**	**19.1 J**	**9.97**	**9.84**
Zinc	mg/kg	10000_e^A	**44.7 B**	**99.7 B**	**80.9 B**	**62.4 B**	**62.3 B**	**46.1 B**
Pesticides								
Aldrin	µg/kg	680^A	1.9 U J	***2000 U DJ***	***1900 U DJ***	2.1 U J	180 U DJ	89 U DJ
BHC, alpha-	µg/kg	3400^A	1.9 U CJ	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
BHC, beta-	µg/kg	3000^A	1.9 U CJ	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
BHC, delta-	µg/kg	500000_c^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Camphechlor (Toxaphene)	µg/kg	500000_c^A	19 U J	20000 U DJ	19000 U DJ	21 U J	1800 U DJ	890 U DJ
Chlordane, alpha-	µg/kg	24000^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Chlordane, gamma-	µg/kg	500000_c^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
DDD (p,p'-DDD)	µg/kg	92000^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
DDE (p,p'-DDE)	µg/kg	62000^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
DDT (p,p'-DDT)	µg/kg	47000^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Dieldrin	µg/kg	1400^A	1.9 U J	***2000 U DJ***	***1900 U DJ***	2.1 U J	180 U DJ	89 U DJ
Endosulfan I	µg/kg	200000_j^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Endosulfan II	µg/kg	200000_j^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Endosulfan Sulfate	µg/kg	200000_j^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Endrin	µg/kg	89000^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Endrin Aldehyde	µg/kg	500000_c^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Endrin Ketone	µg/kg	500000_c^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Heptachlor	µg/kg	15000^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Heptachlor Epoxide	µg/kg	500000_c^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Lindane (Hexachlorocyclohexane, gamma)	µg/kg	9200^A	1.9 U J	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Methoxychlor (4,4'-Methoxychlor)	µg/kg	500000_c^A	**0.57 J**	2000 U DJ	1900 U DJ	2.1 U J	180 U DJ	89 U DJ
Polychlorinated Biphenyls								
Aroclor 1016	µg/kg	1000_o^A	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1221	µg/kg	1000_o^A	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1232	µg/kg	1000_o^A	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1242	µg/kg	1000_o^A	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1248	µg/kg	1000_o^A	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1254	µg/kg	1000_o^A	19 U	200 U D	190 U D	21 U	**19 JDN**	18 U
Aroclor 1260	µg/kg	1000_o^A	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1262	µg/kg	n/v	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1268	µg/kg	n/v	19 U	200 U D	190 U D	21 U	90 U D	18 U

Notes:

6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
^{A}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_{NS,q}$	No SCO has been established for this compound. No SCO has been established for total chromium; however, see standards for trivalent and hexavalent chromium. For commercial use, these are 1500 and 400 mg/kg respectively.
$_c$	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
$_e$	The SCOS for metals were capped at a maximum value of 10,000 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3.
$_g$	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
$_k$	This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See 6 NYCRR Part 375 TSD Table 5.6-1.
$_o$	The criterion is applicable to total PCBs, and the individual aroclors should be added for comparison.
B	Analyte was detected in the associated Method Blank.
C	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected above thelaboratory PQL, data not impacted.
D	Reported result taken from diluted sample analysis.
J	Indicates estimated value.
JN	Presumptively present at an approximated quantity.
TALBU	Test America Laboratories, Inc., Buffalo, NY
ft	feet

Table 3
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**BS-1**	**BS-2**	**BS-3**	**BS-4**	**B/MW-5**	**B/MW-6**	**B/MW-7**	**B/MW-8**	**B/MW-9**	**B/MW-10**	**B/MW-11**	**B/MW-14**	**B-15**	**B-16**		**B-17**	**B-18**
Sample Date			**10-Dec-09**	**10-Dec-09**	**11-Dec-09**	**11-Dec-09**	**2-Dec-10**	**1-Dec-10**	**2-Dec-10**	**1-Dec-10**	**30-Nov-10**	**30-Nov-10**	**30-Nov-10**	**30-Nov-10**	**2-Dec-10**	**3-Dec-10**	**3-Dec-10**	**3-Dec-10**	**2-Dec-10**
Sample ID			**BS-S-1**	**BS-S-2**	**BS-S-3**	**BS-S-4**	**BA-B5-S**	**BA-B6-S**	**BA-B7-S**	**BA-B8-S**	**BA-B9-S**	**BA-B10-S**	**BA-B11-S**	**BA-B14-S**	**BA-B15-S**	**BA-B16-S**	**BA-B16-S2**	**BA-B17-S**	**BA-B18-S**
Sample Depth			**8 - 9 ft**	**7 - 8 ft**	**8 - 9 ft**	**8 - 10 ft**	**8 - 8.7 ft**	**2 - 2.8 ft**	**4.7 - 5.1 ft**	**11.5 - 12 ft**	**8 - 10 ft**	**8 - 9.6 ft**	**8 - 9 ft**	**8 - 10 ft**	**8 - 10.3 ft**	**10.8 - 11.2 ft**	**17.5 - 18 ft**	**4.6 - 6.6 ft**	**9.2 - 9.7 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**SPECTRUM**	**SPECTRUM**	**SPECTRUM**	**SPECTRUM**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**SB05469**	**SB05469**	**SB05538**	**SB05538**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**
Laboratory Sample ID			**SB05469-01**	**SB05469-02**	**SB05538-01**	**SB05538-03**	**RTL0493-05**	**RTL0315-03**	**RTL0493-02**	**RTL0493-01**	**RTK1728-04**	**RTL0315-01**	**RTL0315-02**	**RTK1728-03**	**RTL0493-04**	**RTL0522-04**	**RTL0522-05**	**RTL0522-03**	**RTL0493-03**
Sample Type	**Units**	**6NYCRR**	1	1	1	1													
General Chemistry																			
Total Solids	%	n/v	**85.9**	**83.9**	**86.9**	**79.2**	**84**	**77**	**79**	**76**	**77**	**84**	**82**	**77**	**78**	**81**	**84**	**79**	**76**
Volatile Organic Compounds																			
Acetone	µg/kg	500000_c^A 50^B	***57.6 U***	***3280 U***	***55.1 U***	***657 U***	15 U	14 U	8.5 U	14 U	32 U	14 U	30 U	10 U	17 U	17 U	15 U	30 U	6.1 U
Acrylonitrile	µg/kg	n/v	6.0 U	341 U	5.7 U	68.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	µg/kg	44000^A 60^B	3.6 U	***204 U***	3.4 U	40.8 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Bromobenzene	µg/kg	n/v	3.6 U	207 U	3.5 U	41.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/kg	500000_c^A 1000000_d^B	3.5 U	200 U	3.4 U	40.1 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Bromoform (tribromomethane)	µg/kg	500000_c^A 1000000_d^B	6.0 U	344 U	5.8 U	69.0 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Bromomethane (Methyl bromide)	µg/kg	500000_c^A 1000000_d^B	11.3 U	643 U	10.8 U	129 U	5.8 U	6.4 U J	6.0 U J	6.5 U	6.4 U	5.9 U J	6.0 U J	6.4 U	6.4 U J	6.1 U	6.0 U	6.0 U	6.1 U J
Butylbenzene, n-	µg/kg	500000_c^A 12000^B	5.1 U	288 U	4.8 U	57.7 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, tert-	µg/kg	500000_c^A 5900^B	5.9 U	334 U	5.6 U	66.9 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Disulfide	µg/kg	500000_c^A 1000000_d^B	12.8 U	728 U	12.2 U	146 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	**3.6 J**	6.0 U	6.0 U	6.1 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000^A 760^B	5.1 U	292 U	4.9 U	58.4 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000_c^A 1100^B	5.9 U	334 U	5.6 U	66.9 U	5.8 U	6.4 U J	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Chlorobromomethane	µg/kg	n/v	4.1 U	235 U	4.0 U	47.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane (Ethyl Chloride)	µg/kg	500000_c^A 1000000_d^B	10.2 U	580 U	9.7 U	116 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Chloroform	µg/kg	350000^A 370^B	5.7 U	323 U	5.4 U	64.8 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Chloromethane	µg/kg	500000_c^A 1000000_d^B	7.5 U	425 U	7.1 U	85.2 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Chlorotoluene, 2-	µg/kg	n/v	4.3 U	243 U	4.1 U	48.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene, 4-	µg/kg	n/v	5.1 U	292 U	4.9 U	58.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	µg/kg	n/v	-	-	-	-	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Cymene (p-Isopropyltoluene)	µg/kg	500000_c^A 1000000_d^B	5.1 U	288 U	4.8 U	57.7 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/kg	n/v	9.9 U	562 U	9.5 U	113 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Dibromochloromethane	µg/kg	500000_c^A 1000000_d^B	4.5 U	257 U	4.3 U	51.4 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Dibromomethane (Methylene Bromide)	µg/kg	n/v	4.0 U	228 U	3.8 U	45.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,2-	µg/kg	500000_c^A 1100^B	5.4 U	309 U	5.2 U	62.0 U	5.8 U	6.4 U J	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Dichlorobenzene, 1,3-	µg/kg	280000^A 2400^B	2.8 U	162 U	2.7 U	32.4 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Dichlorobenzene, 1,4-	µg/kg	130000^A 1800^B	5.0 U	285 U	4.8 U	57.0 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Dichlorobutene, trans-1,4-	µg/kg	n/v	6.0 U	344 U	5.8 U	69.0 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	µg/kg	n/v	11.8 U	671 U	11.3 U	134 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Dichloroethane, 1,1-	µg/kg	240000^A 270^B	4.6 U	260 U	4.4 U	52.1 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	**770 JD^B**	6.0 U	6.0 U	6.1 U
Dichloroethane, 1,2-	µg/kg	30000^A 20_g^B	5.9 U	***337 U***	5.7 U	***67.6 U***	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Dichloroethylene, 1,1-	µg/kg	500000_c^A 330^B	5.9 U	***334 U***	5.6 U	**194**	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	**84**	6.0 U	6.0 U	6.1 U
Dichloroethylene, cis-1,2-	µg/kg	500000_c^A 250^B	5.2 U	***299 U***	5.0 U	59.9 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	**13**	6.0 U	6.0 U	6.1 U
Dichloroethylene, trans-1,2-	µg/kg	500000_c^A 190^B	5.8 U	***330 U***	5.6 U	66.2 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	**2.6 J**	6.0 U	6.0 U	6.1 U
Dichloropropane, 1,2-	µg/kg	500000_c^A 1000000_d^B	4.3 U	246 U	4.1 U	49.3 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Dichloropropane, 1,3-	µg/kg	500000_c^A 1000000_d^B	4.3 U	243 U	4.1 U	48.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropane, 2,2-	µg/kg	n/v	6.1 U	348 U	5.8 U	69.7 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, 1,1-	µg/kg	n/v	6.0 U	344 U	5.8 U	69.0 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/kg	500000_c^A 1000000_d^B	3.1 U	179 U	3.0 U	35.9 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Dichloropropene, trans-1,3-	µg/kg	500000_c^A 1000000_d^B	3.4 U	193 U	3.2 U	38.7 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Diisopropyl Ether	µg/kg	n/v	3.8 U	214 U	3.6 U	43.0 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Dioxane, 1,4-	µg/kg	130000^A 100_f^B	***102 U***	***5830 U***	98.0 U	***1170 U***	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

Table 3
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**BS-1**	**BS-2**	**BS-3**	**BS-4**	**B/MW-5**	**B/MW-6**	**B/MW-7**	**B/MW-8**	**B/MW-9**	**B/MW-10**	**B/MW-11**	**B/MW-14**	**B-15**	**B-16**		**B-17**	**B-18**
Sample Date			**10-Dec-09**	**10-Dec-09**	**11-Dec-09**	**11-Dec-09**	**2-Dec-10**	**1-Dec-10**	**2-Dec-10**	**1-Dec-10**	**30-Nov-10**	**30-Nov-10**	**30-Nov-10**	**30-Nov-10**	**2-Dec-10**	**3-Dec-10**	**3-Dec-10**	**3-Dec-10**	**2-Dec-10**
Sample ID			**BS-S-1**	**BS-S-2**	**BS-S-3**	**BS-S-4**	**BA-B5-S**	**BA-B6-S**	**BA-B7-S**	**BA-B8-S**	**BA-B9-S**	**BA-B10-S**	**BA-B11-S**	**BA-B14-S**	**BA-B15-S**	**BA-B16-S**	**BA-B16-S2**	**BA-B17-S**	**BA-B18-S**
Sample Depth			**8 - 9 ft**	**7 - 8 ft**	**8 - 9 ft**	**8 - 10 ft**	**8 - 8.7 ft**	**2 - 2.8 ft**	**4.7 - 5.1 ft**	**11.5 - 12 ft**	**8 - 10 ft**	**8 - 9.6 ft**	**8 - 9 ft**	**8 - 10 ft**	**8 - 10.3 ft**	**10.8 - 11.2 ft**	**17.5 - 18 ft**	**4.6 - 6.6 ft**	**9.2 - 9.7 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**SPECTRUM**	**SPECTRUM**	**SPECTRUM**	**SPECTRUM**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**SB05469**	**SB05469**	**SB05538**	**SB05538**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**
Laboratory Sample ID			**SB05469-01**	**SB05469-02**	**SB05538-01**	**SB05538-03**	**RTL0493-05**	**RTL0315-03**	**RTL0493-02**	**RTL0493-01**	**RTK1728-04**	**RTL0315-01**	**RTL0315-02**	**RTK1728-03**	**RTL0493-04**	**RTL0522-04**	**RTL0522-05**	**RTL0522-03**	**RTL0493-03**
Sample Type	**Units**	**6NYCRR**	1	1	1	1													
Volatile Organic Compounds (cont'd)																			
Ethanol	µg/kg	n/v	385 U	21900 U	368 U	4390 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Ether	µg/kg	n/v	4.6 U	264 U	4.4 U	52.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Tert Butyl Ether	µg/kg	n/v	6.1 U	348 U	5.8 U	69.7 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/kg	390000^A 1000^B	5.7 U	323 U	5.4 U	64.8 U	5.8 U	6.4 U J	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	3.9 U	221 U	3.7 U	44.4 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Hexachlorobutadiene	µg/kg	500000_c^A 1000000_d^B	4.7 U	267 U	4.5 U	53.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexanone, 2-	µg/kg	500000_c^A 1000000_d^B	21.1 U	1200 U	20.2 U	241 U	29 U	32 U	30 U	33 U	32 U	30 U	30 U	32 U	32 U	30 U	30 U	30 U	31 U
Isopropylbenzene	µg/kg	500000_c^A 1000000_d^B	4.0 U	225 U	3.8 U	45.1 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Methyl Acetate	µg/kg	n/v	-	-	-	-	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Methyl Ethyl Ketone (MEK)	µg/kg	500000_c^A 120^B	23.4 U	***1330 U***	22.4 U	***267 U***	29 U	32 U	30 U	33 U	32 U	30 U	30 U	32 U	32 U	30 U	30 U	30 U	31 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000_c^A 1000000_d^B	14.1 U	805 U	13.5 U	161 U	29 U	32 U	30 U	33 U	32 U	30 U	30 U	32 U	32 U	30 U	30 U	30 U	31 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000_c^A 930^B	4.9 U	281 U	4.7 U	56.3 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Methylcyclohexane	µg/kg	n/v	-	-	-	-	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Methylene Chloride (Dichloromethane)	µg/kg	500000_c^A 50^B	30.6 U	***1740 U***	29.3 U	***349 U***	**13**	**13**	**8.2**	**12**	**11**	**9.0**	**11**	**11**	**8.5**	**34**	**33**	**37**	**8.9**
Naphthalene	µg/kg	500000_c^A 12000^B	5.1 U	288 U	4.8 U	**60.6 J**	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenylbutane, 2- (sec-Butylbenzene)	µg/kg	500000_c^A 11000^B	4.3 U	243 U	4.1 U	48.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylbenzene, n-	µg/kg	500000_c^A 3900^B	4.5 U	257 U	4.3 U	51.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	µg/kg	500000_c^A 1000000_d^B	3.1 U	176 U	3.0 U	35.2 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Tert Amyl Methyl Ether	µg/kg	n/v	5.6 U	320 U	5.4 U	64.1 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Tert-Butyl Alcohol	µg/kg	n/v	56.0 U	3190 U	53.6 U	639 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/kg	n/v	5.6 U	320 U	5.4 U	64.1 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,2,2-	µg/kg	500000_c^A 1000000_d^B	4.4 U	253 U	4.3 U	50.7 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Tetrachloroethylene (PCE)	µg/kg	150000^A 1300^B	5.4 U	306 U	5.1 U	61.3 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	**1.5 J**	6.0 U	6.0 U	6.1 U
Tetrahydrofuran	µg/kg	n/v	10.7 U	608 U	10.2 U	122 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/kg	500000_c^A 700^B	5.6 U	316 U	5.3 U	63.4 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Trichlorobenzene, 1,2,3-	µg/kg	n/v	4.8 U	274 U	4.6 U	54.9 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	500000_c^A 1000000_d^B	5.7 U	323 U	5.4 U	64.8 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Trichlorobenzene, 1,3,5-	µg/kg	n/v	4.7 U	267 U	4.5 U	53.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/kg	500000_c^A 680^B	5.7 U	327 U	5.5 U	65.5 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	**130**	**1.5 J**	**1.5 J**	**1.7 J**
Trichloroethane, 1,1,2-	µg/kg	500000_c^A 1000000_d^B	3.9 U	221 U	3.7 U	44.4 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Trichloroethylene (TCE)	µg/kg	200000^A 470^B	**16.8**	**37500^B**	5.8 U	**16800^B**	5.8 U	6.4 U J	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	**25000 D^B**	**46**	6.0 U	**2.1 J**
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	4.9 U	281 U	4.7 U	56.3 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Trichloropropane, 1,2,3-	µg/kg	500000_c^A 1000000_d^B	5.2 U	299 U	5.0 U	59.9 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000_c^A 1000000_d^B	3.7 U	211 U	3.5 U	42.3 U	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	6.1 U	6.0 U	6.0 U	6.1 U
Trimethylbenzene, 1,2,4-	µg/kg	190000^A 3600^B	4.8 U	274 U	4.6 U	54.9 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/kg	190000^A 8400^B	5.9 U	334 U	5.6 U	66.9 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/kg	13000^A 20^B	4.9 U	***281 U***	4.7 U	***56.3 U***	5.8 U	6.4 U	6.0 U	6.5 U	6.4 U	5.9 U	6.0 U	6.4 U	6.4 U	**1.4 J**	6.0 U	6.0 U	6.1 U
Xylene, m & p-	µg/kg	$500000_{c,p}^A$ 1600_p^B	9.9 U	562 U	9.5 U	113 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene, o-	µg/kg	$500000_{c,p}^A$ 1600_p^B	3.9 U	221 U	3.7 U	44.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/kg	500000_c^A 1600^B	-	-	-	-	12 U	13 U J	12 U	13 U	13 U	**1.5 J**	12 U	13 U	13 U	12 U	12 U	12 U	12 U
Total VOC	µg/kg	500000_c^A 1000000_d^B	**16.8**	**37500**	**ND**	**17054.6**	**13**	**13**	**8.2**	**12**	**11**	**10.5**	**11**	**11**	**8.5**	**26040.1**	**80.5**	**38.5**	**12.7**

See last page for notes.

See last page

Table 3
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**B-19**	**B-20**	**B/MW-22**	**B/MW-23**		**B-24**			**B/MW-25**	**B/MW-26**	**B/MW-27**			**B/MW-28D**		**B-29**	**B-30**
Sample Date			**3-Dec-10**	**3-Dec-10**	**3-Dec-10**	**6-Dec-10**	**6-Dec-10**	**6-Dec-10**	**6-Dec-10**	**6-Dec-10**	**6-Dec-10**	**3-Feb-11**	**3-Feb-11**	**3-Feb-11**	**3-Feb-11**	**1-Feb-11**	**1-Feb-11**	**4-Feb-11**	**4-Feb-11**
Sample ID			**BA-B19-S**	**BA-B20-S**	**BA-B22-S**	**BA-B23-S**	**BA-B23-S2**	**BA-B24-S**	**BA-B24-S2**	**BA-B24-S3**	**BA-B25-S**	**BA-B26-S**	**BA-B27-S**	**BA-B27-S2**	**BA-B27-S2/D**	**BA-B28D-S**	**BA-B28D-S2**	**BA-B29-S**	**BA-B30-S**
Sample Depth			**4 - 4.9 ft**	**4 - 4.8 ft**	**15.5 - 16 ft**	**8 - 8.5 ft**	**10 - 10.6 ft**	**0.2 - 0.6 ft**	**6 - 6.6 ft**	**10 - 10.7 ft**	**6 - 7 ft**	**8 - 8.4 ft**	**0.4 - 1.4 ft**	**6.5 - 7.3 ft**	**6.5 - 7.3 ft**	**5.3 - 5.8 ft**	**39 - 40 ft**	**4.5 - 6 ft**	**4.6 - 5.4 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**
Laboratory Sample ID			**RTL0522-01**	**RTL0522-02**	**RTL0493-06**	**RTL0630-05**	**RTL0630-06**	**RTL0630-02**	**RTL0630-03**	**RTL0630-04**	**RTL0630-01**	**480-1409-4**	**480-1409-1**	**480-1409-2**	**480-1409-3**	**480-1342-1**	**480-1342-2**	**480-1418-1**	**480-1418-2**
Sample Type	**Units**	**6NYCRR**													**Field Duplicate**				
General Chemistry																			
Total Solids	%	n/v	**73**	**77**	**80**	**78**	**77**	**92**	**80**	**80**	**86**	-	-	-	-	-	-	-	-
Volatile Organic Compounds																			
Acetone	µg/kg	500000_c^A 50^B	9.1 U	13 U	13 U	12 U	22 U	27 U	7.0 U	10 U	5.7 U	25 U	**25**	25 U	25 U	25 U	25 U	25 U	25 U
Acrylonitrile	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	µg/kg	44000^A 60^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromobenzene	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform (tribromomethane)	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U	6.4 U J	6.3 U	5.4 U	6.2 U	6.1 U J	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U J	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzene, n-	µg/kg	500000_c^A 12000^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, tert-	µg/kg	500000_c^A 5900^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Disulfide	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U	6.4 U J	6.3 U	5.4 U	6.2 U	**3.5 J**	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000^A 760^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000_c^A 1100^B	6.8 U	6.5 U	6.0 U J	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobromomethane	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane (Ethyl Chloride)	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	µg/kg	350000^A 370^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorotoluene, 2-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene, 4-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	µg/kg	n/v	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cymene (p-Isopropyltoluene)	µg/kg	500000_c^A 1000000_d^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/kg	n/v	6.8 U	6.5 U	6.0 U	6.4 U J	6.3 U	5.4 U	6.2 U	6.1 U J	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U	6.4 U J	6.3 U	5.4 U	6.2 U	6.1 U J	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane (Methylene Bromide)	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,2-	µg/kg	500000_c^A 1100^B	6.8 U	6.5 U	6.0 U J	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorobenzene, 1,3-	µg/kg	280000^A 2400^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorobenzene, 1,4-	µg/kg	130000^A 1800^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorobutene, trans-1,4-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	µg/kg	n/v	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethane, 1,1-	µg/kg	240000^A 270^B	6.8 U	6.5 U	6.0 U	**67 J**	**2.2 J**	5.4 U	**110**	**2.5 J**	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethane, 1,2-	µg/kg	30000^A 20_g^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethylene, 1,1-	µg/kg	500000_c^A 330^B	6.8 U	6.5 U	6.0 U	**42**	**1.4 J**	5.4 U	**22**	**5.3 J**	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethylene, cis-1,2-	µg/kg	500000_c^A 250^B	6.8 U	6.5 U	6.0 U	**3.6 J**	**4.6 J**	5.4 U	**2.1 J**	**1.4 J**	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethylene, trans-1,2-	µg/kg	500000_c^A 190^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloropropane, 1,2-	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloropropane, 1,3-	µg/kg	500000_c^A 1000000_d^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropane, 2,2-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, 1,1-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloropropene, trans-1,3-	µg/kg	500000_c^A 1000000_d^B	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diisopropyl Ether	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dioxane, 1,4-	µg/kg	130000^A 100_f^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

Table 3
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			B-19	B-20	B/MW-22	B/MW-23		B-24			B/MW-25	B/MW-26	B/MW-27			B/MW-28D		B-29	B-30
Sample Date			**3-Dec-10**	**3-Dec-10**	**3-Dec-10**	**6-Dec-10**	**6-Dec-10**	**6-Dec-10**	**6-Dec-10**	**6-Dec-10**	**6-Dec-10**	**3-Feb-11**	**3-Feb-11**	**3-Feb-11**	**3-Feb-11**	**1-Feb-11**	**1-Feb-11**	**4-Feb-11**	**4-Feb-11**
Sample ID			**BA-B19-S**	**BA-B20-S**	**BA-B22-S**	**BA-B23-S**	**BA-B23-S2**	**BA-B24-S**	**BA-B24-S2**	**BA-B24-S3**	**BA-B25-S**	**BA-B26-S**	**BA-B27-S**	**BA-B27-S2**	**BA-B27-S2/D**	**BA-B28D-S**	**BA-B28D-S2**	**BA-B29-S**	**BA-B30-S**
Sample Depth			**4 - 4.9 ft**	**4 - 4.8 ft**	**15.5 - 16 ft**	**8 - 8.5 ft**	**10 - 10.6 ft**	**0.2 - 0.6 ft**	**6 - 6.6 ft**	**10 - 10.7 ft**	**6 - 7 ft**	**8 - 8.4 ft**	**0.4 - 1.4 ft**	**6.5 - 7.3 ft**	**6.5 - 7.3 ft**	**5.3 - 5.8 ft**	**39 - 40 ft**	**4.5 - 6 ft**	**4.6 - 5.4 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**	**480-1342-1**
Laboratory Sample ID			**RTL0522-01**	**RTL0522-02**	**RTL0493-06**	**RTL0630-05**	**RTL0630-06**	**RTL0630-02**	**RTL0630-03**	**RTL0630-04**	**RTL0630-01**	**480-1409-4**	**480-1409-1**	**480-1409-2**	**480-1409-3**	**480-1342-1**	**480-1342-2**	**480-1418-1**	**480-1418-2**
Sample Type	**Units**	**6NYCRR**													**Field Duplicate**				
Volatile Organic Compounds (cont'd)																			
Ethanol	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Ether	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Tert Butyl Ether	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/kg	390000^{A} 1000^{B}	6.8 U	6.5 U	6.0 U J	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	**9.0**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexanone, 2-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	34 U	32 U	30 U	32 U	31 U	27 U	31 U	31 U	28 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Isopropylbenzene	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl Acetate	µg/kg	n/v	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U *	5.0 U *	5.0 U *	5.0 U *	5.0 U *	5.0 U *	5.0 U *	5.0 U *
Methyl Ethyl Ketone (MEK)	µg/kg	500000_{c}^{A} 120^{B}	34 U	32 U	30 U	32 U	31 U	27 U	31 U	31 U	28 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	34 U	32 U	30 U	32 U	31 U	27 U	31 U	31 U	28 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000_{c}^{A} 930^{B}	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	µg/kg	n/v	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	**38**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride (Dichloromethane)	µg/kg	500000_{c}^{A} 50^{B}	**45**	**38**	**6.2**	**5.7 J**	**11**	**6.6**	**8.2**	**4.8 J**	**5.2 J**	5.0 U	**6.1**	5.0 U	**5.1**	**7.1**	**5.6**	**11**	5.0 U
Naphthalene	µg/kg	500000_{c}^{A} 12000^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenylbutane, 2- (sec-Butylbenzene)	µg/kg	500000_{c}^{A} 11000^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylbenzene, n-	µg/kg	500000_{c}^{A} 3900^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tert Amyl Methyl Ether	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tert-Butyl Alcohol	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,2,2-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethylene (PCE)	µg/kg	150000^{A} 1300^{B}	6.8 U	6.5 U	6.0 U J	6.4 U	6.3 U	5.4 U	**12**	**89 J**	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrahydrofuran	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/kg	500000_{c}^{A} 700^{B}	6.8 U	6.5 U	6.0 U J	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorobenzene, 1,2,3-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorobenzene, 1,3,5-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/kg	500000_{c}^{A} 680^{B}	6.8 U	6.5 U	6.0 U	**12**	**18**	5.4 U	**4000 D^{B}**	**400**	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethane, 1,1,2-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethylene (TCE)	µg/kg	200000^{A} 470^{B}	6.8 U	6.5 U	6.0 U J	**10000^{B}**	**89**	**2.3 J**	**35000 D^{B}**	**5100^{B}**	**7.3**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloropropane, 1,2,3-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trimethylbenzene, 1,2,4-	µg/kg	190000^{A} 3600^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/kg	190000^{A} 8400^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/kg	13000^{A} 20^{B}	6.8 U	6.5 U	6.0 U	6.4 U	6.3 U	5.4 U	6.2 U	6.1 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylene, m & p-	µg/kg	$500000_{c,p}^{A}$ 1600_{p}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene, o-	µg/kg	$500000_{c,p}^{A}$ 1600_{p}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/kg	500000_{c}^{A} 1600^{B}	14 U	13 U	12 U J	13 U	13 U	11 U	12 U	12 U	11 U	10 U	**13**	10 U	10 U	10 U	10 U	10 U	10 U
Total VOC	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	**45**	**38**	**6.2**	**10130.3**	**126.2**	**8.9**	**39154.3**	**5606.5**	**12.5**	**ND**	**91.1**	**ND**	**5.1**	**7.1**	**5.6**	**11**	**ND**

for notes.

Sample Location			**B-31**		**B-32**
Sample Date			**4-Feb-11**	**4-Feb-11**	**7-Feb-11**
Sample ID			**BA-B31-S**	**BA-B31-S2**	**BA-B32-S**
Sample Depth			**0.3 - 0.9 ft**	**8 - 9 ft**	**6 - 8.4 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-1342-1**	**480-1342-1**	**480-1342-1**
Laboratory Sample ID			**480-1418-3**	**480-1418-4**	**480-1441-1**
Sample Type	**Units**	**6NYCRR**			
General Chemistry					
Total Solids	%	n/v	-	-	-
Volatile Organic Compounds					
Acetone	µg/kg	500000_c^A 50^B	25 U	25 U	25 U
Acrylonitrile	µg/kg	n/v	-	-	-
Benzene	µg/kg	44000^A 60^B	5.0 U	5.0 U	5.0 U
Bromobenzene	µg/kg	n/v	-	-	-
Bromodichloromethane	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Bromoform (tribromomethane)	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Butylbenzene, n-	µg/kg	500000_c^A 12000^B	-	-	-
Butylbenzene, tert-	µg/kg	500000_c^A 5900^B	-	-	-
Carbon Disulfide	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000^A 760^B	5.0 U	5.0 U	5.0 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000_c^A 1100^B	5.0 U	5.0 U	5.0 U
Chlorobromomethane	µg/kg	n/v	-	-	-
Chloroethane (Ethyl Chloride)	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Chloroform	µg/kg	350000^A 370^B	5.0 U	5.0 U	5.0 U
Chloromethane	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Chlorotoluene, 2-	µg/kg	n/v	-	-	-
Chlorotoluene, 4-	µg/kg	n/v	-	-	-
Cyclohexane	µg/kg	n/v	**15**	5.0 U	5.0 U
Cymene (p-Isopropyltoluene)	µg/kg	500000_c^A 1000000_d^B	-	-	-
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/kg	n/v	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Dibromomethane (Methylene Bromide)	µg/kg	n/v	-	-	-
Dichlorobenzene, 1,2-	µg/kg	500000_c^A 1100^B	5.0 U	5.0 U	5.0 U
Dichlorobenzene, 1,3-	µg/kg	280000^A 2400^B	5.0 U	5.0 U	5.0 U
Dichlorobenzene, 1,4-	µg/kg	130000^A 1800^B	5.0 U	5.0 U	5.0 U
Dichlorobutene, trans-1,4-	µg/kg	n/v	-	-	-
Dichlorodifluoromethane	µg/kg	n/v	5.0 U	5.0 U	5.0 U
Dichloroethane, 1,1-	µg/kg	240000^A 270^B	5.0 U	**8.0**	5.0 U
Dichloroethane, 1,2-	µg/kg	30000^A 20_g^B	5.0 U	5.0 U	5.0 U
Dichloroethylene, 1,1-	µg/kg	500000_c^A 330^B	5.0 U	5.0 U	5.0 U
Dichloroethylene, cis-1,2-	µg/kg	500000_c^A 250^B	5.0 U	5.0 U	5.0 U
Dichloroethylene, trans-1,2-	µg/kg	500000_c^A 190^B	5.0 U	5.0 U	5.0 U
Dichloropropane, 1,2-	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Dichloropropane, 1,3-	µg/kg	500000_c^A 1000000_d^B	-	-	-
Dichloropropane, 2,2-	µg/kg	n/v	-	-	-
Dichloropropene, 1,1-	µg/kg	n/v	-	-	-
Dichloropropene, cis-1,3-	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Dichloropropene, trans-1,3-	µg/kg	500000_c^A 1000000_d^B	5.0 U	5.0 U	5.0 U
Diisopropyl Ether	µg/kg	n/v	-	-	-
Dioxane, 1,4-	µg/kg	130000^A 100_f^B	-	-	-

See last page for notes.

Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**B-31**		**B-32**
Sample Date			**4-Feb-11**	**4-Feb-11**	**7-Feb-11**
Sample ID			**BA-B31-S**	**BA-B31-S2**	**BA-B32-S**
Sample Depth			**0.3 - 0.9 ft**	**8 - 9 ft**	**6 - 8.4 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-1342-1**	**480-1342-1**	**480-1342-1**
Laboratory Sample ID			**480-1418-3**	**480-1418-4**	**480-1441-1**
Sample Type	**Units**	**6NYCRR**			
Volatile Organic Compounds (cont'd)					
Ethanol	µg/kg	n/v	-	-	-
Ethyl Ether	µg/kg	n/v	-	-	-
Ethyl Tert Butyl Ether	µg/kg	n/v	-	-	-
Ethylbenzene	µg/kg	390000^{A} 1000^{B}	**7.2**	5.0 U	5.0 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	-	-	-
Hexanone, 2-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	25 U	25 U	25 U
Isopropylbenzene	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	5.0 U	5.0 U	5.0 U
Methyl Acetate	µg/kg	n/v	5.0 U *	5.0 U *	5.0 U *
Methyl Ethyl Ketone (MEK)	µg/kg	500000_{c}^{A} 120^{B}	25 U	25 U	25 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	25 U	25 U	25 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000_{c}^{A} 930^{B}	5.0 U	5.0 U	5.0 U
Methylcyclohexane	µg/kg	n/v	**34**	5.0 U	5.0 U
Methylene Chloride (Dichloromethane)	µg/kg	500000_{c}^{A} 50^{B}	**5.2**	5.0 U	**10**
Naphthalene	µg/kg	500000_{c}^{A} 12000^{B}	-	-	-
Phenylbutane, 2- (sec-Butylbenzene)	µg/kg	500000_{c}^{A} 11000^{B}	-	-	-
Propylbenzene, n-	µg/kg	500000_{c}^{A} 3900^{B}	-	-	-
Styrene	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	5.0 U	5.0 U	5.0 U
Tert Amyl Methyl Ether	µg/kg	n/v	-	-	-
Tert-Butyl Alcohol	µg/kg	n/v	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/kg	n/v	-	-	-
Tetrachloroethane, 1,1,2,2-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	5.0 U	5.0 U	5.0 U
Tetrachloroethylene (PCE)	µg/kg	150000^{A} 1300^{B}	5.0 U	5.0 U	5.0 U
Tetrahydrofuran	µg/kg	n/v	-	-	-
Toluene	µg/kg	500000_{c}^{A} 700^{B}	5.0 U	5.0 U	5.0 U
Trichlorobenzene, 1,2,3-	µg/kg	n/v	-	-	-
Trichlorobenzene, 1,2,4-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	5.0 U	5.0 U	5.0 U
Trichlorobenzene, 1,3,5-	µg/kg	n/v	-	-	-
Trichloroethane, 1,1,1-	µg/kg	500000_{c}^{A} 680^{B}	5.0 U	5.0 U	5.0 U
Trichloroethane, 1,1,2-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	5.0 U	5.0 U	5.0 U
Trichloroethylene (TCE)	µg/kg	200000^{A} 470^{B}	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	5.0 U	5.0 U	5.0 U
Trichloropropane, 1,2,3-	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	-	-	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	5.0 U	5.0 U	5.0 U
Trimethylbenzene, 1,2,4-	µg/kg	190000^{A} 3600^{B}	-	-	-
Trimethylbenzene, 1,3,5-	µg/kg	190000^{A} 8400^{B}	-	-	-
Vinyl chloride	µg/kg	13000^{A} 20^{B}	5.0 U	5.0 U	5.0 U
Xylene, m & p-	µg/kg	$500000_{c,p}^{A}$ 1600_{p}^{B}	-	-	-
Xylene, o-	µg/kg	$500000_{c,p}^{A}$ 1600_{p}^{B}	-	-	-
Xylenes, Total	µg/kg	500000_{c}^{A} 1600^{B}	**22**	10 U	10 U
Total VOC	µg/kg	500000_{c}^{A} 1000000_{d}^{B}	**83.4**	**8.0**	**10**

Notes:

1	Data collected during 2009 Phase II.
6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
6.5^{A}	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
d	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
g	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
p	The criterion is applicable to total xylenes, and the individual isomers should be added for comparison.
*	Indicates analysis is not within the quality control limits.
D	Reported result taken from diluted sample analysis.
E	Compound was over the calibration range.
J	Indicates estimated value.
TALBU	Test America Laboratories Inc., Buffalo, New York
ft	feet
ND	Not detected

Sample Location			**B/MW-6**	**B/MW-9**	**B/MW-10**	**B/MW-11**	**B/MW-12**	**B/MW-13**	**B/MW-14**	**B-15**	**B-17**	**B-19**	**B-20**
Sample Date			**1-Dec-10**	**30-Nov-10**	**30-Nov-10**	**30-Nov-10**	**29-Nov-10**	**29-Nov-10**	**30-Nov-10**	**2-Dec-10**	**3-Dec-10**	**3-Dec-10**	**3-Dec-10**
Sample ID			**BA-B6-S**	**BA-B9-S**	**BA-B10-S**	**BA-B11-S**	**BA-B12-S**	**BA-B13-S**	**BA-B14-S**	**BA-B15-S**	**BA-B17-S**	**BA-B19-S**	**BA-B20-S**
Sample Depth			**2 - 2.8 ft**	**8 - 10 ft**	**8 - 9.6 ft**	**8 - 9 ft**	**8 - 9 ft**	**8 - 8.6 ft**	**8 - 10 ft**	**8 - 10.3 ft**	**4.6 - 6.6 ft**	**4 - 4.9 ft**	**4 - 4.8 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**
Laboratory Sample ID			**RTL0315-03**	**RTK1728-04**	**RTL0315-01**	**RTL0315-02**	**RTK1728-01**	**RTK1728-02**	**RTK1728-03**	**RTL0493-04**	**RTL0522-03**	**RTL0522-01**	**RTL0522-02**
Sample Type	**Units**	**6NYCRR**											
General Chemistry													
Total Solids	%	n/v	**77**	**77**	**84**	**82**	**84**	**84**	**77**	**78**	**79**	**73**	**77**
Semi-Volatile Organic Compounds													
Acenaphthene	µg/kg	500000_c^A 98000^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Acenaphthylene	µg/kg	500000_c^A 107000^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Acetophenone	µg/kg	n/v	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Anthracene	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Atrazine	µg/kg	n/v	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Benzaldehyde	µg/kg	n/v	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Benzo(a)anthracene	µg/kg	5600^A 1000_g^B	220 U	220 U	200 U	210 U	200 U	**87 JD**	220 U	220 U	210 U	230 U	220 U
Benzo(a)pyrene	µg/kg	1000_g^A 22000^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Benzo(b)fluoranthene	µg/kg	5600^A 1700^B	220 U	220 U	200 U	210 U	200 U	**93 JD**	220 U	220 U	210 U	230 U	220 U
Benzo(g,h,i)perylene	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Benzo(k)fluoranthene	µg/kg	56000^A 1700^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Bis(2-Chloroethoxy)methane	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Bis(2-Chloroethyl)ether	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000_c^A 1000000_d^B	**110 J B**	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Butyl Benzyl Phthalate	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Caprolactam	µg/kg	n/v	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Carbazole	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Chloro-3-methyl phenol, 4-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Chloroaniline, 4	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Chloronaphthalene, 2-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Chlorophenol, 2-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Chrysene	µg/kg	56000^A 1000_g^B	220 U	220 U	200 U	210 U	200 U	**70 JD**	**16 J**	220 U	210 U	230 U	220 U
Cresol, o- (Methylphenol, 2-)	µg/kg	500000_c^A 330_f^B	220 U	220 U	200 U	210 U	200 U	***990 U D***	220 U	220 U	210 U	230 U	220 U
Cresol, p- (Methylphenol, 4-)	µg/kg	500000_c^A 330_f^B	***420 U***	***420 U***	***390 U***	***400 U***	***390 U***	***1900 U D***	***420 U***	***420 U***	***410 U***	***440 U***	***420 U***
Dibenzo(a,h)anthracene	µg/kg	560^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	***990 U D***	220 U	220 U	210 U	230 U	220 U
Dibenzofuran	µg/kg	350000^A 210000^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Dichlorobenzidine, 3,3'-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Dichlorophenol, 2,4-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Diethyl Phthalate	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Dimethyl Phthalate	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Dimethylphenol, 2,4-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Di-n-Butyl Phthalate	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Dinitro-o-cresol, 4,6-	µg/kg	500000_c^A 1000000_d^B	420 U	420 U	390 U	400 U	390 U	1900 U D	420 U	420 U	410 U	440 U	420 U
Dinitrophenol, 2,4-	µg/kg	500000_c^A 1000000_d^B	420 U	420 U	390 U	400 U	390 U	1900 U D	420 U	420 U	410 U	440 U	420 U
Dinitrotoluene, 2,4-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Dinitrotoluene, 2,6-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U

See next page for notes.

Table 3
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**B/MW-6**	**B/MW-9**	**B/MW-10**	**B/MW-11**	**B/MW-12**	**B/MW-13**	**B/MW-14**	**B-15**	**B-17**	**B-19**	**B-20**
Sample Date			**1-Dec-10**	**30-Nov-10**	**30-Nov-10**	**30-Nov-10**	**29-Nov-10**	**29-Nov-10**	**30-Nov-10**	**2-Dec-10**	**3-Dec-10**	**3-Dec-10**	**3-Dec-10**
Sample ID			**BA-B6-S**	**BA-B9-S**	**BA-B10-S**	**BA-B11-S**	**BA-B12-S**	**BA-B13-S**	**BA-B14-S**	**BA-B15-S**	**BA-B17-S**	**BA-B19-S**	**BA-B20-S**
Sample Depth			**2 - 2.8 ft**	**8 - 10 ft**	**8 - 9.6 ft**	**8 - 9 ft**	**8 - 9 ft**	**8 - 8.6 ft**	**8 - 10 ft**	**8 - 10.3 ft**	**4.6 - 6.6 ft**	**4 - 4.9 ft**	**4 - 4.8 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**
Laboratory Sample ID			**RTL0315-03**	**RTK1728-04**	**RTL0315-01**	**RTL0315-02**	**RTK1728-01**	**RTK1728-02**	**RTK1728-03**	**RTL0493-04**	**RTL0522-03**	**RTL0522-01**	**RTL0522-02**
Sample Type	**Units**	**6NYCRR**											
Semi-Volatile Organic Compounds (cont'd)													
Di-n-Octyl phthalate	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Fluoranthene	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	**160 JD**	220 U	220 U	210 U	230 U	220 U
Fluorene	µg/kg	500000_c^A 386000^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Hexachlorobenzene	µg/kg	6000^A 3200^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Hexachlorobutadiene	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Hexachlorocyclopentadiene	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Hexachloroethane	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Indeno(1,2,3-cd)pyrene	µg/kg	5600^A 8200^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Isophorone	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Methylnaphthalene, 2-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Naphthalene	µg/kg	500000_c^A 12000^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Nitroaniline, 2-	µg/kg	500000_c^A 1000000_d^B	420 U	420 U	390 U	400 U	390 U	1900 U D	420 U	420 U	410 U	440 U	420 U
Nitroaniline, 3-	µg/kg	500000_c^A 1000000_d^B	420 U	420 U	390 U	400 U	390 U	1900 U D	420 U	420 U	410 U	440 U	420 U
Nitroaniline, 4-	µg/kg	500000_c^A 1000000_d^B	420 U	420 U	390 U	400 U	390 U	1900 U D	420 U	420 U	410 U	440 U	420 U
Nitrobenzene	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Nitrophenol, 2-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Nitrophenol, 4-	µg/kg	500000_c^A 1000000_d^B	420 U	420 U	390 U	400 U	390 U	1900 U D	420 U	420 U	410 U	440 U	420 U
N-Nitrosodi-n-Propylamine	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
n-Nitrosodiphenylamine	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Pentachlorophenol	µg/kg	6700^A 800_f^B	420 U	420 U	390 U	400 U	390 U	***1900 U D***	420 U	420 U	410 U	440 U	420 U
Phenanthrene	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	**120 JD**	220 U	220 U	210 U	230 U	220 U
Phenol	µg/kg	500000_c^A 330_f^B	220 U	220 U	200 U	210 U	200 U	***990 U D***	220 U	220 U	210 U	230 U	220 U
Pyrene	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	**120 JD**	**19 J**	220 U	210 U	230 U	220 U
Trichlorophenol, 2,4,5-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U
Trichlorophenol, 2,4,6-	µg/kg	500000_c^A 1000000_d^B	220 U	220 U	200 U	210 U	200 U	990 U D	220 U	220 U	210 U	230 U	220 U

Notes:

6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
d	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
f	For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value.
g	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
B	Analyte was detected in the associated Method Blank.
D	Reported result taken from diluted sample analysis.
J	Indicates estimated value.
TALBU	Test America Laboratories Inc., Buffalo, New York
ft	feet

Table 3
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**B/MW-9**	**B/MW-10**	**B/MW-14**	**B-15**	**B-17**
Sample Date			**30-Nov-10**	**30-Nov-10**	**30-Nov-10**	**2-Dec-10**	**3-Dec-10**
Sample ID			**BA-B9-S**	**BA-B10-S**	**BA-B14-S**	**BA-B15-S**	**BA-B17-S**
Sample Depth			**8 - 10 ft**	**8 - 9.6 ft**	**8 - 10 ft**	**8 - 10.3 ft**	**4.6 - 6.6 ft**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**	**RTK1728**
Laboratory Sample ID			**RTK1728-04**	**RTL0315-01**	**RTK1728-03**	**RTL0493-04**	**RTL0522-03**
Sample Type	**Units**	**6NYCRR**					
Metals							
Aluminum	mg/kg	10000_e^{AB}	**7130**	**6900**	**8810**	**8980 B**	**7490**
Antimony	mg/kg	10000_e^{AB}	19.1 U J	17.6 U J	19.3 U J	**1.0 J**	18.4 U J
Arsenic	mg/kg	16_g^{AB}	**7.5**	**6.9**	**9.5**	**7.7**	**7.0**
Barium	mg/kg	400^A 820^B	**53.2**	**50.9**	**45.8**	**69.6**	**46.9**
Beryllium	mg/kg	590^A 47^B	**0.360**	**0.359**	**0.450**	**0.439**	**0.377**
Cadmium	mg/kg	9.3^A 7.5^B	**0.141 J**	**0.146 J**	**0.149 J**	**0.145 J**	**0.140 J**
Calcium	mg/kg	10000_e^{AB}	**26300 B^{AB}**	**24100 B^{AB}**	**25200 B^{AB}**	**28600 B^{AB}**	**26200 B^{AB}**
Chromium (Total)	mg/kg	NS,q^{AB}	**9.24**	**9.09**	**11.5**	**12.7**	**10.1**
Cobalt	mg/kg	10000_e^{AB}	**7.68**	**7.40**	**9.78**	**9.88**	**8.49**
Copper	mg/kg	270^A 1720^B	**17.2**	**15.3**	**17.5**	**18.1**	**15.9**
Iron	mg/kg	10000_e^{AB}	**17000 B^{AB}**	**16400 B^{AB}**	**21100 B^{AB}**	**20200 B^{AB}**	**17600 B^{AB}**
Lead	mg/kg	1000^A 450^B	**10.2**	**9.6**	**11.7**	**11.0**	**9.3**
Magnesium	mg/kg	10000_e^{AB}	**11300^{AB}**	**10500^{AB}**	**11700^{AB}**	**12600^{AB}**	**11300^{AB}**
Manganese	mg/kg	10000_e^A 2000_g^B	**432 B**	**409 B**	**482 B**	**597 B**	**378**
Mercury	mg/kg	2.8_k^A 0.73^B	0.0241 U	0.0238 U	0.0256 U	0.0255 U	0.0246 U
Nickel	mg/kg	310^A 130^B	**17.0**	**16.4**	**21.5**	**21.9**	**18.8**
Potassium	mg/kg	10000_e^{AB}	**1430 J**	**1310 J**	**1580 J**	**1570 J**	**1300 J**
Selenium	mg/kg	1500^A 4_g^B	***5.1 U***	***4.7 U***	***5.1 U***	***5.0 U***	***4.9 U***
Silver	mg/kg	1500^A 8.3^B	0.637 U	0.585 U	0.643 U	0.631 U	0.615 U
Sodium	mg/kg	10000_e^{AB}	**96.4 J**	**111 J**	**88.4 J**	**120 J**	**78.2 J**
Thallium	mg/kg	10000_e^{AB}	7.6 U	7.0 U	7.7 U	7.6 U	7.4 U
Vanadium	mg/kg	10000_e^{AB}	**11.2**	**10.7**	**13.3**	**14.5**	**12.7**
Zinc	mg/kg	10000_e^A 2480^B	**46.2 B**	**45.0 B**	**52.3 B**	**50.1 B**	**43.6**
Pesticides							
Aldrin	µg/kg	680^A 190^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
BHC, alpha-	µg/kg	3400^A 20^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
BHC, beta-	µg/kg	3000^A 90^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
BHC, delta-	µg/kg	500000_c^A 250^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Camphechlor (Toxaphene)	µg/kg	500000_c^A 1000000_d^B	21 U	20 U	21 U J	21 U	21 U
Chlordane (Total)	µg/kg	500000_c^A 1000000_d^B	21 U	-	21 U J	-	-
Chlordane, alpha-	µg/kg	24000^A 2900^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Chlordane, gamma-	µg/kg	500000_c^A 1000000_d^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
DDD (p,p'-DDD)	µg/kg	92000^A 14000^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
DDE (p,p'-DDE)	µg/kg	62000^A 17000^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
DDT (p,p'-DDT)	µg/kg	47000^A 136000^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Dieldrin	µg/kg	1400^A 100^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endosulfan I	µg/kg	200000_j^A 102000^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endosulfan II	µg/kg	200000_j^A 102000^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endosulfan Sulfate	µg/kg	200000_j^A 1000000_d^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endrin	µg/kg	89000^A 60^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endrin Aldehyde	µg/kg	500000_c^A 1000000_d^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endrin Ketone	µg/kg	500000_c^A 1000000_d^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Heptachlor	µg/kg	15000^A 380^B	2.1 U	2.0 U J	2.1 U J	2.1 U J	2.1 U J
Heptachlor Epoxide	µg/kg	500000_c^A 1000000_d^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Lindane (Hexachlorocyclohexane, gamma)	µg/kg	9200^A 100^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Methoxychlor (4,4'-Methoxychlor)	µg/kg	500000_c^A 1000000_d^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
See next page for notes.							
Polychlorinated Biphenyls							
Aroclor 1016	µg/kg	1000_o^A 3200_o^B	21 U J	20 U J	21 U J	21 U J	21 U J
Aroclor 1221	µg/kg	1000_o^A 3200_o^B	21 U	20 U	21 U	21 U	21 U
Aroclor 1232	µg/kg	1000_o^A 3200_o^B	21 U	20 U	21 U	21 U	21 U
Aroclor 1242	µg/kg	1000_o^A 3200_o^B	21 U	20 U	21 U	21 U	21 U
Aroclor 1248	µg/kg	1000_o^A 3200_o^B	21 U	20 U	21 U	21 U	21 U
Aroclor 1254	µg/kg	1000_o^A 3200_o^B	21 U	20 U	21 U	21 U	21 U
Aroclor 1260	µg/kg	1000_o^A 3200_o^B	21 U	20 U	21 U	21 U	21 U
Aroclor 1262	µg/kg	n/v	21 U	20 U	21 U	21 U	21 U
Aroclor 1268	µg/kg	n/v	21 U	20 U	21 U	21 U	21 U

Notes:

6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
^{A}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
^{B}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Groundwater
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_{NS,q}$	No SCO has been established for this compound. No SCO has been established for total chromium; however, see standards for trivalent and hexavalent chromium. For commercial use, these are 1500 and 400 mg/kg respectively.
$_c$	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
$_d$	The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg (Organics) and 10000 mg/kg (Inorganics). See 6 NYCRR Part 375 TSD Section 9.3.
$_e$	The SCOS for metals were capped at a maximum value of 10,000 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3.
$_g$	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
$_j$	This SCO is the sum of endosulfan I, endosulfan II, and endosulfan sulfate.
$_o$	The criterion is applicable to total PCBs, and the individual aroclors should be added for comparison.
B	Analyte was detected in the associated Method Blank.
J	Indicates estimated value.
TALBU	Test America Laboratories Inc., Buffalo, New York
ft	feet

Table 4
Summary of RI Analytical Results in Groundwater
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			BS-1	BS-2			BS-3			BS-4			B/MW-5		B/MW-6		B/MW-7	
Sample Date			10-Dec-09	10-Dec-09	5-Jan-11	21-Apr-11	11-Dec-09	5-Jan-11	21-Apr-11	11-Dec-09	4-Jan-11	21-Apr-11	5-Jan-11	20-Apr-11	6-Jan-11	21-Apr-11	5-Jan-11	20-Apr-11
Sample ID			BS-GW-1	BS-GW-2	BA-BS2-W	BA-BS2-R2-W	BS-GW-3	BA-BS3-W	BA-BS3-R2-W	BS-GW-4	BA-BS4-W	BA-BS4-R2-W	BA-MW5-W	BA-MW5-R2-W	BA-MW6-W	BA-MW6-R2-W	BA-MW7-W	BA-MW7-R2-W
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			SPECTRUM	SPECTRUM	TALBU	TALBU	SPECTRUM	TALBU	TALBU	SPECTRUM	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory Work Order			SB05469	SB05469	480-548-1	480-4050-1	SB05538	480-548-1	480-4050-1	SB05538	480-548-1	480-4050-1	480-548-1	480-4050-1	480-548-1	480-4050-1	480-548-1	480-4050-1
Laboratory Sample ID			SB05469-03	SB05469-04	480-633-6	480-4050-7	SB05538-02	480-633-5	480-4050-8	SB05538-04	480-548-3	480-4050-9	480-633-4	480-4050-4	480-689-5	480-4050-10	480-633-2	480-4050-5
Sample Type	Units	TOGS	1	1			1			1								
Volatile Organic Compounds																		
Acetone	µg/L	50^{A}	4.6 U	45.8 U	10 U	10 U	4.6 U	10 U	10 U	22.9 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acrylonitrile	µg/L	5$_{**}^{B}$	0.5 U	4.8 U	5.0 U	-	0.5 U	5.0 U	-	2.4 U	5.0 U	-	5.0 U	-	5.0 U	-	5.0 U	-
Benzene	µg/L	1^{B}	0.5 U	***4.9 U***	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	***2.4 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	µg/L	5$_{**}^{B}$	0.5 U	4.7 U	-	-	0.5 U	-	-	2.4 U	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	50^{A}	0.5 U	4.9 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	2.4 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform (tribromomethane)	µg/L	50^{A}	1.0 U	9.7 U	1.0 U	1.0 U J	1.0 U	1.0 U	1.0 U J	4.8 U	1.0 U	1.0 U J	1.0 U	1.0 U	1.0 U	1.0 U J	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5$_{**}^{B}$	1.2 U	***12.5 U***	1.0 U	1.0 U	1.2 U	1.0 U	1.0 U	***6.2 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Butylbenzene, n-	µg/L	5$_{**}^{B}$	0.8 U	***8.3 U***	-	-	0.8 U	-	-	4.2 U	-	-	-	-	-	-	-	-
Butylbenzene, tert-	µg/L	5$_{**}^{B}$	0.5 U	***5.1 U***	-	-	0.5 U	-	-	2.6 U	-	-	-	-	-	-	-	-
Carbon Disulfide	µg/L	60^{A}	0.9 U	8.9 U	1.0 U	1.0 U	0.9 U	1.0 U	1.0 U	4.4 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/L	5^{B}	0.8 U	***8.5 U***	1.0 U	1.0 U	0.8 U	1.0 U	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorinated Fluorocarbon (Freon 113)	µg/L	5$_{**}^{B}$	1.0 U	***9.9 U***	-	1.0 U	1.0 U	-	1.0 U	5.0 U	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Chlorobenzene (Monochlorobenzene)	µg/L	5$_{**}^{B}$	0.5 U	5.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	5$_{**}^{B}$	1.0 U	***9.5 U***	1.0 U	-	1.0 U	1.0 U	-	4.8 U	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U	-
Chloroethane (Ethyl Chloride)	µg/L	5$_{**}^{B}$	1.1 U	***11.0 U***	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	***5.5 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	7^{B}	0.8 U	***8.1 U***	1.0 U	1.0 U	0.8 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	5$_{**}^{B}$	0.9 U	***8.8 U***	1.0 U	1.0 U	0.9 U	1.0 U	1.0 U	4.4 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorotoluene, 2-	µg/L	5$_{**}^{B}$	0.7 U	***6.7 U***	-	-	0.7 U	-	-	3.4 U	-	-	-	-	-	-	-	-
Chlorotoluene, 4-	µg/L	5$_{**}^{B}$	0.5 U	***5.3 U***	-	-	0.5 U	-	-	2.6 U	-	-	-	-	-	-	-	-
Cyclohexane	µg/L	n/v	-	-	-	1.0 U	-	-	1.0 U	-	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Cymene (p-Isopropyltoluene)	µg/L	5$_{**}^{B}$	0.5 U	***5.1 U***	-	-	0.5 U	-	-	2.6 U	-	-	-	-	-	-	-	-
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/L	0.04^{B}	***1.7 U***	***16.6 U***	***1.0 U***	***1.0 U***	***1.7 U***	***1.0 U***	***1.0 U***	***8.3 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dibromochloromethane	µg/L	50^{A}	0.4 U	4.4 U	1.0 U	1.0 U J	0.4 U	1.0 U	1.0 U J	2.2 U	1.0 U	1.0 U J	1.0 U	1.0 U	1.0 U	1.0 U J	1.0 U	1.0 U
Dibromomethane (Methylene Bromide)	µg/L	5$_{**}^{B}$	0.7 U	***6.7 U***	1.0 U	-	0.7 U	1.0 U	-	3.4 U	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U	-
Dichlorobenzene, 1,2-	µg/L	3^{B}	0.4 U	***4.5 U***	1.0 U	1.0 U	0.4 U	1.0 U	1.0 U	2.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,3-	µg/L	3^{B}	0.5 U	***5.4 U***	-	1.0 U	0.5 U	-	1.0 U	2.7 U	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Dichlorobenzene, 1,4-	µg/L	3^{B}	0.5 U	***5.2 U***	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	2.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobutene, trans-1,4-	µg/L	n/v	2.8 U	27.7 U	5.0 U	-	2.8 U	5.0 U	-	13.8 U	5.0 U	-	5.0 U	-	5.0 U	-	5.0 U	-
Dichlorodifluoromethane	µg/L	5$_{**}^{B}$	0.9 U	***8.8 U***	-	1.0 U	0.9 U	-	1.0 U	4.4 U	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Dichloroethane, 1,1-	µg/L	5$_{**}^{B}$	0.6 U	**8.4 J^{B}**	**200^{B}**	1.0 U	0.6 U	1.0 U	1.0 U	**110^{B}**	**190^{B}**	**1.2**	1.0 U	1.0 U	1.0 U	**1.0**	1.0 U	1.0 U
Dichloroethane, 1,2-	µg/L	0.6^{B}	0.6 U	***6.3 U***	***1.0 U***	***1.0 U***	0.6 U	***1.0 U***	***1.0 U***	***3.2 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloroethylene, 1,1-	µg/L	5$_{**}^{B}$	0.7 U	***7.2 U***	**28^{B}**	1.0 U	0.7 U	1.0 U	1.0 U	**25.6^{B}**	**120^{B}**	**2.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloroethylene, cis-1,2-	µg/L	5$_{**}^{B}$	0.6 U	**6.6 J^{B}**	**160^{B}**	**1.4**	0.6 U	1.0 U	1.0 U	**8.0^{B}**	**12^{B}**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/L	5$_{**}^{B}$	0.9 U	***9.1 U***	**1.7**	1.0 U	0.9 U	1.0 U	1.0 U	4.6 U	**1.4**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/L	1^{B}	0.5 U	***5.3 U***	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	***2.6 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,3-	µg/L	5$_{**}^{B}$	0.7 U	***6.6 U***	-	-	0.7 U	-	-	3.3 U	-	-	-	-	-	-	-	-
Dichloropropane, 2,2-	µg/L	5$_{**}^{B}$	0.6 U	***6.2 U***	-	-	0.6 U	-	-	3.1 U	-	-	-	-	-	-	-	-
Dichloropropene, 1,1-	µg/L	5$_{**}^{B}$	0.8 U	***7.8 U***	-	-	0.8 U	-	-	3.9 U	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/L	0.4$_{p}^{B}$	0.4 U	***4.0 U***	***1.0 U***	***1.0 U***	0.4 U	***1.0 U***	***1.0 U***	***2.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloropropene, trans-1,3-	µg/L	0.4$_{p}^{B}$	0.4 U	***3.9 U***	***1.0 U***	***1.0 U***	0.4 U	***1.0 U***	***1.0 U***	***2.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Diisopropyl Ether	µg/L	n/v	0.6 U	5.5 U	-	-	0.6 U	-	-	2.8 U	-	-	-	-	-	-	-	-
Dioxane, 1,4-	µg/L	n/v	20.0 U	200 U	-	-	20.0 U	-	-	100 U	-	-	-	-	-	-	-	-
Ethanol	µg/L	n/v	37.7 U	377 U	-	-	37.7 U	-	-	189 U	-	-	-	-	-	-	-	-
Ethyl Ether	µg/L	n/v	0.6 U	6.4 U	-	-	0.6 U	-	-	3.2 U	-	-	-	-	-	-	-	-
Ethyl Tert Butyl Ether	µg/L	n/v	0.5 U	5.4 U	-	-	0.5 U	-	-	2.7 U	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	5$_{**}^{B}$	0.5 U	5.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

See last page for notes.

Table 4
Summary of RI Analytical Results in Groundwater
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			BS-1	BS-2			BS-3			BS-4			B/MW-5		B/MW-6		B/MW-7	
Sample Date			10-Dec-09	10-Dec-09	5-Jan-11	21-Apr-11	11-Dec-09	5-Jan-11	21-Apr-11	11-Dec-09	4-Jan-11	21-Apr-11	5-Jan-11	20-Apr-11	6-Jan-11	21-Apr-11	5-Jan-11	20-Apr-11
Sample ID			BS-GW-1	BS-GW-2	BA-BS2-W	BA-BS2-R2-W	BS-GW-3	BA-BS3-W	BA-BS3-R2-W	BS-GW-4	BA-BS4-W	BA-BS4-R2-W	BA-MW5-W	BA-MW5-R2-W	BA-MW6-W	BA-MW6-R2-W	BA-MW7-W	BA-MW7-R2-W
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			SPECTRUM	SPECTRUM	TALBU	TALBU	SPECTRUM	TALBU	TALBU	SPECTRUM	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory Work Order			SB05469	SB05469	480-548-1	480-4050-1	SB05538	480-548-1	480-4050-1	SB05538	480-548-1	480-4050-1	480-548-1	480-4050-1	480-548-1	480-4050-1	480-548-1	480-4050-1
Laboratory Sample ID			SB05469-03	SB05469-04	480-633-6	480-4050-7	SB05538-02	480-633-5	480-4050-8	SB05538-04	480-548-3	480-4050-9	480-633-4	480-4050-4	480-689-5	480-4050-10	480-633-2	480-4050-5
Sample Type	Units	TOGS	1	1			1			1								
Volatile Organic Compounds (cont'd)																		
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	0.0006[B]	***0.5 U***	***4.9 U***	***1.0 U***	***1.0 U***	***0.5 U***	***1.0 U***	***1.0 U***	***2.4 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Hexachlorobutadiene	µg/L	0.5[B]	0.5 U	***4.9 U***	-	-	0.5 U	-	-	***2.4 U***	-	-	-	-	-	-	-	-
Hexanone, 2-	µg/L	50[A]	2.7 U	26.8 U	5.0 U	5.0 U	2.7 U	5.0 U	5.0 U	13.4 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Iodomethane	µg/L	5**[B]	-	-	1.0 U	-	-	1.0 U	-	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U	-
Isopropylbenzene	µg/L	5**[B]	0.5 U	***5.2 U***	-	1.0 U	0.5 U	-	1.0 U	2.6 U	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Methyl Acetate	µg/L	n/v	-	-	-	1.0 U	-	-	1.0 U	-	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Methyl Ethyl Ketone (MEK)	µg/L	50[A]	4.1 U	40.8 U	10 U	10 U	4.1 U	10 U	10 U	20.4 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	1.1 U	10.9 U	5.0 U	5.0 U	1.1 U	5.0 U	5.0 U	5.4 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether (MTBE)	µg/L	10[A]	0.8 U	8.5 U	-	1.0 U	0.8 U	-	1.0 U	4.2 U	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Methylcyclohexane	µg/L	n/v	-	-	-	1.0 U	-	-	1.0 U	-	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Methylene Chloride (Dichloromethane)	µg/L	5**[B]	0.6 U	***6.4 U***	1.0 U	1.0 U	0.6 U	1.0 U	1.0 U	3.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	10[B]	1.0 U	9.6 U	-	-	1.0 U	-	-	4.8 U	-	-	-	-	-	-	-	-
Phenylbutane, 2- (sec-Butylbenzene)	µg/L	5**[B]	0.5 U	***5.4 U***	-	-	0.5 U	-	-	2.7 U	-	-	-	-	-	-	-	-
Propylbenzene, n-	µg/L	5**[B]	0.5 U	***5.3 U***	-	-	0.5 U	-	-	2.6 U	-	-	-	-	-	-	-	-
Styrene	µg/L	5**[B]	0.9 U	***9.2 U***	1.0 U	1.0 U	0.9 U	1.0 U	1.0 U	4.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tert Amyl Methyl Ether	µg/L	n/v	0.6 U	6.4 U	-	-	0.6 U	-	-	3.2 U	-	-	-	-	-	-	-	-
Tert-Butyl Alcohol	µg/L	n/v	9.6 U	96.4 U	-	-	9.6 U	-	-	48.2 U	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	5**[B]	0.5 U	***5.4 U***	1.0 U	-	0.5 U	1.0 U	-	2.7 U	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U	-
Tetrachloroethane, 1,1,2,2-	µg/L	5**[B]	0.5 U	4.6 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	2.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5**[B]	0.7 U	***7.2 U***	**5.6**[B]	**1.6**	0.7 U	1.0 U	1.0 U	3.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrahydrofuran	µg/L	50[A]	2.4 U	24.2 U	-	-	2.4 U	-	-	12.1 U	-	-	-	-	-	-	-	-
Toluene	µg/L	5**[B]	0.8 U	***7.6 U***	**1.2**	1.0 U	**1.6**	1.0 U	1.0 U	3.8 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,3-	µg/L	5**[B]	0.6 U	***5.7 U***	-	-	0.6 U	-	-	2.8 U	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/L	5**[B]	0.6 U	***5.9 U***	-	1.0 U	0.6 U	-	1.0 U	3.0 U	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Trichlorobenzene, 1,3,5-	µg/L	5**[B]	0.5 U	***5.4 U***	-	-	0.5 U	-	-	2.7 U	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/L	5**[B]	0.6 U	**80.3**[B]	**4.6**	**4.7**	**1.5**	1.0 U	1.0 U	**12.8**[B]	**22**[B]	**9.7**[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethane, 1,1,2-	µg/L	1[B]	0.7 U	***7.3 U***	1.0 U	1.0 U	0.7 U	1.0 U	1.0 U	***3.6 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5**[B]	**1.3**	**611**[B]	**12000**[B]	**46**[B]	**8.2**[B]	1.0 U	1.0 U	**2080**[B]	**3600**[B]	**91**[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	µg/L	5**[B]	0.7 U	***6.9 U***	1.0 U	1.0 U	0.7 U	1.0 U	1.0 U	3.4 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloropropane, 1,2,3-	µg/L	0.04[B]	***0.9 U***	***9.3 U***	***1.0 U***	-	***0.9 U***	***1.0 U***	-	***4.6 U***	***1.0 U***	-	***1.0 U***	-	***1.0 U***	-	***1.0 U***	-
Trimethylbenzene, 1,2,4-	µg/L	5**[B]	0.4 U	4.5 U	-	-	0.4 U	-	-	2.2 U	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/L	5**[B]	0.5 U	5.0 U	-	-	0.5 U	-	-	2.5 U	-	-	-	-	-	-	-	-
Vinyl Acetate	µg/L	n/v	-	-	5.0 U	-	-	5.0 U	-	-	5.0 U	-	5.0 U	-	5.0 U	-	5.0 U	-
Vinyl chloride	µg/L	2[B]	0.9 U	***8.6 U***	1.0 U	1.0 U	0.9 U	1.0 U	1.0 U	***4.3 U***	**1.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene, m & p-	µg/L	5**[B]	1.0 U	***9.8 U***	-	-	1.0 U	-	-	4.9 U	-	-	-	-	-	-	-	-
Xylene, o-	µg/L	5**[B]	0.5 U	4.9 U	-	-	0.5 U	-	-	2.4 U	-	-	-	-	-	-	-	-
Xylenes, Total	µg/L	5**[B]	-	-	2.0 U	2.0 U	-	2.0 U	2.0 U	-	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOC	µg/L	n/v	**1.3**	**706.3**	**12401.1**	**53.7**	**11.3**	ND	ND	**2236.4**	**3947**	**104.4**	ND	ND	ND	**1**	ND	ND

See last page for notes.

Sample Location			**B/MW-8**		**B/MW-9**		**B/MW-10**	**B/MW-11**	**B/MW-12**	**B/MW-13**	**B/MW-14**	**B/MW-22**		**B/MW-23**		
Sample Date			**7-Jan-11**	**20-Apr-11**	**5-Jan-11**	**5-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**5-Jan-11**	**20-Apr-11**	**7-Jan-11**	**21-Apr-11**	**21-Apr-11**
Sample ID			**BA-MW8-W**	**BA-MW8-R2-W**	**BA-MW9-W**	**BA-MW9-W/D**	**BA-MW10-W**	**BA-MW11-W**	**BA-MW12-W**	**BA-MW13-W***	**BA-MW14-W**	**BA-MW22-W**	**BA-MW22-R2-W**	**BA-MW23-W**	**BA-MW23-R2-W**	**BA-MW23-R2-W/D**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-4050-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-4050-1**	**480-548-1**	**480-4050-1**	**480-4050-1**
Laboratory Sample ID			**480-689-7**	**480-4050-2**	**480-548-5**	**480-548-6**	**480-689-1**	**480-633-7**	**480-689-3**	**480-689-4**	**480-689-2**	**480-633-3**	**480-4050-3**	**480-689-6**	**480-4050-11**	**480-4050-12**
Sample Type	**Units**	**TOGS**				**Field Duplicate**										**Field Duplicate**
Volatile Organic Compounds																
Acetone	µg/L	50^{A}	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**46 J**	10 U	10 U	10 U	10 U	10 U	10 U
Acrylonitrile	µg/L	5_{**}^{B}	5.0 U	-	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	***25 U***	5.0 U	5.0 U	-	5.0 U	-	-
Benzene	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***5.0 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform (tribromomethane)	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ
Bromomethane (Methyl bromide)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Butylbenzene, n-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, tert-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Disulfide	µg/L	60^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/L	5^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorinated Fluorocarbon (Freon 113)	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	-	-	-	-	-	1.0 U	-	1.0 U	1.0 U
Chlorobenzene (Monochlorobenzene)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	-	1.0 U	-	-
Chloroethane (Ethyl Chloride)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	7^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorotoluene, 2-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene, 4-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	µg/L	n/v	-	1.0 U	-	-	-	-	-	-	-	-	1.0 U	-	1.0 U	1.0 U
Cymene (p-Isopropyltoluene)	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/L	0.04^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***5.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dibromochloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U J	1.0 U J
Dibromomethane (Methylene Bromide)	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	-	1.0 U	-	-
Dichlorobenzene, 1,2-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***5.0 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,3-	µg/L	3^{B}	-	1.0 U	-	-	-	-	-	-	-	-	1.0 U	-	1.0 U	1.0 U
Dichlorobenzene, 1,4-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***5.0 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobutene, trans-1,4-	µg/L	n/v	5.0 U	-	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	-	5.0 U	-	-
Dichlorodifluoromethane	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	-	-	-	-	-	1.0 U	-	1.0 U	1.0 U
Dichloroethane, 1,1-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	**71^{B}**	1.0 U	1.0 U
Dichloroethane, 1,2-	µg/L	0.6^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***5.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloroethylene, 1,1-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	**71^{B}**	1.0 U	1.0 U
Dichloroethylene, cis-1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	**6.0^{B}**	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***5.0 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,3-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropane, 2,2-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, 1,1-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***5.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloropropene, trans-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***5.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Diisopropyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dioxane, 1,4-	µg/L	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethanol	µg/L	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Tert Butyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

See last page for notes.

Table 4
Summary of RI Analytical Results in Groundwater
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**B/MW-8**		**B/MW-9**		**B/MW-10**	**B/MW-11**	**B/MW-12**	**B/MW-13**	**B/MW-14**	**B/MW-22**		**B/MW-23**		
Sample Date			**7-Jan-11**	**20-Apr-11**	**5-Jan-11**	**5-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**5-Jan-11**	**20-Apr-11**	**7-Jan-11**	**21-Apr-11**	**21-Apr-11**
Sample ID			**BA-MW8-W**	**BA-MW8-R2-W**	**BA-MW9-W**	**BA-MW9-W/D**	**BA-MW10-W**	**BA-MW11-W**	**BA-MW12-W**	**BA-MW13-W***	**BA-MW14-W**	**BA-MW22-W**	**BA-MW22-R2-W**	**BA-MW23-W**	**BA-MW23-R2-W**	**BA-MW23-R2-W/D**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-4050-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-4050-1**	**480-548-1**	**480-4050-1**	**480-4050-1**
Laboratory Sample ID			**480-689-7**	**480-4050-2**	**480-548-5**	**480-548-6**	**480-689-1**	**480-633-7**	**480-689-3**	**480-689-4**	**480-689-2**	**480-633-3**	**480-4050-3**	**480-689-6**	**480-4050-11**	**480-4050-12**
Sample Type	**Units**	**TOGS**				**Field Duplicate**										**Field Duplicate**
Volatile Organic Compounds (cont'd)																
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	0.0006^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***5.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Hexachlorobutadiene	µg/L	0.5^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexanone, 2-	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Iodomethane	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	-	1.0 U	-	-
Isopropylbenzene	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	-	-	-	-	-	1.0 U	-	1.0 U	1.0 U
Methyl Acetate	µg/L	n/v	-	1.0 U	-	-	-	-	-	-	-	-	1.0 U	-	1.0 U	1.0 U
Methyl Ethyl Ketone (MEK)	µg/L	50^{A}	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether (MTBE)	µg/L	10^{A}	-	1.0 U	-	-	-	-	-	-	-	-	1.0 U	-	1.0 U	1.0 U
Methylcyclohexane	µg/L	n/v	-	1.0 U	-	-	-	-	-	-	-	-	1.0 U	-	1.0 U	1.0 U
Methylene Chloride (Dichloromethane)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.1 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	10^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenylbutane, 2- (sec-Butylbenzene)	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylbenzene, n-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tert Amyl Methyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tert-Butyl Alcohol	µg/L	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	-	1.0 U	-	-
Tetrachloroethane, 1,1,2,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	**1.7**	1.0 U	1.0 U
Tetrahydrofuran	µg/L	50^{A}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,3-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	-	-	-	-	-	1.0 U	-	1.0 U	1.0 U
Trichlorobenzene, 1,3,5-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/L	5_{**}^{B}	1.0 U	**1.9**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	**290^{B}**	1.0 U	1.0 U
Trichloroethane, 1,1,2-	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***5.0 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5_{**}^{B}	**3.3**	**6.6 J^{B}**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	**2600^{B}**	**2.9**	**3.5**
Trichlorofluoromethane (Freon 11)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloropropane, 1,2,3-	µg/L	0.04^{B}	***1.0 U***	-	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***5.0 U***	***1.0 U***	***1.0 U***	-	***1.0 U***	-	-
Trimethylbenzene, 1,2,4-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl Acetate	µg/L	n/v	5.0 U	-	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	-	5.0 U	-	-
Vinyl chloride	µg/L	2^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	***5.0 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene, m & p-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene, o-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/L	5_{**}^{B}	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOC	µg/L	n/v	**3.3**	**8.5**	ND	ND	ND	ND	ND	**49.1**	ND	ND	ND	**3039.7**	**2.9**	**3.5**

See last page for notes.

Table 4
Summary of RI Analytical Results in Groundwater
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			B/MW-25		B/MW-26	B/MW-27		B/MW-28D	WSW	TP-RB		Trip Blank				
Sample Date			**4-Jan-11**	**20-Apr-11**	**22-Feb-11**	**22-Feb-11**	**22-Feb-11**	**22-Feb-11**	**7-Dec-10**	**26-Oct-10**	**28-Nov-11**	**8-Dec-09**	**11-Dec-09**	**7-Dec-10**	**4-Jan-11**	**5-Jan-11**
Sample ID			**BA-MW25-W**	**BA-MW25-R2-W**	**BA-MW26-W**	**BA-MW27-W**	**BA-MW27-W/D**	**BA-MW28D-W**	**BA-WSW-W**	**BA-TP-RB-W**	**BA-RB112811-W**	**TRIP BLANK**	**TRIP BLANK**	**BA-TB**	**BA-TB010411-W**	**BA-TB010511-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**SPECTRUM**	**SPECTRUM**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-4050-1**	**480-1891-1**	**480-1891-1**	**480-1891-1**	**480-1891-1**	**RTL0627**	**RTJ1956**	**480-13227-1-rev**	**SB05470**	**SB05538**	**RTL0627**	**480-548-1**	**480-548-1**
Laboratory Sample ID			**480-548-2**	**480-4050-6**	**480-1891-1**	**480-1891-2**	**480-1891-4**	**480-1891-3**	**RTL0627-01**	**RTJ1956-13**	**480-13227-6**	**SB05470-10**	**SB05538-05**	**RTL0627-04**	**480-548-1**	**480-633-1**
Sample Type	**Units**	**TOGS**					**Field Duplicate**			**Material Rinse Blank**	**Material Rinse Blank**	**Trip Blank**	**Trip Blank**	**Trip Blank**	**Trip Blank**	**Trip Blank**
Volatile Organic Compounds																
Acetone	µg/L	50^{A}	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.0 U	4.6 U	4.6 U	10 U	10 U	10 U
Acrylonitrile	µg/L	5_{**}^{B}	5.0 U	-	5.0 U	5.0 U	5.0 U	5.0 U	-	-	-	0.5 U	0.5 U	-	5.0 U	5.0 U
Benzene	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U
Bromobenzene	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-
Bromodichloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U
Bromoform (tribromomethane)	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2 U	1.2 U	1.0 U	1.0 U	1.0 U
Butylbenzene, n-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-
Butylbenzene, tert-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-
Carbon Disulfide	µg/L	60^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	1.0 U	1.0 U	-	0.9 U	0.9 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/L	5^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.8 U	0.8 U	1.0 U	1.0 U	1.0 U
Chlorinated Fluorocarbon (Freon 113)	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	-	1.0 U J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U J	-	-
Chlorobenzene (Monochlorobenzene)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	1.0 U	1.0 U	-	1.0 U	1.0 U
Chloroethane (Ethyl Chloride)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.1 U	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	7^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.8 U	0.8 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.2**	**1.6**	1.0 U	1.0 U	1.0 U
Chlorotoluene, 2-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	0.7 U	0.7 U	-	-	-
Chlorotoluene, 4-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-
Cyclohexane	µg/L	n/v	-	1.0 U	-	-	-	-	1.0 U	1.0 U	1.0 U	-	-	1.0 U	-	-
Cymene (p-Isopropyltoluene)	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/L	0.04^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.7 U***	***1.7 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dibromochloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.4 U	0.4 U	1.0 U	1.0 U	1.0 U
Dibromomethane (Methylene Bromide)	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	0.7 U	0.7 U	-	1.0 U	1.0 U
Dichlorobenzene, 1,2-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.4 U	0.4 U	1.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,3-	µg/L	3^{B}	-	1.0 U	-	-	-	-	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	-	-
Dichlorobenzene, 1,4-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U
Dichlorobutene, trans-1,4-	µg/L	n/v	5.0 U	-	50 U	50 U	50 U	50 U	-	-	-	2.8 U	2.8 U	-	5.0 U	5.0 U
Dichlorodifluoromethane	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	-	1.0 U	1.0 U	1.0 U	0.9 U	0.9 U	1.0 U	-	-
Dichloroethane, 1,1-	µg/L	5_{**}^{B}	**4.6**	1.0 U	1.0 U	**2.4**	**2.4**	1.0 U	1.0 U	1.0 U	1.0 U	0.6 U	0.6 U	1.0 U	1.0 U	1.0 U
Dichloroethane, 1,2-	µg/L	0.6^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	0.6 U	0.6 U	***1.0 U***	***1.0 U***	***1.0 U***
Dichloroethylene, 1,1-	µg/L	5_{**}^{B}	**1.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.7 U	0.7 U	1.0 U	1.0 U	1.0 U
Dichloroethylene, cis-1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	**1.4**	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	0.6 U	0.6 U	1.0 U	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	0.9 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,3-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	0.7 U	0.7 U	-	-	-
Dichloropropane, 2,2-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	0.6 U	0.6 U	-	-	-
Dichloropropene, 1,1-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-
Dichloropropene, cis-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	0.4 U	0.4 U	***1.0 U***	***1.0 U***	***1.0 U***
Dichloropropene, trans-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	0.4 U	0.4 U	***1.0 U***	***1.0 U***	***1.0 U***
Diisopropyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-	-	0.6 U	0.6 U	-	-	-
Dioxane, 1,4-	µg/L	n/v	-	-	-	-	-	-	-	-	-	20.0 U	20.0 U	-	-	-
Ethanol	µg/L	n/v	-	-	-	-	-	-	-	-	-	37.7 U	37.7 U	-	-	-
Ethyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-	-	0.6 U	0.6 U	-	-	-
Ethyl Tert Butyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-
Ethylbenzene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U

See last page for notes.

Sample Location			**B/MW-25**		**B/MW-26**	**B/MW-27**		**B/MW-28D**	**WSW**	**TP-RB**		**Trip Blank**				
Sample Date			**4-Jan-11**	**20-Apr-11**	**22-Feb-11**	**22-Feb-11**	**22-Feb-11**	**22-Feb-11**	**7-Dec-10**	**26-Oct-10**	**28-Nov-11**	**8-Dec-09**	**11-Dec-09**	**7-Dec-10**	**4-Jan-11**	**5-Jan-11**
Sample ID			**BA-MW25-W**	**BA-MW25-R2-W**	**BA-MW26-W**	**BA-MW27-W**	**BA-MW27-W/D**	**BA-MW28D-W**	**BA-WSW-W**	**BA-TP-RB-W**	**BA-RB112811-W**	**TRIP BLANK**	**TRIP BLANK**	**BA-TB**	**BA-TB010411-W**	**BA-TB010511-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**SPECTRUM**	**SPECTRUM**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-4050-1**	**480-1891-1**	**480-1891-1**	**480-1891-1**	**480-1891-1**	**RTL0627**	**RTJ1956**	**480-13227-1-rev**	**SB05470**	**SB05538**	**RTL0627**	**480-548-1**	**480-548-1**
Laboratory Sample ID			**480-548-2**	**480-4050-6**	**480-1891-1**	**480-1891-2**	**480-1891-4**	**480-1891-3**	**RTL0627-01**	**RTJ1956-13**	**480-13227-6**	**SB05470-10**	**SB05538-05**	**RTL0627-04**	**480-548-1**	**480-633-1**
Sample Type	**Units**	**TOGS**					**Field Duplicate**			**Material Rinse Blank**	**Material Rinse Blank**	**Trip Blank**	**Trip Blank**	**Trip Blank**	**Trip Blank**	**Trip Blank**
Volatile Organic Compounds (cont'd)																
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	0.0006[B]	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***0.5 U***	***0.5 U***	***1.0 U***	***1.0 U***	***1.0 U***
Hexachlorobutadiene	µg/L	0.5[B]	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-
Hexanone, 2-	µg/L	50[A]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U J	2.7 U	2.7 U	5.0 U	5.0 U	5.0 U
Iodomethane	µg/L	5**[B]	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	-	-	-	1.0 U	1.0 U
Isopropylbenzene	µg/L	5**[B]	-	1.0 U	-	-	-	-	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	-	-
Methyl Acetate	µg/L	n/v	-	1.0 U	-	-	-	-	1.0 U	1.0 U	2.0 U	-	-	1.0 U	-	-
Methyl Ethyl Ketone (MEK)	µg/L	50[A]	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.0 U	4.1 U	4.1 U	10 U	10 U	10 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U J	1.1 U	1.1 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether (MTBE)	µg/L	10[A]	-	1.0 U	-	-	-	-	1.0 U	1.0 U	1.0 U	0.8 U	0.8 U	1.0 U	-	-
Methylcyclohexane	µg/L	n/v	-	1.0 U	-	-	-	-	1.0 U	1.0 U	1.0 U	-	-	1.0 U	-	-
Methylene Chloride (Dichloromethane)	µg/L	5**[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.6 U	0.6 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	10[B]	-	-	-	-	-	-	-	-	-	1.0 U	1.0 U	-	-	-
Phenylbutane, 2- (sec-Butylbenzene)	µg/L	5**[B]	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-
Propylbenzene, n-	µg/L	5**[B]	-	-	-	-	-	-	-	-	1.0 U	0.5 U	0.5 U	-	-	-
Styrene	µg/L	5**[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	0.9 U	0.9 U	1.0 U	1.0 U	1.0 U
Tert Amyl Methyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-	-	0.6 U	0.6 U	-	-	-
Tert-Butyl Alcohol	µg/L	n/v	-	-	-	-	-	-	-	-	-	9.6 U	9.6 U	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	5**[B]	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	-	-	1.0 U	0.5 U	0.5 U	-	1.0 U	1.0 U
Tetrachloroethane, 1,1,2,2-	µg/L	5**[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5**[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	0.7 U	0.7 U	1.0 U	1.0 U	1.0 U
Tetrahydrofuran	µg/L	50[A]	-	-	-	-	-	-	-	-	1.0 U	2.4 U	2.4 U	-	-	-
Toluene	µg/L	5**[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	0.8 U	**3.0**	1.0 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,3-	µg/L	5**[B]	-	-	-	-	-	-	-	-	1.0 U	0.6 U	0.6 U	-	-	-
Trichlorobenzene, 1,2,4-	µg/L	5**[B]	-	1.0 U	-	-	-	-	1.0 U	1.0 U	-	0.6 U	0.6 U	1.0 U	-	-
Trichlorobenzene, 1,3,5-	µg/L	5**[B]	-	-	-	-	-	-	-	-	1.0 U	0.5 U	0.5 U	-	-	-
Trichloroethane, 1,1,1-	µg/L	5**[B]	**2.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.6 U	0.6 U	1.0 U	1.0 U	1.0 U
Trichloroethane, 1,1,2-	µg/L	1[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.7 U	0.7 U	1.0 U	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5**[B]	**29[B]**	**12[B]**	1.0 U	**2.8**	**3.0**	1.0 U	1.0 U	1.0 U	1.0 U	0.6 U	0.6 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	µg/L	5**[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	0.7 U	0.7 U	1.0 U	1.0 U	1.0 U
Trichloropropane, 1,2,3-	µg/L	0.04[B]	***1.0 U***	-	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	-	-	1.0 U	***0.9 U***	***0.9 U***	-	***1.0 U***	***1.0 U***
Trimethylbenzene, 1,2,4-	µg/L	5**[B]	-	-	-	-	-	-	-	-	-	0.4 U	0.4 U	-	-	-
Trimethylbenzene, 1,3,5-	µg/L	5**[B]	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-
Vinyl Acetate	µg/L	n/v	5.0 U	-	5.0 U	5.0 U	5.0 U	5.0 U	-	-	-	-	-	-	5.0 U	5.0 U
Vinyl chloride	µg/L	2[B]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	0.9 U	1.0 U	1.0 U	1.0 U
Xylene, m & p-	µg/L	5**[B]	-	-	-	-	-	-	-	-	-	1.0 U	1.0 U	-	-	-
Xylene, o-	µg/L	5**[B]	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-
Xylenes, Total	µg/L	5**[B]	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	-	-	2.0 U	2.0 U	2.0 U
Total VOC	µg/L	n/v	**37.2**	**12**	ND	**6.6**	**6.6**	**1**	ND	ND	ND	**1.2**	**4.6**	ND	ND	ND

See last page for notes.

Table 4
Summary of RI Analytical Results in Groundwater
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**Trip Blank**		
Sample Date			**6-Jan-11**	**22-Feb-11**	**20-Apr-11**
Sample ID			**BA-TB010611-W**	**BA-TB-022211-W**	**BA-TB-042011-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-1891-1**	**480-4050-1**
Laboratory Sample ID			**480-689-8**	**480-1891-5**	**480-4050-1**
Sample Type	**Units**	**TOGS**	**Trip Blank**	**Trip Blank**	**Trip Blank**
Volatile Organic Compounds					
Acetone	µg/L	50^{A}	10 U	10 U	10 U
Acrylonitrile	µg/L	5_{**}^{B}	5.0 U	5.0 U	-
Benzene	µg/L	1^{B}	1.0 U	1.0 U	1.0 U
Bromobenzene	µg/L	5_{**}^{B}	-	-	-
Bromodichloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U
Bromoform (tribromomethane)	µg/L	50^{A}	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U
Butylbenzene, n-	µg/L	5_{**}^{B}	-	-	-
Butylbenzene, tert-	µg/L	5_{**}^{B}	-	-	-
Carbon Disulfide	µg/L	60^{A}	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/L	5^{B}	1.0 U	1.0 U	1.0 U
Chlorinated Fluorocarbon (Freon 113)	µg/L	5_{**}^{B}	-	-	1.0 U
Chlorobenzene (Monochlorobenzene)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	5_{**}^{B}	1.0 U	1.0 U	-
Chloroethane (Ethyl Chloride)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U
Chloroform	µg/L	7^{B}	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U
Chlorotoluene, 2-	µg/L	5_{**}^{B}	-	-	-
Chlorotoluene, 4-	µg/L	5_{**}^{B}	-	-	-
Cyclohexane	µg/L	n/v	-	-	1.0 U
Cymene (p-Isopropyltoluene)	µg/L	5_{**}^{B}	-	-	-
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/L	0.04^{B}	***1.0 U***	***1.0 U***	***1.0 U***
Dibromochloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U
Dibromomethane (Methylene Bromide)	µg/L	5_{**}^{B}	1.0 U	1.0 U	-
Dichlorobenzene, 1,2-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,3-	µg/L	3^{B}	-	-	1.0 U
Dichlorobenzene, 1,4-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U
Dichlorobutene, trans-1,4-	µg/L	n/v	5.0 U	50 U	-
Dichlorodifluoromethane	µg/L	5_{**}^{B}	-	-	1.0 U
Dichloroethane, 1,1-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U
Dichloroethane, 1,2-	µg/L	0.6^{B}	***1.0 U***	***1.0 U***	***1.0 U***
Dichloroethylene, 1,1-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U
Dichloroethylene, cis-1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/L	1^{B}	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,3-	µg/L	5_{**}^{B}	-	-	-
Dichloropropane, 2,2-	µg/L	5_{**}^{B}	-	-	-
Dichloropropene, 1,1-	µg/L	5_{**}^{B}	-	-	-
Dichloropropene, cis-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***
Dichloropropene, trans-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***
Diisopropyl Ether	µg/L	n/v	-	-	-
Dioxane, 1,4-	µg/L	n/v	-	-	-
Ethanol	µg/L	n/v	-	-	-
Ethyl Ether	µg/L	n/v	-	-	-
Ethyl Tert Butyl Ether	µg/L	n/v	-	-	-
Ethylbenzene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U

See last page for notes.

Sample Location			**Trip Blank**		
Sample Date			**6-Jan-11**	**22-Feb-11**	**20-Apr-11**
Sample ID			**BA-TB010611-W**	**BA-TB-022211-W**	**BA-TB-042011-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-1891-1**	**480-4050-1**
Laboratory Sample ID			**480-689-8**	**480-1891-5**	**480-4050-1**
Sample Type	**Units**	**TOGS**	**Trip Blank**	**Trip Blank**	**Trip Blank**
Volatile Organic Compounds (cont'd)					
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	0.0006[B]	***1.0 U***	***1.0 U***	***1.0 U***
Hexachlorobutadiene	µg/L	0.5[B]	-	-	-
Hexanone, 2-	µg/L	50[A]	5.0 U	5.0 U	5.0 U
Iodomethane	µg/L	5**[B]	1.0 U	1.0 U	-
Isopropylbenzene	µg/L	5**[B]	-	-	1.0 U
Methyl Acetate	µg/L	n/v	-	-	1.0 U
Methyl Ethyl Ketone (MEK)	µg/L	50[A]	10 U	10 U	10 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether (MTBE)	µg/L	10[A]	-	-	1.0 U
Methylcyclohexane	µg/L	n/v	-	-	1.0 U
Methylene Chloride (Dichloromethane)	µg/L	5**[B]	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	10[B]	-	-	-
Phenylbutane, 2- (sec-Butylbenzene)	µg/L	5**[B]	-	-	-
Propylbenzene, n-	µg/L	5**[B]	-	-	-
Styrene	µg/L	5**[B]	1.0 U	1.0 U	1.0 U
Tert Amyl Methyl Ether	µg/L	n/v	-	-	-
Tert-Butyl Alcohol	µg/L	n/v	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	5**[B]	1.0 U	1.0 U	-
Tetrachloroethane, 1,1,2,2-	µg/L	5**[B]	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5**[B]	1.0 U	1.0 U	1.0 U
Tetrahydrofuran	µg/L	50[A]	-	-	-
Toluene	µg/L	5**[B]	1.0 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,3-	µg/L	5**[B]	-	-	-
Trichlorobenzene, 1,2,4-	µg/L	5**[B]	-	-	1.0 U
Trichlorobenzene, 1,3,5-	µg/L	5**[B]	-	-	-
Trichloroethane, 1,1,1-	µg/L	5**[B]	1.0 U	1.0 U	1.0 U
Trichloroethane, 1,1,2-	µg/L	1[B]	1.0 U	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5**[B]	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	µg/L	5**[B]	1.0 U	1.0 U	1.0 U
Trichloropropane, 1,2,3-	µg/L	0.04[B]	***1.0 U***	***1.0 U***	-
Trimethylbenzene, 1,2,4-	µg/L	5**[B]	-	-	-
Trimethylbenzene, 1,3,5-	µg/L	5**[B]	-	-	-
Vinyl Acetate	µg/L	n/v	5.0 U	5.0 U	-
Vinyl chloride	µg/L	2[B]	1.0 U	1.0 U	1.0 U
Xylene, m & p-	µg/L	5**[B]	-	-	-
Xylene, o-	µg/L	5**[B]	-	-	-
Xylenes, Total	µg/L	5**[B]	2.0 U	2.0 U	2.0 U
Total VOC	µg/L	n/v	ND	ND	ND

Notes:

[1]	Data collected during 2009 Phase II.
TOGS	NYSDEC Technical and Operational Guideline Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guideline Values and Groundwater Effluent Limitations (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004)
[A]	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance
[B]	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
6.5[A]	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
**	The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.
p	Applies to the sum of cis- and trans-1,3-dichloropropene.
E	Compound was over the calibration range.
J	Indicates estimated value.
SPECTRUM	Spectrum Analytical Inc., Agawam, MA
TALBU	Test America Laboratories Inc., Buffalo, NY
ND	Not detected
*	Subsequent to receipt of laboratory report and the Data Usability Summary Report, reporting limits for the diluted sample BA-MW13-W were recalculated by the laboratory based on the practical quantitation limit.

Table 4
Summary of RI Analytical Results in Groundwater
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**B/MW-9**		**B/MW-10**	**B/MW-11**	**B/MW-12**	**B/MW-13**	**B/MW-14**	**B/MW-25**	**WSW**	**SS-RB**	**TP-RB**
Sample Date			**5-Jan-11**	**5-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**4-Jan-11**	**7-Dec-10**	**25-Oct-10**	**26-Oct-10**
Sample ID			**BA-MW9-W**	**BA-MW9-W/D**	**BA-MW10-W**	**BA-MW11-W**	**BA-MW12-W**	**BA-MW13-W**	**BA-MW14-W**	**BA-MW25-W**	**BA-WSW-W**	**BA-SS-RB-W**	**BA-TP-RB-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**RTL0627**	**RTJ1956**	**RTJ1956**
Laboratory Sample ID			**480-548-5**	**480-548-6**	**480-689-1**	**480-633-7**	**480-689-3**	**480-689-4**	**480-689-2**	**480-548-2**	**RTL0627-01**	**RTJ1956-10**	**RTJ1956-13**
Sample Type	**Units**	**TOGS**		**Field Duplicate**								**Material Rinse Blank**	**Material Rinse Blank**
Semi-Volatile Organic Compounds													
Acenaphthene	µg/L	20^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Acenaphthylene	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Acetophenone	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Anthracene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Atrazine	µg/L	7.5^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Benzaldehyde	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Benzo(a)anthracene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Benzo(a)pyrene	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Benzo(b)fluoranthene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Benzo(g,h,i)perylene	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Benzo(k)fluoranthene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Biphenyl, 1,1'- (Biphenyl)	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U
Bis(2-Chloroethoxy)methane	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U
Bis(2-Chloroethyl)ether	µg/L	1^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	5^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U J***	4.8 U	5.0 U
Bromophenyl Phenyl Ether, 4-	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Butyl Benzyl Phthalate	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Caprolactam	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Carbazole	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Chloro-3-methyl phenol, 4-	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Chloroaniline, 4	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U
Chloronaphthalene, 2-	µg/L	10^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Chlorophenol, 2-	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U J	4.8 U	5.0 U
Chlorophenyl Phenyl Ether, 4-	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Chrysene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Cresol, o- (Methylphenol, 2-)	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Cresol, p- (Methylphenol, 4-)	µg/L	n/v	10 U	10 U	10 U	10 U J	10 U	10 U	10 U	10 U	11 U	9.5 U	9.9 U
Dibenzo(a,h)anthracene	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Dibenzofuran	µg/L	n/v	10 U	10 U	10 U	10 U J	10 U	10 U	10 U	10 U	5.7 U	4.8 U	5.0 U
Dichlorobenzidine, 3,3'-	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U
Dichlorophenol, 2,4-	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U
Diethyl Phthalate	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Dimethyl Phthalate	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Dimethylphenol, 2,4-	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Di-n-Butyl Phthalate	µg/L	50^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Dinitro-o-cresol, 4,6-	µg/L	n/v	10 U	10 U	10 U	10 U J	10 U	10 U	10 U	10 U	11 U	9.5 U	9.9 U
Dinitrophenol, 2,4-	µg/L	10^{A}	10 U	10 U	10 U	10 U J	10 U	10 U	10 U	10 U	***11 U***	9.5 U	9.9 U
Dinitrotoluene, 2,4-	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U
Dinitrotoluene, 2,6-	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U
Di-n-Octyl phthalate	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Fluoranthene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Fluorene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Hexachlorobenzene	µg/L	0.04^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Hexachlorobutadiene	µg/L	0.5^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Hexachlorocyclopentadiene	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U

See next page for notes.

Sample Location			B/MW-9		B/MW-10	B/MW-11	B/MW-12	B/MW-13	B/MW-14	B/MW-25	WSW	SS-RB	TP-RB
Sample Date			**5-Jan-11**	**5-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**6-Jan-11**	**4-Jan-11**	**7-Dec-10**	**25-Oct-10**	**26-Oct-10**
Sample ID			**BA-MW9-W**	**BA-MW9-W/D**	**BA-MW10-W**	**BA-MW11-W**	**BA-MW12-W**	**BA-MW13-W**	**BA-MW14-W**	**BA-MW25-W**	**BA-WSW-W**	**BA-SS-RB-W**	**BA-TP-RB-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**RTL0627**	**RTJ1956**	**RTJ1956**
Laboratory Sample ID			**480-548-5**	**480-548-6**	**480-689-1**	**480-633-7**	**480-689-3**	**480-689-4**	**480-689-2**	**480-548-2**	**RTL0627-01**	**RTJ1956-10**	**RTJ1956-13**
Sample Type	**Units**	**TOGS**		**Field Duplicate**								**Material Rinse Blank**	**Material Rinse Blank**
Semi-Volatile Organic Compounds (cont'd)													
Hexachloroethane	µg/L	5**^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	***5.7 U***	4.8 U	5.0 U
Indeno(1,2,3-cd)pyrene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Isophorone	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Methylnaphthalene, 2-	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Naphthalene	µg/L	10^{B}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Nitroaniline, 2-	µg/L	5**^{B}	***10 U***	***10 U***	***10 U***	***10 U J***	***10 U***	***10 U***	***10 U***	***10 U***	***11 U***	***9.5 U***	***9.9 U***
Nitroaniline, 3-	µg/L	5**^{B}	***10 U***	***10 U***	***10 U***	***10 U J***	***10 U***	***10 U***	***10 U***	***10 U***	***11 U***	***9.5 U***	***9.9 U***
Nitroaniline, 4-	µg/L	5**^{B}	***10 U***	***10 U***	***10 U***	***10 U J***	***10 U***	***10 U***	***10 U***	***10 U***	***11 U***	***9.5 U***	***9.9 U***
Nitrobenzene	µg/L	0.4^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Nitrophenol, 2-	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Nitrophenol, 4-	µg/L	n/v	10 U	10 U	10 U	10 U J	10 U	10 U	10 U	10 U	11 U	9.5 U	9.9 U
N-Nitrosodi-n-Propylamine	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
n-Nitrosodiphenylamine	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Pentachlorophenol	µg/L	1.0^{B}	***10 U***	***10 U***	***10 U***	***10 U J***	***10 U***	***10 U***	***10 U***	***10 U***	***11 U***	***9.5 U***	***9.9 U***
Phenanthrene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Phenol	µg/L	1.0^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U J***	***5.0 U***	***5.0 U***	***5.0 U***	***5.0 U***	***5.7 U***	***4.8 U***	***5.0 U***
Pyrene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Trichlorophenol, 2,4,5-	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U
Trichlorophenol, 2,4,6-	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	5.7 U	4.8 U	5.0 U

Notes:

TOGS	NYSDEC Technical and Operational Guideline Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guideline Values and Groundwater Effluent Limitations (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004)
^{A}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance
^{B}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
6.5^{A}	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
**	The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.
J	Indicates estimated value.
TALBU	Test America Laboratories Inc., Buffalo, NY

Table 4
Summary of RI Analytical Results in Groundwater
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			B/MW-9		B/MW-11	B/MW-25		WSW	SS-RB		TP-RB	
Sample Date			5-Jan-11	5-Jan-11	6-Jan-11	4-Jan-11	5-Jan-11	7-Dec-10	25-Oct-10	25-Oct-10	26-Oct-10	26-Oct-10
Sample ID			BA-MW9-W	BA-MW9-W/D	BA-MW11-W	BA-MW25-W	BA-MW25-W	BA-WSW-W	BA-SS-RB-W	BA-SS-RB-W	BA-TP-RB-W	BA-TP-RB-W
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory Work Order			480-548-1	480-548-1	480-548-1	480-548-1	480-548-1	RTL0627	RTJ1956	RTJ1956	RTJ1956	RTJ1956
Laboratory Sample ID			480-548-5	480-548-6	480-633-7	480-548-2	480-548-4	RTL0627-01	RTJ1956-10	RTJ1956-10RE1	RTJ1956-13	RTJ1956-13RE1
Sample Type	Units	TOGS		Field Duplicate					Material Rinse Blank	Material Rinse Blank	Material Rinse Blank	Material Rinse Blank
Metals												
Aluminum	mg/L	n/v	0.20 U	0.20 U	0.20 U	-	**2.2**	0.200 U	**0.057 J**	-	**0.063 J**	-
Antimony	mg/L	0.003^{B}	***0.020 U***	***0.020 U***	***0.020 U***	-	***0.020 U***	***0.0200 U***	***0.0200 U***	-	***0.0200 U***	-
Arsenic	mg/L	0.025^{B}	0.010 U	0.010 U	0.010 U	-	0.010 U	**0.188**^{B}	0.0100 U	-	0.0100 U	-
Barium	mg/L	1^{B}	**0.040**	**0.039**	**0.045**	-	**0.030**	**0.694**	0.0020 U	-	0.0020 U	-
Beryllium	mg/L	0.003^{A}	0.0020 U	0.0020 U	0.0020 U	-	0.0020 U	0.0020 U	0.0020 U	-	0.0020 U	-
Cadmium	mg/L	0.005^{B}	0.0010 U	0.0010 U	0.0010 U	-	0.0010 U	**0.0008 J**	0.0010 U	-	0.0010 U	-
Calcium	mg/L	n/v	**47.8**	**46.8**	**50.0**	-	**11.8**	**51.8 B**	**0.2 J**	-	**0.4 J**	-
Chromium (Total)	mg/L	0.05^{B}	0.0040 U	0.0040 U	0.0040 U	-	0.0040 U	**0.0036 J**	**0.0009 J**	-	0.0040 U	-
Cobalt	mg/L	n/v	0.0040 U	0.0040 U	0.0040 U	-	0.0040 U	**0.0006 J**	0.0040 U	-	0.0040 U	-
Copper	mg/L	0.2^{B}	0.010 U	0.010 U	0.010 U	-	0.010 U	**0.0026 J**	0.0100 U	-	0.0100 U	-
Iron	mg/L	0.3_{*}^{B}	0.050 U	0.050 U	**0.078**	-	**1.5**^{B}	**3.99**^{B}	0.050 U	-	**0.042 J**	-
Lead	mg/L	0.025^{B}	0.0050 U	0.0050 U	0.0050 U	-	0.0050 U	**0.0048 J**	0.0050 U	-	0.0050 U	-
Magnesium	mg/L	35^{A}	**8.5**	**8.5**	**12.1**	-	**2.8**	**15.6**	0.200 U	-	**0.095 J**	-
Manganese	mg/L	0.3_{*}^{B}	**0.0055**	**0.0046**	**2.9**^{B}	-	**0.056**	**0.119 B**	**0.0024 J**	-	0.0018 U	-
Mercury	mg/L	0.0007^{B}	0.00020 U	0.00020 U	0.00020 U	-	0.00020 U	0.0002 U	0.0002 U	-	0.0002 U	-
Nickel	mg/L	0.1^{B}	0.010 U	0.010 U	0.010 U	-	0.010 U	**0.0032 J**	0.0100 U	-	0.0100 U	-
Potassium	mg/L	n/v	**3.0**	**2.9**	**2.7**	-	**5.1**	**1.48**	0.500 U	-	0.500 U	-
Selenium	mg/L	0.01^{B}	***0.015 U***	***0.015 U***	***0.015 U***	-	***0.015 U***	***0.0150 U***	***0.0150 U***	-	***0.0150 U***	-
Silver	mg/L	0.05^{B}	0.0030 U	0.0030 U	0.0030 U	-	0.0030 U	0.0030 U	0.0030 U	-	0.0030 U	-
Sodium	mg/L	20^{B}	**4.7**	**4.6**	**16.5**	-	**2.3**	**129**^{B}	1.0 U	-	1.0 U	-
Thallium	mg/L	0.0005^{A}	***0.020 U***	***0.020 U***	***0.020 U***	-	***0.020 U***	***0.0200 U***	***0.0200 U***	-	***0.0200 U***	-
Vanadium	mg/L	n/v	0.0050 U	0.0050 U	**0.014**	-	0.0050 U	0.0050 U	0.0050 U	-	0.0050 U	-
Zinc	mg/L	2^{A}	0.010 U	0.010 U	0.010 U	-	0.010 U	**0.999**	**0.0020 J**	-	0.0100 U	-
Pesticides												
Aldrin	µg/L	n/v	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
BHC, alpha-	µg/L	0.01^{B}	***0.050 U***	***0.050 U***	***0.050 U***	***0.050 U***	-	***0.050 U J***	***0.049 U J***	-	***0.050 U J***	-
BHC, beta-	µg/L	0.04^{B}	***0.050 U***	***0.050 U***	***0.050 U***	***0.050 U***	-	***0.050 U J***	***0.049 U J***	-	***0.050 U J***	-
BHC, delta-	µg/L	0.04^{B}	***0.050 U***	***0.050 U***	***0.050 U***	***0.050 U***	-	***0.050 U J***	***0.049 U J***	-	***0.050 U J***	-
Camphechlor (Toxaphene)	µg/L	0.06^{B}	***0.50 U***	***0.50 U***	***0.50 U***	***0.50 U***	-	***0.50 U J***	***0.49 U J***	-	***0.50 U J***	-
Chlordane (Total)	µg/L	0.05^{B}	***0.50 U***	***0.50 U***	***0.50 U***	***0.50 U***	-	-	***0.49 U J***	-	***0.50 U J***	-
Chlordane, alpha-	µg/L	n/v	-	-	-	-	-	0.050 U J	0.049 U J	-	0.050 U J	-
Chlordane, gamma-	µg/L	n/v	-	-	-	-	-	0.050 U J	0.049 U J	-	0.050 U J	-
DDD (p,p'-DDD)	µg/L	0.3^{B}	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
DDE (p,p'-DDE)	µg/L	0.2^{B}	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
DDT (p,p'-DDT)	µg/L	0.2^{B}	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
Dieldrin	µg/L	0.004^{B}	***0.050 U***	***0.050 U***	***0.050 U***	***0.050 U***	-	***0.050 U J***	***0.049 U J***	-	***0.050 U J***	-
Endosulfan I	µg/L	n/v	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
Endosulfan II	µg/L	n/v	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
Endosulfan Sulfate	µg/L	n/v	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
Endrin	µg/L	n/v	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
Endrin Aldehyde	µg/L	5_{**}^{B}	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
Endrin Ketone	µg/L	5_{**}^{B}	-	-	-	-	-	0.050 U J	0.049 U J	-	0.050 U J	-
Heptachlor	µg/L	0.04^{AB}	***0.050 U***	***0.050 U***	***0.050 U***	***0.050 U***	-	***0.050 U J***	***0.049 U J***	-	***0.050 U J***	-
Heptachlor Epoxide	µg/L	0.03^{B}	***0.050 U***	***0.050 U***	***0.050 U***	***0.050 U***	-	***0.050 U J***	***0.049 U J***	-	***0.050 U J***	-
Lindane (Hexachlorocyclohexane, gamma)	µg/L	0.05^{B}	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-
Methoxychlor (4,4'-Methoxychlor)	µg/L	35^{B}	0.050 U	0.050 U	0.050 U	0.050 U	-	0.050 U J	0.049 U J	-	0.050 U J	-

See next page for notes.

Table 4
Summary of RI Analytical Results in Groundwater
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**B/MW-9**		**B/MW-11**	**B/MW-25**		**WSW**	**SS-RB**		**TP-RB**	
Sample Date			**5-Jan-11**	**5-Jan-11**	**6-Jan-11**	**4-Jan-11**	**5-Jan-11**	**7-Dec-10**	**25-Oct-10**	**25-Oct-10**	**26-Oct-10**	**26-Oct-10**
Sample ID			**BA-MW9-W**	**BA-MW9-W/D**	**BA-MW11-W**	**BA-MW25-W**	**BA-MW25-W**	**BA-WSW-W**	**BA-SS-RB-W**	**BA-SS-RB-W**	**BA-TP-RB-W**	**BA-TP-RB-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**480-548-1**	**RTL0627**	**RTJ1956**	**RTJ1956**	**RTJ1956**	**RTJ1956**
Laboratory Sample ID			**480-548-5**	**480-548-6**	**480-633-7**	**480-548-2**	**480-548-4**	**RTL0627-01**	**RTJ1956-10**	**RTJ1956-10RE1**	**RTJ1956-13**	**RTJ1956-13RE1**
Sample Type	**Units**	**TOGS**		**Field Duplicate**					**Material Rinse Blank**	**Material Rinse Blank**	**Material Rinse Blank**	**Material Rinse Blank**
Polychlorinated Biphenyls												
Aroclor 1016	µg/L	0.09^B	***0.50 U***	***0.50 U***	***0.50 U***	***0.50 U***	-	***0.50 U J***	***0.49 U***	***0.48 U J***	***0.50 U***	***0.50 U J***
Aroclor 1221	µg/L	0.09^B	***0.50 U***	***0.50 U***	***0.50 U***	***0.50 U***	-	***0.50 U***	***0.49 U***	***0.48 U J***	***0.50 U***	***0.50 U J***
Aroclor 1232	µg/L	0.09^B	***0.50 U***	***0.50 U***	***0.50 U***	***0.50 U***	-	***0.50 U***	***0.49 U***	***0.48 U J***	***0.50 U***	***0.50 U J***
Aroclor 1242	µg/L	0.09^B	***0.50 U***	***0.50 U***	***0.50 U***	***0.50 U***	-	***0.50 U***	***0.49 U***	***0.48 U J***	***0.50 U***	***0.50 U J***
Aroclor 1248	µg/L	0.09^B	***0.50 U***	***0.50 U***	***0.50 U***	***0.50 U***	-	***0.50 U***	***0.49 U***	***0.48 U J***	***0.50 U***	***0.50 U J***
Aroclor 1254	µg/L	0.09^B	***0.50 U***	***0.50 U***	***0.50 U***	***0.50 U***	-	***0.50 U***	***0.49 U***	***0.48 U J***	***0.50 U***	***0.50 U J***
Aroclor 1260	µg/L	0.09^B	***0.50 U***	***0.50 U***	***0.50 U***	***0.50 U***	-	***0.50 U***	***0.49 U***	***0.48 U J***	***0.50 U***	***0.50 U J***
Aroclor 1262	µg/L	n/v	-	-	-	-	-	0.50 U	0.49 U	0.48 U J	0.50 U	0.50 U J
Aroclor 1268	µg/L	n/v	-	-	-	-	-	0.50 U	0.49 U	0.48 U J	0.50 U	0.50 U J

Notes:

TOGS	NYSDEC Technical and Operational Guideline Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guideline Values and Groundwater Effluent Limitations (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004)
^{A}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance
^{B}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
·	The standard for Iron and Manganese is 500 ug/L, which applies to the sum of these substances. As individual standards, the standard is 300 ug/L.
··	The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.
B	Indicates analyte was found in associated blank, as well as in the sample.
J	Indicates estimated value.
TALBU	Test America Laboratories Inc., Buffalo, NY

Table 5
Summary of Analytical Results for Groundwater in Existing Wells
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Sample Location			**BS-2**			**BS-2R**			**BS-3**				
Sample Date			**10-Dec-09**	**5-Jan-11**	**21-Apr-11**	**29-Mar-12**	**21-Jun-12**	**21-Jun-12**	**11-Dec-09**	**5-Jan-11**	**21-Apr-11**	**29-Mar-12**	**20-Jun-12**
Sample ID			**BS-GW-2**	**BA-BS2-W**	**BA-BS2-R2-W**	**BA-BS2R-R3-W**	**BA-BS2R-R4-W**	**BA-BS2R-R4-W/D**	**BS-GW-3**	**BA-BS3-W**	**BA-BS3-R2-W**	**BA-BS3-R3-W**	**BA-BS3-R4-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**SPECTRUM**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**SPECTRUM**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**SB05469**	**480-548-1**	**480-4050-1**	**480-17823-1**	**480-21640-1**	**480-21640-1**	**SB05538**	**480-548-1**	**480-4050-1**	**480-17823-1**	**480-21640-1**
Laboratory Sample ID			**SB05469-04**	**480-633-6**	**480-4050-7**	**480-17880-2**	**480-21687-1**	**480-21687-2**	**SB05538-02**	**480-633-5**	**480-4050-8**	**480-17880-1**	**480-21640-4**
Sample Type	**Units**	**TOGS**						**Field Duplicate**					
Volatile Organic Compounds													
Acetone	µg/L	50^{A}	45.8 U	10 U	10 U	10 U	10 U	10 U	4.6 U	10 U	10 U	10 U	10 U
Acrylonitrile	µg/L	5_{**}^{B}	4.8 U	5.0 U	-	5.0 U	5.0 U	5.0 U	0.5 U	5.0 U	-	5.0 U	5.0 U
Benzene	µg/L	1^{B}	***4.9 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	µg/L	5_{**}^{B}	4.7 U	-	-	-	-	-	0.5 U	-	-	-	-
Bromodichloromethane	µg/L	50^{A}	4.9 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform (Tribromomethane)	µg/L	50^{A}	9.7 U	1.0 U	1.0 U J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U J	1.0 U	1.0 UJ
Bromomethane (Methyl bromide)	µg/L	5_{**}^{B}	***12.5 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	1.0 U
Butylbenzene, n-	µg/L	5_{**}^{B}	***8.3 U***	-	-	-	-	-	0.8 U	-	-	-	-
Butylbenzene, sec- (2-Phenylbutane)	µg/L	5_{**}^{B}	***5.4 U***	-	-	-	-	-	0.5 U	-	-	-	-
Butylbenzene, tert-	µg/L	5_{**}^{B}	***5.1 U***	-	-	-	-	-	0.5 U	-	-	-	-
Carbon Disulfide	µg/L	60^{A}	8.9 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/L	5^{B}	***8.5 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.8 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene (Monochlorobenzene)	µg/L	5_{**}^{B}	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	5_{**}^{B}	***9.5 U***	1.0 U	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U
Chloroethane (Ethyl Chloride)	µg/L	5_{**}^{B}	***11.0 U***	1.0 U	1.0 U	1.0 U J	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U J	1.0 U
Chloroform (Trichloromethane)	µg/L	7^{B}	***8.1 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.8 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	5_{**}^{B}	***8.8 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorotoluene, 2-	µg/L	5_{**}^{B}	***6.7 U***	-	-	-	-	-	0.7 U	-	-	-	-
Chlorotoluene, 4-	µg/L	5_{**}^{B}	***5.3 U***	-	-	-	-	-	0.5 U	-	-	-	-
Cyclohexane	µg/L	n/v	-	-	1.0 U	-	-	-	-	-	1.0 U	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/L	0.04^{B}	***16.6 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.7 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dibromochloromethane	µg/L	50^{A}	4.4 U	1.0 U	1.0 U J	1.0 U	1.0 U	1.0 U	0.4 U	1.0 U	1.0 U J	1.0 U	1.0 U
Dibromomethane (Methylene Bromide)	µg/L	5_{**}^{B}	***6.7 U***	1.0 U	-	1.0 U	1.0 U	1.0 U	0.7 U	1.0 U	-	1.0 U	1.0 U
Dichlorobenzene, 1,2-	µg/L	3^{B}	***4.5 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.4 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,3-	µg/L	3^{B}	***5.4 U***	-	1.0 U	-	-	-	0.5 U	-	1.0 U	-	-
Dichlorobenzene, 1,4-	µg/L	3^{B}	***5.2 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobutene, trans-1,4-	µg/L	n/v	27.7 U	5.0 U	-	5.0 U	5.0 U	5.0 U	2.8 U	5.0 U	-	5.0 U	5.0 UJ
Dichlorodifluoromethane (Freon 12)	µg/L	5_{**}^{B}	***8.8 U***	-	1.0 U	-	-	-	0.9 U	-	1.0 U	-	-
Dichloroethane, 1,1-	µg/L	5_{**}^{B}	**8.4 J**^{B}	**200**^{B}	1.0 U	1.6	1.5	1.4	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloroethane, 1,2-	µg/L	0.6^{B}	***6.3 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	0.6 U	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloroethene, 1,1-	µg/L	5_{**}^{B}	***7.2 U***	**28**^{B}	1.0 U	1.0 U	1.0 U	1.0 U	0.7 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloroethylene, cis-1,2-	µg/L	5_{**}^{B}	**6.6 J**^{B}	**160**^{B}	1.4	3.8	**7.4**^{B}	**7.2**^{B}	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/L	5_{**}^{B}	***9.1 U***	1.7	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/L	1^{B}	***5.3 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,3-	µg/L	5_{**}^{B}	***6.6 U***	-	-	-	-	-	0.7 U	-	-	-	-
Dichloropropane, 2,2-	µg/L	5_{**}^{B}	***6.2 U***	-	-	-	-	-	0.6 U	-	-	-	-
Dichloropropene, 1,1-	µg/L	5_{**}^{B}	***7.8 U***	-	-	-	-	-	0.8 U	-	-	-	-
Dichloropropene, cis-1,3-	µg/L	0.4_{p}^{B}	***4.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	0.4 U	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloropropene, trans-1,3-	µg/L	0.4_{p}^{B}	***3.9 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	0.4 U	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Diisopropyl Ether	µg/L	n/v	5.5 U	-	-	-	-	-	0.6 U	-	-	-	-
Dioxane, 1,4-	µg/L	n/v	200 U	-	-	-	-	-	20.0 U	-	-	-	-
Ethanol	µg/L	n/v	377 U	-	-	-	-	-	37.7 U	-	-	-	-
Ethyl Ether	µg/L	n/v	6.4 U	-	-	-	-	-	0.6 U	-	-	-	-
Ethyl Tert Butyl Ether	µg/L	n/v	5.4 U	-	-	-	-	-	0.5 U	-	-	-	-
Ethylbenzene	µg/L	5_{**}^{B}	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	0.0006^{B}	***4.9 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***0.5 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Hexachlorobutadiene	µg/L	0.5^{B}	***4.9 U***	-	-	-	-	-	0.5 U	-	-	-	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/L	50^{A}	26.8 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Iodomethane	µg/L	5_{**}^{B}	-	1.0 U	-	1.0 U	1.0 U	1.0 U	-	1.0 U	-	1.0 U	1.0 U
Isopropylbenzene	µg/L	5_{**}^{B}	***5.2 U***	-	1.0 U	-	-	-	0.5 U	-	1.0 U	-	-
Isopropyltoluene, p- (Cymene)	µg/L	5_{**}^{B}	***5.1 U***	-	-	-	-	-	0.5 U	-	-	-	-
Methyl Acetate	µg/L	n/v	-	-	1.0 U	-	-	-	-	-	1.0 U	-	-
Methyl Ethyl Ketone (MEK)	µg/L	50^{A}	40.8 U	10 U	10 U	10 U	10 U	10 U	4.1 U	10 U	10 U	10 U	10 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	10.9 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.1 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether (MTBE)	µg/L	10^{A}	8.5 U	-	1.0 U	-	-	-	0.8 U	-	1.0 U	-	-
Methylcyclohexane	µg/L	n/v	-	-	1.0 U	-	-	-	-	-	1.0 U	-	-
Methylene Chloride (Dichloromethane)	µg/L	5_{**}^{B}	***6.4 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	10^{B}	9.6 U	-	-	-	-	-	1.0 U	-	-	-	-
Propylbenzene, n-	µg/L	5_{**}^{B}	***5.3 U***	-	-	-	-	-	0.5 U	-	-	-	-
Styrene	µg/L	5_{**}^{B}	***9.2 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	1.0 U	1.0 U	1.0 U	1.0 U
Tert Amyl Methyl Ether	µg/L	n/v	6.4 U	-	-	-	-	-	0.6 U	-	-	-	-
Tert-Butyl Alcohol	µg/L	n/v	96.4 U	-	-	-	-	-	9.6 U	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	5_{**}^{B}	***5.4 U***	1.0 U	-	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	-	1.0 U	1.0 U
Tetrachloroethane, 1,1,2,2-	µg/L	5_{**}^{B}	4.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5_{**}^{B}	***7.2 U***	**5.6**^{B}	1.6	1.0 U	1.0 U	1.0 U	0.7 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrahydrofuran	µg/L	50^{A}	24.2 U	-	-	-	-	-	2.4 U	-	-	-	-
Toluene	µg/L	5_{**}^{B}	***7.6 U***	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.6	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,3-	µg/L	5_{**}^{B}	***5.7 U***	-	-	-	-	-	0.6 U	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/L	5_{**}^{B}	***5.9 U***	-	1.0 U	-	-	-	0.6 U	-	1.0 U	-	-
Trichlorobenzene, 1,3,5-	µg/L	5_{**}^{B}	***5.4 U***	-	-	-	-	-	0.5 U	-	-	-	-
Trichloroethane, 1,1,1-	µg/L	5_{**}^{B}	**80.3**^{B}	4.6	4.7	**5.7**^{B}	4.9	4.7	1.5	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethane, 1,1,2-	µg/L	1^{B}	***7.3 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.7 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5_{**}^{B}	**611**^{B}	**12000**^{B}	**46**^{B}	**30**^{B}	**22**^{B}	**21**^{B}	**8.2**^{B}	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	µg/L	5_{**}^{B}	***6.9 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.7 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloropropane, 1,2,3-	µg/L	0.04^{B}	***9.3 U***	***1.0 U***	-	***1.0 U***	***1.0 U***	***1.0 U***	***0.9 U***	***1.0 U***	-	***1.0 U***	***1.0 U***
Trichlorotrifluoroethane (Freon 113)	µg/L	5_{**}^{B}	***9.9 U***	-	1.0 U	-	-	-	1.0 U	-	1.0 U	-	-
Trimethylbenzene, 1,2,4-	µg/L	5_{**}^{B}	4.5 U	-	-	-	-	-	0.4 U	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/L	5_{**}^{B}	5.0 U	-	-	-	-	-	0.5 U	-	-	-	-
Vinyl Acetate	µg/L	n/v	-	5.0 U	-	5.0 U	5.0 U	5.0 U	-	5.0 U	-	5.0 U	5.0 U
Vinyl chloride	µg/L	2^{B}	***8.6 U***	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene, m & p-	µg/L	5_{**}^{B}	***9.8 U***	-	-	-	-	-	1.0 U	-	-	-	-
Xylene, o-	µg/L	5_{**}^{B}	4.9 U	-	-	-	-	-	0.5 U	-	-	-	-
Xylenes, Total	µg/L	5_{**}^{B}	-	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	-	2.0 U	2.0 U	2.0 U	2.0 U
Total VOC	µg/L	n/v	706.3	12401.1	53.7	41.1	35.8	34.3	11.3	ND	ND	ND	ND

See last page for notes.

Table 5
Summary of Analytical Results for Groundwater in Existing Wells
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Sample Location			**B/MW-8**				**B/MW-25**			
Sample Date			**7-Jan-11**	**20-Apr-11**	**29-Mar-12**	**20-Jun-12**	**4-Jan-11**	**20-Apr-11**	**29-Mar-12**	**21-Jun-12**
Sample ID			**BA-MW8-W**	**BA-MW8-R2-W**	**BA-MW8-R3-W**	**BA-MW8-R4-W**	**BA-MW25-W**	**BA-MW25-R2-W**	**BA-MW25-R3-W**	**BA-MW25-R4-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-4050-1**	**480-17823-1**	**480-21640-1**	**480-548-1**	**480-4050-1**	**480-17823-1**	**480-21640-1**
Laboratory Sample ID			**480-689-7**	**480-4050-2**	**480-17880-3**	**480-21640-3**	**480-548-2**	**480-4050-6**	**480-17880-4**	**480-21687-3**
Sample Type	**Units**	**TOGS**								
Volatile Organic Compounds										
Acetone	µg/L	50^{A}	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acrylonitrile	µg/L	5_{**}^{B}	5.0 U	-	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U
Benzene	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform (Tribromomethane)	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Butylbenzene, n-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Butylbenzene, sec- (2-Phenylbutane)	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Butylbenzene, tert-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Carbon Disulfide	µg/L	60^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/L	5^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene (Monochlorobenzene)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U
Chloroethane (Ethyl Chloride)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U J	1.0 U	1.0 U	1.0 U	1.0 U J	1.0 U
Chloroform (Trichloromethane)	µg/L	7^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorotoluene, 2-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Chlorotoluene, 4-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Cyclohexane	µg/L	n/v	-	1.0 U	-	-	-	1.0 U	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/L	0.04^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dibromochloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane (Methylene Bromide)	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U
Dichlorobenzene, 1,2-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,3-	µg/L	3^{B}	-	1.0 U	-	-	-	1.0 U	-	-
Dichlorobenzene, 1,4-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobutene, trans-1,4-	µg/L	n/v	5.0 U	-	5.0 U	5.0 UJ	5.0 U	-	5.0 U	5.0 U
Dichlorodifluoromethane (Freon 12)	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	1.0 U	-	-
Dichloroethane, 1,1-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.4	1.6	4.6	1.0 U	3.0	5.0
Dichloroethane, 1,2-	µg/L	0.6^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloroethene, 1,1-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	2.4
Dichloroethylene, cis-1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	**9.9^{B}**	**9.6^{B}**	1.0 U	1.0 U	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,3-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Dichloropropane, 2,2-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Dichloropropene, 1,1-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloropropene, trans-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Diisopropyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-
Dioxane, 1,4-	µg/L	n/v	-	-	-	-	-	-	-	-
Ethanol	µg/L	n/v	-	-	-	-	-	-	-	-
Ethyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-
Ethyl Tert Butyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	0.0006^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Hexachlorobutadiene	µg/L	0.5^{B}	-	-	-	-	-	-	-	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Iodomethane	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U
Isopropylbenzene	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	1.0 U	-	-
Isopropyltoluene, p- (Cymene)	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Methyl Acetate	µg/L	n/v	-	1.0 U	-	-	-	1.0 U	-	-
Methyl Ethyl Ketone (MEK)	µg/L	50^{A}	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether (MTBE)	µg/L	10^{A}	-	1.0 U	-	-	-	1.0 U	-	-
Methylcyclohexane	µg/L	n/v	-	1.0 U	-	-	-	1.0 U	-	-
Methylene Chloride (Dichloromethane)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	10^{B}	-	-	-	-	-	-	-	-
Propylbenzene, n-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Styrene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tert Amyl Methyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-
Tert-Butyl Alcohol	µg/L	n/v	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	5_{**}^{B}	1.0 U	-	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U
Tetrachloroethane, 1,1,2,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0
Tetrahydrofuran	µg/L	50^{A}	-	-	-	-	-	-	-	-
Toluene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,3-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	1.0 U	-	-
Trichlorobenzene, 1,3,5-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/L	5_{**}^{B}	1.0 U	1.9	2.0	1.7	2.3	1.0 U	1.9	3.9
Trichloroethane, 1,1,2-	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5_{**}^{B}	3.3	**6.6 J^{B}**	**5.7^{B}**	**6.5^{B}**	**29^{B}**	**12^{B}**	**16^{B}**	**36^{B}**
Trichlorofluoromethane (Freon 11)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloropropane, 1,2,3-	µg/L	0.04^{B}	***1.0 U***	-	***1.0 U***	***1.0 U***	***1.0 U***	-	***1.0 U***	***1.0 U***
Trichlorotrifluoroethane (Freon 113)	µg/L	5_{**}^{B}	-	1.0 U	-	-	-	1.0 U	-	-
Trimethylbenzene, 1,2,4-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Vinyl Acetate	µg/L	n/v	5.0 U	-	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U
Vinyl chloride	µg/L	2^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene, m & p-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Xylene, o-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Xylenes, Total	µg/L	5_{**}^{B}	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOC	µg/L	n/v	3.3	8.5	19	19.4	37.2	12	20.9	48.3

See last page for notes.

Summary of Analytical Results for Groundwater in Existing Wells
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Sample Location			**B/MW-27**					**B/MW-28D**		
Sample Date			**22-Feb-11**	**22-Feb-11**	**28-Mar-12**	**28-Mar-12**	**21-Jun-12**	**22-Feb-11**	**28-Mar-12**	**21-Jun-12**
Sample ID			**BA-MW27-W**	**BA-MW27-W/D**	**BA-MW27-R3-W**	**BA-MW27-R3-W/D**	**BA-MW27-R4-W**	**BA-MW28D-W**	**BA-MW28D-R3-W**	**BA-MW28D-R4-W**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-1891-1**	**480-1891-1**	**480-17823-1**	**480-17823-1**	**480-21640-1**	**480-1891-1**	**480-17823-1**	**480-21640-1**
Laboratory Sample ID			**480-1891-2**	**480-1891-4**	**480-17823-3**	**480-17823-6**	**480-21687-4**	**480-1891-3**	**480-17823-4**	**480-21687-5**
Sample Type	**Units**	**TOGS**		**Field Duplicate**		**Field Duplicate**				
Volatile Organic Compounds										
Acetone	µg/L	50^{A}	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acrylonitrile	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform (Tribromomethane)	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Butylbenzene, n-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Butylbenzene, sec- (2-Phenylbutane)	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Butylbenzene, tert-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Carbon Disulfide	µg/L	60^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	1.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/L	5^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene (Monochlorobenzene)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane (Ethyl Chloride)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U J	1.0 U J	1.0 U	1.0 U	1.0 U J	1.0 U
Chloroform (Trichloromethane)	µg/L	7^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorotoluene, 2-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Chlorotoluene, 4-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Cyclohexane	µg/L	n/v	-	-	-	-	-	-	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/L	0.04^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dibromochloromethane	µg/L	50^{A}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane (Methylene Bromide)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,2-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,3-	µg/L	3^{B}	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/L	3^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorobutene, trans-1,4-	µg/L	n/v	50 U	50 U	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U
Dichlorodifluoromethane (Freon 12)	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Dichloroethane, 1,1-	µg/L	5_{**}^{B}	2.4	2.4	**5.7^{B}**	**6.1^{B}**	**8.0^{B}**	1.0 U	1.0 U	1.0 U
Dichloroethane, 1,2-	µg/L	0.6^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloroethene, 1,1-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U
Dichloroethylene, cis-1,2-	µg/L	5_{**}^{B}	1.4	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropane, 1,3-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Dichloropropane, 2,2-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Dichloropropene, 1,1-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Dichloropropene, trans-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Diisopropyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-
Dioxane, 1,4-	µg/L	n/v	-	-	-	-	-	-	-	-
Ethanol	µg/L	n/v	-	-	-	-	-	-	-	-
Ethyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-
Ethyl Tert Butyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	0.0006^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Hexachlorobutadiene	µg/L	0.5^{B}	-	-	-	-	-	-	-	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Iodomethane	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Isopropyltoluene, p- (Cymene)	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Methyl Acetate	µg/L	n/v	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone (MEK)	µg/L	50^{A}	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether (MTBE)	µg/L	10^{A}	-	-	-	-	-	-	-	-
Methylcyclohexane	µg/L	n/v	-	-	-	-	-	-	-	-
Methylene Chloride (Dichloromethane)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	10^{B}	-	-	-	-	-	-	-	-
Propylbenzene, n-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Styrene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tert Amyl Methyl Ether	µg/L	n/v	-	-	-	-	-	-	-	-
Tert-Butyl Alcohol	µg/L	n/v	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethane, 1,1,2,2-	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrahydrofuran	µg/L	50^{A}	-	-	-	-	-	-	-	-
Toluene	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,3-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Trichlorobenzene, 1,3,5-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/L	5_{**}^{B}	1.0 U	1.0 U	2.0	2.0	2.3	1.0 U	1.0 U	1.0 U
Trichloroethane, 1,1,2-	µg/L	1^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5_{**}^{B}	2.8	3.0	**5.6^{B}**	**5.7^{B}**	**7.5^{B}**	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	µg/L	5_{**}^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloropropane, 1,2,3-	µg/L	0.04^{B}	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***	***1.0 U***
Trichlorotrifluoroethane (Freon 113)	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,2,4-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Vinyl Acetate	µg/L	n/v	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	µg/L	2^{B}	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene, m & p-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Xylene, o-	µg/L	5_{**}^{B}	-	-	-	-	-	-	-	-
Xylenes, Total	µg/L	5_{**}^{B}	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOC	µg/L	n/v	6.6	6.6	13.3	13.8	19.1	1.0	ND	ND

See last page for notes.

Table 5
Summary of Analytical Results for Groundwater in Existing Wells
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Sample Location			B/MW-65		Trip Blank	
Sample Date			28-Mar-12	20-Jun-12	20-Jun-12	21-Jun-12
Sample ID			BA-MW65-R3-W	BA-MW65-R4-W	BA-TB-062012-W	BA-TB062112-W
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBU	TALBU	TALBU	TALBU
Laboratory Work Order			480-17823-1	480-21640-1	480-21640-1	480-21640-1
Laboratory Sample ID			480-17823-1	480-21640-2	480-21640-5	480-21687-6
Sample Type	Units	TOGS			Trip Blank	Trip Blank
Volatile Organic Compounds						
Acetone	µg/L	50^{A}	10 U	20 U	10 U	10 U
Acrylonitrile	µg/L	5_{**}^{B}	5.0 U	***10 U***	5.0 U	5.0 U
Benzene	µg/L	1^{B}	1.0 U	***2.0 U***	1.0 U	1.0 U
Bromobenzene	µg/L	5_{**}^{B}	-	-	-	-
Bromodichloromethane	µg/L	50^{A}	1.0 U	2.0 U	1.0 U	1.0 U
Bromoform (Tribromomethane)	µg/L	50^{A}	1.0 U	2.0 UJ	1.0 UJ	1.0 U
Bromomethane (Methyl bromide)	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Butylbenzene, n-	µg/L	5_{**}^{B}	-	-	-	-
Butylbenzene, sec- (2-Phenylbutane)	µg/L	5_{**}^{B}	-	-	-	-
Butylbenzene, tert-	µg/L	5_{**}^{B}	-	-	-	-
Carbon Disulfide	µg/L	60^{A}	1.0 U	2.0 U	1.0 U	1.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/L	5^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Chlorobenzene (Monochlorobenzene)	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Chloroethane (Ethyl Chloride)	µg/L	5_{**}^{B}	1.0 U J	2.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	7^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Chloromethane	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Chlorotoluene, 2-	µg/L	5_{**}^{B}	-	-	-	-
Chlorotoluene, 4-	µg/L	5_{**}^{B}	-	-	-	-
Cyclohexane	µg/L	n/v	-	-	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/L	0.04^{B}	***1.0 U***	***2.0 U***	***1.0 U***	***1.0 U***
Dibromochloromethane	µg/L	50^{A}	1.0 U	2.0 U	1.0 U	1.0 U
Dibromomethane (Methylene Bromide)	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,2-	µg/L	3^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,3-	µg/L	3^{B}	-	-	-	-
Dichlorobenzene, 1,4-	µg/L	3^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Dichlorobutene, trans-1,4-	µg/L	n/v	5.0 U	10 UJ	5.0 UJ	5.0 U
Dichlorodifluoromethane (Freon 12)	µg/L	5_{**}^{B}	-	-	-	-
Dichloroethane, 1,1-	µg/L	5_{**}^{B}	1.9	2.0 U	1.0 U	1.0 U
Dichloroethane, 1,2-	µg/L	0.6^{B}	***1.0 U***	***2.0 U***	***1.0 U***	***1.0 U***
Dichloroethene, 1,1-	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Dichloroethylene, cis-1,2-	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/L	1^{B}	1.0 U	***2.0 U***	1.0 U	1.0 U
Dichloropropane, 1,3-	µg/L	5_{**}^{B}	-	-	-	-
Dichloropropane, 2,2-	µg/L	5_{**}^{B}	-	-	-	-
Dichloropropene, 1,1-	µg/L	5_{**}^{B}	-	-	-	-
Dichloropropene, cis-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***2.0 U***	***1.0 U***	***1.0 U***
Dichloropropene, trans-1,3-	µg/L	0.4_{p}^{B}	***1.0 U***	***2.0 U***	***1.0 U***	***1.0 U***
Diisopropyl Ether	µg/L	n/v	-	-	-	-
Dioxane, 1,4-	µg/L	n/v	-	-	-	-
Ethanol	µg/L	n/v	-	-	-	-
Ethyl Ether	µg/L	n/v	-	-	-	-
Ethyl Tert Butyl Ether	µg/L	n/v	-	-	-	-
Ethylbenzene	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	0.0006^{B}	***1.0 U***	***2.0 U***	***1.0 U***	***1.0 U***
Hexachlorobutadiene	µg/L	0.5^{B}	-	-	-	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/L	50^{A}	5.0 U	10 U	5.0 U	5.0 U
Iodomethane	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Isopropylbenzene	µg/L	5_{**}^{B}	-	-	-	-
Isopropyltoluene, p- (Cymene)	µg/L	5_{**}^{B}	-	-	-	-
Methyl Acetate	µg/L	n/v	-	-	-	-
Methyl Ethyl Ketone (MEK)	µg/L	50^{A}	10 U	20 U	10 U	10 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	5.0 U	10 U	5.0 U	5.0 U
Methyl tert-butyl ether (MTBE)	µg/L	10^{A}	-	-	-	-
Methylcyclohexane	µg/L	n/v	-	-	-	-
Methylene Chloride (Dichloromethane)	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Naphthalene	µg/L	10^{B}	-	-	-	-
Propylbenzene, n-	µg/L	5_{**}^{B}	-	-	-	-
Styrene	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Tert Amyl Methyl Ether	µg/L	n/v	-	-	-	-
Tert-Butyl Alcohol	µg/L	n/v	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Tetrachloroethane, 1,1,2,2-	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Tetrahydrofuran	µg/L	50^{A}	-	-	-	-
Toluene	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,3-	µg/L	5_{**}^{B}	-	-	-	-
Trichlorobenzene, 1,2,4-	µg/L	5_{**}^{B}	-	-	-	-
Trichlorobenzene, 1,3,5-	µg/L	5_{**}^{B}	-	-	-	-
Trichloroethane, 1,1,1-	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Trichloroethane, 1,1,2-	µg/L	1^{B}	1.0 U	***2.0 U***	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	µg/L	5_{**}^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Trichloropropane, 1,2,3-	µg/L	0.04^{B}	***1.0 U***	***2.0 U***	***1.0 U***	***1.0 U***
Trichlorotrifluoroethane (Freon 113)	µg/L	5_{**}^{B}	-	-	-	-
Trimethylbenzene, 1,2,4-	µg/L	5_{**}^{B}	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/L	5_{**}^{B}	-	-	-	-
Vinyl Acetate	µg/L	n/v	5.0 U	10 U	5.0 U	5.0 U
Vinyl chloride	µg/L	2^{B}	1.0 U	2.0 U	1.0 U	1.0 U
Xylene, m & p-	µg/L	5_{**}^{B}	-	-	-	-
Xylene, o-	µg/L	5_{**}^{B}	-	-	-	-
Xylenes, Total	µg/L	5_{**}^{B}	2.0 U	4.0 U	2.0 U	2.0 U
Total VOC	µg/L	n/v	1.9	ND	ND	ND

Notes:

TOGS	NYSDEC TOGS 1.1.1 (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004)
^{A}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance
^{B}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
6.5^{A}	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_{**}$	The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.
$_{p}$	Applies to the sum of cis- and trans-1,3-dichloropropene.
J	Indicates estimated value.
UJ	Indicates estimated non-detect.

Table 5
Summary of Analytical Results for Groundwater in Existing Wells
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Sample Location			**B/MW-25**	**B/MW-65**			
Sample Date			**4-Jan-11**	**28-Mar-12**	**28-Mar-12**	**20-Jun-12**	**20-Jun-12**
Sample ID			**BA-MW25-W**	**BA-MW65-R3-W**	**BA-MW65-R3-W/D**	**BA-MW65-R4-W**	**BA-MW65-R4-W/D**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-548-1**	**480-17823-1**	**480-17823-1**	**480-21640-1**	**480-21640-1**
Laboratory Sample ID			**480-548-2**	**480-17823-1**	**480-17823-2**	**480-21640-2**	**480-21640-1**
Sample Type	**Units**	**TOGS**			**Field Duplicate**		**Field Duplicate**
Semi-Volatile Organic Compounds							
Acenaphthene	µg/L	20^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Acenaphthylene	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Acetophenone	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Anthracene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Atrazine	µg/L	7.5^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Benzaldehyde	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Benzo(a)anthracene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Benzo(a)pyrene	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Benzo(b)fluoranthene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Benzo(g,h,i)perylene	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Benzo(k)fluoranthene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Biphenyl, 1,1'- (Biphenyl)	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Bis(2-Chloroethoxy)methane	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Bis(2-Chloroethyl)ether	µg/L	1^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U *	4.8 U *
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	5^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Bromophenyl Phenyl Ether, 4-	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Butyl Benzyl Phthalate	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Caprolactam	µg/L	n/v	5.0 U	20 U J	20 U J	19 UJ	19 U
Carbazole	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Chloro-3-methyl phenol, 4-	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Chloroaniline, 4-	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Chloronaphthalene, 2-	µg/L	10^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Chlorophenyl Phenyl Ether, 4-	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Chrysene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Cresol, o- (Methylphenol, 2-)	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Cresol, p- (Methylphenol, 4-)	µg/L	n/v	10 U	10 U	10 U	9.5 U	9.6 U
Dibenzo(a,h)anthracene	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Dibenzofuran	µg/L	n/v	10 U	10 U	10 U	9.5 U	9.6 U
Dibutyl Phthalate (DBP)	µg/L	50^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Dichlorobenzidine, 3,3'-	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Dichlorophenol, 2,4-	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Diethyl Phthalate	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Dimethyl Phthalate	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Dimethylphenol, 2,4-	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Dinitro-o-cresol, 4,6-	µg/L	n/v	10 U	10 U	10 U	9.5 U	9.6 U
Dinitrophenol, 2,4-	µg/L	10^{A}	10 U	10 U	10 U	9.5 U	9.6 U
Dinitrotoluene, 2,4-	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Dinitrotoluene, 2,6-	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Di-n-Octyl phthalate	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Fluoranthene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Fluorene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Hexachlorobenzene	µg/L	0.04^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Hexachlorobutadiene	µg/L	0.5^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Hexachlorocyclopentadiene	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Hexachloroethane	µg/L	5_{**}^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Indeno(1,2,3-cd)pyrene	µg/L	0.002^{A}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Isophorone	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Methylnaphthalene, 2-	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Naphthalene	µg/L	10^{B}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Nitroaniline, 2-	µg/L	5_{**}^{B}	***10 U***	***10 U***	***10 U***	***9.5 U***	***9.6 U***
Nitroaniline, 3-	µg/L	5_{**}^{B}	***10 U***	***10 U***	***10 U***	***9.5 U***	***9.6 U***
Nitroaniline, 4-	µg/L	5_{**}^{B}	***10 U***	***10 U***	***10 U***	***9.5 U***	***9.6 U***
Nitrobenzene	µg/L	0.4^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Nitrophenol, 2-	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Nitrophenol, 4-	µg/L	n/v	10 U	10 U	10 U	9.5 U	9.6 U
N-Nitrosodi-n-Propylamine	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
n-Nitrosodiphenylamine	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Pentachlorophenol	µg/L	1.0^{B}	***10 U***	***10 U***	***10 U***	***9.5 U***	***9.6 U***
Phenanthrene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Phenol	µg/L	1.0^{B}	***5.0 U***	***5.0 U***	***5.0 U***	***4.8 U***	***4.8 U***
Pyrene	µg/L	50^{A}	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Trichlorophenol, 2,4,5-	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
Trichlorophenol, 2,4,6-	µg/L	n/v	5.0 U	5.0 U	5.0 U	4.8 U	4.8 U
SVOC Tentatively Identified Compounds							
Total SVOC TICs	µg/L	n/v	-	621.2	616.1	87.5	56

Notes:

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^{B}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
6.5^{A}	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_{**}$	The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.
*	Indicates analysis is not within the quality control limits.
J	Indicates estimated value.
UJ	Indicates estimated non-detect.

Table 5
Summary of Analytical Results for Groundwater in Existing Wells
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Sample Location			BS-2R			BS-3		B/MW-8		B/MW-25			B/MW-27			B/MW-28D		B/MW-65			
Sample Date			29-Mar-12	21-Jun-12	21-Jun-12	29-Mar-12	20-Jun-12	29-Mar-12	20-Jun-12	4-Jan-11	29-Mar-12	21-Jun-12	28-Mar-12	28-Mar-12	21-Jun-12	28-Mar-12	21-Jun-12	28-Mar-12	28-Mar-12	20-Jun-12	20-Jun-12
Sample ID			BA-BS2R-R3-W	BA-BS2R-R4-W	BA-BS2R-R4-W/D	BA-BS3-R3-W	BA-BS3-R4-W	BA-MW8-R3-W	BA-MW8-R4-W	BA-MW25-W	BA-MW25-R3-W	BA-MW25-R4-W	BA-MW27-R3-W	BA-MW27-R3-W/D	BA-MW27-R4-W	BA-MW28D-R3-W	BA-MW28D-R4-W	BA-MW65-R3-W	BA-MW65-R3-W/D	BA-MW65-R4-W	BA-MW65-R4-W/D
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory Work Order			480-17823-1	480-21640-1	480-21640-1	480-17823-1	480-21640-1	480-17823-1	480-21640-1	480-548-1	480-17823-1	480-21640-1	480-17823-1	480-17823-1	480-21640-1	480-17823-1	480-21640-1	480-17823-1	480-17823-1	480-21640-1	480-21640-1
Laboratory Sample ID			480-17880-2	480-21687-1	480-21687-2	480-17880-1	480-21640-4	480-17880-3	480-21640-3	480-548-4	480-17880-4	480-21687-3	480-17823-3	480-17823-6	480-21687-4	480-17823-4	480-21687-5	480-17823-1	480-17823-2	480-21640-2	480-21640-1
Sample Type	Units	TOGS			Field Duplicate									Field Duplicate					Field Duplicate		Field Duplicate
General Chemistry																					
Nitrate (as N)	mg/L	10_x^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.050 U	0.050 U	0.050 U	0.050 U
Nitrate + Nitrite (as N)	mg/L	10_y^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.050 U	0.050 U	0.050 U	0.050 U
Nitrite (as N)	mg/L	1_x^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.050 U	0.050 U	0.050 U	0.050 U
Sulfate	mg/L	250^B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162	161	**426^B**	**476^B**
Total Organic Carbon	mg/L	n/v	1.3	1.0 U	1.0 U	1.8	1.2	4.7	3.2	-	1.4	1.0 U	6.7	6.5	1.0 U	1.0 U	1.0 U	-	-	-	-
Metals																					
Aluminum	mg/L	n/v	-	-	-	-	-	-	-	2.2	-	-	-	-	-	-	-	-	-	-	-
Antimony	mg/L	0.003^B	-	-	-	-	-	-	-	***0.020 U***	-	-	-	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.025^B	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.014	0.013	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.020	0.017	-	-	-	-
Barium	mg/L	1^B	-	-	-	-	-	-	-	0.030	-	-	-	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.003^A	-	-	-	-	-	-	-	0.0020 U	-	-	-	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.005^B	-	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	-	-	-	-	-	-
Calcium	mg/L	n/v	-	-	-	-	-	-	-	11.8	-	-	-	-	-	-	-	-	-	-	-
Chromium (Total)	mg/L	0.05^B	-	-	-	-	-	-	-	0.0040 U	-	-	-	-	-	-	-	-	-	-	-
Cobalt	mg/L	n/v	-	-	-	-	-	-	-	0.0040 U	-	-	-	-	-	-	-	-	-	-	-
Copper	mg/L	0.2^B	-	-	-	-	-	-	-	0.010 U	-	-	-	-	-	-	-	-	-	-	-
Iron	mg/L	0.3_*^B	-	-	-	-	-	-	-	**1.5^B**	-	-	-	-	-	-	-	-	-	-	-
Lead	mg/L	0.025^B	-	-	-	-	-	-	-	0.0050 U	-	-	-	-	-	-	-	-	-	-	-
Magnesium	mg/L	35^A	-	-	-	-	-	-	-	2.8	-	-	-	-	-	-	-	-	-	-	-
Manganese	mg/L	0.3_*^B	**2.1^B**	**1.8 J^B**	**1.8 J^B**	**2.0^B**	**2.0 J^B**	**4.3^B**	**3.2 J^B**	0.056	0.052	0.0030 U	**0.83^B**	**0.85^B**	**0.34 J^B**	0.080	0.053 J	-	-	-	-
Mercury	mg/L	0.0007^B	-	-	-	-	-	-	-	0.00020 U	-	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	0.1^B	-	-	-	-	-	-	-	0.010 U	-	-	-	-	-	-	-	-	-	-	-
Potassium	mg/L	n/v	-	-	-	-	-	-	-	5.1	-	-	-	-	-	-	-	-	-	-	-
Selenium	mg/L	0.01^B	-	-	-	-	-	-	-	***0.015 U***	-	-	-	-	-	-	-	-	-	-	-
Silver	mg/L	0.05^B	-	-	-	-	-	-	-	0.0030 U	-	-	-	-	-	-	-	-	-	-	-
Sodium	mg/L	20^B	**86.2^B**	**64.7^B**	**64.3^B**	**198^B**	**241^B**	**103^B**	**79.3^B**	2.3	**29.7^B**	**28.1^B**	**40.7^B**	**39.8^B**	**29.2^B**	**24.3^B**	**20.6^B**	-	-	-	-
Thallium	mg/L	0.0005^A	-	-	-	-	-	-	-	***0.020 U***	-	-	-	-	-	-	-	-	-	-	-
Vanadium	mg/L	n/v	-	-	-	-	-	-	-	0.0050 U	-	-	-	-	-	-	-	-	-	-	-
Zinc	mg/L	2^A	-	-	-	-	-	-	-	0.010 U	-	-	-	-	-	-	-	-	-	-	-

Notes:

TOGS	NYSDEC TOGS 1.1.1 (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004)
^{A}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance
^{B}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_*$	The standard for Iron and Manganese is 500 ug/L, which applies to the sum of these substances. As individual standards, the standard is 300 ug/L.
$_x$	Topsoil: surface A, L, F, H and O horizons on the control area, or the equivalent surface soil where these horizons are not present.
$_y$	Subsoil: B and C horizons and the upper portion of the parent material.
J	Indicates estimated value.

Table 5
Summary of Analytical Results for Groundwater in Existing Wells
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Sample Location			**B/MW-25**
Sample Date			**4-Jan-11**
Sample ID			**BA-MW25-W**
Sampling Company			**STANTEC**
Laboratory			**TALBU**
Laboratory Work Order			**480-548-1**
Laboratory Sample ID			**480-548-2**
Sample Type	**Units**	**TOGS**	
Pesticides			
Aldrin	µg/L	n/v	0.050 U
BHC, alpha-	µg/L	0.01^{B}	***0.050 U***
BHC, beta-	µg/L	0.04^{B}	***0.050 U***
BHC, delta-	µg/L	0.04^{B}	***0.050 U***
Camphechlor (Toxaphene)	µg/L	0.06^{B}	***0.50 U***
Chlordane (Total)	µg/L	0.05^{B}	***0.50 U***
DDD (p,p'-DDD)	µg/L	0.3^{B}	0.050 U
DDE (p,p'-DDE)	µg/L	0.2^{B}	0.050 U
DDT (p,p'-DDT)	µg/L	0.2^{B}	0.050 U
Dieldrin	µg/L	0.004^{B}	***0.050 U***
Endosulfan I	µg/L	n/v	0.050 U
Endosulfan II	µg/L	n/v	0.050 U
Endosulfan Sulfate	µg/L	n/v	0.050 U
Endrin	µg/L	n/v	0.050 U
Endrin Aldehyde	µg/L	5**^{B}	0.050 U
Heptachlor	µg/L	0.04^{AB}	***0.050 U***
Heptachlor Epoxide	µg/L	0.03^{B}	***0.050 U***
Lindane (Hexachlorocyclohexane, gamma)	µg/L	0.05^{B}	0.050 U
Methoxychlor (4,4'-Methoxychlor)	µg/L	35^{B}	0.050 U
Polychlorinated Biphenyls			
Aroclor 1016	µg/L	0.09^{B}	***0.50 U***
Aroclor 1221	µg/L	0.09^{B}	***0.50 U***
Aroclor 1232	µg/L	0.09^{B}	***0.50 U***
Aroclor 1242	µg/L	0.09^{B}	***0.50 U***
Aroclor 1248	µg/L	0.09^{B}	***0.50 U***
Aroclor 1254	µg/L	0.09^{B}	***0.50 U***
Aroclor 1260	µg/L	0.09^{B}	***0.50 U***

Notes:

TOGS	NYSDEC TOGS 1.1.1 (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004)
^{A}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance
^{B}	TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards
6.5^{A}	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
**	The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.

Table 6
Soil Sample Remaining at the Site after Completion of Remedial Action that Exceeds the Commercial SCOs
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			**TP-10**
Sample Date			**27-Oct-10**
Sample ID			**BA-TP10-S**
Sample Depth			**6 - 6.5 ft**
Sampling Company			**STANTEC**
Laboratory			**TALBU**
Laboratory Work Order			**RTJ2029**
Laboratory Sample ID			**RTJ2137-08**
Sample Type	**Units**	**6NYCRR**	
General Chemistry			
Total Solids	%	n/v	**94**
Semi-Volatile Organic Compounds			
Acenaphthene	µg/kg	500000_c^A	**720 JD**
Acenaphthylene	µg/kg	500000_c^A	**2700 JD**
Acetophenone	µg/kg	n/v	3500 U D
Anthracene	µg/kg	500000_c^A	**2000 JD**
Atrazine	µg/kg	n/v	3500 U D
Benzaldehyde	µg/kg	n/v	3500 U D
Benzo(a)anthracene	µg/kg	5600^A	**5000 D**
Benzo(a)pyrene	µg/kg	1000_g^A	**4100 D^A**
Benzo(b)fluoranthene	µg/kg	5600^A	**3700 D**
Benzo(g,h,i)perylene	µg/kg	500000_c^A	**1900 JD**
Benzo(k)fluoranthene	µg/kg	56000^A	**1500 JD**
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	3500 U D
Bis(2-Chloroethoxy)methane	µg/kg	500000_c^A	3500 U D
Bis(2-Chloroethyl)ether	µg/kg	500000_c^A	3500 U D
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000_c^A	3500 U D
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000_c^A	3500 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000_c^A	3500 U D
Butyl Benzyl Phthalate	µg/kg	500000_c^A	3500 U D
Caprolactam	µg/kg	n/v	3500 U D
Carbazole	µg/kg	500000_c^A	3500 U D
Chloro-3-methyl phenol, 4-	µg/kg	500000_c^A	3500 U D
Chloroaniline, 4	µg/kg	500000_c^A	3500 U D
Chloronaphthalene, 2-	µg/kg	500000_c^A	3500 U D
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	500000_c^A	3500 U D
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000_c^A	3500 U D
Chrysene	µg/kg	56000^A	**6400 D**
Cresol, o- (Methylphenol, 2-)	µg/kg	500000_c^A	3500 U D
Cresol, p- (Methylphenol, 4-)	µg/kg	500000_c^A	6900 U D
Dibenzo(a,h)anthracene	µg/kg	560^A	**460 JD**
Dibenzofuran	µg/kg	350000^A	3500 U D
Dichlorobenzidine, 3,3'-	µg/kg	500000_c^A	3500 U D
Dichlorophenol, 2,4-	µg/kg	500000_c^A	3500 U D
Diethyl Phthalate	µg/kg	500000_c^A	3500 U D
Dimethyl Phthalate	µg/kg	500000_c^A	3500 U D
Dimethylphenol, 2,4-	µg/kg	500000_c^A	3500 U D
Di-n-Butyl Phthalate	µg/kg	500000_c^A	3500 U D
Dinitro-o-cresol, 4,6-	µg/kg	500000_c^A	6900 U D
Dinitrophenol, 2,4-	µg/kg	500000_c^A	6900 U D
Dinitrotoluene, 2,4-	µg/kg	500000_c^A	3500 U D
Dinitrotoluene, 2,6-	µg/kg	500000_c^A	3500 U D
Di-n-Octyl phthalate	µg/kg	500000_c^A	3500 U D
Fluoranthene	µg/kg	500000_c^A	**8100 D**
Fluorene	µg/kg	500000_c^A	**2700 JD**
Hexachlorobenzene	µg/kg	6000^A	3500 U D
Hexachlorobutadiene	µg/kg	500000_c^A	3500 U D
Hexachlorocyclopentadiene	µg/kg	500000_c^A	3500 U D
Hexachloroethane	µg/kg	500000_c^A	3500 U D
Indeno(1,2,3-cd)pyrene	µg/kg	5600^A	**1400 JD**
Isophorone	µg/kg	500000_c^A	3500 U D
Methylnaphthalene, 2-	µg/kg	500000_c^A	**2100 JD**
Naphthalene	µg/kg	500000_c^A	**990 JD**
Nitroaniline, 2-	µg/kg	500000_c^A	6900 U D
Nitroaniline, 3-	µg/kg	500000_c^A	6900 U D
Nitroaniline, 4-	µg/kg	500000_c^A	6900 U D
Nitrobenzene	µg/kg	500000_c^A	3500 U D
Nitrophenol, 2-	µg/kg	500000_c^A	3500 U D
Nitrophenol, 4-	µg/kg	500000_c^A	6900 U D
N-Nitrosodi-n-Propylamine	µg/kg	500000_c^A	3500 U D
n-Nitrosodiphenylamine	µg/kg	500000_c^A	3500 U D
Pentachlorophenol	µg/kg	6700^A	***6900 U D***
Phenanthrene	µg/kg	500000_c^A	**15000 D**
Phenol	µg/kg	500000_c^A	3500 U D
Pyrene	µg/kg	500000_c^A	**12000 D**
Trichlorophenol, 2,4,5-	µg/kg	500000_c^A	3500 U D
Trichlorophenol, 2,4,6-	µg/kg	500000_c^A	3500 U D
SVOC Tentatively Identified Compounds			
Total SVOC TICs	µg/kg	500000_c^A	None

Notes:

6NYCRR	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
^{A}	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5^A	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
$_c$	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
$_g$	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
D	Reported result taken from diluted sample analysis.
J	Indicates estimated value.
TALBU	Test America Laboratories, Inc., Buffalo, NY
ft	feet

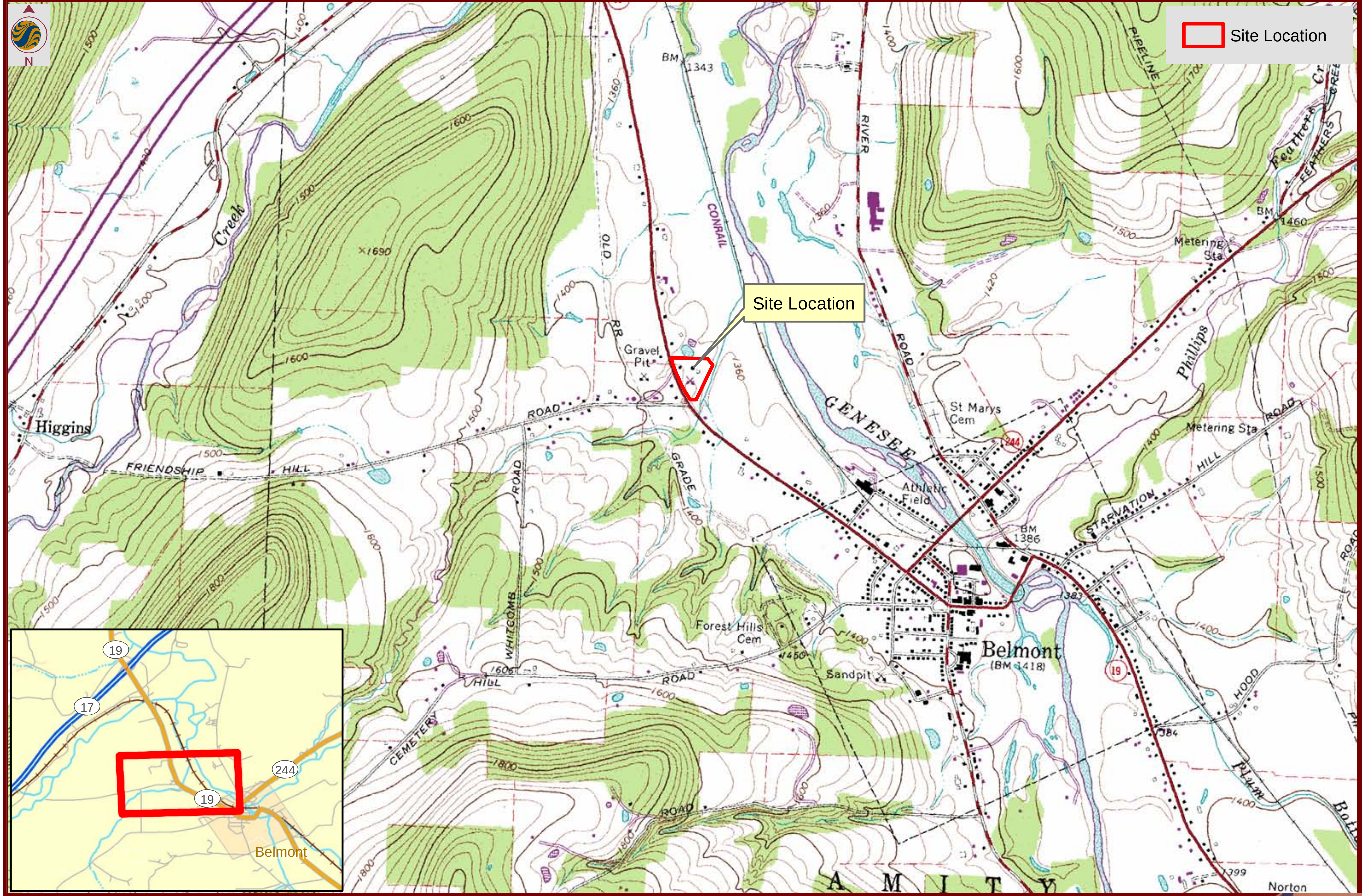
Table 10 - Water Level Summary
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Well ID	Ground Elevation (ft AMSL)	TOIC Elevation (ft AMSL)	Well Type	January 4, 2011		February 22, 2011		April 20, 2011		March 28, 2012		June 20, 2012	
				Water Level (ft BTOIC)	Water Elevation (ft AMSL)	Water Level (ft BTOIC)	Water Elevation (ft AMSL)	Water Level (ft BTOIC)	Water Elevation (ft AMSL)	Water Level (ft BTOIC)	Water Elevation (ft AMSL)	Water Level (ft BTOIC)	Water Elevation (ft AMSL)
BS-2	1375.39	1378.06	Shallow	11.28	1366.78	11.49	1366.57	8.08	1369.98	NM	NM	NM	NM
BS-2R	1374.70	1377.79	Shallow	NM	NM	NM	NM	NM	NM	9.44	1368.35	9.86	1367.93
BS-3	1376.00	1379.24	Shallow	10.43	1368.81	11	1368.24	9.505	1369.74	10.72	1368.52	11.20	1368.04
BS-4	1375.28	1378.31	Shallow	11.27	1367.04	11.18	1367.13	8.35	1369.96	NM	NM	NM	NM
MW-5	1367.57	1370.24	Shallow	4.09	1366.15	4.73	1365.51	3.18	1367.06	NM	NM	NM	NM
MW-6	1372.72	1375.40	Shallow	9.93	1365.47	10.29	1365.11	8.61	1366.79	NM	NM	NM	NM
MW-7	1375.64	1378.68	Shallow	12.79	1365.89	13.36	1365.32	9.04	1369.64	NM	NM	NM	NM
MW-8	1365.91	1368.70	Shallow	3.18	1365.52	Frozen at 3.80	Frozen at 1364.90	2.55	1366.15	3.13	1365.57	3.61	1365.09
MW-9	1368.80	1371.68	Shallow	7.68	1364.00	8.09	1363.59	6.40	1365.28	NM	NM	NM	NM
MW-10	1370.90	1373.76	Shallow	7.48	1366.28	7.13	1366.63	6.64	1367.12	NM	NM	NM	NM
MW-11	1369.87	1372.39	Shallow	6.09	1366.30	6.76	1365.63	5.29	1367.1	NM	NM	NM	NM
MW-12	1378.46	1381.50	Shallow	12.24	1369.26	12.63	1368.87	11.32	1370.18	NM	NM	NM	NM
MW-13	1371.24	1374.00	Shallow	17.54	1356.46	17.84	1356.16	15.87	1358.13	NM	NM	NM	NM
MW-14	1363.62	1366.54	Shallow	13.64	1352.90	14.32	1352.22	12.26	1354.28	NM	NM	NM	NM
MW-22	1365.66	1368.32	Shallow	3.48	1364.84	4.02	1364.3	2.96	1365.36	NM	NM	NM	NM
MW-23	1374.46	1377.59	Shallow	10.34	1367.25	8.82	1368.77	7.58	1370.01	NM	NM	NM	NM
MW-25	1376.07	1378.52	Shallow	11.69	1366.83	11.26	1367.26	8.88	1369.64	10.53	1367.99	11.50	1367.02
MW-26	1373.07	1375.79	Shallow	NM	NM	7.61	1368.18	6.18	1369.61	NM	NM	NM	NM
MW-27	1372.76	1375.28	Shallow	NM	NM	7.41	1367.87	5.85	1369.43	7.98	1367.30	8.27	1367.01
MW-65	1371.40	1374.33	Shallow	NM	NM	NM	NM	NM	NM	8.23	1366.10	7.94	1366.39
MW-28D	1374.40	1377.17	Deep	NM	NM	18.93	1358.24	16.90	1360.27	17.72	1359.45	18.12	1359.05
WSW	1370.79	1371.01	Deep	NM	NM	12.15	1358.86	10.85	1360.16	10.79	1360.22	11.05	1359.96

Notes:

DTW	Depth to water
ft AMSL	Feet above mean sea level (NAVD 88)
ft BTOIC	Feet below top of inner casing
NM	Not measured
TOIC	Top of inner casing

FIGURES



Geographic Information Systems

Map Source : NYSGIS Clearinghouse Web Site

Cartographic Design By: Andrew Less

June 29,2011
U:\190500593\drawing\RI Report Figures\Figure 1_Site Location Map.mxd

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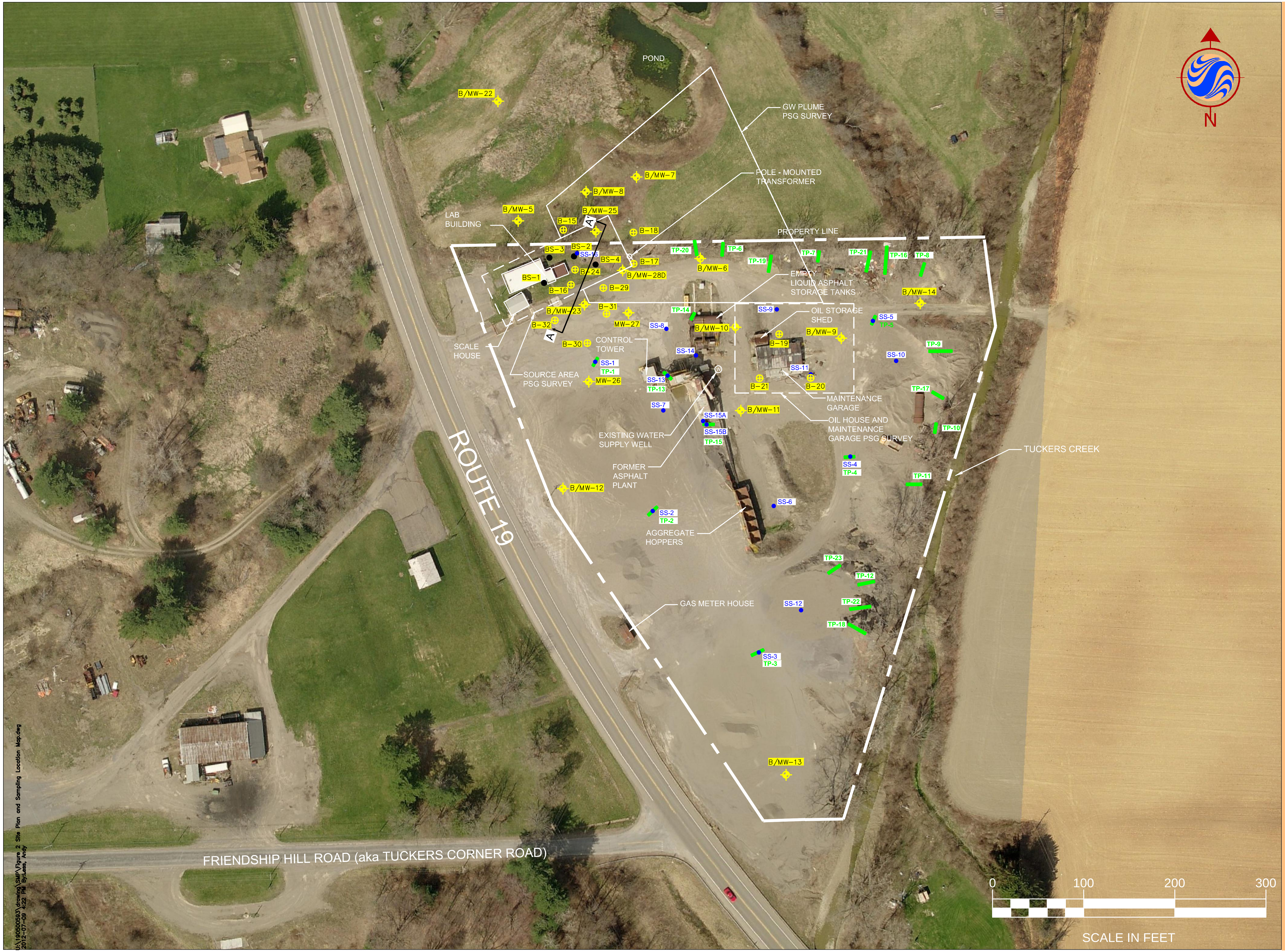
1 inch = 2,000 feet

0 1,000 2,000 4,000 Feet

Allegany Bitumens Belmont Asphalt Plant Site

FIGURE 1 : Site Location Map Showing USGS Topographic Information



U:\190500593\drawing\SMP\Figure 2 Site Plan and Sampling Location Map.dwg
2012-07-09 4:22 PM By:Less, Andy

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Legend

●	PREVIOUS TEST BORING/WELL (2009 PHASE II ESA)
Ⓦ	EXISTING WATER SUPPLY WELL
⊕	TEST BORING
⊕	RI TEST BORING/MONITORING WELL
●	SURFACE SOIL SAMPLE
🟩	TEST PIT

Notes

1. MAP REFERENCE : INFORMATION ON THIS MAP IS REFERENCED FROM MAP ENTITLED "PLAN OF LANDS OWNED BY: ALLEGANY BITUMENS, INC , SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, AND BEING A PORTION OF GREAT LOT # 18, TOWNSHIP #3, RANGE #2 OF THE ROBERT MORRIS RESERVE.

2. AERIAL MAPPING OBTAINED FROM PICTOMETRY ONLINE 1.10.1 PICTOMETRY INTERNATIONAL CORP DATED 04-19-2006.

3. PSG = PASSIVE SOIL GAS

RI REPORT	SRS	MPS	12.05
Issued	By	Appd.	YY.MM.DD

File Name: Figure 2 Site Plan and Sampling Location Map

Permit-Seal

Project/ Client

ALLEGANY BITUMENS
BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title

SITE PLAN AND RI SAMPLE LOCATION MAP

Project No.
190500593

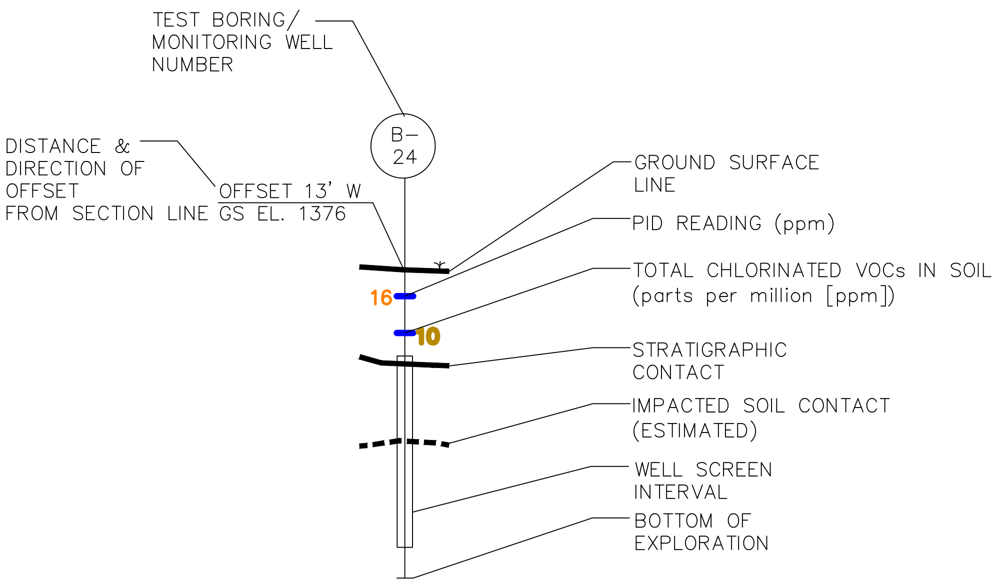
Scale
AS SHOWN

Drawing No.
FIG. 2

Sheet

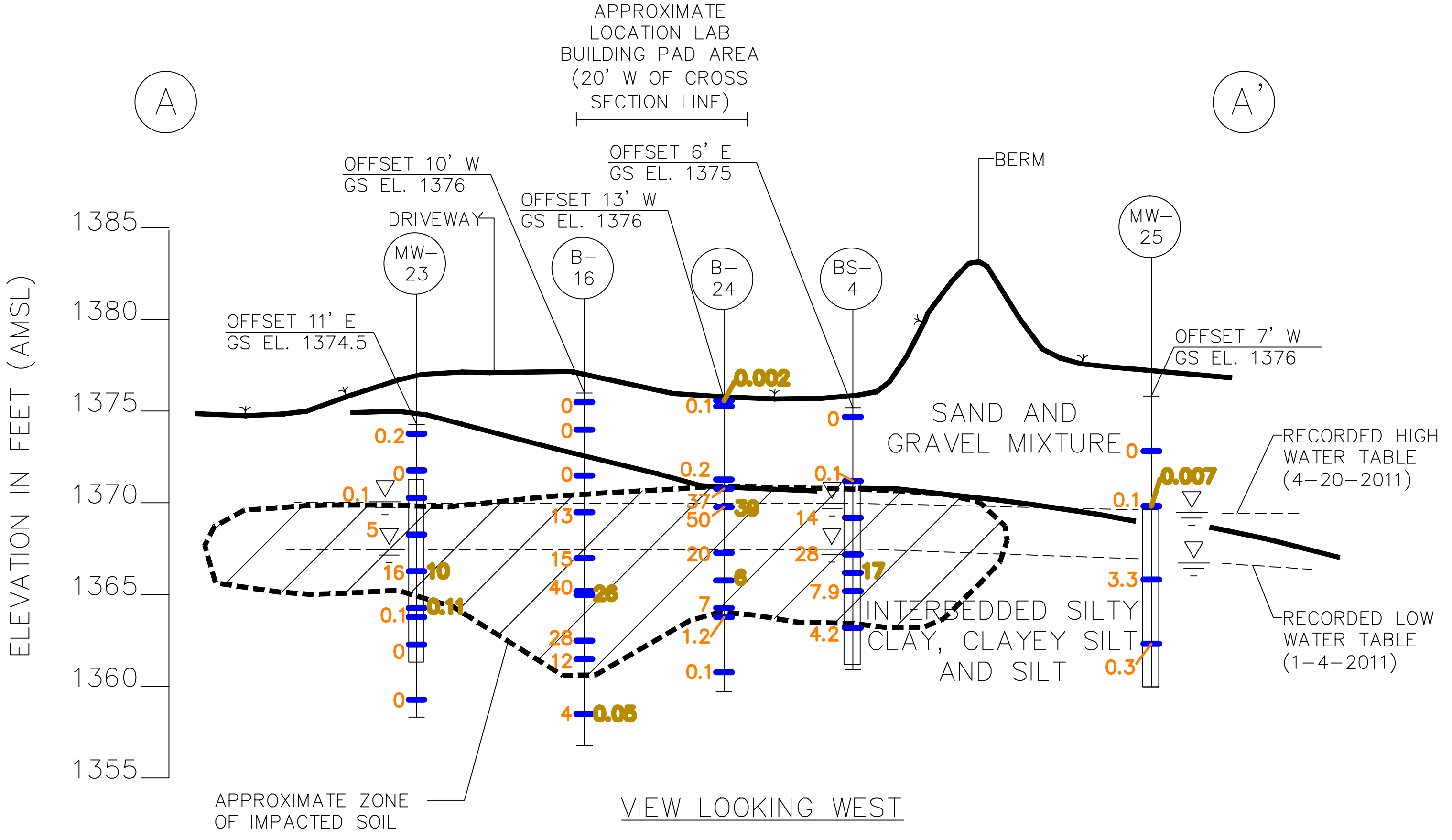
of

Revision

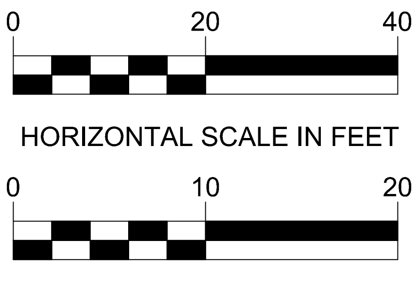


LEGEND

NOTE:
SEE FIGURE 2 FOR THE LOCATION OF CROSS SECTION A–A'



VIEW LOOKING WEST



HORIZONTAL SCALE IN FEET

VERTICAL SCALE IN FEET

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File Name: Figure 4 Cross Section.dwg		MPS	SRS	12.05
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Permit-Seal

Project/ Client

ALLEGANY BITUMENS
BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title

CROSS SECTION OF RI SOIL
CONDITIONS IN LABORATORY AREA

Project No. 190500593
Scale 1"=40'

Drawing No. Figure 4
Sheet 1 of 1
Revision 0

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2012-07-11 8:37 AM By:Less, Andy

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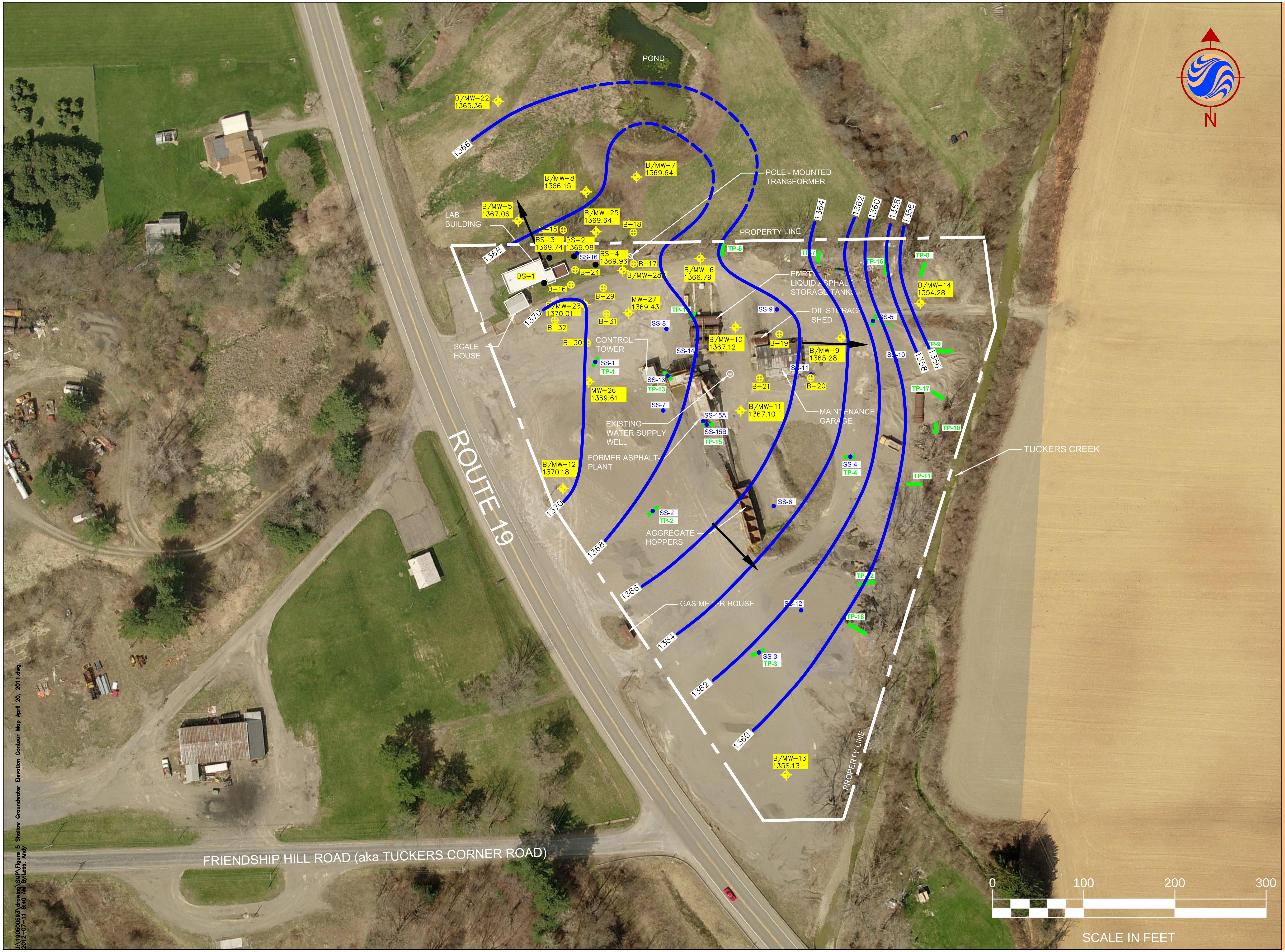

U:\190500593\drawing\SMP\Figure 5 Shallow Groundwater Elevation Contour Map April 20, 2011.dwg
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● PREVIOUS TEST BORING/WELL (2009 PHASE II ESA) WITH GROUNDWATER ELEVATION (ft AMSL)
Ⓦ EXISTING WATER SUPPLY WELL
⊕ TEST BORING
⌖ RI TEST BORING/MONITORING WELL WITH GROUNDWATER ELEVATION (ft AMSL)
● SURFACE SOIL SAMPLE
🟩 TEST PIT
~ GROUNDWATER ELEVATION CONTOUR (ft AMSL) (DASHED WHERE INFERRED), APRIL 20, 2011
→ APPARENT DIRECTION OF GROUNDWATER FLOW

Notes

1. MAP REFERENCE : INFORMATION ON THIS MAP IS REFERENCED FROM MAP ENTITLED "PLAN OF LANDS OWNED BY: ALLEGANY BITUMENS, INC , SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, AND BEING A PORTION OF GREAT LOT # 18, TOWNSHIP #3, RANGE #2 OF THE ROBERT MORRIS RESERVE.

2. AERIAL MAPPING OBTAINED FROM PICTOMETRY ONLINE 1.10.1 PICTOMETRY INTERNATIONAL CORP DATED 04-19-2006.

RI REPORT	SRS	MPS	12.05
Issued	By	Appd.	YY.MM.DD

File Name: Figure 5 Shallow Groundwater Elevation Contour Map April 20, 2011

Permit-Seal

Project/ Client

ALLEGANY BITUMENS
BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title

SHALLOW GROUNDWATER ELEVATION
CONTOUR MAP
APRIL 20, 2011

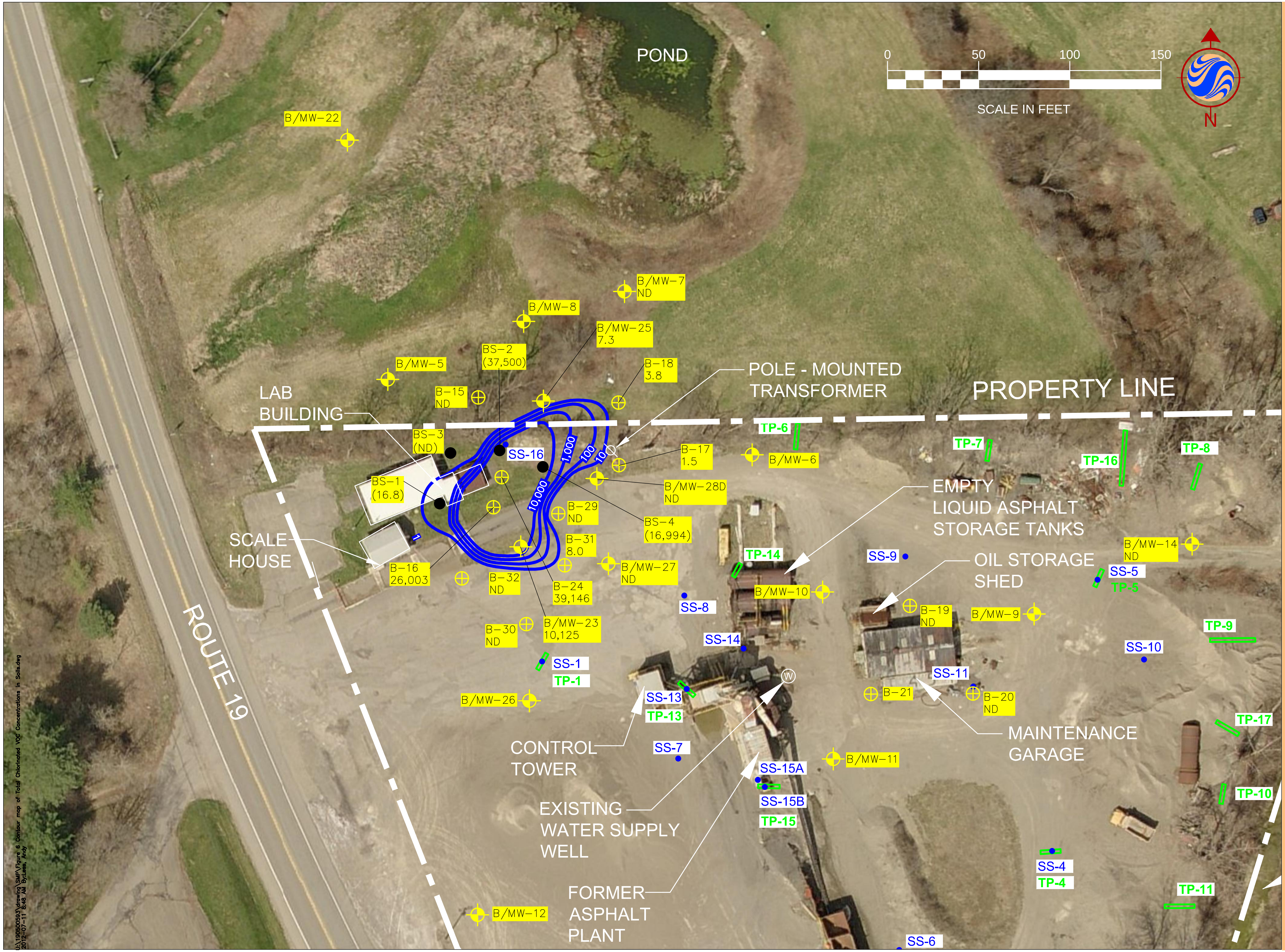
Project No.
190500593

Scale
AS SHOWN

Drawing No.
FIG. 5

Sheet
of

Revision



U:\190500593\drawing\SMP\Figure 6 Contour map of Total Chlorinated VOC Concentrations in Soils.dwg
2012-07-11 8:48 AM By:Less, Andy

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Legend

●	PREVIOUS TEST BORING / SHALLOW WELL (2009 PHASE II ESA)
Ⓦ	EXISTING WATER SUPPLY WELL
⊕	TEST BORING
⌖	RI TEST BORING / MONITORING WELL
●	SURFACE SOIL SAMPLE
▭	TEST PIT
~	CHLORINATED VOCs IN SOIL CONTOUR (ug/kg) (DASHED WHERE INFERRED)
7.3	NOV. 2010 – FEB. 2011 CHLORINATED VOC CONCENTRATION (ug/kg)
(16.8)	DEC. 2009 CHLORINATED VOC CONCENTRATION (ug/kg)

Notes

1. MAP REFERENCE : INFORMATION ON THIS MAP IS REFERENCED FROM MAP ENTITLED "PLAN OF LANDS OWNED BY: ALLEGANY BITUMENS, INC , SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, AND BEING A PORTION OF GREAT LOT # 18, TOWNSHIP #3, RANGE #2 OF THE ROBERT MORRIS RESERVE.

2. AERIAL MAPPING OBTAINED FROM PICTOMETRY ONLINE 1.10.1 PICTOMETRY INTERNATIONAL CORP DATED 04–19–2006.

3. * WITH THE EXCEPTION OF BS–1 TO BS–4, WHICH WERE 2009 PHASE II BORINGS, ALL DATA CONTOURED ARE 2010 TO 2011 RI DATA.

4. AT WELLS WHERE A CONCENTRATION IS NOT LISTED, EITHER A SAMPLE WAS NOT TAKEN AT THE WATER TABLE (i.e. B/MW–9, ect.) OR THE SAMPLE WAS NOT ANALYZED FOR VOC's (MW–12 & MW–13 [NOT SHOWN]).

5. CONCENTRATIONS INCLUDE CHLORINATED ETHENES AND ETHANES.

Issued	By	Appd.	YY.MM.DD
RI REPORT	SRS	MPS	12.05

File Name: Figure 6 Contour map of Total Chlorinated VOC Concentrations in Soils

Permit-Seal

Project/ Client

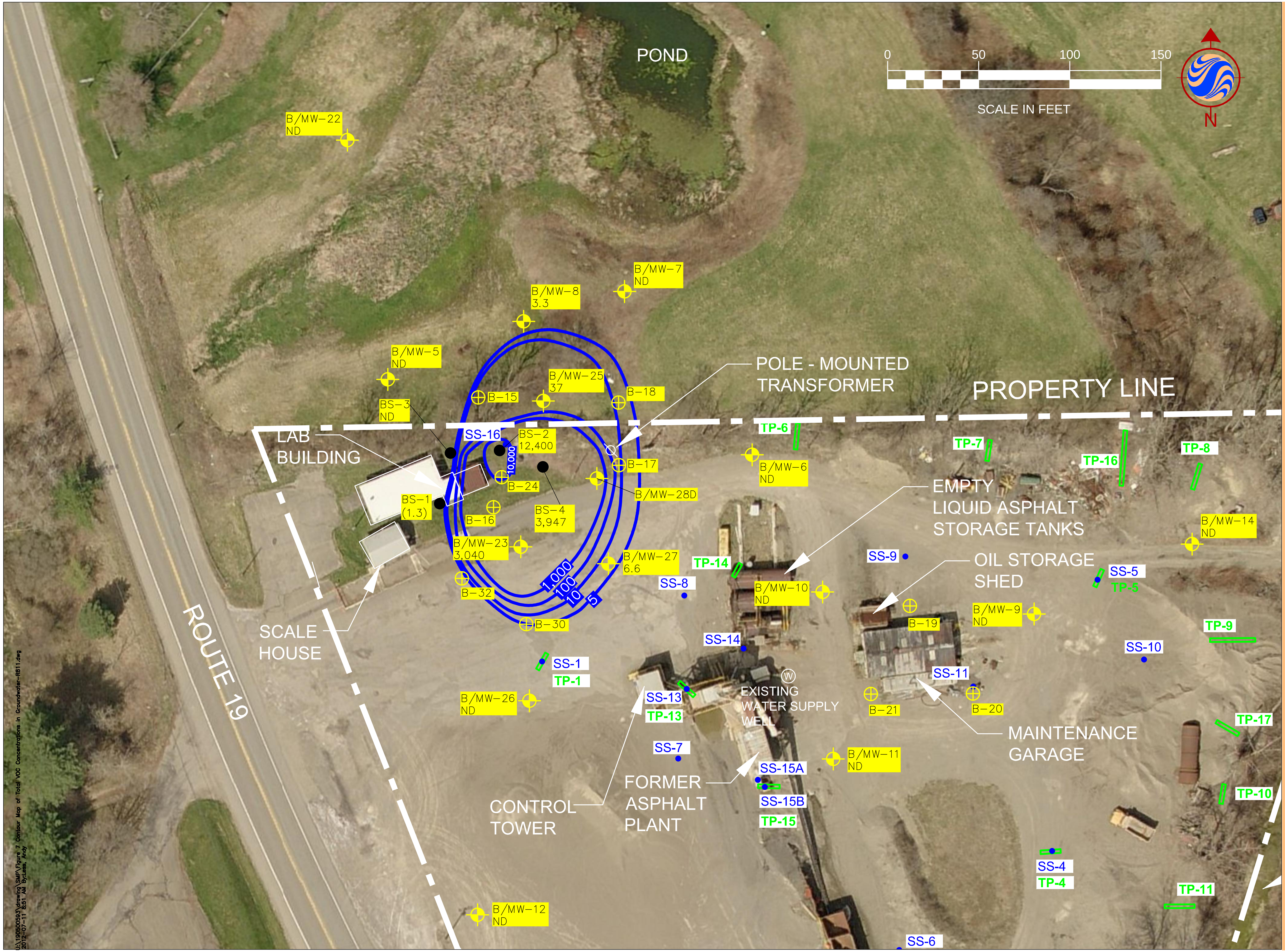
ALLEGANY BITUMENS
BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title
CONTOUR MAP OF
TOTAL CHLORINATED VOC
CONCENTRATIONS IN SOILS AT OR NEAR
THE WATER TABLE (ug/kg), 2009-2011 *

Project No. 190500593
Scale AS SHOWN

Drawing No. FIG. 6
Sheet of
Revision



ORIGINAL SHEET – 22 X 34

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Legend

●	PREVIOUS TEST BORING / SHALLOW WELL (2009 PHASE II ESA)
Ⓦ	EXISTING WATER SUPPLY WELL
⊕	TEST BORING
⊕	RI TEST BORING / MONITORING WELL
●	SURFACE SOIL SAMPLE
▭	TEST PIT
∼	CHLORINATED VOC GROUNDWATER CONTOUR (ug/L) (DASHED WHERE INFERRED)
6.6	JAN. – FEB. 2011 CHLORINATED VOC CONCENTRATION (ug/L)
(1.3)	DEC. 2009 CHLORINATED VOC CONCENTRATION (ug/L)

Notes

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2. AERIAL MAPPING OBTAINED FROM PICTOMETRY ONLINE 1.10.1 PICTOMETRY INTERNATIONAL CORP DATED 04–19–2006.

3. * WITH THE EXCEPTION OF BS–1, WHICH WAS A TEMPORARY DEC. 2009 PHASE II WELL, ALL DATA CONTOURED ARE JAN TO FEB. 2011 RI DATA.

4. CONCENTRATIONS INCLUDE CHLORINATED ETHENES & ETHANES.

5. 5 ug/L CONTOUR SHOWN AS 5 ug/L IS THE GROUNDWATER STANDARD FOR MOST OF THE CONTAINMENTS OF CONCERN.

RI REPORT	SRS	MPS	12.05
Issued	By	Appd.	YY.MM.DD

File Name: Figure 7 Contour Map of Total VOC Concentrations in Groundwater–R811

Permit-Seal

Project/ Client

ALLEGANY BITUMENS
BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title
CONTOUR MAP OF
TOTAL CHLORINATED VOC
CONCENTRATIONS IN SHALLOW
GROUNDWATER (ug / L), JAN - FEB 2011 *

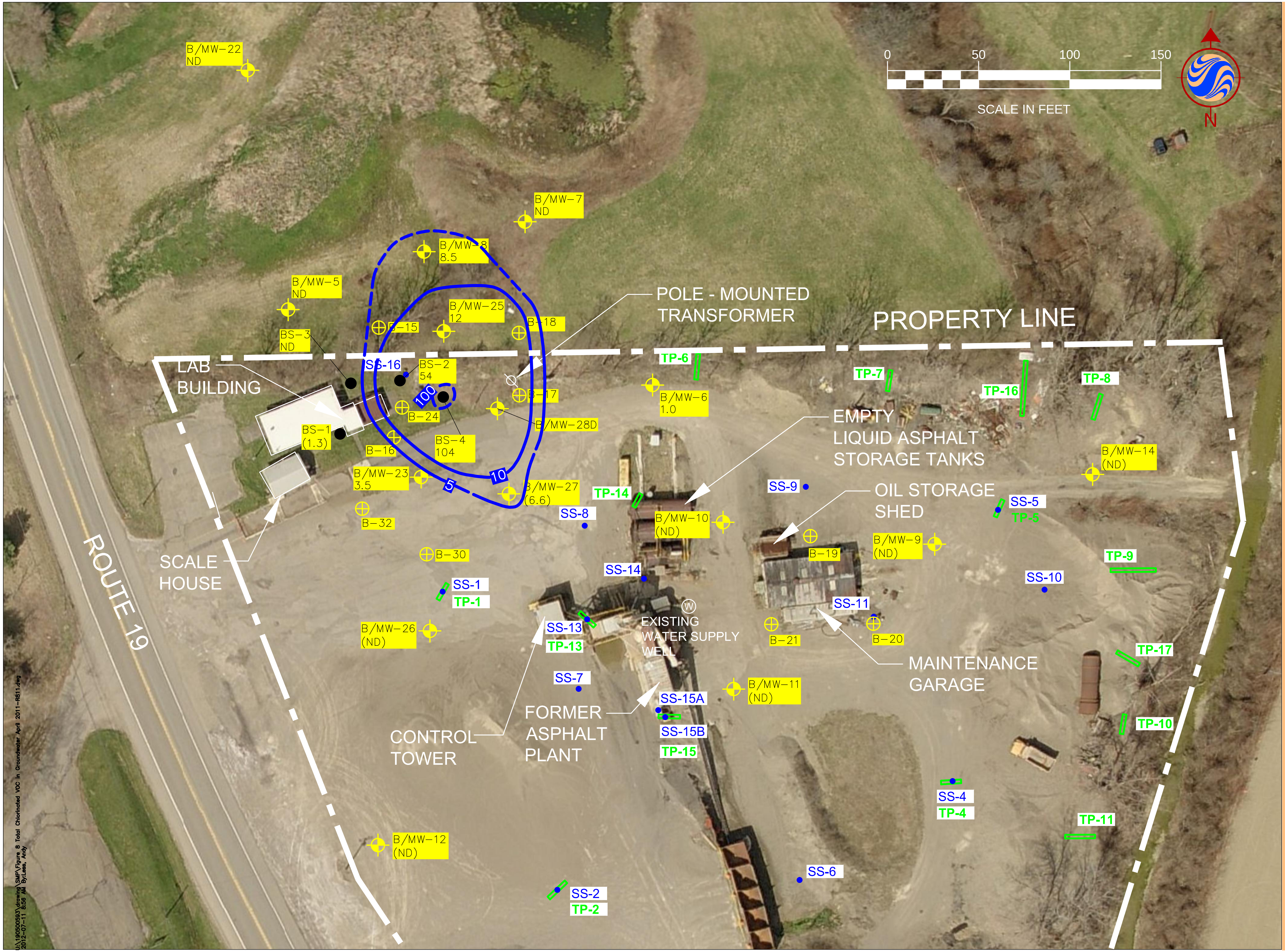
Project No.
190500593

Scale
AS SHOWN

Drawing No.
FIG. 7

Sheet
of

Revision



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●	PREVIOUS TEST BORING / SHALLOW WELL (2009 PHASE II ESA)
Ⓦ	EXISTING WATER SUPPLY WELL
⊕	TEST BORING
⌖	RI TEST BORING / MONITORING WELL
●	SURFACE SOIL SAMPLE
▭	TEST PIT
~	CHLORINATED VOC GROUNDWATER CONTOUR (ug/L) (DASHED WHERE INFERRED)
8.5	APRIL 2011 CHLORINATED VOC CONCENTRATION (ug/L)
(1.3)	CHLORINATED VOC CONCENTRATION (ug/L) FROM SAMPLING ROUND PRIOR TO APRIL 2011

Notes

1. MAP REFERENCE : INFORMATION ON THIS MAP IS REFERENCED FROM MAP ENTITLED "PLAN OF LANDS OWNED BY: ALLEGANY BITUMENS, INC , SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, AND BEING A PORTION OF GREAT LOT # 18, TOWNSHIP #3, RANGE #2 OF THE ROBERT MORRIS RESERVE.

2. AERIAL MAPPING OBTAINED FROM PICTOMETRY ONLINE 1.10.1 PICTOMETRY INTERNATIONAL CORP DATED 04-19-2006.

3. * APRIL 2011 CONCENTRATIONS ARE PRESENTED WHERE SAMPLES WERE TAKEN. WHERE SAMPLES WERE NOT TAKEN , CONCENTRATIONS FROM PREVIOUS (DEC 2009 TO FEB 2011) SAMPLING ROUNDS ARE PRESENTED IN PARENTHESES.

4. CONCENTRATIONS INCLUDE CHLORINATED ETHENES AND ETHANES.

5. 5 ug/L CONTOUR SHOWN AS 5 ug/L IS THE GROUNDWATER STANDARD FOR MOST OF THE CONTAINMENTS OF CONCERN.

Issued	By	Appd.	YY.MM.DD
RI REPORT	SRS	MPS	12.05

File Name: Figure 8 Total Chlorinated VOC in Groundwater April 2011-R811

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Project/ Client

ALLEGANY BITUMENS
BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title

CONTOUR MAP OF
TOTAL CHLORINATED VOC
CONCENTRATIONS IN SHALLOW
GROUNDWATER (ug / L), APRIL 2011

Project No. 190500593

Scale AS SHOWN

Drawing No. FIG. 8

Sheet of

Revision

U:\190500593\drawing\SMP\Figure 8 Total Chlorinated VOC in Groundwater April 2011-R811.dwg
2012-07-11 8:56 AM By:Less, Andy

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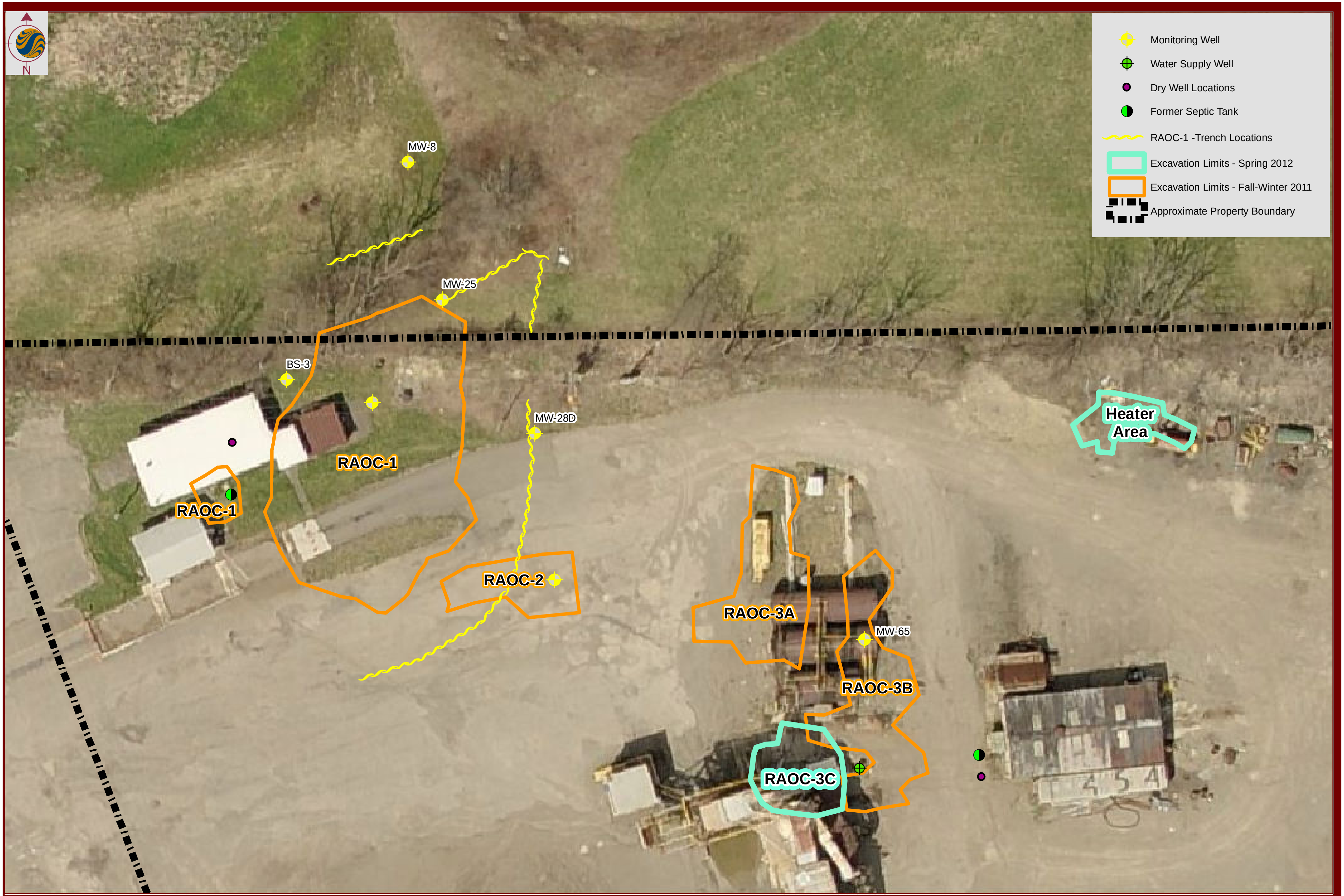

Geographic Information Systems Cartographic Design By: Travis Money Date: 7/12/2012 Path: U:\190500593\GIS\MXD\Fig9_ExcavAreas-Trench&WellLocations-7-11--2012.mxd

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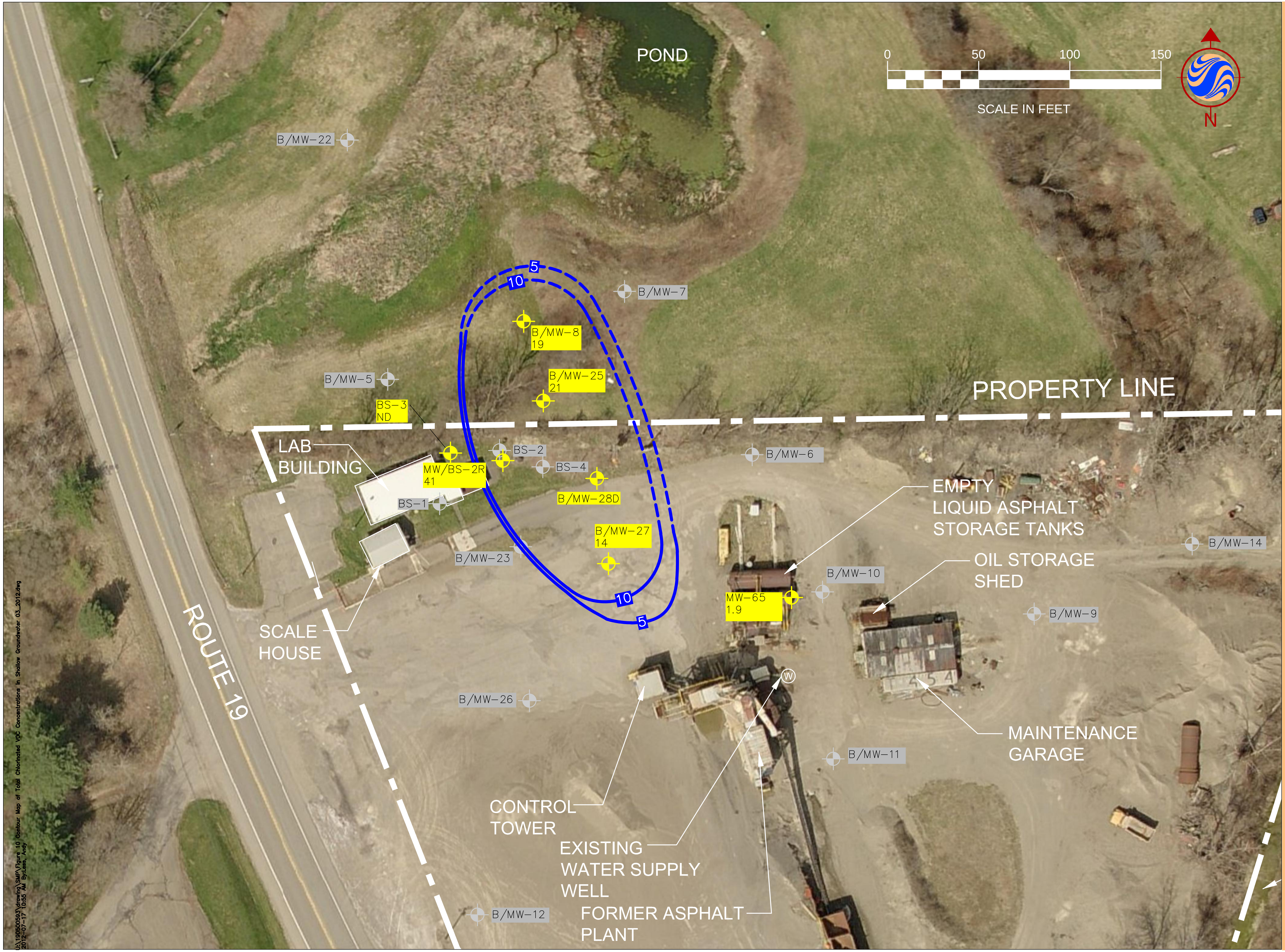
1 inch = 40 feet

0 20 40 80 Feet

Former Allegany Bitumens Belmont Asphalt Plant Site

FIGURE 9: Excavation Areas, RAOC-1 Trench Locations & Well Locations



U:\190500593\drawing\SMP\Figure 10 Contour Map of Total Chlorinated VOC Concentrations in Shallow Groundwater 03_2012.dwg
2012−07−17 10:55 AM By:Less, Andy

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Ⓦ	EXISTING WATER SUPPLY WELL
⌖	ABANDONED MONITORING WELL
⌖	MONITORING WELL
∼	CHLORINATED VOC GROUNDWATER CONTOUR (ug/L) (DASHED WHERE INFERRED)
6.6	MARCH 2012 CHLORINATED VOC CONCENTRATION (ug/L)

Notes

1. MAP REFERENCE : INFORMATION ON THIS MAP IS REFERENCED FROM MAP ENTITLED "PLAN OF LANDS OWNED BY: ALLEGANY BITUMENS, INC , SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, AND BEING A PORTION OF GREAT LOT # 18, TOWNSHIP #3, RANGE #2 OF THE ROBERT MORRIS RESERVE.

2. AERIAL MAPPING OBTAINED FROM PICTOMETRY ONLINE 1.10.1 PICTOMETRY INTERNATIONAL CORP DATED 04−19−2006.

3. CONCENTRATIONS INCLUDE CHLORINATED ETHENES & ETHANES.

4. AT THE TIME OF GROUNDWATER SAMPLING, SEVERAL SITE STRUCTURES HAD BEEN OR WERE IN THE PROCESS OF BEING REMOVED.

5. 5 ug/L CONTOUR SHOWN AS 5 ug/L IS THE GROUNDWATER STANDARD FOR MOST OF THE CONTAINMENTS OF CONCERN.

SMP	SRS	MPS	12.07
Issued	By	Appd.	YY.MM.DD

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Project/ Client

ALLEGANY BITUMENS
BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title

CONTOUR MAP OF
TOTAL CHLORINATED VOC
CONCENTRATIONS IN SHALLOW
GROUNDWATER (ug / L), MARCH 2012

Project No.
190500593

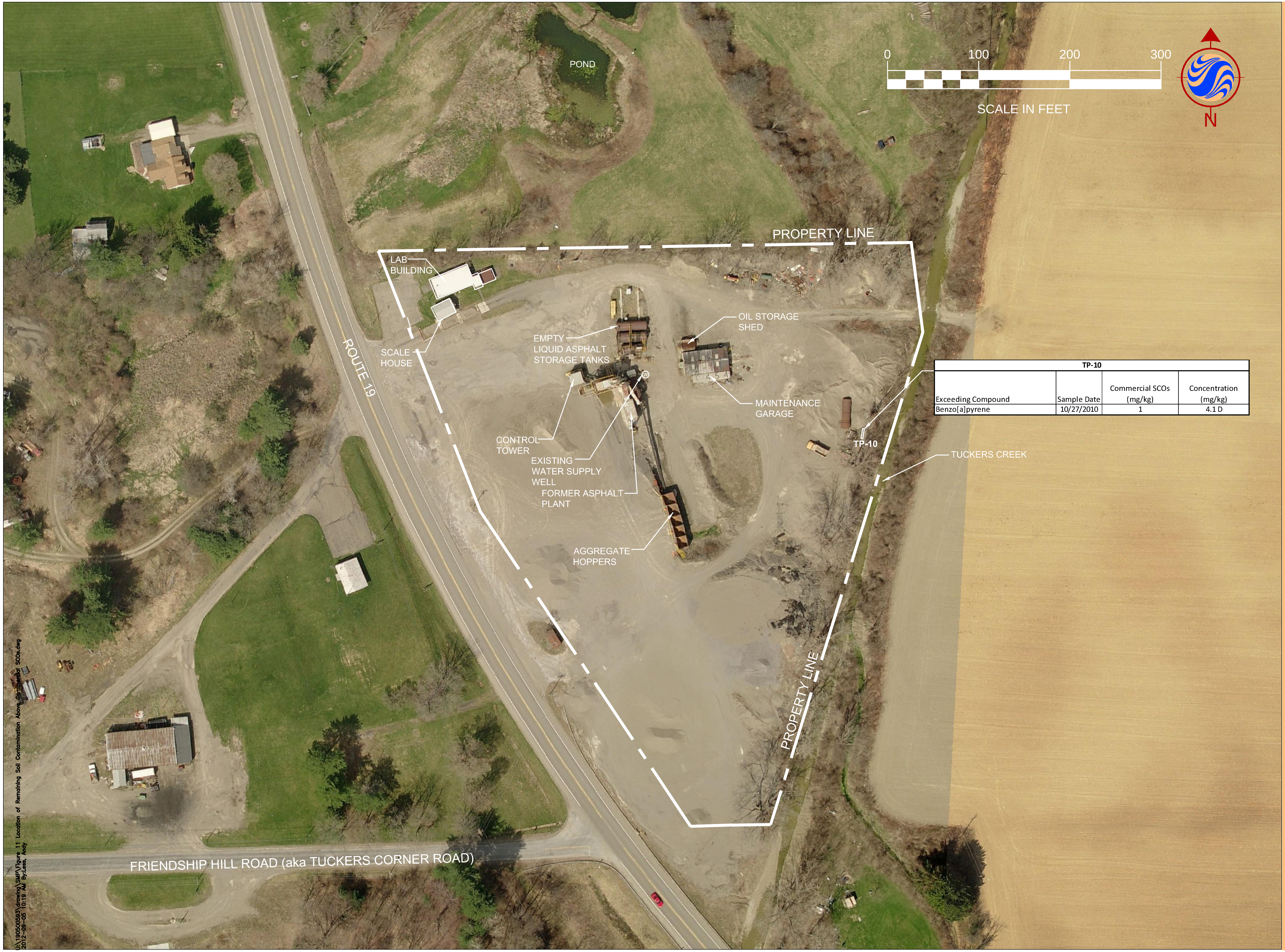
Scale
AS SHOWN

Drawing No.
FIG. 10

Sheet
of

Revision

File Name: Figure 10 Contour Map of Total Chlorinated VOC Concentrations in Shallow Groundwater 03_2012



TP-10

Exceeding Compound	Sample Date	Commercial SCOs (mg/kg)	Concentration (mg/kg)
Benzo[a]pyrene	10/27/2010	1	4.1 D

U:\190500593\drawing\SMP\Figure 11 Location of Remaining Soil Contamination Above Commercial SCOs.dwg
2012-09-05 10:19 AM By:Less, Andy

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D = REPORTED RESULTS TAKEN FROM DILUTED SAMPLE ANALYSIS

mg/kg = MILLIGRAM PER KILOGRAM

Notes

1. MAP REFERENCE : INFORMATION ON THIS MAP IS REFERENCED FROM MAP ENTITLED "PLAN OF LANDS OWNED BY: ALLEGANY BITUMENS, INC , SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, AND BEING A PORTION OF GREAT LOT # 18, TOWNSHIP #3, RANGE #2 OF THE ROBERT MORRIS RESERVE.

2. AERIAL MAPPING OBTAINED FROM PICTOMETRY ONLINE 1.10.1 PICTOMETRY INTERNATIONAL CORP DATED 04-19-2006.

Issued	By	Appd.	YY.MM.DD
SITE MANAGEMENT PLAN (SMP)	SRS	MPS	12.07

Permit-Seal

Project/ Client

ALLEGANY BITUMENS
BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title

LOCATION OF REMAINING SOIL CONTAMINATION
ABOVE COMMERCIAL SCOs

Project No. 190500593

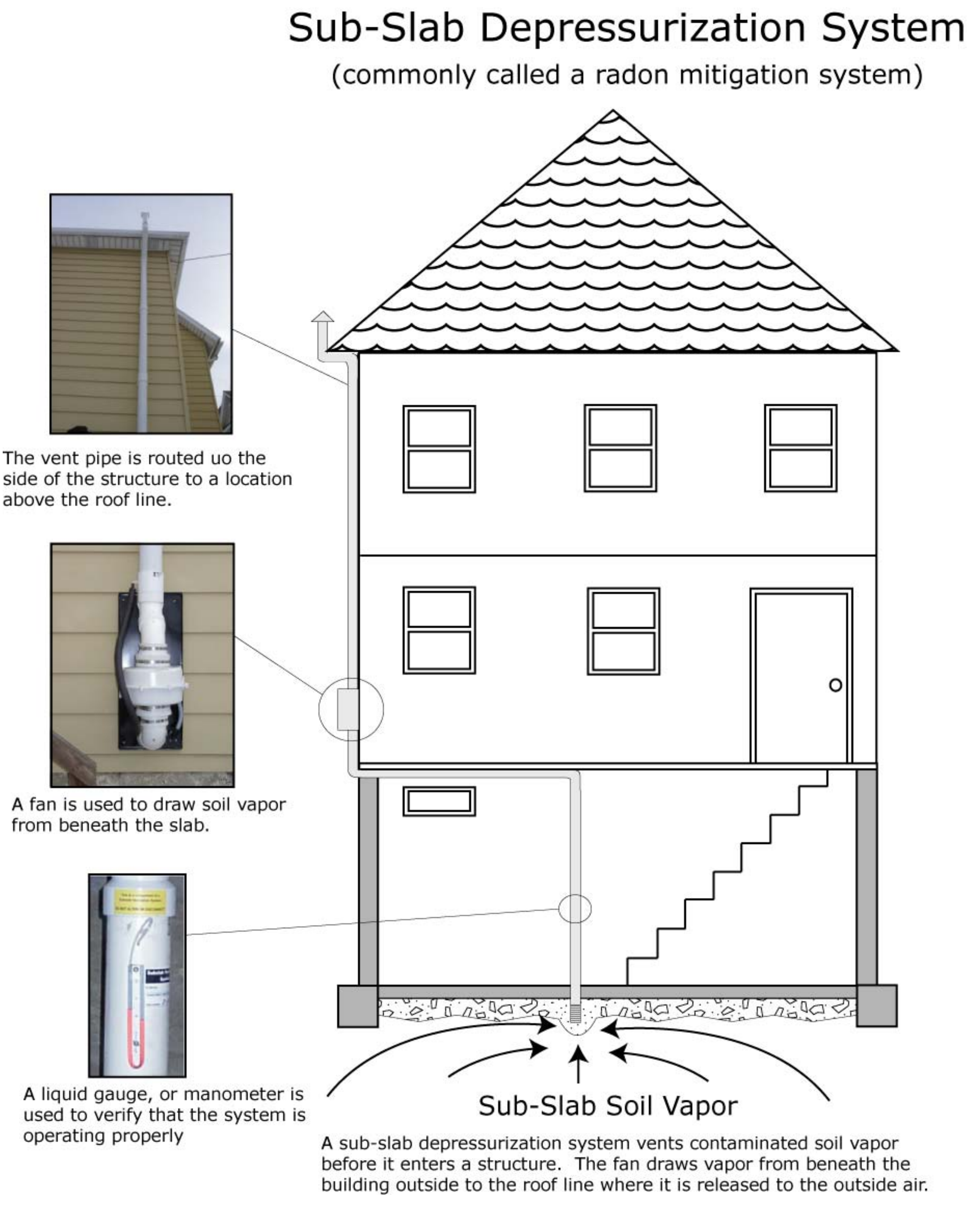
Scale AS SHOWN

Drawing No. FIG. 11

Sheet of

Revision

File Name: Figure 11 Location of Remaining Soil Contamination Above Commercial SCOs



The vent pipe is routed uo the side of the structure to a location above the roof line.

A fan is used to draw soil vapor from beneath the slab.

A liquid gauge, or manometer is used to verify that the system is operating properly

A sub-slab depressurization system vents contaminated soil vapor before it enters a structure. The fan draws vapor from beneath the building outside to the roof line where it is released to the outside air.

Schematic Diagram of Sub-slab Depressurization System

FIGURE 12

APPENDICES

Appendix A

Excavation Work Plan

5. INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

All inspections and monitoring events will be recorded on the appropriate forms for their respective system which are contained in Appendix F. Additionally, a general site-wide inspection form will be completed during the site-wide inspection (see Appendix G). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report.

5.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,
- The site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

After the last inspection of the reporting period, a qualified environmental professional will prepare the following certification:

> For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.
- 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, _____________,

of Stantec Consulting Services, Inc., 61 Commercial Street, Rochester, NY 14614, am certifying as Owner's Designated Site Representative for the site.

The signed certification will be included in the Periodic Review Report described below.

- No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid; and

Every five years the following certification will be added:

- The assumptions made in the qualitative exposure assessment remain valid.

The signed certification will be included in the Periodic Review Report described below.

5.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to the Department every year, beginning eighteen months after the Certificate of Completion is issued. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix B (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;

- Data summary tables and graphical representations of contaminants of concern by media (e.g. groundwater, soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the site-specific RAWP, ROD or Decision Document;
  - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
  - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
  - The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 CORRECTIVE MEASURES PLAN

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

APPENDIX A – EXCAVATION WORK PLAN

A-1 NOTIFICATION

At least 7 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the Department. It is anticipated that remaining contamination may potentially be encountered in the areas defined in Section 1.4.3 of the SMP. This includes groundwater at RAOC-1 and soil/fill at RAOC-4. Currently, this notification will be made to:

Mr. Anthony L. Lopes, P.E.
NYSDEC
270 Michigan Avenue
Buffalo, New York 14203-2999

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix D of this document,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

A-2 SOIL SCREENING METHODS

Monitoring of materials encountered during construction is generally needed for three purposes:

- To protect the health and safety of Site workers during construction;
- To determine that soil/fill materials and groundwater are consistent with pre-construction characterization; or
- To allow characterization of the non-hazardous or hazardous nature of material encountered in the event that no previous investigation results are available for a specific area.

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially-contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Several portable monitoring instruments are available to assist in field monitoring of materials. Such instruments are primarily used for detection of volatile organic compounds or dust and particulates. Since volatile and semi-volatile organics have been detected in the past at the Site, this type of instrumentation is appropriate for construction excavation monitoring. Types of instruments available for this purpose include:

- Photoionization detector instruments (PID) - these instruments operate by pumping a sample of ambient air into a chamber where the air is ionized using a light source of specific energy (10.2, 10.6, or 11.7 eV). Such instruments are manufactured by Rae Systems.
- Flame ionization detector instruments (FID) - these instruments operate on a similar principle as the PIDs; however, ionization is caused by a flame produced by combusting hydrogen. Such instruments are manufactured by Thermo Scientific and Photovac.
- Colorimetric tubes - these are small glass tubes which contain chemical salts formulated to react with specific volatile and some non-volatile compounds. A sample of air is drawn through a tube with the use of a hand pump. The presence

of the target chemical causes a reaction and a color change to the chemical salts in the tube. The Draeger Tube system is such an instrument.

- Combustible gas meters/gas monitors – these instruments are capable of measuring combustible gases such as methane and hydrogen sulfide and would be used during construction activities if large amounts of organic materials such as railroad timbers or peat are encountered.
- Dust/Particulate Meters – these instruments are capable of measuring dust and particulates in ambient air. An example of an aerosol monitor is the TSI Dust Trak II.

These types of instruments are readily available in the Rochester and Buffalo areas and can be rented or purchased from several sources. However, these instruments should be operated by individuals trained and experienced in their use, limitations and capability for data generation. Readings generated from monitoring instruments should be recorded in the field along with visual observations. Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil. Excavated soil and fill materials must be tested with regard to potential contaminant presence. If analytical results indicate contaminant concentrations are below Commercial SCOs, the soil can be reused on-site without further NYSDEC approval in accordance with Section A-7 of this Appendix. If the concentrations are elevated above Commercial SCOs, but below hazardous waste thresholds then reuse on site may be allowed if approved in advance by the NYSDEC. If the concentrations are elevated above hazardous waste thresholds, reuse on-site will not be allowed and the soil will need to be disposed of off-site at a properly-permitted facility.

Sampling of excavated fill or subsurface materials during construction efforts should be considered if either of the following conditions are encountered:

- If conditions during construction are significantly different than those observed during pre-construction exploration, including unusual odors or visual observations such as stained soils, drums, containers, etc.; or

- If concerns such as sheens or free-product are identified within soil or groundwater. If evidence of staining, olfactory, fill or other impacts are observed within the excavated materials, sampling will be required for VOCs and SVOCs.

In these situations, sampling frequency and analyses would vary based on the types and quantities of material encountered and anticipated use/disposal of removed materials. Analysis must adequately characterize materials in light of current NYSDEC 6 NYCRR Part 375 Recommended Soil Cleanup Objectives and/or permitted disposal facility requirements, depending on intended destination of materials.

Typical waste disposal analyses are:

- Toxicity Characteristic Leaching Procedure (TCLP) VOCs,
- TCLP SVOCs,
- TCLP Metals,
- PCBs, Pesticides and Herbicides,
- Ignitability,
- Reactivity,
- Modified Paint Filter Test, and
- pH.

A-3 STOCKPILE METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately-anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every rainstorm event resulting in 0.25 inches or more of rainfall, as measured at the nearest U.S. Weather Service gauging station. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC.

A-4 MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

Excavated soil and fill materials must be tested with regard to potential contaminant presence. If analytical results indicate contaminant concentrations are below Commercial SCOs, the soil can be reused on-site in accordance with Section A-7 of this Appendix. If the concentrations are elevated above Commercial SCOs, approval for reuse on site must be obtained from NYSDEC. If hazardous materials are encountered, they cannot be reused on-site and must be disposed properly at a permitted facility.

A-5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Truck transport routes are as follows: trucks will enter and exit the site from Route 19. All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

A-6 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the site will be considered as potentially-contaminated and regulated material and will be managed, transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If exportation of soil/fill from this site is proposed (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the

NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

A-7 MATERIALS REUSE ON-SITE

Impacted materials that will be re-used on-Site will need to be segregated based upon field screening, previous investigation findings, and/or additional pre-construction and/or construction sampling and analyses. The analyses will include TCL VOCs + TICs (Method 8260) and TCL SVOCs + TICs (Method 8270). The analysis results will be compared to Commercial SCOs. If concentrations are below Commercial SCOs, the soil can be reused on-Site. If the concentrations are elevated above Commercial SCOs, the results shall be shared with the NYSDEC and approval obtained prior to their specified reuse on-Site. It should be noted the NYSDEC may require highly impacted materials to be transported off-Site and disposed of at a permitted landfill facility. Impacted materials that are determined acceptable for re-use on-Site to backfill excavations should be covered with clean soil or an impervious surface. Staging and stockpiling management of materials should be conducted as described in the sections above.

Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in Tables 1 through 3 and include VOC and SVOC levels less than Commercial SCOs. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below a demarcation layer, approved clean soil cover or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

A-8 FLUIDS MANAGEMENT

Sufficient data are available at this time such that it does not appear necessary to perform additional groundwater sampling prior to construction activities in areas outside the vicinity of RAOC-1. If excavation activities are proposed near or within RAOC-1 and are expected to extend to the depth of the water table, pre-construction sampling is recommended. In such cases, pre-construction sampling frequency and analyses would vary based on the location of proposed work in relation to the characterized areas and on the anticipated quantity and handling of groundwater.

Sampling of groundwater during construction efforts should also be considered if either of the following conditions are encountered:

- If conditions during construction are significantly different than those observed during pre-construction exploration, including unusual odors or visual observations such as stained soils, drums, containers, etc.; or
- If concerns such as sheens or free-product are identified within soil or groundwater.

In these situations, sampling frequency and analyses would vary based on the condition and quantity of groundwater encountered and handling options.

All liquids to be removed from the site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, but will be managed off-site.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

A-9 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site.

The past use of the site proposed as a source of backfill materials must be known and material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are as defined in 6NYCRR 375-6.7 and 6.8 and include conformance with the lower of the Protection of Groundwater or Commercial SCOs. Analytical methods will be dictated by the past use of the site that is the source of the backfill and will be approved by NYSDEC prior to testing. Analytical testing frequencies will be as defined in Table 5.4(e)10 of DER-10 or as otherwise approved by NYSDEC.

Soils that meet ‘exempt’ fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

A-10 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once a week and after every rainstorm event resulting in 0.25 inches or more of rainfall, as measured at the nearest U.S. Weather Service gauging station. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately. Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials. Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

A-11 CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for full a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC’s Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5 of the SMP.

A-12 COMMUNITY AIR MONITORING PLAN

The CAMP will follow the guidance provided in Appendix 1A of NYSDEC's DER-10, Generic Community Air Monitoring Plan (see Appendix I to the SMP). For each day of intrusive field work, a wind sock or flag will be used to monitor wind direction in the area of the work zone. Based upon the daily wind direction, one upwind and one downwind monitoring point will be identified, at the perimeter of the site or field work location. Locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide upwind and downwind monitoring stations.

Real-time particulate monitoring and VOC monitoring will be carried out using equipment appropriate to both measure the types of contaminants known to be present and satisfy the requirements of DER-10's Generic Community Air Monitoring Plan. Prior to the commencement of field work each day, background measurements of particulate and VOC concentrations will be logged at the up- and downwind locations. The real-time readings will be used to observe the difference between upwind and downwind particulate and VOC levels. If at any time, the difference between the upwind and downwind particulate levels or VOC levels exceeds action levels, then work will be temporarily halted. The Contractor will then be required to implement dust suppression techniques or any other means necessary to control dusts and VOCs. Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

A-13 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site and on-site, if there are residents or tenants on the property. Specific odor control methods to be used on a routine basis will include limiting the area of open excavations and the size of soil stockpiles, and covering soil stockpiles. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's

Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils;. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

A-14 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.

- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, un-vegetated soils vulnerable to dust production.

- Gravel will be used on roadways to provide a clean and dust-free road surface.

- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

A-15 OTHER NUISANCES

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

Appendix B

Metes and Bounds

"ENVIRONMENTAL EASEMENT DESCRIPTION" – C902019

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, BEING A PORTION OF GREAT LOT NO.18, TOWNSHIP NO.3, RANGE NO.2 OF THE ROBERT MORRIS RESERVE AND BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE EASTERLY BOUNDS OF NEW YORK STATE ROUTE NO.19, SAID POINT BEING POSITIONED AT THE INTERSECTION OF THE SAID HIGHWAY BOUNDS AND THE DIVISION LINE BETWEEN THE LANDS HEREIN DESCRIBED, ON THE SOUTH AND LANDS DESCRIBED IN A DEED FROM CLYDE HANCHETT TO EDWARD HANCHETT, RECORDED IN LIBER 542 OF DEEDS AT PAGE 420, ON THE NORTH;

THENCE S 81°04'41" E AND ALONG THE SAID DIVISION LINE A DISTANCE OF 576.19 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE WESTERLY EDGE OF AN EXISTING FARM ROAD WHICH EXTENDS IN A NORTHERLY DIRECTION TOWARD THE LANDS OF HANCHETT, SAID POINT BEING THE NORTHWESTERLY CORNER OF LANDS DESCRIBED IN A DEED FROM CARL W. AND ELIZABETH ANDREWS TO ROBERT L. AND DORA H. STOWELL, RECORDED IN LIBER 411 OF DEEDS AT PAGE 218, LANDS LATER CONVEYED BY EDWARD HANCHETT TO RALPH W. AND DARLENE A. KEESLER AS EVIDENCED BY A DEED RECORDED IN LIBER 593 OF DEEDS AT PAGE 420;

THENCE S 02°47'59" W AND PASSING THROUGH THE SAID LANDS OF KEESLER A DISTANCE OF 96.02 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET;

THENCE S 26°14'08" W AND CONTINUING THROUGH THE LANDS OF KEESLER A DISTANCE OF 565.43 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET IN THE DIVISION LINE BETWEEN THE LANDS OF KEESLER, ON THE NORTH AND LANDS ONCE REPUTEDLY OWNED BY LYLE AND HELEN BENJAMIN AS EVIDENCED BY A DEED RECORDED IN LIBER 384 OF DEEDS AT PAGE 70, ON THE SOUTH, LANDS NOW REPUTEDLY OWNED BY THEODORE F. AND LANA L. PHILLIPS AS EVIDENCED BY A DEED RECORDED IN LIBER 1232 OF DEEDS AT PAGE 159;

THENCE N 81°51'04" W ALONG THE DIVISION LINE BETWEEN THE LANDS OF KEESLER AND THE SAID LANDS OF BENJAMIN, NOW REPUTEDLY PHILLIPS A DISTANCE OF 40.17 FEET TO A 5/8" IRON REBAR WITH SURVEY CAP SET AT THE SOUTHWESTERLY CORNER OF THE ABOVE MENTIONED LANDS DESCRIBED IN A DEED TO STOWELL AND LATER CONVEYED TO KEESLER;

THENCE N 81°51'04" W AND ALONG THE DIVISION LINE BETWEEN THE LANDS HEREIN DESCRIBED, ON THE NORTH AND THE ABOVE MENTIONED LANDS OF BENJAMIN, NOW REPUTEDLY PHILLIPS A DISTANCE OF 45.56 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE EASTERLY BOUNDS OF N.Y.S. ROUTE NO.19;

THENCE ALONG THE EASTERLY HIGHWAY BOUNDS OF N.Y.S. ROUTE NO.19 THE FOLLOWING TWO (2) COURSES AND DISTANCES:

1. N 24°26'18" W A DISTANCE OF 414.81 FEET TO A POINT;
2. N 10°52'03" W A DISTANCE OF 308.17 FEET TO THE POINT AND PLACE OF BEGINNING OF THE PARCEL HEREIN DESCRIBED.

CONTAINING 5.424+/- ACRES

Appendix C

Environmental Easement

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 28th day of May, 2012, between Owner **BLADES HOLDING COMPANY, INC.**, at P.O. Box 12, Arkport, New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 5392 State Route 19, in the Town of Amity, County of Allegany and State of New York, known and designated on the tax map of the County Clerk of Allegany County as tax map parcel number: Section 171 Block 1 Lot 60, being the same as that property conveyed to Grantor by deeds dated March 2, 1960 and __________ and recorded in the Allegany County Clerk's Office in Liber 536, page 1063 and Liber ________, page _________, respectively. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 5.424± acres, and is hereinafter more fully described in the Land Title Survey dated May 18, 2012 prepared by B&R Surveying, P.L.L.C, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of the Brownfield Cleanup Agreement Number: C902019-09-10. Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial uses as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial uses as described in 6 NYCRR Part 375-1.8(g)(2)(iv).

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.

(4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(5) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(6) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(7) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.

(8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

(9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as described in 6 NYCRR Part 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement.

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C902019
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

BLADES HOLDING COMPANY, INC.

By: Robert Blades Jr

Print Name: Robert U. Blades Jr.

Title: President

Date: 5/28/12

STATE OF NEW YORK)
) ss:
COUNTY OF STEUBEN)

On the 28th day of May, in the year 2012, before me, the undersigned, personally appeared __________________, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York

CHARLES F. LIBORDI
Notary Public-State of New York
Steuben County No. 4737120
My Commission Expires 9/30/13

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner.

By: ______________________________

Dale A. Desnoyers, Director
Division of Environmental Remediation

STATE OF NEW YORK)
) ss:
COUNTY OF ____________)

On the _______ day of______, in the year 2012, before me, the undersigned, personally appeared __________________, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

____
Notary Public - State of New York

SCHEDULE "A" ENVIRONMENTAL EASEMENT PROPERTY DESCRIPTION

Property Address: 5392 State Route 19, Amity, New York 14813
County of Allegany
Tax Map: 171.-1-60

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Amity, County of Allegany, State of New York, being a portion of Great Lot No. 18, Township No. 3, Range No. 2 of the Robert Morris Reserve and being more particularly bounded and described as follows:

Beginning at a point marked by a 5/8" iron rebar with survey cap on the easterly bounds of New York State Route No. 19, said point being positioned at the intersection of the said highway bounds and the division line between the lands herein described, on the south and lands described in a deed from Clyde Hanchett to Edward Hanchett, recorded in Liber 542 of Deeds at page 420, on the north; thence

S 81° 04' 41" E and along the said division line, a distance of 576.19 feet to a point marked by a 5/8" iron rebar with survey cap set on the westerly edge of an existing farm road which extends in a northerly direction toward the lands of Hanchett, said point being the northwesterly corner of lands described in a deed from Carl W. and Elizabeth Andrews to Robert L. and Dora H. Stowell, recorded in Liber 411 of Deeds at page 218, lands later conveyed by Edward Hanchett to Ralph W. and Darleene A. Keesler as evidenced by a deed recorded in Liber 593 of Deeds at page 420; thence

S 02° 47' 59" W and passing through the said lands of Keesler, a distance of 96.02 feet to a point marked by a 5/8" iron rebar with survey cap set; thence

S 26° 14' 08" W and continuing through the lands of Keesler, a distance of 565.43 feet to a point marked by a 5/8" iron rebar with survey cap set in the division line between the lands of Keesler, on the north and lands once reputedly owned by Lyle and Helen Benjamin as evidenced by a deed recorded in Liber 384 of Deeds at page 70, on the south, lands now reputedly owned by Theodore F. and Lana L. Phillips as evidenced by a deed recorded in Liber 1232 of Deeds at page 159; thence

N 81° 51' 04" W along the division line between the lands of Keesler and the said lands of Benjamin, now reputedly Phillips, a distance of 40.17 feet to a 5/8" iron rebar with survey cap set at the southwesterly corner of the above mentioned lands described in a deed to Stowell and later conveyed to Keesler; thence

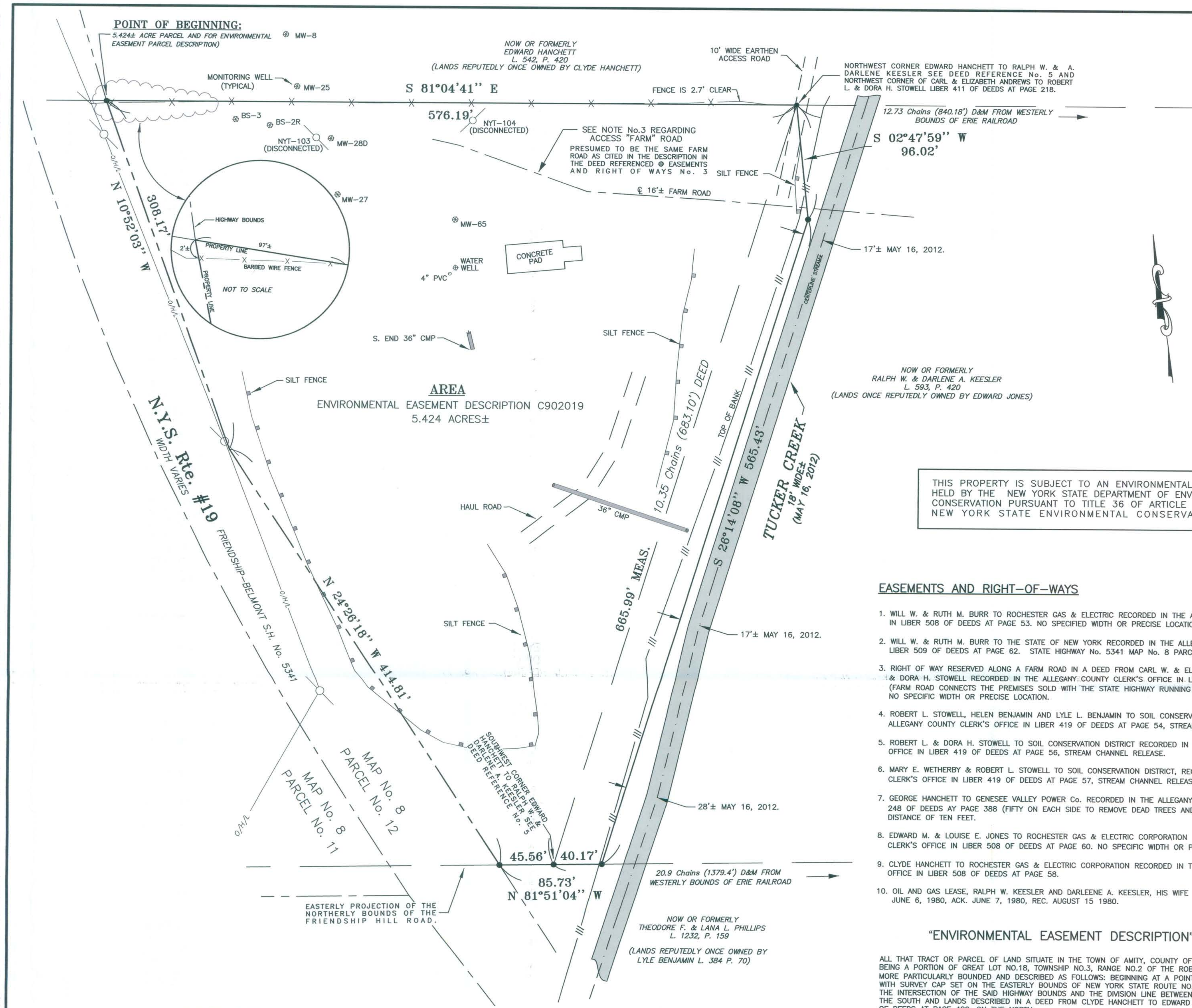
N 81° 51' 04" W and along the division line between the lands herein described, on the north and the above mentioned lands of Benjamin, now reputedly Phillips, a distance of 45.56 feet to a point marked by a 5/8" iron rebar with survey cap set on the easterly bounds of N.Y.S. Route No. 19; thence

Along the easterly highway bounds of N.Y.S. Route No. 19 the following two (2) courses and distances:

(1) N 24° 26' 18" W, a distance of 414.81 feet to a point;

(2) N 10° 52' 03" W, a distance of 308.17 feet to the point and place of beginning of the parcel herein described.

SURVEY



THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL EASEMENT HELD BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PURSUANT TO TITLE 36 OF ARTICLE 71 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

REVISIONS

No.	REVISION	DATE
1.	REVISED PER HARTER SECREST & EMERY LLP REQUEST	09-24-12
2.	REVISED PER HARTER SECREST & EMERY LLP REQUEST	10-03-12
3.	REVISED PER HARTER SECREST & EMERY LLP REQUEST	10-12-12

LEGEND:

●	5/8" REBAR W/SURVEY CAP SET
	CENTERLINE OF TRAVELED WAY
	RIGHT OF WAY LIMITS
	DEED AND/OR MAP LINE
o/H/L o/H/L	OVERHEAD UTILITY LINE
x x x x	FENCELINE
	CENTER OF TUCKER CREEK
D&M	DEED AND MEASURED DIMENSION
	UTILITY POLE & ANCHOR
(18)	GREAT LOT NUMBER

"Unauthorized alteration or addition to a survey map bearing a Licensed Land Surveyors seal is a violation of section 7209, sub-division 2, of the New York State Education Law."

"Copies from the original of this survey map not marked with an original of the land surveyor's inked seal or his embossed seal, shall not be considered to be a valid true copy."

NOTE

THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT "derweb@gw.dec.state.ny.us "

EASEMENTS AND RIGHT-OF-WAYS

1. WILL W. & RUTH M. BURR TO ROCHESTER GAS & ELECTRIC RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 508 OF DEEDS AT PAGE 53. NO SPECIFIED WIDTH OR PRECISE LOCATION.
2. WILL W. & RUTH M. BURR TO THE STATE OF NEW YORK RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 509 OF DEEDS AT PAGE 62. STATE HIGHWAY No. 5341 MAP No. 8 PARCELS 11 & 12.
3. RIGHT OF WAY RESERVED ALONG A FARM ROAD IN A DEED FROM CARL W. & ELIZABETH ANDREWS TO ROBERT L. & DORA H. STOWELL RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 411 OF DEEDS AT PAGE 218. (FARM ROAD CONNECTS THE PREMISES SOLD WITH THE STATE HIGHWAY RUNNING FROM BELMONT TO BELVEDERE) NO SPECIFIC WIDTH OR PRECISE LOCATION.
4. ROBERT L. STOWELL, HELEN BENJAMIN AND LYLE L. BENJAMIN TO SOIL CONSERVATION DISTRICT RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 419 OF DEEDS AT PAGE 54, STREAM CHANNEL RELEASE.
5. ROBERT L. & DORA H. STOWELL TO SOIL CONSERVATION DISTRICT RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 419 OF DEEDS AT PAGE 56, STREAM CHANNEL RELEASE.
6. MARY E. WETHERBY & ROBERT L. STOWELL TO SOIL CONSERVATION DISTRICT, RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 419 OF DEEDS AT PAGE 57, STREAM CHANNEL RELEASE.
7. GEORGE HANCHETT TO GENESEE VALLEY POWER Co. RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 248 OF DEEDS AY PAGE 388 (FIFTY ON EACH SIDE TO REMOVE DEAD TREES AND TREE BRANCHES WITHIN A DISTANCE OF TEN FEET.
8. EDWARD M. & LOUISE E. JONES TO ROCHESTER GAS & ELECTRIC CORPORATION RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 508 OF DEEDS AT PAGE 60. NO SPECIFIC WIDTH OR PRECISE LOCATION.
9. CLYDE HANCHETT TO ROCHESTER GAS & ELECTRIC CORPORATION RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 508 OF DEEDS AT PAGE 58.
10. OIL AND GAS LEASE, RALPH W. KEESLER AND DARLEENE A. KEESLER, HIS WIFE TO UNITED EXPLORATION DATED JUNE 6, 1980, ACK. JUNE 7, 1980, REC. AUGUST 15 1980.

"ENVIRONMENTAL EASEMENT DESCRIPTION" – C902019

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, BEING A PORTION OF GREAT LOT NO.18, TOWNSHIP NO.3, RANGE NO.2 OF THE ROBERT MORRIS RESERVE AND BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE EASTERLY BOUNDS OF NEW YORK STATE ROUTE NO.19, SAID POINT BEING POSITIONED AT THE INTERSECTION OF THE SAID HIGHWAY BOUNDS AND THE DIVISION LINE BETWEEN THE LANDS HEREIN DESCRIBED, ON THE SOUTH AND LANDS DESCRIBED IN A DEED FROM CLYDE HANCHETT TO EDWARD HANCHETT, RECORDED IN LIBER 542 OF DEEDS AT PAGE 420, ON THE NORTH;

THENCE S 81°04'41" E AND ALONG THE SAID DIVISION LINE A DISTANCE OF 576.19 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE WESTERLY EDGE OF AN EXISTING FARM ROAD WHICH EXTENDS IN A NORTHERLY DIRECTION TOWARD THE LANDS OF HANCHETT, SAID POINT BEING THE NORTHWESTERLY CORNER OF LANDS DESCRIBED IN A DEED FROM CARL W. AND ELIZABETH ANDREWS TO ROBERT L. AND DORA H. STOWELL, RECORDED IN LIBER 411 OF DEEDS AT PAGE 218, LANDS LATER CONVEYED BY EDWARD HANCHETT TO RALPH W. AND DARLENE A. KEESLER AS EVIDENCED BY A DEED RECORDED IN LIBER 593 OF DEEDS AT PAGE 420;

THENCE S 02°47'59" W AND PASSING THROUGH THE SAID LANDS OF KEESLER A DISTANCE OF 96.02 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET;

THENCE S 26°14'08" W AND CONTINUING THROUGH THE LANDS OF KEESLER A DISTANCE OF 565.43 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET IN THE DIVISION LINE BETWEEN THE LANDS OF KEESLER, ON THE NORTH AND LANDS ONCE REPUTEDLY OWNED BY LYLE AND HELEN BENJAMIN AS EVIDENCED BY A DEED RECORDED IN LIBER 384 OF DEEDS AT PAGE 70, ON THE SOUTH, LANDS NOW REPUTEDLY OWNED BY THEODORE F. AND LANA L. PHILLIPS AS EVIDENCED BY A DEED RECORDED IN LIBER 1232 OF DEEDS AT PAGE 159;

THENCE N 81°51'04" W ALONG THE DIVISION LINE BETWEEN THE LANDS OF KEESLER AND THE SAID LANDS OF BENJAMIN, NOW REPUTEDLY PHILLIPS A DISTANCE OF 40.17 FEET TO A 5/8" IRON REBAR WITH SURVEY CAP SET AT THE SOUTHWESTERLY CORNER OF THE ABOVE MENTIONED LANDS DESCRIBED IN A DEED TO STOWELL AND LATER CONVEYED TO KEESLER;

THENCE N 81°51'04" W AND ALONG THE DIVISION LINE BETWEEN THE LANDS HEREIN DESCRIBED, ON THE NORTH AND THE ABOVE MENTIONED LANDS OF BENJAMIN, NOW REPUTEDLY PHILLIPS A DISTANCE OF 45.56 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE EASTERLY BOUNDS OF N.Y.S. ROUTE NO.19;

THENCE ALONG THE EASTERLY HIGHWAY BOUNDS OF N.Y.S. ROUTE NO.19 THE FOLLOWING TWO (2) COURSES AND DISTANCES:
1. N 24°26'18" W A DISTANCE OF 414.81 FEET TO A POINT;
2. N 10°52'03" W A DISTANCE OF 308.17 FEET TO THE POINT AND PLACE OF BEGINNING OF THE PARCEL HEREIN DESCRIBED.

CONTAINING 5.424+/– ACRES

ANCIENT DESCRIPTION

WILLIAM L. COLLINS TO A.L. BLADES & SONS, Inc. BY WARRANTY DEED
DATED MARCH 02, 1960.
ACKNOWLEDGED MARCH 02, 1960.
RECORDED MARCH 02, 1960
LIBER 536 OF DEEDS AT PAGE 1063.

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS: NORTH BY THE LANDS NOW OR FORMERLY OWNED BY CLYDE HANCHETT; EAST BY THE LANDS NOW OR FORMERLY OWNED EDWARD JONES; SOUTH BY LANDS NOW OR FORMERLY OWNED BY LYLE BENJAMIN; AND ON THE WEST BY THE EAST LINE OF THE RIGHT-OF-WAY OF NEW YORK STATE HIGHWAY No. 5341 RUNNING FROM THE VILLAGE OF BELMONT TO BELVEDERE; SAID LAND CONSISTING OF THREE AND ONE HALF (3½) ACRES MORE OR LESS, AND BEING ALL OF THE LAND OWNED BY THE SAID GRANTORS HEREIN LYING TO THE EAST OF SAID NEW YORK STATE HIGHWAY No. 5341 AND ABUTTING SAID HIGHWAY ON THE EAST FROM STATIONS 779+10 TO STATION 786+50.

MODERN DEED DESCRIPTION OF LANDS OWNED BY BLADES HOLDING COMPANY Inc.
(5.424± ACRES PARCEL EAST OF N.Y.S. ROUTE No. 19)

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, BEING A PORTION OF GREAT LOT NO.18, TOWNSHIP NO.3, RANGE NO.2 OF THE ROBERT MORRIS RESERVE AND BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE EASTERLY BOUNDS OF NEW YORK STATE ROUTE NO.19, SAID POINT BEING POSITIONED AT THE INTERSECTION OF THE SAID HIGHWAY BOUNDS AND THE DIVISION LINE BETWEEN THE LANDS HEREIN DESCRIBED, ON THE SOUTH AND LANDS DESCRIBED IN A DEED FROM CLYDE HANCHETT TO EDWARD HANCHETT, RECORDED IN LIBER 542 OF DEEDS AT PAGE 420, ON THE NORTH;

THENCE S 81°04'41" E AND ALONG THE SAID DIVISION LINE A DISTANCE OF 576.19 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE WESTERLY EDGE OF AN EXISTING FARM ROAD WHICH EXTENDS IN A NORTHERLY DIRECTION TOWARD THE LANDS OF HANCHETT, SAID POINT BEING THE NORTHWESTERLY CORNER OF LANDS DESCRIBED IN A DEED FROM CARL W. AND ELIZABETH ANDREWS TO ROBERT L. AND DORA H. STOWELL, RECORDED IN LIBER 411 OF DEEDS AT PAGE 218, LANDS LATER CONVEYED BY EDWARD HANCHETT TO RALPH W. AND DARLENE A. KEESLER AS EVIDENCED BY A DEED RECORDED IN LIBER 593 OF DEEDS AT PAGE 420;

THENCE S 02°47'59" W AND PASSING THROUGH THE SAID LANDS OF KEESLER A DISTANCE OF 96.02 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET;

THENCE S 26°14'08" W AND CONTINUING THROUGH THE LANDS OF KEESLER A DISTANCE OF 565.43 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET IN THE DIVISION LINE BETWEEN THE LANDS OF KEESLER, ON THE NORTH AND LANDS ONCE REPUTEDLY OWNED BY LYLE AND HELEN BENJAMIN AS EVIDENCED BY A DEED RECORDED IN LIBER 384 OF DEEDS AT PAGE 70, ON THE SOUTH, LANDS NOW REPUTEDLY OWNED BY THEODORE F. AND LANA L. PHILLIPS AS EVIDENCED BY A DEED RECORDED IN LIBER 1232 OF DEEDS AT PAGE 159;

THENCE N 81°51'04" W ALONG THE DIVISION LINE BETWEEN THE LANDS OF KEESLER AND THE SAID LANDS OF BENJAMIN, NOW REPUTEDLY PHILLIPS A DISTANCE OF 40.17 FEET TO A 5/8" IRON REBAR WITH SURVEY CAP SET AT THE SOUTHWESTERLY CORNER OF THE ABOVE MENTIONED LANDS DESCRIBED IN A DEED TO STOWELL AND LATER CONVEYED TO KEESLER;

THENCE N 81°51'04" W AND ALONG THE DIVISION LINE BETWEEN THE LANDS HEREIN DESCRIBED, ON THE NORTH AND THE ABOVE MENTIONED LANDS OF BENJAMIN, NOW REPUTEDLY PHILLIPS A DISTANCE OF 45.56 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE EASTERLY BOUNDS OF N.Y.S. ROUTE NO.19;

THENCE ALONG THE EASTERLY HIGHWAY BOUNDS OF N.Y.S. ROUTE NO.19 THE FOLLOWING TWO (2) COURSES AND DISTANCES:
1. N 24°26'18" W A DISTANCE OF 414.81 FEET TO A POINT;
2. N 10°52'03" W A DISTANCE OF 308.17 FEET TO THE POINT AND PLACE OF BEGINNING OF THE PARCEL HEREIN DESCRIBED.

CONTAINING 5.424+/– ACRES

DEED DESCRIPTION OF LANDS CONVEYED BY RALPH AND DARLENE KEESLER TO BLADES HOLDING COMPANY, INC.
(SEE DEED REFERENCE No. 7)

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, BEING A PORTION OF GREAT LOT NO.18, TOWNSHIP NO.3, RANGE NO.2 OF THE ROBERT MORRIS RESERVE AND BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET ON THE EASTERLY BOUNDS OF NEW YORK STATE ROUTE NO.19, SAID POINT BEING POSITIONED AT THE INTERSECTION OF THE SAID HIGHWAY BOUNDS AND THE DIVISION LINE BETWEEN THE LANDS HEREIN DESCRIBED, ON THE SOUTH AND LANDS DESCRIBED IN A DEED FROM CLYDE HANCHETT TO EDWARD HANCHETT, RECORDED IN LIBER 542 OF DEEDS AT PAGE 420, ON THE NORTH;

THENCE S 81°04'41" E AND ALONG THE SAID DIVISION LINE A DISTANCE OF 576.19 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET AT THE TRUE POINT AND PLACE OF BEGINNING OF THE LANDS HEREIN DESCRIBED, SAID POINT OF BEGINNING BEING ON THE WESTERLY EDGE OF AN EXISTING FARM ROAD WHICH EXTENDS IN A NORTHERLY DIRECTION TOWARD THE LANDS OF HANCHETT AND BEING THE NORTHWESTERLY CORNER OF LANDS DESCRIBED IN A DEED FROM CARL W. AND ELIZABETH ANDREWS TO ROBERT L. AND DORA H. STOWELL, RECORDED IN LIBER 411 OF DEEDS AT PAGE 218, LANDS LATER CONVEYED BY EDWARD HANCHETT TO RALPH W. AND DARLENE A. KEESLER AS EVIDENCED BY A DEED RECORDED IN LIBER 593 OF DEEDS AT PAGE 420;

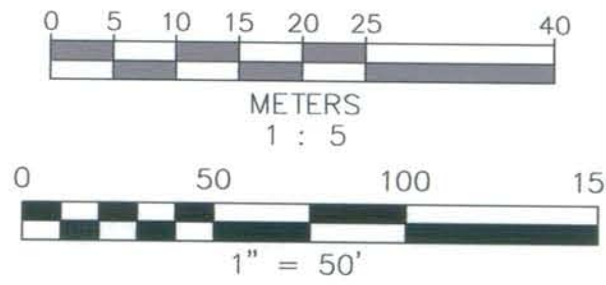
THENCE S 02°47'59" W AND PASSING THROUGH THE SAID LANDS DESCRIBED IN A DEED TO RALPH W. AND DARLENE A. KEESLER A DISTANCE OF 96.02 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET;

THENCE S 26°14'08" W AND CONTINUING THROUGH THE LANDS OF KEESLER A DISTANCE OF 565.43 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET IN THE DIVISION LINE BETWEEN KEESLER, ON THE NORTH AND LANDS ONCE REPUTEDLY OWNED BY LYLE AND HELEN BENJAMIN AS EVIDENCED BY A DEED RECORDED IN LIBER 384 OF DEEDS AT PAGE 70, LANDS REPUTEDLY NOW OWNED BY THEODORE F. AND LANA L. PHILLIPS AS EVIDENCED BY A DEED RECORDED IN LIBER 1232 OF DEEDS AT PAGE 159, ON THE SOUTH;

THENCE N 81°51'04" W AND ALONG THE DIVISION LINE BETWEEN THE LANDS HEREIN DESCRIBED, ON THE NORTH AND THE SAID LANDS OF BENJAMIN, NOW REPUTEDLY PHILLIPS,ON THE SOUTH A DISTANCE OF 40.17 FEET TO A POINT MARKED BY A 5/8" IRON REBAR WITH SURVEY CAP SET AT THE SOUTHWESTERLY CORNER OF THE ABOVE MENTIONED LANDS DESCRIBED IN A DEED FROM HANCHETT TO KEESLER;

THENCE N 26°14'08" E AND ALONG THE WESTERLY LINE OF THE SAID LANDS OF HANCHETT TO KEESLER A DISTANCE OF 665.99 FEET TO THE POINT AND PLACE OF BEGINNING OF THE PARCEL HEREIN DESCRIBED.

CONTAINING 0.540+/– ACRES.



NOTES

1. MAP NORTH MERIDIAN IS ORIENTED TO MAGNETC NORTH
2. UNDERGROUND UTILITIES AND/OR STRUCTURES NOT SHOWN HEREON UNLESS APPARENT AT THE SURFACE. CONTACT U.F.P.O. PRIOR TO DIGGING.
3. CENTERLINE OF ACCESS ROAD CURRENTLY USED BY RALPH KEESLER FOR THE PURPOSE OF ACCESSING A CULTIVATED FIELD ON THE EASTERLY SIDE OF TUCKER'S CREEK AND DEPICTED HEREON IS PRESUMED TO BE THE THE SAME FARM ROAD AS CITED IN A DEED FROM CARL W. & ELIZABETH ANDREWS TO ROBERT L. AND DORA H. STOWELL, RECORDED IN LIBER 411 AT PAGE 218. THE PHYSICAL CENTERLINE OF THE ACCESS IS NOT DISCERNIBLE ALONG IT'S ENTIRE LENGTH.
4. A REVIEW OF THE NEW YORK STATE DEC. FRESH WATER WETLANDS MAP EFFECTIVE DATE 1987 WHICH IS HOUSED IN THE ALLEGANY COUNTY CLERK'S OFFICE REVEALED NOTHING RELATIVE TO A DESIGNATED WETLAND IN THE AREA OF THE SUBJECT PARCEL.

DEED REFERENCES:

1. CARL W. AND ELIZABETH ANDREWS TO WILL W. AND RUTH M. BURR BY WARRANTY DEED RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 429 AT PAGE 430
2. WILLIAM L. COLLINS TO A.L. BLADES & SONS, Inc. BY WARRANTY DEED RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 536 AT PAGE 1063. (COVERS 4.885± ACRES)
3. A.L. BLADES & SONS, Inc. TO ALLEGANY BITUMENS Inc. RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 537 AT PAGE 1142. (COVERS 4.885± ACRES)
4. ALLEGANY BITUMENS, Inc. TO BELMONT EQUIPMENT & RENTAL Co., Inc. RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 580 AT PAGE 260.
5. EDWARD HANCHETT TO RALPH W. & DARLENE A. KEESLER BY WARRANTY DEED RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE IN LIBER 593. OF DEEDS AT PAGE 420.
6. RESTATED CERTIFICATE OF INCORPORATION OF A.L. BLADES AND SONS, INC. FOR THE PURPOSE OF AMONG OTHERS TO CHANGE NAME TO BLADES HOLDING COMPANY, INC.
7. RALPH W. KEESLER AND DARLENE A. KEESLER TO BLADES HOLDING COMPANY INC. RECORDED IN THE ALLEGANY COUNTY CLERK'S OFFICE AS INSTUMENT No. 2012-57698.

ABSTRACT REFERENCE:

1. ABSTRACT OF TITLE PREPARED BY WEBTITLE AGENCY, SEARCH NUMBER WTA-12-9925-NY. DATED MARCH 21, 2012.
2. ABSTRACT OF TITLE PREPARED BY ALLEGANY ABSTRACT COMPANY, ABSTRACT No. 1685-AMITY DATED MAY 07, 2012.

MAP REFERENCES:

1. SURVEY MAP PREPARED BY N.Y.S. DEPT. OF PUBLIC WORKS, ENTITLED "FRIENDSHIP-BELMONT S.H. No.5341" DATED DEC. 1955.
   MAP No.8, PARCELS 11 & 12
2. SURVEY MAP PREPARED BY J.B. BALL, L.S. ENTITLED "PLAN OF LANDS TO BE CONVEYED BY: PHILIP C. JOHNSON" DATED MARCH 19, 1986. FILED IN THE ALLEGANY COUNTY CLERK'S OFFICE & INDEXED AS SMALL MAP #35 TOWN OF AMITY
3. SURVEY MAP PREPARED BY B&R SURVEYING, P.L.L.C. ENTITLED "PLAN OF LANDS TO BE CONVEYED BY: ALLEGANY BITUMENS, Inc." DATED FEB. 25, 2005 JOB NUMBER 05-006.

THIS SURVEY MAP IS HEREBY CERTIFIED TO THE FOLLOWING:

1.) BLADES HOLDING COMPANY Inc.
2.) HARTER, SECREST & EMERY, LLP
3.) STEWART TITLE INSURANCE COMPANY
4.) THE PEOPLE OF THE STATE OF NEW YORK ACTING THROUGH THEIR COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

CERTIFICATION:

I HEREBY CERTIFY THAT I AM A NEW YORK STATE LICENSED LAND SURVEYOR AND THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION ON MAY 18, 2012 USING FIELD NOTES FROM AN INSTRUMENT SURVEY DATED MAY 9, 2012.

SIGNED : Brent M. Rohrabacher
BRENT M. ROHRABACHER, L.S. #050102

THIS SURVEY PLAN NOT VALID WITH AN AFFIDAVIT OF NO CHANGE

SIGNATURE AND SEAL

BRENT M. ROHRABACHER
LIC. 050102

B&R SURVEYING, P.L.L.C.
ROY J. BONHAM, L.S.
P.O. BOX 6 WELLSVILLE, NY 14895
OFFICE: (585) 593-1352
FAX: (585) 593-1466
BRENT M. ROHRABACHER, L.S.

ENVIRONMENTAL CONTROL AND EASEMENT MAP SITE No. C902019

PLAN OF LANDS OWNED BY:
BLADES HOLDING COMPANY Inc.
LOCATED AT No. 5392 STATE ROUTE No. 19
AMITY, NY 14813

SITUATE IN THE TOWN OF AMITY, COUNTY OF ALLEGANY, STATE OF NEW YORK, AND BEING A PORTION OF GREAT LOT #18, TOWNSHIP #3, RANGE #2 OF THE ROBERT MORRIS RESERVE.

SCALE:	DWG BY:	CHK BY:	TAX PARCEL No.	JOB No.
1" = 50'	J.A.T.	B.M.R.	171-1-60 AND PART OF 171-1-59	12-019 REF: 09-067, 05-006

Appendix D

Health and Safety Plan

APPENDIX D

HEALTH AND SAFETY PLAN
SITE MANAGEMENT PLAN
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT
5392 STATE ROUTE 19
TOWN OF AMITY, ALLEGANY COUNTY, NEW YORK

September 2012

Prepared for:

**NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
270 MICHIGAN AVENUE
BUFFALO, NEW YORK 14203**

Prepared on Behalf of:

**BLADES HOLDING COMPANY, INC.
P.O. BOX 12
ARKPORT, NY 14807**

Prepared by:

**STANTEC CONSULTING SERVICES INC.
61 COMMERCIAL STREET
ROCHESTER, NEW YORK 14614**

Stantec

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Tables

Figures

Appendices

1.0 INTRODUCTION

The following Health and Safety Plan (HASP) describes personal safety protection standards and procedures to be followed by Stantec staff during implementation of the Site Management Plan (SMP) at the Former Allegany Bitumens Belmont Asphalt Plant site located in the Town of Amity, Allegany County, New York (Figure 1). This work could potentially include:

- oversight of:
    - soil excavation or grading;
    - excavation dewatering;
    - placement of material designed to facilitate in-situ remediation;
    - backfilling of excavations;
    - cover system or demarcation layer restoration;
    - transportation of excavated materials off-site;
    - transportation of excavation groundwater off-site or on-site treatment and discharge;
    - monitoring well repair; and
    - monitoring well decommissioning;
- conducting monitoring for a Community Air Monitoring Plan (CAMP);
- site inspection;
- subsurface soil sampling from excavations;
- sampling for waste disposal;
- monitoring well inspections, re-development, and repair; and
- groundwater elevation measurement and sampling.

This HASP establishes mandatory safety procedures and personal protection standards pursuant to the Occupational Safety and Health Administration (OSHA) regulations 29 Code of Federal Regulations (CFR) 1910.120. The HASP applies to all Stantec personnel conducting any site work, as defined in 29 CFR 1910.120(a). All personnel involved in the mentioned activities must familiarize themselves with this HASP, comply with its requirements and have completed the required health and safety training and medical surveillance program participation pursuant to 29 CFR 1910.120 prior to beginning any work on site.

THIS HASP IS FOR THE EXPRESS USE OF STANTEC EMPLOYEES. ALL OTHER CONTRACTORS TO BE WORKING IN THE EXCLUSION AREAS ARE REQUIRED BY LAW TO DEVELOP THEIR OWN HASP, AS WELL TO MEET ALL PERTINENT ASPECTS OF OSHA REGULATIONS. STANTEC RESERVES THE RIGHT TO STOP ANY SITE WORK WHICH IS DEEMED TO POSE A HEALTH AND SAFETY THREAT TO ITS STAFF.

1.1 Background

This project is being performed as part of a Brownfield Cleanup Program. The SMP was prepared to manage remaining contamination identified during prior investigations at the site.

Site Background

The Former Allegany Bitumens Belmont Asphalt Plant is a 5.4± acre parcel located at 5392 State Route 19 in the Town of Amity, Allegany County, New York. A hot-mix asphalt plant started operations at this location in approximately 1960. From about 1960 to 1995, Allegany Bitumens, Inc. operated the site. Allegany Bitumens was merged into Blades in 1995. Blades operated the site from 1995 till 2005, when operation at the site ceased. The operations at the asphalt plant included quality control testing at an on-site laboratory.

The subject property was previously improved with an asphalt plant, control tower, truck scale, scale house, office and laboratory building, oil storage building, maintenance shop and maintenance garage, which were demolished or dismantled and removed from site in late 2011 through early 2012.

Land use in the surrounding area is dominated by agricultural uses. The northern limits of the Village of Belmont are located approximately one-half mile southeast of the property. Undeveloped wooded property is located to the southwest of the property along Tucker's Creek and its small tributaries.

Phase I and II Environmental Site Assessments were performed at the site in 2009. A Remedial Investigation (RI) was performed at the site in 2010-2011. These investigations revealed the presence of volatile organic compounds (VOCs) in soil and groundwater at levels exceeding applicable NYSDEC cleanup objectives and standards or guidance values. As a result, Interim Remedial Measures (IRMs) were performed from September 2011 to May 2012.

1.2 Site-Specific Chemicals of Concern

VOCs

The primary volatile compounds of concern that are documented to be present in the soil and groundwater at the Former Allegany Bitumens Belmont Asphalt Plant Site are listed in Table 1. Material Safety Data Sheets (MSDSs) for these compounds are presented in Appendix A. The air monitoring action levels will be based on one-half of the current Threshold Limit Valve (TLV) or Permissible Exposure Limit (PEL) for 1,1-dichloroethene (1,1-DCE) with a margin of safety built into the action levels to account for the non-specificity of the field monitoring instruments. Exposure limits for less hazardous compounds will be satisfied by meeting the more stringent exposure limits for 1,1-DCE. Table 1 summarizes health and safety data for the volatile compounds of primary concern.

PAHs in Asphalt

The past use of the site for storage and production of asphalt products indicate it is likely that polycyclic aromatic hydrocarbons (PAHs), which are semi-volatile organic compounds that are components of asphalt, may be present in soil, or groundwater. Because the potential for encountering liquid asphalt at the site is low, and because the solubility of PAHs in water is low, the primary risk for exposure to PAHs at the site is likely to be from ingestion or inhalation of soil particles contaminated with PAHs.

The Department of Health and Human Services (DHHS) has determined that some PAHs may be carcinogens. Some people who have breathed or touched mixtures of PAHs and other chemicals for long periods of time have developed cancer. Some PAHs have caused cancer in laboratory animals when they breathed air containing them (lung cancer), ingested them in food (stomach cancer), or had them applied to their skin (skin cancer).

The Occupational Safety and Health Administration (OSHA) has set a limit of 0.2 milligrams of PAHs per cubic meter of air (0.2 mg/m3). Therefore, adherence to the provisions specified in the Community Air Monitoring Plan for the project (CAMP, Appendix I of the SMP to which this HASP is attached) for monitoring and suppression of fugitive dust during intrusive sampling or remedial activities, with the conservative action level of 150 micrograms per cubic meter for airborne dust, will achieve compliance with exposure limits for PAHs.

Table 1
Health and Safety Data for Volatile Contaminants of Concern

Compound	PEL/ TWA	Physical Description	Odor Threshold	Route of Exposure	Symptoms	Target Organs
1,1-Dichloroethane (1,1-DCA)	100 ppm	Colorless, oily liquid with a chloroform-like odor.	255 ppm	inhalation, ingestion, skin and/or eye contact	irritation skin; central nervous system depression; liver, kidney, lung damage	Skin, liver, kidneys, lungs, central nervous system
1,1-Dichloroethene (1,1-DCE)	1 ppm	Colorless liquid or gas (above 89°F) with a mild, sweet, chloroform-like odor.	35.5 ppm	inhalation, skin absorption, ingestion, skin and/or eye contact	irritation eyes, skin, throat; dizziness, headache, nausea, dyspnea (breathing difficulty); liver, kidney disturbance; pneumonitis; [potential occupational carcinogen]	Eyes, skin, respiratory system, central nervous system, liver, kidneys
cis-1,2-Dichloroethene (cis-1,2-DCE)	200 ppm	Colorless liquid (usually a mixture of the cis & trans isomers) with a slightly acrid, chloroform-like odor.	19.1 ppm	inhalation, ingestion, skin and/or eye contact	Irritation eyes, respiratory system; central nervous system depression	Eyes, respiratory system, central nervous system
Tetrachloroethene (PCE)	100 ppm	Colorless liquid with a mild chloroform-like odor.	6.17 ppm	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin erythema (skin redness); liver damage; [potential occupational carcinogen]	Eyes, skin, respiratory system, liver, kidneys, central nervous system
1,1,1-trichloroethane (1,1,1-TCA)	350 ppm	Colorless liquid with a mild, chloroform-like odor.	22.4 ppm	inhalation, ingestion, skin and/or eye contact	irritation eyes, skin; headache, lassitude (weakness, exhaustion), central nervous system depression, poor equilibrium; dermatitis; cardiac arrhythmias; liver damage	Eyes, skin, central nervous system, cardiovascular system, liver

Trichloroethylene (TCE)	100 ppm	Colorless liquid with a chloroform-like odor.	1.36 ppm	inhalation, skin absorption, ingestion, skin and/or eye contact	Irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen]	Eyes, skin, respiratory system, heart, liver, kidneys, central nervous system
Benzo(a)pyrene	0.2 mg/m^3	Black or dark-brown amorphous residue	0.2 mg/m$^{3\ A}$	Inhalation, skin, ingestion and/or eye contact	Irritation eye, respiratory tract, skin; dermatitis, acne, blisters; Nausea, vomiting: [potential occupational carcinogen]	Respiratory system, skin, bladder, kidneys

Notes:
PEL - permissible exposure limits
TWA - time weighted average, 8-hour workday
mg/m^3 - milligrams per cubic meter.
ppm - parts per million, in air
^{A} - threshold for coal tar pitch volatiles

2.0 STANTEC PERSONNEL ORGANIZATION

The following Stantec personnel will be involved in health and safety operations at the Former Allegany Bitumens Belmont Asphalt Plant Site:

2.1 Project Manager

Mr. Michael Storonsky, Managing Principal, is the Project Manager. Mr. Storonsky is responsible for ensuring that all Stantec procedures and methods are carried out, and that all Stantec personnel abide by the provisions of this Health and Safety Plan.

2.2 Site Safety Officer/Field Team Leader

The field team leader (FTL) and Site Safety Officer (SSO) will report directly to the Project Manager and will be responsible for the implementation of this HASP as well as daily calibration of Stantec's safety monitoring instruments. The FTL/SSO will keep a log book of all calibration data and instrument readings for the Site. The FTL/SSO will be determined at the time when the field work is scheduled.

2.3 Health and Safety Coordinator

Ms. Erin McCormick will be the Health and Safety Coordinator. Ms. McCormick will be responsible for overall coordination of Health and Safety issues on the project.

2.4 Daily Meetings

All Stantec personnel and contractors working within the exclusion zone will be required to read this document and sign off on the daily safety meeting form presented in Appendix B.

3.0 MEDICAL SURVEILLANCE REQUIREMENTS

3.1 Introduction

A. Hazardous waste site workers can often experience high levels of physical and chemical stress. Their daily tasks may expose them to toxic chemicals, physical hazards, biologic hazards, or radiation. They may develop heat stress while wearing protective equipment or working under temperature extremes, or face life-threatening emergencies such as explosions and fires. Therefore, a medical program is essential to: assess and monitor worker's health and fitness both prior to employment and during the course of the work; provide emergency and other treatment as needed; and keep accurate records for future reference. In addition, OSHA requires a medical evaluation for employees that may be required to work on hazardous waste sites and/or wear a respirator (29 CFR Part 1910.120 and 1910.134), and certain OSHA standards include specific medical surveillance requirements (e.g., 29 CFR Part 1926.62, Part 1910.95 and Parts 1910.1001 through 1910.1045).

3.2 Medical Examinations

A. All Stantec personnel working in areas of the site where site-related contaminants may be present shall have been examined by a licensed physician as prescribed in 29 CFR Part 1910.120, and determined to be medically fit to perform their duties for work conditions which require respirators. Employees will be provided with medical examinations as outlined below:

- Pre-job physical examination
- Annually thereafter if contract duration exceeds 1 year;
- Termination of employment;
- Upon reassignment in accordance with CFR 29 Part 1910.120(e)(3)(i)(C);
- If the employee develops signs or symptoms of illness related to workplace exposures;
- If the physician determines examinations need to be conducted more often than once a year; and
- When an employee develops a lost time injury or illness during the Contract period.

B. Examinations will be performed by, or under the supervision of a licensed physician, preferably one knowledgeable in occupational medicine, and will be provided without cost to the employee, without loss of pay and at a reasonable time and place. Medical surveillance protocols and examination and test results shall be reviewed by the Occupational Physician.

4.0 ON-SITE HAZARDS

4.1 Chemical Hazards

The primary potential chemical hazards on-site are expected to be exposure to the VOCs and SVOCs detailed in Table 1. Material safety data sheets for the documented VOCs are presented in Appendix A.

The soil and groundwater contaminants are volatile; therefore, any activity at the site which causes physical disturbance of the soil can potentially allow the release of contaminants into the air. For volatiles, this can include release of organic vapors into the air. Such an occurrence may be recognized by noticeable chemical odors. Field personnel should be aware of the odor threshold for these chemicals and their relation to the action levels and Permissible Exposure Limits.

Symptoms of overexposure to primary compounds of concern are detailed in Table 1. To prevent exposure to these chemicals, dermal contact will be minimized by using disposable surgical gloves with work gloves (as appropriate) when handling soil, groundwater equipment or samples. Real time, breathing zone levels of total VOCs will be monitored using a portable photoionization detector (PID). If ambient levels exceed action levels, all site activities will be performed using level C personal protection until ambient concentrations dissipate. Where levels exceed 50 ppm, work will cease and the project manager will be notified immediately. Intrusive work may also be halted where required by action levels detailed in the Community Air Monitoring Plan (CAMP), Appendix I of the SMP.

In addition, depending on seasonal conditions, disturbance of the site soils may cause the particulate contaminants to become airborne as dust. Therefore, particulates will be monitored as discussed in Section 6.1 and dust-suppression methods used where appropriate as discussed in Section 6.2, or in the CAMP.

Finally, aeration of the groundwater may cause volatilization of chemicals into the air, particularly VOCs. Table 2 below summarizes first aid instructions for exposure pathways for the compounds of concern.

Table 2

Exposure Pathways and First Aid Response for Contaminants of Concern

Substance	**Exposure Pathways**	**First-Aid Instructions**
VOCs and SVOCs listed in Table 1	Eye	irrigate immediately
	Dermal	soap wash promptly (soap flush immediately for 1,1-DCE and benzo(a)pyrene)
	Inhalation	respiratory support
	Ingestion	medical attention immediately

4.2 Physical Hazards

Hazards typically encountered at construction sites with drilling, excavation, grading or other earthwork-related activities will be a concern at this site. These hazards include slippery ground surfaces, holes, and operation of heavy machinery and equipment. Field team members will wear the basic safety apparel such as steel-toed shoes, hard hat and safety glasses during all appropriate activities.

Under no circumstances will Stantec personnel approach the borehole during active drilling operation. All field personnel working around the rig will be shown the location and operation of kill switches, which are to be tested daily. Stantec personnel will not enter excavations.

Multi-purpose fire extinguishers, functional and within annual inspection period, will be staged and readily accessible for use.

The use of electrical equipment in any established exclusion zones will be limited to areas verified as containing non-explosive atmospheres (<10% LEL) prior to operation, unless the equipment has been previously demonstrated or designed to be FM or UL rated as intrinsically safe. Care will be taken to avoid an ignition source while working in the presence of vapors.

Drilling and excavating contractors shall make all necessary contacts with utilities and/or underground utility locator hotlines prior to drilling or excavating, and shall meet OSHA requirements for distances between the drilling rig and overhead utilities. No drilling work will be carried out where the drill rig chassis has not been stabilized and the rig is not to be moved between locations with its boom in a vertical position.

4.2.1 Noise

The use of heavy machinery/equipment and operation may result in noise exposures, which require hearing protection. Exposure to noise can result in temporary hearing losses, interference with speech communication, interference with complicated tasks or permanent hearing loss due to repeated exposure to noise.

During the investigative activities, all Stantec field team members will use hearing protection when sound levels are in excess of 90 dB TWA.

4.2.2 *Heat and Cold Stress Exposure*

Heat is a potential threat to the health and safety of site personnel. The Site Safety Officer under the direction of the Project Manager will determine the schedule of work and rest. These schedules will be employed as necessary so that personnel do not suffer adverse effects from heat. Table 3 summarizes exposure symptoms and first aid instructions for heat stress. Non-caffeinated, thirst replenishment liquids will be available on-site.

Cold stress is also a potential threat to the health and safety of site personnel. Symptoms of cold stress include, shivering, blanching of the extremities, numbness or burning sensations, blue, purple or gray discoloration of hands and feet, frostbite, hypothermia, and loss of consciousness. Cold stress can be prevented by acclimatizing one's self to the cold, increasing fluid intake, avoiding caffeine and alcohol, maintaining proper salt and electrolyte intake, eating a well-balanced diet, wearing proper clothing, building heated enclosures to work in, and taking regular breaks to warm up. If any of the above symptoms are encountered the person should be removed from the cold area. Depending on the severity of the cold stress, 911 should be contacted and first aid administered. No fluids should be given to an unconscious person.

Table 3
Exposure Symptoms and First Aid for Heat Exposure

Hazard	Exposure Symptoms	First-Aid Instructions
Heat Stress	Fatigue, sweating, irritability	rest; take fluids
	Dizziness, disorientation, perspiration ceases, loss of consciousness	remove from hot area, activate 911, administer first aid, no fluids to be administered to unconscious victim.

4.2.3 *Roadway Hazards*

Field activities are planned to take place near active roadways. Where such work zones are established, personnel shall assure that protective measures including signage, cones, and shielding through use of vehicles parked at workmen perimeter, are in place. All contractors shall be responsible for meeting signage requirements of DOT. Fluorescent safety vests shall be worn by all personnel during activities in or adjacent to roadways and driveways.

4.2.4 *Electrical Work*

Site work involving electrical installation or energized equipment must be performed by a qualified electrician. All electrical work will be performed in accordance with the OSHA electrical safety requirements found in 29 CFR 1926.400 through 1926.449. Workers are not permitted to work near electrical power circuits unless the worker is protected against electric shock by de-energizing and grounding the circuit or by guarding or barricading the circuit and providing proper personal protective equipment. All electrical installations must comply with NEC regulations.

All electrical wiring and equipment used must be listed by a nationally recognized testing laboratory.

All electrical circuits and equipment must be grounded in accordance with the NEC regulations. The path to ground from circuits, equipment, and enclosures will be permanent and continuous. Ground fault circuit interrupters (GFCIs) are required on all 120-volt, single phase, 15- and 20-amp outlets in work areas that are not part of the permanent wiring of the building or structure. A GFCI is required when using an extension cord. GFCIs must be tested regularly with a GFCI tester.

Heavy-duty extension cords will be used; flat-type extension cords are not allowed. All extension cords must be the three-wire type, and designed for hard/extra hard usage. Electrical wire or cords passing through work areas must be protected from water and damage. Worn, frayed, or damaged cords and cables will not be used. Walkways and work spaces will be kept clear of cords and cables to prevent a tripping hazard. Extension cords and cables may not be secured with staples, hung from nails, or otherwise temporarily secured. Cords or cables passing through holes in covers, outlet boxes, etc., will be protected by bushings or fittings.

All lamps used in temporary lighting will be protected from accidental contact and breakage. Metal shell and paper-lined lamp holders are not permitted. Fixtures, lamp holders, lamps, receptacles, etc. are not permitted to have live parts. Workers must not have wet hands while plugging/unplugging energized equipment. Plugs and receptacles will be kept out of water (unless they are approved for submersion).

4.2.5 Lock-Out/Tag-Out

Before a worker sets up, services, or repairs a system where unexpected energizing (or release of stored energy) could occur and cause injury or electrocution, the circuits energizing the parts must be locked-out and tagged. Only authorized personnel will perform lock-out/tag-out procedures. All workers affected by the lock-out/tag-out will be notified prior to, and upon completion of, the lock-out/tag-out procedure.

Lock-out/tag-out devices must be capable of withstanding the environment to which they are exposed. Locks will be attached in such a way as to prevent other personnel from operating the equipment, circuit, or control, or from removing the lock unless they resort to excessive force. Tags will identify the worker who attached the device, and contain information, which warns against the hazardous condition that will result from the system's unauthorized start-up. Tags must be legible and understood by all affected workers and incidental personnel. The procedures for attaching and removing lock-out/tag-out devices include the steps outlined in the following table.

If maintenance work is required, the electrical supply to the equipment must be disconnected. Turning off the MAIN breaker using the disconnect switch will disconnect all power to the system. Once the disconnect switch has been turned off, the switch will be locked-out using the steps outlined below.

STEP	LOCK-OUT/TAG-OUT PROCEDURES
1	Disconnect the circuits and/or equipment to be worked on from all electrical energy sources.
2	Ensure that the system is completely isolated so that it cannot be operated at that shut-off point or at any other location.
3	Release stored electrical energy.
4	Block or relieve stored non-electrical energy.
5	Place a lock on each shut-off or disconnect point necessary to isolate all potential energy sources. Place the lock in such a manner that it will maintain the shut-off/disconnect in the off position.
6	Place a tag on each shut-off or disconnect point. The tag must contain a statement prohibiting the unauthorized re-start or re-connect of the energy source and the removal of the tag, and the identity of the individual performing the tag and lock-out.
7	Workers who will be working on the system must place their own lock and tag on <u>each</u> lock-out point.
8	A qualified person must verify the system cannot be re-started or re-connected, and de-energizing of the system has been accomplished.

Once the service or repairs have been made on the system:	
1	A qualified person will conduct an inspection of the work area, to verify that all tools, jumpers, shorts, grounds, etc., have been removed so that the system can then be safely re-energized.
2	All workers stand clear of the system.
3	Each lock and tag will be removed by the worker who attached it. If the worker has left the site, then the lock and tag may be removed by a qualified person under the following circumstances:
	a. The qualified person ensures the worker who placed the lock and tag has left the site; and
	b. The qualified person ensures the worker is aware the lock and tag has been removed before the worker resumes work on-site.

4.2.6 Ladders

One-third of worker deaths in construction result from falls. Many falls occur because ladders are not placed or used safely. Ladder use will comply with OSHA 1926.1053 through 1926.1060, including the following safety requirements.

STEP	PROPER LADDER USE PROCEDURE
1	Choose the right ladder for the task--the proper type and size, with a sufficient rating for the task.
2	Check the condition of the ladder before climbing. • Do not use a ladder with broken, loose, or cracked rails or rungs. • Do not use a ladder with oil, grease, or dirt on its rungs. • The ladder should have safety feet.
3	Place the ladder on firm footing, with a four-to-one pitch.
4	Support the ladder by: • Tying it off; • Using ladder outrigger stabilizers; or • Have another worker hold the ladder at the bottom. If another worker holds the ladder, they must: • Wear a hard hat; • Hold the ladder with both hands; • Brace the ladder with their feet; and • Not look up.
5	Keep the areas around the top and bottom of the ladder clear.
6	Extend the top of the ladder at least 36 inches (3 feet) above the landing.
7	Climb the ladder carefully - facing it - and use both hands. • Use a tool belt and hand-line to carry material to the top or bottom of the ladder. • Wear shoes in good repair with clean soles.
8	Inspect the ladder every day, prior to use, for the following problems: • Rail or rung damage • Broken feet • Rope or pulley damage • Rung lock defects or damage • Excessive dirt, oil, or grease If the ladder fails inspection, it must be removed from service and tagged with a "Do Not Use" sign.

Ladders with non-conductive side rails must be used when working near electrical conductors, equipment, or other sources. Ladders will not be used horizontally for platforms, runways, or scaffolds.

4.2.7 Hand and Power Tools

All hand and power tools will be maintained in a safe condition and in good repair. Hand and power tools will be used in accordance with 29 CFR 1926, Subpart I (1926.300 through 1926.307). Neither Stantec nor its subcontractors will issue unsafe tools, and workers are not permitted to bring unsafe tools on-site. All tools will be used, inspected, and maintained in accordance with the manufacturer's instructions. Throwing tools or dropping tools to lower levels is prohibited. Hand and power tools will be inspected, tested, and determined to be in safe operating condition prior to each use. Periodic safety inspections of all tools will be conducted to assure that the tools are in good condition, all guards are in place, and the tools are being properly maintained. Any tool that fails an inspection will be immediately removed from service and tagged with a "Do Not Use" sign.

Workers using hand and power tools, who are exposed to falling, flying, abrasive, or splashing hazards will be required to wear personal protective equipment (PPE). Eye protection must always be worn when working on-site. Additional eye and face protection, such as safety goggles or face shields, may also be required when working with specific hand and power tools. Workers, when on-site, will wear hard hats. Additional hearing protection may be required when working with certain power tools. Workers using tools, which may subject their hands to an injury, such as cuts, abrasions, punctures, or burns, will wear protective gloves. Loose or frayed clothing, dangling jewelry, or loose long hair will not be worn when working with power tools.

Electric power-operated tools will be double insulated or grounded, and equipped with an on/off switch. Guards must be provided to protect the operator and other nearby workers from hazards such as in-going nip points, rotating parts, flying chips, and sparks. All reciprocating, rotating and moving parts of tools will be guarded if contact is possible. Removing machine guards is prohibited.

Abrasive wheels will only be used on equipment provided with safety guards. Safety guards must be strong enough to withstand the effect of a bursting wheel. Abrasive wheels will not be operated in excess of their rated speed. Work or tool rests will not be adjusted while the wheel is in motion. All abrasive wheels will be closely inspected and ring tested before each use, and any cracked or damaged wheels will be removed immediately and destroyed.

Circular saws must be equipped with guards that completely enclose the cutting edges and have anti-kickback devices. All planer and joiner blades must be fully guarded. The use of cracked, bent, or otherwise defective parts is prohibited. Chain saws must have an automatic chain brake or kickback device. The worker operating the chain saw will hold it with both hands during cutting operations. A chain saw must never be used to cut above the operator's shoulder height. Chain saws will not be re-fueled while running or hot. Power saws will not be left unattended.

Only qualified workers will operate pneumatic tools, powder-actuated tools, and abrasive blasting tools.

4.2.8 Manual Lifting

Back injuries are among the leading occupational injuries reported by industrial workers. Back injuries such as pulls and disc impairments can be reduced by using proper manual lifting techniques. Leg muscles are stronger than back muscles, so workers should lift with their legs and not with their back. Proper manual lifting techniques include the following steps:

STEP	PROPER MANUAL LIFTING PROCEDURE
1	Plan the lift before lifting the load. Take into consideration the weight, size, and shape of the load.
2	Preview the intended path of travel and the destination to ensure there are no tripping hazards along the path.
3	Wear heavy-duty work gloves to protect hands and fingers from rough edges, sharp corners, and metal straps. Also, keep hands away from potential pinch points between the load and other objects.
4	Get the load close to your ankles, and spread your feet apart. Keep your back straight and do not bend your back too far; instead bend at your knees.
5	Feel the weight; test it.
6	Lift the load smoothly, and let your legs do the lifting. If you must pivot, do not swing just the load; instead, move your feet and body with the load.

If the load is too heavy, then do not lift it alone. Lifting is always easier when performed with another person. Assistance should always be used when it is available.

4.2.9 Weather-Related Hazards

Weather-related hazards include the potential for heat or cold stress, electrical storms, treacherous weather-related working conditions, or limited visibility. These hazards correlate with the season in which site activities occur. Outside work will be suspended during electrical storms. In the event of other adverse weather conditions, the Site Safety Officer will determine if work can continue without endangering the health and safety of site personnel.

5.0 SITE WORK ZONES

The following work zones will be physically delineated by Stantec during the site activities.

5.1 Control Zones

Control boundaries will be established within the areas of site activities. Examples of boundary zones include the exclusion and decontamination zone. All boundaries will be dynamic, and will be determined by the planned activities for the day. The Field Team Leader will record the names of any visitors to the site.

5.2 Exclusion Zone

The controlled portion of the site will be delineated to identify the exclusion zone, wherein a higher level of personal protective equipment may be required for entry during intrusive activities. The limits of the exclusion zone will be designated at each work location appropriately. A decontamination zone will be located immediately outside the entrance to the exclusion zone. All personnel leaving the exclusion zone will be required to adhere to proper decontamination procedures.

A "super exclusion" zone will be established around boreholes which will not be entered by Stantec personnel at any time during any active drilling, slambar, cathead, silica sand dumping, or other related activities. The drilling contractor will be directed to stop such activity when Stantec site team members have a need to enter this zone.

5.3 Decontamination Zone

The decontamination zone will be located immediately outside the entrance to the exclusion zone on its apparent upwind side, if feasible, and will be delineated with caution tape and traffic cones as needed. This zone will contain the necessary decontamination materials for personnel decontamination. Decontamination procedures are outlined in Section 8.0 of this plan.

6.0 SITE MONITORING/ACTION LEVELS

6.1 Site Monitoring

Field activities associated with drilling, excavation, earthwork, grading and sampling may create potentially hazardous conditions due to the migration of contaminants into the breathing zone. These substances may be in the form of mists, vapors, dusts, or fumes that can enter the body through ingestion, inhalation, absorption, and direct dermal contact. Monitoring for VOCs and particulates will be performed to ensure appropriate personal protective measures are employed during site activities.

A separate Community Air Monitoring Plan (CAMP) has also been developed (Appendix I of the SMP) to protect the surrounding neighborhood.

Although the concentrations of anticipated contaminants in soil/groundwater should not present an explosive hazard, explosive environments or conditions may be encountered unexpectedly during the course of this project. Monitoring for explosivity in the atmosphere will be routinely conducted during site activities as a precautionary measure to ensure site personnel are not subjected to any dangerous conditions.

The following describes the conditions that will be monitored for during the investigation activities. All background and site readings will be logged, and all instrument calibrations, etc., will be logged.

Organic Vapor Concentrations - Organic vapors will be monitored continuously in the breathing zone in the work area with a portable photoionization detector (PID), such as a miniRAE Model 3000 with a 10.2 eV lamp. The instrument will be calibrated daily or as per the manufacturer’s recommendations. PID readings will be used as the criteria for upgrading or downgrading protective equipment and for implementing additional precautions or procedures.

Split spoons or other soil sampling devices will be monitored using the PID at the time they are opened, with appropriate PPE to be used where soils exhibit measurable volatile organic compound levels.

Explosivity - Explosivity will be monitored continuously during active drilling, excavation or other earthwork-related operations. Measurements obtained from this monitoring instrument will also be used as criteria for implementation of work stoppage or site evacuation. A combination combustible gas/oxygen (CGO_2) instrument, calibrated per manufacturer's recommendations, will be used.

Particulates - Should subsurface conditions be observed to be dry, Stantec will perform particulate monitoring with an aerosol monitor such as the TSI DustTrak II, within the work area to monitor personal exposures to particulates and to compare work area readings with downwind and upwind readings. The first readings of the day will be obtained prior to the commencement of work to obtain a daily background reading, and the instrument will be zeroed daily and calibrated to manufacturer's specifications. Readings will be recorded approximately every 30 minutes thereafter. If the work area particulate levels exceed the background levels by more than 0.15 mg/m^3, the Contractor will be instructed to implement dust suppression measures.

6.2 Action Levels

During the course of any activity, as long as PID readings in the breathing zone are less than 5 ppm above background, Level D protection will be considered adequate. Level C protection will be required when VOC concentrations in ambient air in the work zone exceed 5 ppm total VOCs above background but remain below 50 ppm total VOCs.

If concentrations in the work zone exceed 50 ppm for a period of 5 minutes or longer, work will immediately be terminated by the Site Safety Officer. Options to allow continued drilling, excavation or earthwork would then be discussed amongst all parties. Supplied-air respiratory protection is generally required for earth-disturbance-related work to resume under these conditions. If Level B protection is not used, work may resume in Level C once monitoring concentrations have decreased below 50 ppm and conditions outlined in the CAMP are met.

If the monitoring of fugitive particulate levels within the work area exceeds 0.15 mg/m^3 above background, then the Contractor will be directed to implement fugitive dust control measures which may include use of engineering controls such as water spray at the borehole or in an excavation/grading area.

7.0 PERSONAL PROTECTIVE EQUIPMENT

Based on an evaluation of the hazards at the site, personal protective equipment (PPE) will be required for all personnel and visitors entering the exclusion zone(s). It is anticipated that all Stantec oversight work will be performed in Level D. All contractors will be responsible for selection and implementation of PPE for their personnel.

7.1 Protective Clothing/Respiratory Protection:

Protective equipment for each level of protection is as follows:

If PID readings are above 50 ppm, requiring an upgrade to Level B, site work will be halted pending review of conditions and options by Stantec and other involved parties.

When PID readings range between 5 and 50 ppm, upgrade to Level C:

Level C

- Full face, air purifying respirator with organic/HEPA cartridge;
- Disposable chemical resistant one-piece suit (Tyvek or Saranex, as appropriate);
- Inner and outer chemical resistant gloves;
- Hard hat;
- Steel-toed boots; and
- Disposable booties.

When PID readings range between background and 5 ppm use Level D:

Level D

- Safety glasses;
- Steel-toed boots;
- Protective cotton, latex or leather gloves depending on site duties;
- Hard hat; and
- Tyvek coverall (optional).

8.0 DECONTAMINATION

8.1 Personnel Decontamination

For complete decontamination, all personnel will observe the following procedures upon leaving the exclusion zone:

1. Remove outer boots and outer gloves and place in disposal drum.

2. If using a respirator, remove respirator, dispose of cartridges if necessary, and set aside for later cleaning.

3. Remove disposable chemical resistant suits and dispose of in drum.

4. Remove and dispose of inner gloves.

Decontamination solutions shall be supplied at the decontamination zone. The wash solution will consist of water and detergent such as Alconox or trisodium phosphate (TSP), and the rinse solution will consist of clean water.

Contaminated wash solutions shall be collected in drums for disposal. All other disposable health and safety equipment will be decontaminated and disposed of as non-hazardous waste.

8.2 Equipment Decontamination

If equipment is used during field activities, it will be properly washed or steam-cleaned prior to exiting the decontamination zone. Pre- or post-use rinsing using solvents will be done wearing appropriate PPE.

Monitoring instruments will be either wrapped in poly sheeting or carried by personnel not involved in handling contaminated materials, to reduce the need for decontamination. All instruments will be wet-wiped prior to removal from the work zone.

9.0 EMERGENCY PROCEDURES

The Site Safety Officer will coordinate emergency procedures and will be responsible for initiating emergency response activities. Emergency communications at the site will be conducted verbally and by means of an air or vehicle horn. All personnel will be informed of the location of the cellular telephone and horn. Three blasts on the air or vehicle horn will be used to signal distress.

9.1 List of Emergency Contacts

Ambulance: 911
Hospital: Jones Memorial Hospital, Wellsville, NY: (585) 593-1100
Fire Department: 911

Police: 911
Poison Control Center: (585) 222-1222
RG&E Utility Emergency: 911 or (800) 743-1702

9.2 Directions to Hospital

A map presenting directions to the hospital is included in the back of the document (Figure 2). The route shall be reviewed at the initial site safety meeting on site.

9.3 Accident Investigation and Reporting

A. All accidents requiring first aid, which occur incidental to activities onsite, will be investigated. The investigation format will be as follows:

- interviews with witnesses,
- pictures, if applicable, and
- necessary actions to alleviate the problem.

B. In the event that an accident or some other incident such as an explosion or exposure to toxic chemicals occurs during the course of the project, the Project Health and Safety Officer will be telephoned as soon as possible and receive a written notification within 24 hours. The report will include the following items:

- Name of injured;
- Name and title of person(s) reporting;
- Date and time of accident/incident;
- Location of accident/incident, building number, facility name;
- Brief summary of accident/incident giving pertinent details including type of operation ongoing at the time of the accident/incident;
- Cause of accident/incident;
- Casualties (fatalities, disabling injuries), hospitalizations;
- Details of any existing chemical hazard or contamination;
- Estimated property damage, if applicable;
- Nature of damage; effect on contract schedule;
- Action taken to insure safety and security; and
- Other damage or injuries sustained (public or private).

Where reportable injuries, hospitalizations or fatalities occur amongst Stantec personnel, the necessary document required by OSHA will be submitted within timeframes allowed by law.

The accident report form is illustrated in Table 4.

TABLE 4
ACCIDENT REPORT

Project_Allegany Bitumens Belmont Asphalt Plant Site__ Date of Occurrence______________________

Location __5392 State Route 19, Amity, NY, 14813_________________________________

____

Type of Occurrence: (check all that Apply)

☐Disabling Injury
☐Property Damage
☐Chemical Exposure
☐Explosion
☐Other (explain)____

☐Other Injury
☐Equip. Failure
☐Fire
☐Vehicle Accident

____

Witnesses to Accident/Injury:

________________________ ________________
________________________ ________________
________________________ ________________

Injuries:

Name of Injured ____

What was being done at the time of the accident/injury?

____
____

What corrective actions will be taken to prevent recurrence? ___________________________

____
____

SIGNATURES

Health and Safety Officer ____________________ Date ___________________________

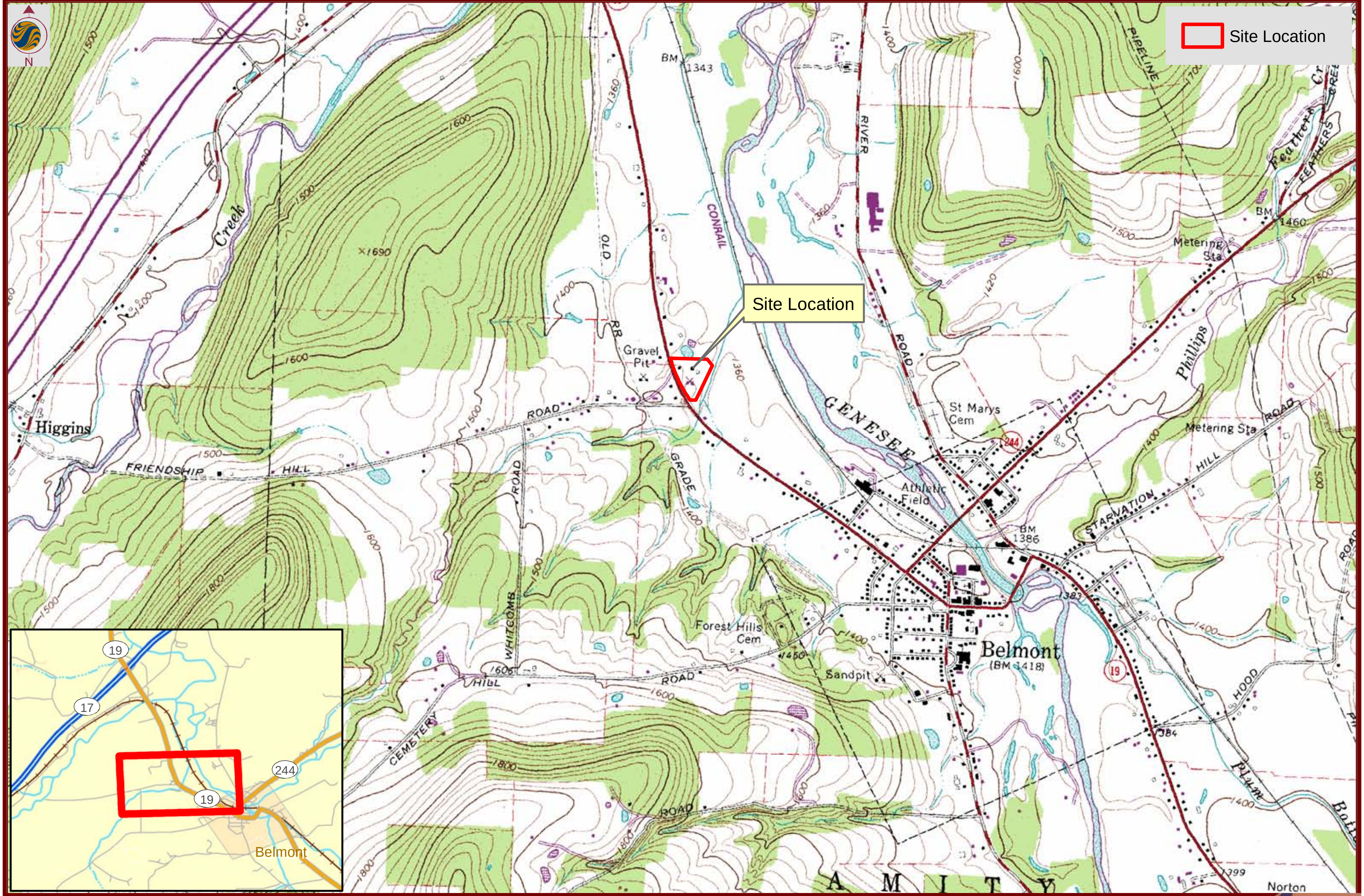
Project Manager __________________________ Date ___________________________

Reviewer ________________________________ Date ___________________________

Comments by reviewer ____

____
____

FIGURES



Geographic Information Systems

Map Source : NYSGIS Clearinghouse Web Site

Cartographic Design By: Andrew Less

June 29,2011
U:\190500593\drawing\RI Report Figures\Figure 1_Site Location Map.mxd

Stantec

Stantec Consulting
61 Commercial Street
Rochester, NY 14614
Phone 585.475.1440 Fax 585.272.1814
www.stantec.com

1 inch = 2,000 feet

0 1,000 2,000 4,000
Feet

Allegany Bitumens Belmont Asphalt Plant Site

FIGURE 1 : Site Location Map Showing USGS Topographic Information

FIGURE 2

Directions and Map from the Site to Jones Memorial Hospital, Wellsville, NY

Directions to 191 N Main St, Wellsville, NY 14895-1150

Total Time: 19 mins, Total Distance: 11.03 mi

		Distance
A	1. **Start at 5392 RT-19, AMITY going toward TUCKERS CORNER RD**	go **0.74** mi
	2. Continue on **RT-19**	go **10.09** mi
	3. Turn L on **W MADISON ST**	go **75** ft
	4. Turn L on **PARK AVE**	go **0.12** mi
	5. Continue on **W PEARL ST**	go **197** ft
	6. Turn L on **N MAIN ST**	go **125** ft
B	7. **Arrive at 191 N MAIN ST, WELLSVILLE, on the** L	

Time: 19 mins, Distance: 11.03 mi

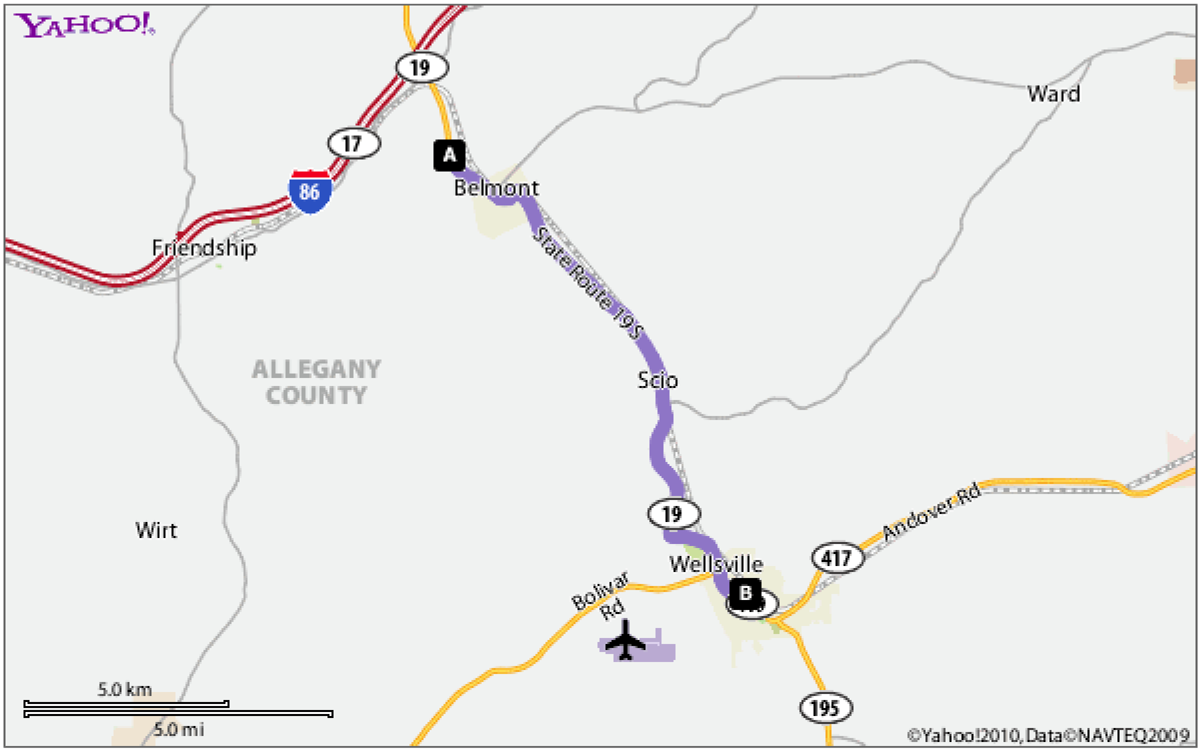


Figure 2 - Directions and Map from the site to Jones Memorial Hospital, Wellsville, NY

APPENDIX A
MATERIAL SAFETY DATA SHEETS

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September 2005

NIOSH Publication Number 2005-149

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SEARCH

Enter search terms separated by spaces.

1,1-Dichloroethane

Synonyms & Trade Names Asymmetrical dichloroethane; Ethylidene chloride; 1,1-Ethylidene dichloride

CAS No. 75-34-3

RTECS No. KI0175000

DOT ID & Guide 2362 130

Formula $CHCl_2CH_3$

Conversion 1 ppm = 4.05 mg/m^3

IDLH 3000 ppm
See: 75343

Exposure Limits

NIOSH REL : TWA 100 ppm (400 mg/m^3) See Appendix C (Chloroethanes)

OSHA PEL : TWA 100 ppm (400 mg/m^3)

Measurement Methods
NIOSH 1003 ;
OSHA 7
See: NMAM or OSHA Methods

Physical Description Colorless, oily liquid with a chloroform-like odor.

MW: 99.0	**BP:** 135°F	**FRZ:** -143°F	**Sol:** 0.6%	**VP:** 182 mmHg	**IP:** 11.06 eV
Sp.Gr: 1.18	**Fl.P:** 2°F	**UEL:** 11.4%	**LEL:** 5.4%		

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities Strong oxidizers, strong caustics

Exposure Routes inhalation, ingestion, skin and/or eye contact

Symptoms irritation skin; central nervous system depression; liver, kidney, lung damage

Target Organs Skin, liver, kidneys, lungs, central nervous system

Personal Protection/Sanitation (See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap flush promptly

Wash skin: When contaminated **Remove:** When wet (flammable) **Change:** No recommendation	**Breathing:** Respiratory support **Swallow:** Medical attention immediately

Respirator Recommendations

NIOSH/OSHA

Up to 1000 ppm:
(APF = 10) Any supplied-air respirator

Up to 2500 ppm:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode

Up to 3000 ppm:
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece

Emergency or planned entry into unknown concentrations or IDLH conditions:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection

See also: INTRODUCTION See ICSC CARD: 0249

Page last reviewed: February 3, 2009
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Vinylidene chloride

Synonyms & Trade Names 1,1-DCE; 1,1-Dichloroethene; 1,1-Dichloroethylene; VDC; Vinylidene chloride monomer; Vinylidene dichloride

CAS No. 75-35-4	**RTECS No.** KV9275000	**DOT ID & Guide** 1303 130P (inhibited)
Formula $CH_2=CCl_2$	**Conversion**	**IDLH** Ca [N.D.] See: IDLH INDEX

Exposure Limits

NIOSH REL : Ca See Appendix A

OSHA PEL †: none

Measurement Methods
NIOSH 1015 ;
OSHA 19
See: NMAM or OSHA Methods

Physical Description Colorless liquid or gas (above 89°F) with a mild, sweet, chloroform-like odor.

MW: 96.9	**BP:** 89°F	**FRZ:** -189°F	**Sol:** 0.04%	**VP:** 500 mmHg	**IP:** 10.00 eV
Sp.Gr: 1.21	**Fl.P:** -2°F	**UEL:** 15.5%	**LEL:** 6.5%		

Class IA Flammable Liquid: Fl.P. below 73°F and BP below 100°F.

Incompatibilities & Reactivities Aluminum, sunlight, air, copper, heat [Note: Polymerization may occur if exposed to oxidizers, chlorosulfonic acid, nitric acid, or oleum. Inhibitors such as the monomethyl ether of hydroquinone are added to prevent polymerization.]

Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms irritation eyes, skin, throat; dizziness, headache, nausea, dyspnea (breathing difficulty); liver, kidney disturbance; pneumonitis; [potential occupational carcinogen]

Target Organs Eyes, skin, respiratory system, central nervous system, liver, kidneys

Cancer Site [in animals: liver & kidney tumors]

Personal Protection/Sanitation (See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation
Provide: Eyewash, Quick drench

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap flush immediately

Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection

See also: INTRODUCTION See ICSC CARD: 0083

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NIOSH Pocket Guide to Chemical Hazards

NPG Home | Introduction | Synonyms & Trade Names | Chemical Names | CAS Numbers | RTECS Numbers | Appendices | Search

1,2-Dichloroethylene

CAS

540-59-0

RTECS

KV9360000

DOT ID & Guide

1150 130P

ClCH=CHCl

Synonyms & Trade Names

Acetylene dichloride, cis-Acetylene dichloride, trans-Acetylene dichloride, sym-Dichloroethylene

Exposure Limits

NIOSH REL: TWA 200 ppm (790 mg/m^3)

OSHA PEL: TWA 200 ppm (790 mg/m^3)

IDLH

1000 ppm See: 540590

Conversion

1 ppm = 3.97 mg/m^3

Physical Description

Colorless liquid (usually a mixture of the cis & trans isomers) with a slightly acrid, chloroform-like odor.

MW: 97.0	BP: 118-140°F	FRZ: -57 to -115°F	Sol: 0.4%
VP: 180-265 mmHg	IP: 9.65 eV		Sp.Gr(77°F): 1.27
Fl.P: 36-39°F	UEL: 12.8%	LEL: 5.6%	

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities

Strong oxidizers, strong alkalis, potassium hydroxide, copper [Note: Usually contains inhibitors to prevent polymerization.]

Measurement Methods

NIOSH 1003; OSHA 7
See: NMAM or OSHA Methods

Personal Protection & Sanitation

(See protection)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation

First Aid

(See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

NIOSH/OSHA
Up to 2000 ppm:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode£
(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s)£
(APF = 50) Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s)
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus
Important additional information about respirator selection

Exposure Routes

inhalation, ingestion, skin and/or eye contact

Symptoms

Irritation eyes, respiratory system; central nervous system depression

Target Organs

Eyes, respiratory system, central nervous system

See also: INTRODUCTION See ICSC CARD: 0436

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Tetrachloroethylene

Synonyms & Trade Names

Perchlorethylene, Perchloroethylene, Perk, Tetrachlorethylene

CAS No.	**RTECS No.**	**DOT ID & Guide**
127-18-4	KX3850000	1897 160
Formula	**Conversion**	**IDLH**
$Cl_2C=CCl_2$	1 ppm = 6.78 mg/m^3	Ca [150 ppm] See: 127184

Exposure Limits

NIOSH REL

: Ca Minimize workplace exposure concentrations. See Appendix A

OSHA PEL

†: TWA 100 ppm
C 200 ppm (for 5 minutes in any 3-hour period), with a maximum peak of 300 ppm

Measurement Methods

NIOSH 1003 ;
OSHA 1001
See: NMAM or OSHA Methods

Physical Description

Colorless liquid with a mild, chloroform-like odor.

MW:	**BP:**	**FRZ:**	**Sol:**	**VP:**	**IP:**
165.8	250°F	-2°F	0.02%	14 mmHg	9.32 eV
Sp.Gr:	**Fl.P:**	**UEL:**	**LEL:**		
1.62	NA	NA	NA		

Noncombustible Liquid, but decomposes in a fire to hydrogen chloride and phosgene.

Incompatibilities & Reactivities

Strong oxidizers; chemically-active metals such as lithium, beryllium & barium; caustic soda; sodium hydroxide; potash

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin erythema (skin redness); liver damage; [potential occupational carcinogen]

Target Organs

Eyes, skin, respiratory system, liver, kidneys, central nervous system

Cancer Site

[in animals: liver tumors]

Personal Protection/Sanitation

(See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet or contaminated
Change: No recommendation
Provide: Eyewash, Quick drench

First Aid

(See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection

See also: INTRODUCTION See ICSC CARD: 0076 See MEDICAL TESTS: 0179

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Page last updated: November 18, 2010
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Methyl chloroform

Synonyms & Trade Names Chlorothene; 1,1,1-Trichloroethane; 1,1,1-Trichloroethane (stabilized)

CAS No. 71-55-6	**RTECS No.** KJ2975000	**DOT ID & Guide** 2831 160
Formula CH_3CCl_3	**Conversion** 1 ppm = 5.46 mg/m^3	**IDLH** 700 ppm See: 71556

Exposure Limits

NIOSH REL : C 350 ppm (1900 mg/m^3) [15-minute] See Appendix C (Chloroethanes)

OSHA PEL †: TWA 350 ppm (1900 mg/m^3)

Measurement Methods

NIOSH 1003

See: NMAM or OSHA Methods

Physical Description Colorless liquid with a mild, chloroform-like odor.

MW: 133.4	**BP:** 165°F	**FRZ:** -23°F	**Sol:** 0.4%	**VP:** 100 mmHg	**IP:** 11.00 eV
Sp.Gr: 1.34	**Fl.P:** ?	**UEL:** 12.5%	**LEL:** 7.5%		

Combustible Liquid, but burns with difficulty.

Incompatibilities & Reactivities Strong caustics; strong oxidizers; chemically-active metals such as zinc, aluminum, magnesium powders, sodium & potassium; water [Note: Reacts slowly with water to form hydrochloric acid.]

Exposure Routes inhalation, ingestion, skin and/or eye contact

Symptoms irritation eyes, skin; headache, lassitude (weakness, exhaustion), central nervous system depression, poor equilibrium; dermatitis; cardiac arrhythmias; liver damage

Target Organs Eyes, skin, central nervous system, cardiovascular system, liver

Personal Protection/Sanitation (See protection codes) **Skin:** Prevent skin contact	**First Aid** (See procedures) **Eye:** Irrigate immediately

Eyes: Prevent eye contact **Wash skin:** When contaminated **Remove:** When wet or contaminated **Change:** No recommendation	**Skin:** Soap wash promptly **Breathing:** Respiratory support **Swallow:** Medical attention immediately

Respirator Recommendations

NIOSH/OSHA

Up to 700 ppm:
(APF = 10) Any supplied-air respirator*
(APF = 50) Any self-contained breathing apparatus with a full facepiece

Emergency or planned entry into unknown concentrations or IDLH conditions:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection

See also: INTRODUCTION See ICSC CARD: 0079 See MEDICAL TESTS: 0141

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Trichloroethylene

$ClCH=CCl_2$

CAS

79-01-6

RTECS

KX4550000

Synonyms & Trade Names

Ethylene trichloride, TCE, Trichloroethene, Trilene

DOT ID & Guide

1710 160

Exposure Limits

NIOSH REL: Ca See Appendix A See Appendix C

OSHA PEL†: TWA 100 ppm C 200 ppm 300 ppm (5-minute maximum peak in any 2 hours)

IDLH

Ca [1000 ppm] See: 79016

Conversion

1 ppm = 5.37 mg/m^3

Physical Description

Colorless liquid (unless dyed blue) with a chloroform-like odor.

MW: 131.4	BP: 189°F	FRZ: -99°F	Sol(77°F): 0.1%
VP: 58 mmHg	IP: 9.45 eV		Sp.Gr: 1.46
Fl.P: ?	UEL(77°F): 10.5%	LEL(77°F): 8%	

Combustible Liquid, but burns with difficulty.

Incompatibilities & Reactivities

Strong caustics & alkalis; chemically-active metals (such as barium, lithium, sodium, magnesium, titanium & beryllium)

Measurement Methods

NIOSH 1022, 3800; OSHA 1001

See: NMAM or OSHA Methods

Personal Protection & Sanitation

(See protection)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet or contaminated
Change: No recommendation
Provide: Eyewash, Quick drench

First Aid

(See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

NIOSH
At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister/Any appropriate escape-type, self-contained breathing apparatus
Important additional information about respirator selection

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

Irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen]

Target Organs

Eyes, skin, respiratory system, heart, liver, kidneys, central nervous system

Cancer Site

[in animals: liver & kidney cancer]
See also: INTRODUCTION See ICSC CARD: 0081 See MEDICAL TESTS: 0236

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APPENDIX B
ON-SITE SAFETY MEETING FORMS

ON-SITE SAFETY MEETING

Project: Allegany Bitumens Belmont Asphalt Plant Site
Date:_______________ Time:_______________ Job No.: 190500593
Address: 5392 State Route 19, Amity, NY, 14813

Scope of Work:____

Weather Temp:________________ Wind direction/speed: ____________________
Sky Conditions:______________________ Humidity:____________________
Weather Conditions affecting work: ____________________________________

Safety Topics Discussed

Protective Clothing/Equipment: Level D (steel toe boots, hard hat with overhead hazards, etc.)

Chemical Hazards:____

Physical Hazardous: Slip/trip/fall; weather/heat/cold; overhead and noise hazards during drilling, earth moving, and excavating.

Personnel/Equipment Decontamination: Alconox solution and water rinse or high pressure wash

Personnel/Job Functions: ____

Emergency Procedures: Emergency will be signaled verbally or with air or vehicle horn. Appropriate authorities will be contacted and after event, accident reporting procedures will be followed, as appropriate.

Special Equipment: ____

Other: ____

Emergency Phone Numbers/Addresses

Ambulance: 911
Hospital: Jones Memorial Hospital (585) 593-1100
Police: 911
Fire Department: 911

On-Site Safety Meeting
ATTENDEES

Name Printed	Signature	Job Function
____________	____________	____________
____________	____________	____________
____________	____________	____________
____________	____________	____________

Meeting Conducted By: ____________________ ____________________

Name Printed Signature

Site Safety Officer ____________________ ____________________

Team Leader ____________________ ____________________

Appendix E

Monitoring Well Boring and Construction Logs

Stantec

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Test Boring No.: BS-2

Page 1 of 1

Project: Blades Phase II
Project #: 190500543-600
Client: A.L. Blades and Sons
Location: Belmont

Drill Contractor: TREC
Driller: J. Agar
Elevation: NA
Weather: Cold, windy, partly cloudy, 20^{o}s F

Start Date: 12/10/2009
Completion Date: 12/10/2009
Drilling Method: Geoprobe
Supervisor: D. Bauch-Barker

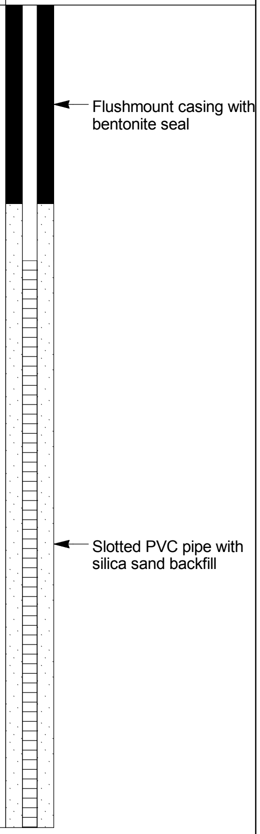
	SAMPLE				**Soil Information**	
0	**PID**	**Rec.**	**No.**	**Depth**	**Remarks**	
	1	1.9	1	0-4	Topsoil and grass.	0
					Brown, medium-coarse SAND, some fine-coarse GRAVEL, moist.	0.4
					Brown coarse SAND, little fine-coarse GRAVEL, moist.	1.1
					Brown coarse SAND and fine-coarse GRAVEL, trace SILT, moist-wet.	1.5
	14.7	3.3	2	4-8	Same as above, broken pink rock at 4.2'.	4
5						
					Gray SILT and fine SAND with trace CLAY, moist, wet at 7.1'.	5.1
	941					
	184	2.3	3	8-12		
10						
					Bottom of hole at 12'.	
15						
20						

Notes:
1. PID Model Mini-Rae 2000 with 10.6eV lamp.
2. Temporary 1" PVC well installed and left in place; screen from 4-14' bgs, SAND 2-14' bgs, and bentonite to surface.

Monitoring Well: BS-2R

Project:	Belmont IRM	**Drilling method:**	Macrocore
Client:	Blades Holding Company Inc.	**Date started/completed:**	26-Jan-2012
Location:	5392 Rt 19, Amity, NY	**Ground surface elevation:**	n/a
Number:	190500593.300	**Top of casing elevation:**	n/a
Field investigator:	S. Reynolds-Smith	**Easting:**	n/a
Contractor:	TREC	**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS				
Depth (m) (ft)	Graphic Log	Lithologic Description	Depth (ft BGS)	Sample Number	Sample Type	Recovery (Inches)	Diagram	Description
		Ground Surface						
		No soil samples taken AUGERED straight to 14.5 ft	0.00					Flushmount casing with bentonite seal Slotted PVC pipe with silica sand backfill
		End of Monitoring Well	14.50					



Depth scale (m): 1, 2, 3, 4, 5, 6; (ft): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20

Screen Interval: 4.50 - 14.50 ft BGS
Sand Pack Interval: 3.50 - 14.50 ft BGS
Well Seal Interval: 0.00 - 3.50 ft BGS

Notes:
ft BGS - feet below ground surface
n/a - not available

MA - Macrocore

Drawn By/Checked By: KP / SRS

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61 Commercial St
Rochester, NY 14614
(585) 475-1440

Test Boring No.: BS-3

Page 1 of 1

Project:	Blades Phase II	Drill Contractor:	TREC	Start Date:	12/11/2009
Project #:	190500543-600	Driller:	J. Agar	Completion Date:	12/11/2009
Client:	A.L. Blades and Sons	Elevation:	NA	Drilling Method:	Geoprobe
Location:	Belmont	Weather:	Cold, windy, partly cloudy, 20^{o}s F	Supervisor:	D. Bauch-Barker

	SAMPLE				**Soil Information**	
0	**PID**	**Rec.**	**No.**	**Depth**	**Remarks**	
	0.4	2.2	1	0-4	Brown, icy topsoil and fine GRAVEL.	0
					Brown medium-coarse SAND and fine-medium GRAVEL, some coarse GRAVEL, moist.	0.5
	0.4					
	0.4	1.9	2	4-8	Same as above, wet at 7.5'.	4
5						
	0.4					
	0.6	2.3	3	8-12	Same as above, wet, dark brown streak at 8.6'.	8
					Brown fine SAND and SILT, trace CLAY, wet.	8.6
10						
	0.5					
					Bottom of hole at 12'.	
15						
20						

Notes:

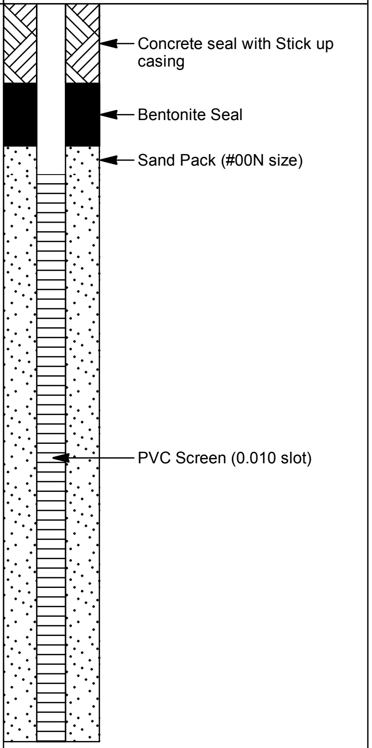
1. PID Model Mini-Rae 2000 with 10.6eV lamp.
2. PID background reading 0.3 ppm.
3. Temporary 1" PVC well installed and left in place; screen from 4-14' bgs, SAND 2-14' bgs, and bentonite to surface.

Monitoring Well: B/MW-8

Project:	Remedial Investigation	**Drilling method:**	Macrocore / Hollow Stem Auger
Client:	Blades Holding Company Inc.	**Date started/completed:**	01-Dec-2010
Location:	5392 Rt 19, Amity, NY	**Ground surface elevation:**	1,365.91 ft AMSL
Number:	190500593.300	**Top of casing elevation:**	1,368.70 ft AMSL
Field investigator:	S. Reynolds-Smith	**Easting:**	1292620.66
Contractor:	Nothnagle Drilling	**Northing:**	814148.74

SUBSURFACE PROFILE | SAMPLE DETAILS | WELL DETAILS

Lithologic Description	Elevation (ft AMSL) Depth (ft BGS)	Sample Number	Sample Type	Recovery (inches)	Vapour Concentration (ppm) PID ●
Ground Surface					
CLAYEY SILT gray, wet	1365.91 0.00	1	MC	15" 31%	0
		2	MC	29" 60%	0
		3	MC	36" 75%	0
NO RECOVERY	1353.91 12.00	4	MC	0" 0%	
End of Borehole	1349.91 16.00				



Sand Pack Interval: 2.50 - 13.00 ft BGS
Screen Interval: 3.00 - 13.00 ft BGS
Well Seal Interval: 1.40 - 2.50 ft BGS

Drawn By/Checked By: KP / SRS

Notes:
ft AMSL - feet above mean sea level
ft BGS - feet below ground surface
ft BTOC - feet below top of casing
ft AGS - feet above ground surface
ppm - parts per million
n/a - not available
MC - macrocore

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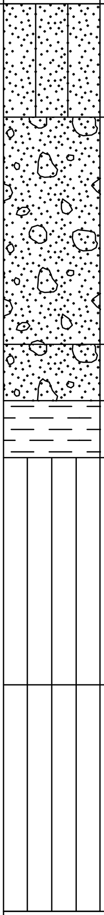
Monitoring Well: B/MW-25

Project:	Remedial Investigation	**Drilling method:**	Macrocore / Hollow Stem Auger
Client:	Blades Holding Company Inc.	**Date started/completed:**	06-Dec-2010
Location:	5392 Rt 19, Amity, NY	**Ground surface elevation:**	n/a
Number:	190500593.300	**Top of casing elevation:**	n/a
Field investigator:	S. Reynolds-Smith	**Easting:**	n/a
Contractor:	Nothnagle Drilling	**Northing:**	n/a

SUBSURFACE PROFILE

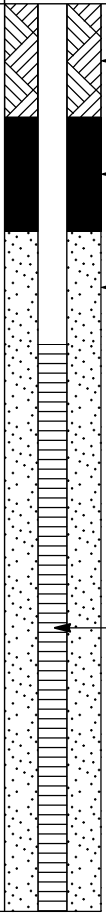


Lithologic Description	Depth (ft BGS)
Ground Surface	0.00
SILTY SAND grayish brown, little gravel, moist	0.00
GRAVELLY SAND brown, moist	2.00
SAND AND GRAVEL brown, moist to wet, black staining	6.00
CLAYEY SILT light gray brown, moist	7.00
SILT light grayish brown to gray, trace clay, moist to wet	8.00
SILT gray, wet	12.00
End of Borehole	16.00

SAMPLE DETAILS

Sample Number	Sample Type	Recovery (inches)	Vapour Concentration (ppm) PID ●
1	MC	24" 50%	0.8
2	MC	24" 50%	0.1
3	MC	40" 83%	3.3
4	MC	38" 79%	0.3

WELL DETAILS



Well Diagram Description
Concrete seal with Stick up casing
Bentonite Seal
Sand Pack (#00N size)
PVC Screen (0.010 slot)

Sand Pack Interval: 4.00 - 16.00 ft BGS
Screen Interval: 6.00 - 16.00 ft BGS
Well Seal Interval: 2.00 - 4.00 ft BGS

Drawn By/Checked By: KP / SRS

Notes:
ft AMSL - feet above mean sea level
ft BGS - feet below ground surface
ft BTOC - feet below top of casing
ft AGS - feet above ground surface
ppm - parts per million
n/a - not available
MC - macrocore

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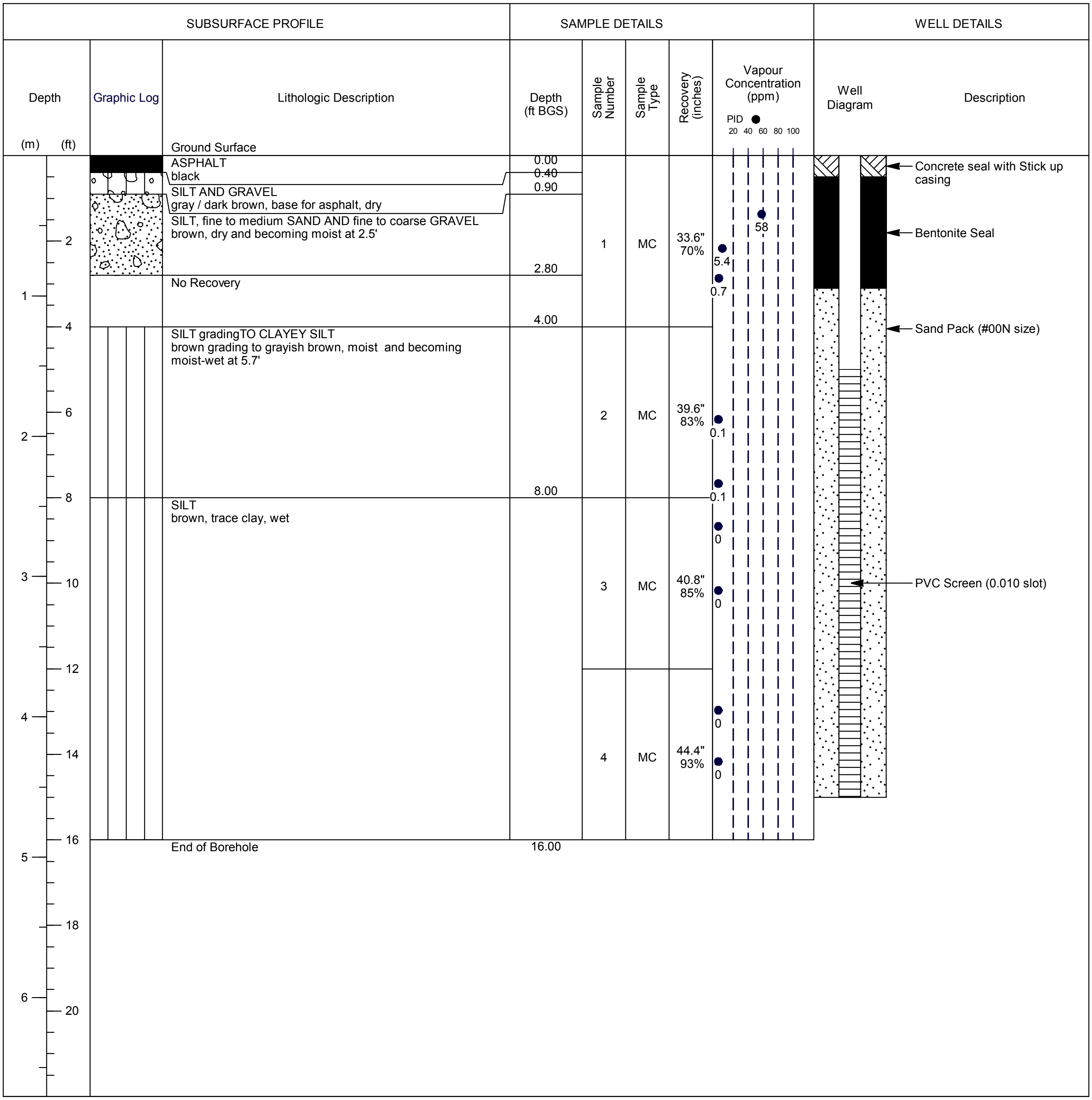
Sheet 1 of 1

Monitoring Well: B/MW-27

Project:	Remedial Investigation	**Drilling method:**	Macrocore / Hollow Stem Auger
Client:	Blades Holding Company Inc.	**Date started/completed:**	03-Feb-2011
Location:	5392 Rt 19, Amity, NY	**Ground surface elevation:**	n/a
Number:	190500593.300	**Top of casing elevation:**	n/a
Field investigator:	S. Reynolds-Smith	**Easting:**	n/a
Contractor:	Nothnagle Drilling	**Northing:**	n/a



Depth (ft BGS)	Lithologic Description
	Ground Surface
0.00	ASPHALT black
0.40	SILT AND GRAVEL gray / dark brown, base for asphalt, dry
0.90	SILT, fine to medium SAND AND fine to coarse GRAVEL brown, dry and becoming moist at 2.5'
2.80	No Recovery
4.00	SILT gradingTO CLAYEY SILT brown grading to grayish brown, moist and becoming moist-wet at 5.7'
8.00	SILT brown, trace clay, wet
16.00	End of Borehole

Sample Number	Sample Type	Recovery (inches)
1	MC	33.6" 70%
2	MC	39.6" 83%
3	MC	40.8" 85%
4	MC	44.4" 93%

Description

- Concrete seal with Stick up casing
- Bentonite Seal
- Sand Pack (#00N size)
- PVC Screen (0.010 slot)

Sand Pack Interval: 3.10 - 15.00 ft BGS
Screen Interval: 5.00 - 15.00 ft BGS
Well Seal Interval: 0.50 - 3.10 ft BGS

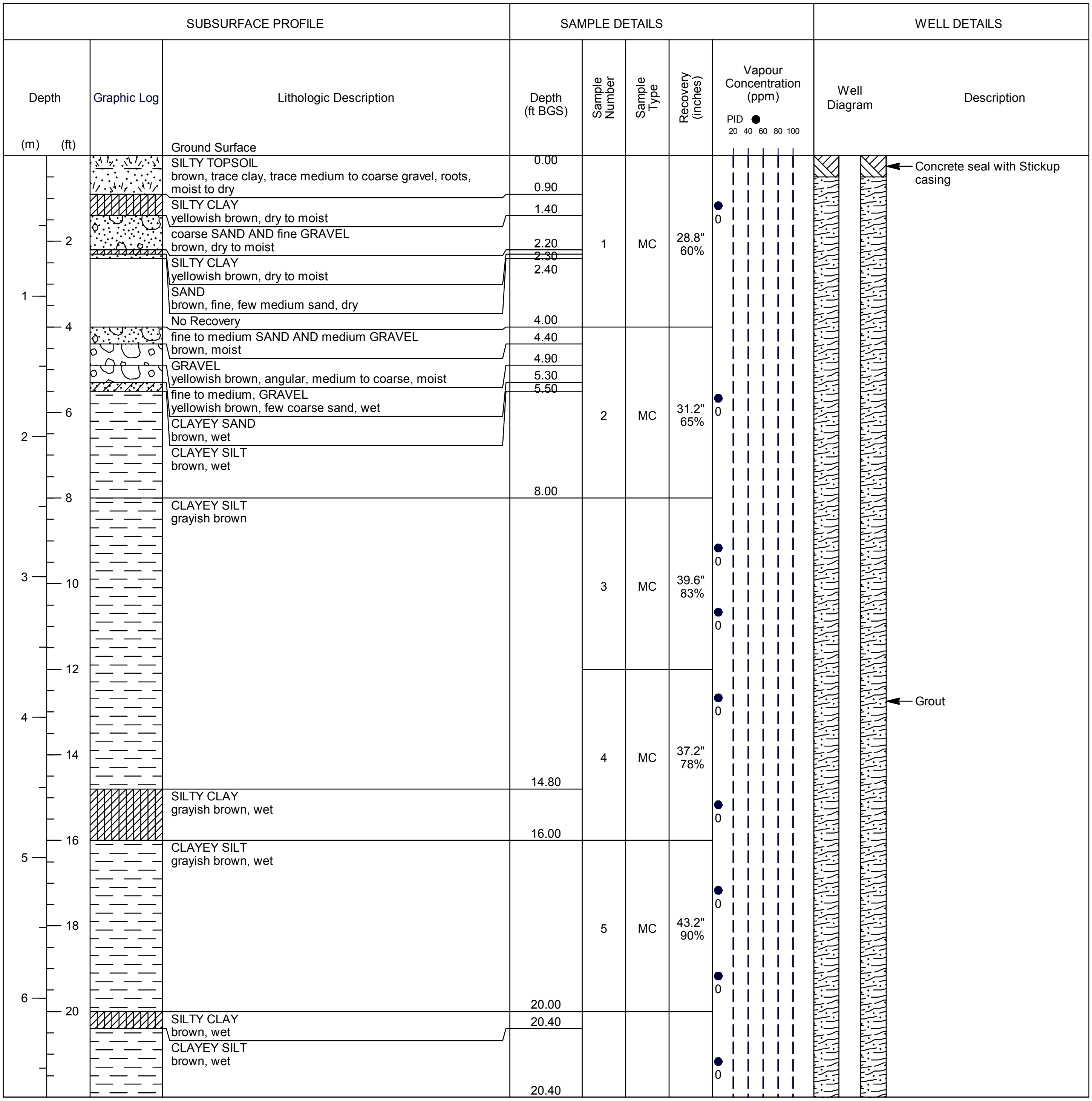
Drawn By/Checked By: KP / SRS

Notes:
ft AMSL - feet above mean sea level
ft BGS - feet below ground surface
ft BTOC - feet below top of casing
ft AGS - feet above ground surface
ppm - parts per million
n/a - not available
MC - macrocore

Monitoring Well: B/MW-28D

Project: Remedial Investigation
Client: Blades Holding Company Inc.
Location: 5392 Rt 19, Amity, NY
Number: 190500593.300
Field investigator: S. Reynolds-Smith
Contractor: Nothnagle Drilling

Drilling method: Macrocore / Hollow Stem Auger
Date started/completed: 01-Feb-2011
Ground surface elevation: n/a
Top of casing elevation: n/a
Easting: n/a
Northing: n/a



Lithologic Description	Depth (ft BGS)
Ground Surface	0.00
SILTY TOPSOIL brown, trace clay, trace medium to coarse gravel, roots, moist to dry	0.90
SILTY CLAY yellowish brown, dry to moist	1.40
coarse SAND AND fine GRAVEL brown, dry to moist	2.20
SILTY CLAY yellowish brown, dry to moist	2.30
SAND brown, fine, few medium sand, dry	2.40
No Recovery	4.00
fine to medium SAND AND medium GRAVEL brown, moist	4.40
GRAVEL yellowish brown, angular, medium to coarse, moist	4.90
fine to medium, GRAVEL yellowish brown, few coarse sand, wet	5.30
CLAYEY SAND brown, wet	5.50
CLAYEY SILT brown, wet	8.00
CLAYEY SILT grayish brown	14.80
SILTY CLAY grayish brown, wet	16.00
CLAYEY SILT grayish brown, wet	20.00
SILTY CLAY brown, wet	20.40
CLAYEY SILT brown, wet	20.40

Sample Number	Sample Type	Recovery (inches)
1	MC	28.8" 60%
2	MC	31.2" 65%
3	MC	39.6" 83%
4	MC	37.2" 78%
5	MC	43.2" 90%

PID: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Well Details Description
Concrete seal with Stickup casing
Grout

Sand Pack Interval: 27.70 - 40.00 ft BGS
Screen Interval: 30.00 - 40.00 ft BGS
Well Seal Interval: 25.00 - 27.70 ft BGS

Drawn By/Checked By: KP / SRS

Notes:
ft AMSL - feet above mean sea level
ft BGS - feet below ground surface
ft BTOC - feet below top of casing
ft AGS - feet above ground surface
ppm - parts per million
n/a - not available
MC - macrocore

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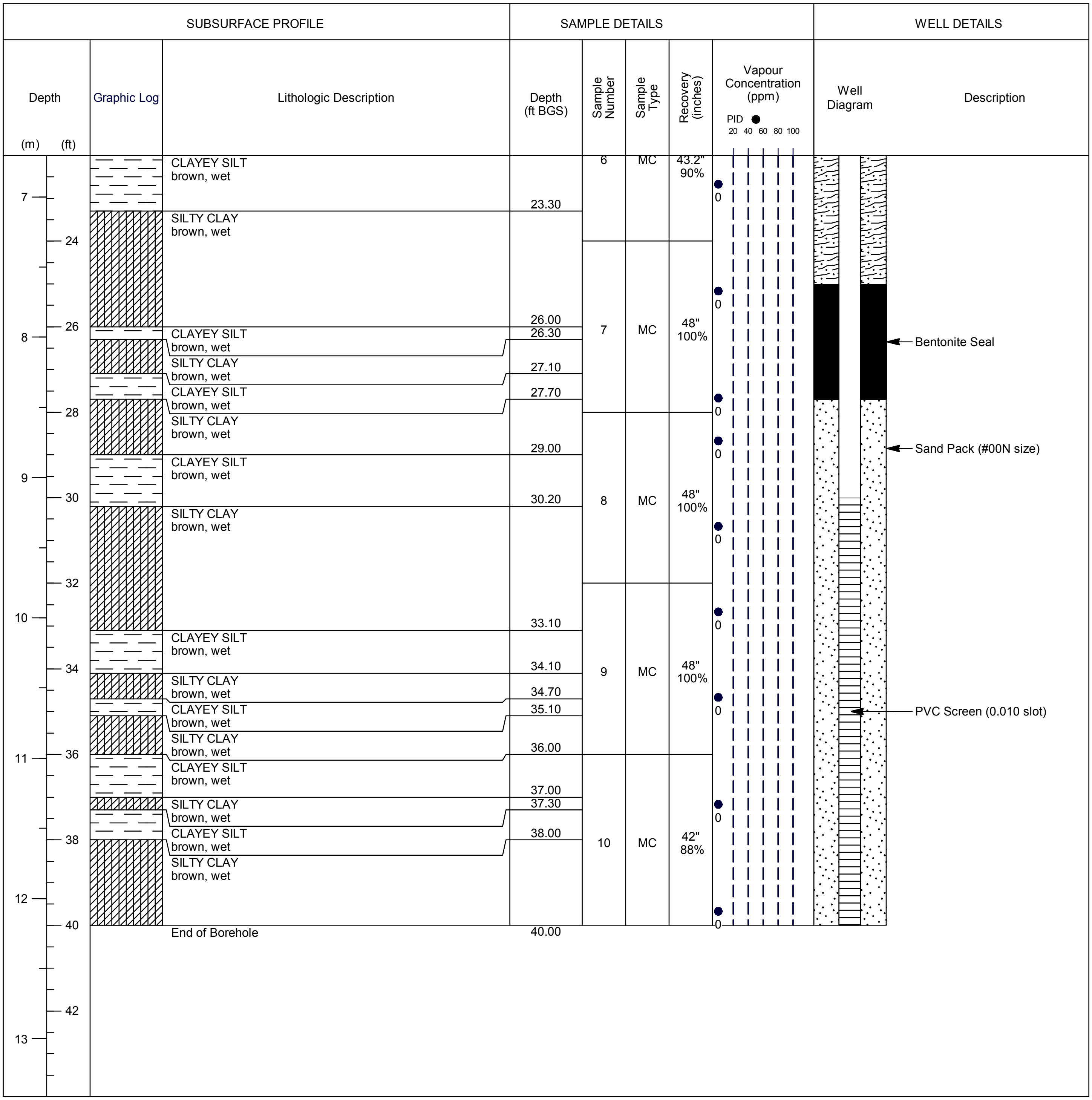
Monitoring Well: B/MW-28D

Project:	Remedial Investigation	**Drilling method:**	Macrocore / Hollow Stem Auger
Client:	Blades Holding Company Inc.	**Date started/completed:**	01-Feb-2011
Location:	5392 Rt 19, Amity, NY	**Ground surface elevation:**	n/a
Number:	190500593.300	**Top of casing elevation:**	n/a
Field investigator:	S. Reynolds-Smith	**Easting:**	n/a
Contractor:	Nothnagle Drilling	**Northing:**	n/a



Lithologic Description	Depth (ft BGS)
CLAYEY SILT brown, wet	23.30
SILTY CLAY brown, wet	26.00
CLAYEY SILT brown, wet	26.30
SILTY CLAY brown, wet	27.10
CLAYEY SILT brown, wet	27.70
SILTY CLAY brown, wet	29.00
CLAYEY SILT brown, wet	30.20
SILTY CLAY brown, wet	33.10
CLAYEY SILT brown, wet	34.10
SILTY CLAY brown, wet	34.70
CLAYEY SILT brown, wet	35.10
SILTY CLAY brown, wet	36.00
CLAYEY SILT brown, wet	37.00
SILTY CLAY brown, wet	37.30
CLAYEY SILT brown, wet	38.00
SILTY CLAY brown, wet	40.00
End of Borehole	40.00

Sample Number	Sample Type	Recovery (inches)
6	MC	43.2" 90%
7	MC	48" 100%
8	MC	48" 100%
9	MC	48" 100%
10	MC	42" 88%

PID: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Sand Pack Interval: 27.70 - 40.00 ft BGS
Screen Interval: 30.00 - 40.00 ft BGS
Well Seal Interval: 25.00 - 27.70 ft BGS

Drawn By/Checked By: KP / SRS

Notes:
ft AMSL - feet above mean sea level
ft BGS - feet below ground surface
ft BTOC - feet below top of casing
ft AGS - feet above ground surface
ppm - parts per million
n/a - not available
MC - macrocore

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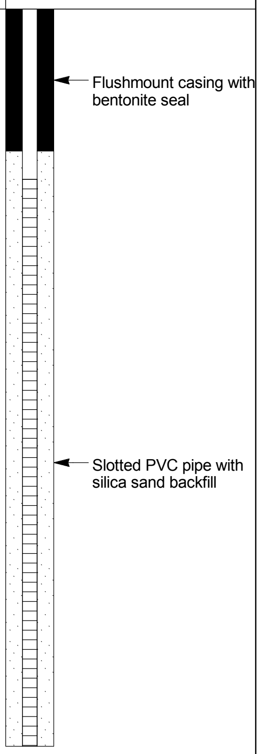
Monitoring Well: B/MW-65

Project:	Belmont IRM	**Drilling method:**	Macrocore
Client:	Blades Holding Company Inc.	**Date started/completed:**	26-Jan-2012
Location:	5392 Rt 19, Amity, NY	**Ground surface elevation:**	n/a
Number:	190500593.300	**Top of casing elevation:**	n/a
Field investigator:	S. Reynolds-Smith	**Easting:**	n/a
Contractor:	TREC	**Northing:**	n/a

SUBSURFACE PROFILE | SAMPLE DETAILS

Lithologic Description	Depth (ft BGS)	Sample Number	Sample Type	Recovery (Inches)	PID Reading (ppm)
Ground Surface					
EXCAVATION BACKFILL	0.00	1	MA		
		2	MA		
fine SAND and SILT brown, wet, sheen	8.00	3	MA	2.9" 6%	0
SILT gray, trace clay, wet	9.70				0
		4	MA	10.8" 90%	0
End of Monitoring Well	13.00				



Screen Interval: 3.00 - 13.00 ft BGS
Sand Pack Interval: 2.50 - 13.00 ft BGS
Well Seal Interval: 0.00 - 2.50 ft BGS

Notes:
ft BGS - feet below ground surface
n/a - not available

MA - Macrocore

Drawn By/Checked By: KP / SRS

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Sheet 1 of 1

STANTEC BOREHOLE AND WELL 190500593 BHLOGS_DEC2011.GPJ EQUIS DATA TEMPLATE.GDT 2/6/12 KPIETSCHMANN

Appendix F

Groundwater Monitoring Well Sampling Log Form

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61 Commercial Street
Rochester, NY 14614
(585) 475-1440

Monitoring Well Purging and Sampling Record

Site Name: Belmont Asphalt Plant, Amity, NY; BCP Site # C902019

Well ID: ____________

Initial Depth to Water: ________ ft TOIC

Date: ____________

Total Well Depth: ________ ft TOIC

Purge Start Time: ____________

Depth to Pump: ________ ft TOIC

Purge End Time: ____________

Initial Pump Rate: ________ mL/min

Purge/Pump Type: ____________

adjusted to: ________ mL/min at ________ minutes

Well Diameter: ________ inches

adjusted to: ________ mL/min at ________ minutes

Well Volume: ________ gallons

Time	Purge Volume (gallons)	pH (s.u.)	ORP (mV)	Conductivity (mS/cm)	Temp. (ºC)	DO (mg/L)	Turbidity (NTU)	Water Level (ft)
Final Sample Data:								

Sample ID(s): ____________

Field Test Kit Results: Ferrous Iron*: _________ mg/L

Sample Time: ____________

Total Iron*: _________ mg/L

Weather: ____________

Time: ______________

Sampler(s): ____________

Lab Analyses:	Dup?	MS/MSD?
☑ TCL VOCs + TICs (8260)	☐	☐
☐TCL SVOCs + TICs (8270)	☐	☐
☐TOC (415.1), Total Na (6010), Dissolved Mn* & As* (6010)	☐	☐
☐ Nitrate, nitrite, nitrate-nitrite, sulfate (300)	☐	☐
☐ Other:	☐	☐

*Filtered in field

Comments/Well Inspection Notes: ______________________

Appendix G

Site-wide Inspection Form

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Annual Sitewide Inspection Form

Former Allegany Bitumens Belmont Asphalt Plant
Brownfield Cleanup Program Site # C902019
53992 State Route #19
Amity, Allegany County, New York

Inspection Date: ____

Time Period Inspection Covers: ____________________________________

Inspector(s):______________________________Weather:________________

A. Describe the site usage (i.e. commercial or industrial purposes, or higher level usage [i.e. unrestricted, residential]? ____________________________________
____

B. Describe general site conditions.____________________________________
____

C. Is the site currently undergoing development? If so, describe. ____________________
____

D. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during the Reporting Period? ______________________________
____

E. Is the site being used for vegetable gardening or farming? ____________________

F. Has groundwater monitoring been performed according to the schedule in the Site Management Plan (SMP)? ____
____

G. Is groundwater being used on-site? _____ If so, is it being rendered safe for its intended use? Describe.____

H. Are there buildings on-site? ____

I. If so, has the potential for vapor intrusion been evaluated or has a sub-slab depressurization system (SSDS) been installed? If a SSDS is present, has the SMP been modified to include a SSDS inspection schedule and form? ______________________________
____

J. Are soil covers in place on bermed areas as defined in SMP? ____________________

K. Is vegetation on soil covers in place? ______________________________

L. Have any activities been conducted since the last inspection that necessitated site management activities be conducted, such as excavation in covered areas, confirmation sampling and a health and safety inspection? ____________________________________
____

M. Is the site in compliance with permits and schedules included in the Operations and Maintenance Plan in the SMP? ____

N. Have any federal, state, and/or local permits (e.g. building, discharge) been issued for or at the property during this Reporting Period? ____
____

O. Has all reporting been performed per the schedules outlined in the SMP and are all site records up to date? ____

P. Area all ICs/ECs in place and functioning as designed? ________________________________

Q. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding off-site contamination are no longer valid? __________________________________

R. Are the assumptions in the Qualitative Exposure Assessment still valid? ____________________
____

Appendix H

Quality Assurance Project Plan

APPENDIX H

QUALITY ASSURANCE PROJECT PLAN
SITE MANAGEMENT PLAN
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT
5392 STATE ROUTE 19
TOWN OF AMITY, ALLEGANY COUNTY, NEW YORK

September 2012

Prepared for:

**NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
270 MICHIGAN AVENUE
BUFFALO, NEW YORK 14203**

Prepared on Behalf of:

**BLADES HOLDING COMPANY, INC.
P.O. BOX 12
ARKPORT, NY 14807**

Prepared by:

**STANTEC CONSULTING SERVICES INC.
61 COMMERCIAL STREET
ROCHESTER, NEW YORK 14614**

QUALITY ASSURANCE PROJECT PLAN
FOR
SITE MANAGEMENT PLAN
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT
5392 STATE ROUTE 19
TOWN OF AMITY, ALLEGANY COUNTY, NEW YORK

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1.0 Introduction

This Quality Assurance Project Plan (QAPP) is to be used in conjunction with the Site Management Plan (SMP) for the Former Allegany Bitumens Belmont Asphalt Plant located at 5392 State Route 19 in the Town of Amity, Allegany County, New York (Site) (Figure 1). This QAPP presents the policies, organization, objectives, functional activities, and specific quality assurance and quality control activities to ensure the validity of data generated in the completion of the investigation. The purpose of this QAPP program is to ensure that all technical data generated are accurate and representative.

Quality assurance (QA) is a management system for ensuring that all information, data, and decisions resulting from investigation and environmental monitoring programs are technically sound, and properly documented. Quality control (QC) is the functional mechanism through which quality assurance achieves its goals. Quality control programs, for example, define the frequency and methods of checks, audits, and reviews necessary to identify problems and dictate corrective actions to resolve these problems, thus ensuring high quality data. As such, a quality assurance and quality control program pertains to all data collection, evaluation, and review activities which are part of the investigation.

All QA/QC procedures will be in accordance with applicable professional technical standards, government regulations and guidelines, and specific project goals and requirements. This QAPP has been prepared in accordance with New York State Department of Environmental Conservation (NYSDEC) and United States Environmental Protection Agency (EPA) Region II guidance documents.

The QAPP incorporates the following activities:

- Sample collection, control, chain-of-custody, and analysis;
- Document control;
- Laboratory instrumentation, analysis, and control; and
- Review of project reports.

Laboratory analysis of all project samples will be performed by an independent laboratory with the experience and certifications appropriate to the analyses to be performed. All analyses will be performed by laboratories accredited pursuant to the NYSDOH Environmental Laboratory Accreditation Program (ELAP) for the category of parameters to be analyzed by the laboratory. The specific environmental laboratory or laboratories to be used will be determined at the time the monitoring activities are scheduled.

Duplicates, replicates, and spiked samples will be used to identify the quality of the analytical data. Field audits may be conducted to verify that proper sampling techniques and chain-of-custody procedures are followed. Field data compilation, tabulation, and analysis will be checked for accuracy. Calculations and other post-field tasks will be reviewed by senior project personnel. Equipment used to take field measurements will be maintained and calibrated in accordance with established procedures. Records of calibration and maintenance will be kept by assigned personnel. Field testing and data acquisition will be performed following strict guidelines as described herein.

Document control procedures will be used to coordinate the distribution, coding, storage, retrieval, and review of all data collected during all sampling tasks.

A Data Usability Summary Report (DUSR) will be prepared for analytical results from each monitoring activity. The DUSR will be prepared by an independent consultant with the required experience, in accordance with NYSDEC's "Guidance for the Development of Data Usability

Summary Reports," revised 1997 and NYSDEC's DER-10 "Technical Guidance for Site Investigation and Remediation," May 2010 (DER-10).

2.0 Project Description

This QAPP pertains to the completion of field activities and subsequent laboratory and data analysis associated with the SMP at the Former Allegany Bitumens Belmont Asphalt Plant located at 5392 State Route 19 in the Town of Amity, Allegany County, New York. The remedial activities are described in detail in the IRM Work Plan.

Blades Holding Company, Inc. has entered into a Brownfield Cleanup Agreement with the NYSDEC. A Remedial Investigation, Interim Remedial Measures, and Remedial Actions have been conducted under this agreement. The objective of the proposed project is to implement the SMP to manage residual contamination.

2.1 Site Description

The Site is a 5.4± acre parcel located at 5392 State Route 19 in the Town of Amity, Allegany County, New York (see Figure 1). The property (Tax Parcel No. 171-1-60) was formerly occupied by a non-operational asphalt plant. Operations at this asphalt plant ceased in 2005 and the plant and all site structures were demolished or dismantled in 2011-2012. Redevelopment of the site is anticipated to involve a commercial or industrial use.

2.2 Previous Investigations

A Phase I ESA was completed by Stantec in December 2010 in connection with real estate due diligence activities. The Phase I ESA identified one recognized environmental condition associated with the subject property:

- A former on-site laboratory was located in the northwest corner of the Site. The laboratory was used for testing of aggregate and asphalt materials manufactured on site to determine whether the materials complied with NYSDOT or customer specifications. Trichloroethylene (TCE) was reportedly used as a solvent in the testing operations. Regular use of TCE at the site was reported to have been discontinued more than 10 years ago; however, a drum containing approximately 10 gallons of fresh (unused) TCE was present in the laboratory at the time of the Phase I ESA site visit.

  The laboratory building had its own septic system, which reportedly received waste from the sinks and toilet in the laboratory. At the time of the site visit, several empty small- to medium-sized containers were present on an outdoor asphalt-paved pad attached to the east end of the laboratory building. Plant personnel indicated that the pad had not been used for outdoor storage of solvent or waste containers.

  No records or knowledge of releases were identified during the Phase I ESA. However, given the potential for historic releases of TCE, it was recommended that a soil boring program be conducted in the area of the septic system.

Stantec conducted a Phase II ESA in December 2010. Four soil test borings and four temporary monitoring wells were installed for the purposes of collecting soil and groundwater samples adjacent to and downgradient from the former laboratory building and its septic system. The Phase II ESA test boring and monitoring locations are shown on Figure 2. Results indicated the presence of TCE and related volatile organic compounds (VOCs) in an area northeast of the laboratory building. These VOCs were detected in shallow soil and groundwater at levels above NYSDEC's soil cleanup objectives and groundwater standards. Indications of soil contamination were encountered at depths of 5 to 10 feet below ground surface (bgs) in test borings BS-2 and BS-4, and TCE was detected in soil samples from these borings at concentrations of up to 37.5 parts per million (ppm). The water table at the site was encountered at depths of 9 to 10 feet below ground surface, and TCE was detected in BS-2 and BS-4 groundwater samples at concentrations of 0.6 to 2.1 ppm, respectively. Traces of TCE (0.001 to 0.008 ppm) were detected in the groundwater samples from the BS-1 and BS-3 locations.

A RI was performed by Stantec for the Site in accordance with a NYSDEC-approved RI Work Plan (October 2010). A detailed description of the RI program and findings is presented in the May 2012 RI report. The RI field program included several field sampling events conducted during the period October 2010 through November 2011. An abbreviated summary of the primary RI program elements is presented below:

- Physical Conditions Assessment and Hazardous Materials Survey – This was an assessment of the overall site conditions via additional literature and records search and a Site inspection of structures, equipment and stored materials.
- Assessment of Area Water Wells – A survey was performed to identify the location, use, and construction of private water supply wells in close proximity to the Site. Responses were obtained from most local residents, however several residents did not respond.
- Surface Soil Sampling – 14 surface soil samples were collected across the Site and analyzed for a variety of chemical parameters, depending on the area of concern.
- Test Pit Excavation and Subsurface Soil Sampling – 21 test pits were excavated across the site to assess subsurface conditions and facilitate subsurface soil sampling.
- Passive Soil Gas Survey – 28 soil gas samples were obtained from three investigation areas to assess the potential for VOCs to exist in shallow soil vapor.
- Assessment and Sampling of Existing Water Supply Well – The submersible pump and associated piping was removed from the onsite water supply well, the well bore was videotaped, and a groundwater sample was obtained and analyzed.
- Test Boring and Monitoring Well Installation, with Soil and Groundwater Sampling – 28 soil test borings were drilled and 16 groundwater monitoring wells were installed across the site. 34 subsurface soil samples and 19 groundwater samples (including three from previously-installed Phase II ESA wells) were initially submitted for laboratory analysis. Groundwater samples from 10 select wells were submitted and analyzed in a second sampling event.
- Ecological Survey – A qualitative exposure assessment of potential impacts to fish and wildlife resources was performed in accordance with DER-10. This included a site reconnaissance, a written request for review to the NYSDEC Natural Heritage Program, and an online search of the U.S. Fish and Wildlife Service database.

The site was remediated in accordance with the NYSDEC-approved Interim Remedial Measures and Remedial Action Work Plans respectively dated October 2011 and August 2012. The activities conducted during the IRM are described in detail in the Remedial Investigation Report and Interim Remedial Measures Construction Completion Report (draft, May 30, 2012). The activities conducted during subsequent remedial actions will be described in detail in the Final Engineering Report.

The following is a summary of the Remedial Actions performed at the site:

- Excavation of soil/fill at RAOCs 1 through 3 and the Heater Area, including soil/fill:
    - At RAOC-1 exceeding POGW SCOs listed in Table 3 to maximum depths ranging from approximately 10 to 14.5 ft bgs;
    - At RAOC-2 which exhibited nuisance characteristics to a depth of approximately 2 ft bgs;
    - At RAOC-3A which exhibited elevated PID readings and staining and petroleum odors to a depth of approximately 4.5 ft bgs;
    - At RAOC-3B and -3C within which petroleum product was observed from approximately 5 to 8 ft bgs; and
    - At the Heater Area where petroleum odor, visual staining, and a sheen were observed to a depth of approximately 5 ft bgs.
- Removal of groundwater in source areas, including:
    - At RAOC-1, de-watering of the source area groundwater during excavation with ex-situ treatment via on-site carbon drums and subsequent on-site treatment;
    - At RAOC-3B and -3C, dewatering of the source area groundwater and LNAPL during excavation with off-site disposal; and
    - At the Heater Area, removal of accumulated groundwater with minor amounts of oil from the excavation and off-site disposal.
- In-situ biological treatment of groundwater, including:
    - Application of sodium lactate to the groundwater in the open excavation at RAOC-1 and to downgradient trenches within the plume area;
    - Placement of agricultural grade gypsum in RAOC-3B and -3C source area to enhance breakdown of petroleum compounds via sulfate-reducing bacteria; and
    - Groundwater monitoring;
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site;
- Institutional Controls as detailed in the SMP; and
- 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 and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

3.0 Project Organization and Responsibility

This QAPP provides for designated qualified personnel to review products and provide guidance on QA matters. This QAPP also outlines the approach to be followed to ensure that products of sufficient quality are obtained. This structure will provide for direct and constant operational responsibility, clear lines of authority, and the integration of QA activities. The various QA functions of the project positions are explained in the following subsections.

Project Manager
The project manager will have overall responsibility for ensuring that the project meets the objectives and quality standards as presented in the SMP and this QAPP. He/She will be responsible for implementing the project and will have the authority to commit the resources necessary to meet project objectives and requirements. The project manager's primary function is to ensure that technical, financial, and scheduling objectives are achieved successfully. The project manager will provide the major point of contact and control for matters concerning the project. In addition, he/she will be responsible for technical quality control and project oversight.

Team Leaders
The project manager will be supported by a team leader or leaders who will be responsible for leading and coordinating the day-to-day activities of the various resource specialists under their supervision. The team leader is a highly experienced environmental professional who will report directly to the project manager.

Technical Staff
The technical staff (team members) for this project will be drawn from corporate resources and appropriately qualified subcontractors. The technical team staff will be used to gather and analyze data, and to prepare various task reports and support materials. All of the designated technical team members will be experienced professionals who possess the degree of specialization and technical competence required to effectively and efficiently perform the required work.

Project QA Director
The Project QA Director will be responsible for maintaining QA for the project.

Laboratory Director
The laboratory director will be responsible for all analytical work and works in conjunction with the QA unit. He/She maintains liaison with the QA officer regarding QA and custody requirements.

Laboratory Manager
The laboratory manager will maintain liaison with the laboratory director regarding QA elements of specific sample analyses tasks. He/She will report to the laboratory director and work in conjunction with the laboratory QA unit.

Laboratory QA Coordinator
The Laboratory QA officer will be responsible for overseeing the QA program within the laboratory and for maintaining all QC documentation. He/She reports directly to the laboratory director.

Laboratory Staff
Each member of the laboratory staff will perform an assigned QA or analytical function that is pertinent to and within the scope of his or her knowledge, experience, training, and aptitude. An individual will be assigned the responsibility for checking, reviewing, or otherwise verifying that a sample analysis activity has been correctly performed.

Laboratory Facilities
All laboratory work will be performed in accordance with guidelines established by NYSDEC, United States Environmental Protection Agency (USEPA), the Water Pollution Control Federation, and/or the American Society for Testing and Materials (ASTM). In case of conflict, these guidelines and protocols will be considered in the order shown (i.e., NYSDEC criteria is of primary precedence). In addition, QA and QC programs will be maintained for the instruments and the analytical procedures used. A NYSDOH ELAP certified laboratory capable of providing (NYSDEC Analytical Services Protocol (ASP) Category B deliverables will be identified to provide laboratory services for this project. The laboratory's preventative maintenance procedures will be provided and outlined in their Laboratory Quality Assurance Manual.

4.0 QA Objectives for Data Measurement

All measurements will be made to ensure that analytical results are representative of the media and conditions measured. Unless otherwise specified, all data will be calculated and reported in units consistent with other organizations who report similar data to allow comparability of databases among organizations.

The key considerations for the QA assessment of generated data are accuracy, precision, completeness, representativeness, and comparability. These characteristics are defined below:

Accuracy: Accuracy is the degree of agreement of a measurement or average of measurements with an accepted reference or "true" value and is a measure of bias in the system.

Precision: Precision is the degree of mutual agreement among individual measurements of a given parameter.

Completeness: Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount expected to be obtained under correct normal conditions.

Representativeness: Representativeness expresses the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition.

Comparability: Comparability expresses the confidence with which one data set can be compared to another.

4.1 Goals

The QA/QC goal will focus on controlling measurement error within the limits established and will ultimately provide a database for estimating the actual uncertainty in the measurement data.

Target values for detection limit, percent spike recovery and percent "true" value of known check standards, and RPD of duplicates/replicates are provided in the referenced analytical procedures. It should be noted that target values are not always attainable. Instances may arise where high sample concentrations, non-homogeneity of samples, or matrix interferences preclude achievement of target detection limits or other quality control criteria. In such instances, the laboratory will report reasons for deviations from these detection limits or noncompliance with quality control criteria.

5.0 Sampling Procedures

The sampling of various environmental media will be completed as part of SMP activities. Table 1 presents the location, type, and analytical requirements of samples to be collected or potentially to be collected as part of the SMP Activities.

5.1 Sampling Protocol

The sampling and field procedures for sampling activities are described in the SMP:

The sample containers that will be or may be used are identified in Table 2. The sample containers will be labeled in accordance with Section 6.2. Sample handling, packaging and shipping procedures are presented in Section 6.3.

5.2 Field Quality Control Samples

Field quality control samples will consist of trip blanks, field blanks, field duplicates, matrix spikes and matrix spike duplicates, as shown on Table 3.

5.2.1 Field Duplicates

Field quality control samples will be collected to verify reproducibility of the sampling and analytical methods. Field duplicates will be obtained at a rate of one per 20 original field samples, as outlined in Table 3.

5.2.2 Trip Blanks

Trip blanks will be used to assess whether groundwater has been exposed to volatile constituents during sample storage and transport. The trip blanks for water samples will consist of a container filled by the laboratory with analyte-free water. The trip blanks will remain unopened throughout the sampling event and will only be analyzed for volatile organics. The trip blanks will be collected as outlined in Table 3.

5.2.3 Matrix Spike/Matrix Spike Duplicates

Matrix Spike/Matrix Spike Duplicates (MS/MSD) will be obtained to determine if the matrix is interfering with the sample analysis. MS/MSDs will be collected at a rate of one per 20 original field samples, as outlined on Table 3.

5.2.4 Rinsate Blanks

Rinsate blanks will be used to assess decontamination procedures for non-dedicated equipment. Rinse blanks will be collected as outlined in Table 3.

5.2.5 Laboratory Quality Control Checks

Internal laboratory quality control checks will be used to monitor data integrity. These checks include method (equipment) blanks, spike blanks, internal standards, surrogate samples, calibration standards, and reference standards.

5.3 Sample Containers

The volumes and containers required for the sampling activities are included in Table 2. Pre-washed sample containers will be provided by the laboratory. All bottles are to be prepared in accordance with EPA bottle washing procedures.

5.4 Decontamination

Dedicated and/or disposable sampling equipment will be used to the extent possible to minimize decontamination requirements and the possibility of cross-contamination.

Split spoon samplers and hand augers are examples of sampling equipment to be used at more than one location. The water level indicator will be decontaminated between locations by using the following decontamination procedures:

- Initial cleaning of any foreign matter with paper towels, if needed;
- Low phosphate detergent wash;
- De-ionized water rinse; and
- Air dry.

If a Geoprobe is used to install monitoring wells, the Geoprobe, Geoprobe rods, and Macrocore® samplers utilized to install borings will be decontaminated with a bucket wash consisting of a low phosphate detergent wash followed by water rinse. If a backhoe bucket, drill rig, augers, rods, split spoon samplers, and/or other related downhole equipment are used, they will be decontaminated using high pressure steam prior to initiating the excavation and well installation programs. This decontamination procedure will also be used on the downhole equipment between each boring. Steam cleaning will be performed in a designated on-site decontamination area. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will not be permitted. Decontamination waste water will be collected in 55-gallon drums. The drill rig and associated equipment will also be cleaned upon completion of the investigation prior to departure from the site using the following methods:

- Initial cleaning of all foreign matter; and
- Wash down with high pressure, high temperature spray to remove and/or volatilize organic contamination.

5.5 Levels of Protection/Site Safety

All sampling will be conducted under a documented Health and Safety Plan. On the basis of air monitoring, the level of protection may be downgraded or upgraded at the discretion of the site safety officer. Crew members will stand upwind of open boreholes or wellheads during the collection of samples, when possible.

All work will initially be conducted in Level D (refer to Site Specific Health and Safety Plan). Air purifying respirators (APRs) will be available if monitoring indicates an upgrade to Level C is appropriate.

6.0 Sample Custody

This section describes standard operating procedures for sample identification and chain-of-custody to be used for all field activities. The purpose of these procedures is to ensure that the quality of the samples is maintained during collection, transportation, storage, and analysis. All chain-of-custody requirements comply with standard operating procedures indicated in USEPA and NYSDEC sample-handling protocol.

Sample identification documents must be carefully prepared so that sample identification and chain-of-custody can be maintained and sample disposition controlled. Sample identification documents include:

- Field records,
- Sample label,
- Custody seals, and
- Chain-of-custody records.

6.1 Chain-Of-Custody

The primary objective of the chain-of-custody procedures is to provide an accurate written or computerized record that can be used to trace the possession and handling of a sample from collection to completion of all required analyses.

6.1.1 Sample Labels

Sample labels attached to, or affixed around, the sample container must be used to properly identify all samples collected in the field. To the extent possible, the sample labels are to be placed on the bottles so as not to obscure any QA/QC lot numbers on the bottles. Sample information must be printed in a legible manner using waterproof ink. Field identification must be sufficient to enable cross-reference with the field sampling records or sample logbook. For chain-of-custody purposes, all QC samples are subject to exactly the same custodial procedures and documentation as "real" samples.

6.1.2 Custody Seals

Custody seals are preprinted adhesive-backed seals often with security slots which are designed to break if the seals are disturbed. Sample shipping containers (coolers, cardboard boxes, etc., as appropriate) are sealed in as many places as necessary to ensure security. Seals must be signed and dated before use. On receipt at the laboratory, the custodian must check (and certify, by completing logbook entries) that seals on shipping containers are intact. Strapping tape should be placed over the seals to ensure that seals on shipping containers are not accidentally broken during shipment.

6.1.3 Chain-Of-Custody Record

The chain-of-custody record must be fully completed at least in duplicate by the field technician who has been designated by the project manager as being responsible for sample shipment to the appropriate laboratory for analysis. In addition, if samples are known to require rapid turnaround in the laboratory because of project time constraints or analytical concerns (e.g., extraction time or sample retention period limitations, etc.), the person completing the chain-of-custody record should note these constraints in the "Remarks" or other appropriate section of the custody record.

6.1.4 Field Custody Procedures

- As few persons as possible should handle samples.
- Sample bottles will be obtained pre-cleaned by the laboratory and shipped to the sampling personnel in charge of the field activities. Coolers or boxes containing cleaned bottles should be sealed with a custody tape seal during transport to the field or while in storage prior to use.
- The sample collector is personally responsible for the care and custody of samples collected until they are transferred to another person or dispatched properly under chain-of-custody rules.
- The sample collector will record sample data in a controlled field notebook and/or on appropriate field sampling records.

- The site team leader will determine whether proper custody procedures were followed during the fieldwork and decide if additional samples are required.

6.2 Documentation

6.2.1 Sample Identification

All containers of samples collected from the project will be identified using the following format on a label or tag fixed to the sample container:

BA-XX-Y

- BA - This set of initials indicates the Former Allegany Bitumens Belmont Asphalt Plant project.

- XX - These initials identify the sample. Actual sample locations will be recorded on the sampling record. Field duplicates, field blanks and rinsate blanks will be assigned unique sample numbers.

- Y - These initials identify the sample matrix in accordance with the following abbreviations:

W – Water Sample
S – Soil or Sediment Sample
A – Air

Each sample will be labeled, chemically preserved, if required, and sealed immediately after collection. To minimize handling of sample containers, labels will be filled out prior to sample collection to the extent possible. The sample label will be filled out using waterproof ink and will be firmly affixed to the sample containers. The sample label will give the following information:

- Name or initials of sampler;
- Date (and time, if possible) of collection;
- Sample number;
- Intended analysis; and
- Preservation performed.

6.2.2 Daily Logs

Daily logs and data forms are necessary to provide sufficient data and observations to enable participants to reconstruct events that occurred during the project. All daily logs will be kept in a notebook and consecutively numbered. All entries will be made in waterproof ink, dated, and signed. Sampling data will be recorded in the sampling records. All information will be completed in waterproof ink. Corrections will be made according to the procedures given at the end of this section.

6.3 Sample Handling, Packaging, and Shipping

The transportation and handling of samples must be accomplished in a manner that not only protects the integrity of the sample, but also prevents any detrimental effects due to the possible hazardous nature of samples. Regulations for packaging, marking, labeling, and shipping hazardous materials are promulgated by the United States Department of Transportation (DOT) in the Code of Federal Regulations, 49 CFR 171 through 177.

All chain-of-custody requirements must comply with standard operating procedures in the NYSDEC and USEPA sample handling protocol. Field personnel will make arrangements for transportation of samples to the laboratory. When custody is relinquished to a shipper, field personnel will ensure that the laboratory custodian or project manager is aware of the expected time of arrival of the sample shipment and of any time constraints on sample analysis(es). All samples will be delivered to the laboratory in a timely manner to help ensure that holding times are followed.

7.0 Calibration Procedures and Frequency

All instruments and equipment used during sampling and analysis will be operated, calibrated, and maintained according to the manufacturer's guidelines and recommendations as well as criteria set forth in the applicable analytical methodology references.

7.1 Field Instruments

A calibration program will be implemented to ensure that routine calibration is performed on all field instruments. Field team members familiar with the field calibration and operations of the equipment will maintain proficiency and perform the prescribed calibration procedures outlined in the Operation and Field Manuals accompanying the respective instruments. Calibration records for each field instrument used on the project will be maintained on-site during the respective field activities and a copy will be kept in the project files.

7.1.1 Portable Total Organic Vapor Monitor

Any vapor monitor used will undergo routine maintenance and calibration prior to shipment to the project site. Daily calibration and instrument checks will be performed by a trained team member at the start of each day. Daily calibrations will be performed according to the manufacturer's specifications and are to include the following:

Battery check: If the equipment fails the battery check, recharge the battery.

- Gas standard: The gauge should display an accurate reading when a standard gas is used.

- Cleaning: If proper calibration cannot be achieved, then the instrument ports must be cleaned.

7.1.2 pH and Specific Conductance

The following steps should be observed by personnel engaged in groundwater sampling for pH and specific conductance:

- The operation of the instrument should be checked, and calibrated if needed, with fresh standard buffer solution (pH 4, pH 7 and pH 10) prior to each day's sampling.

- The specific conductance meter should be calibrated prior to each sampling event using a standard solution of known specific conductance.

More frequent calibrations may be performed as necessary to maintain analytical integrity. Calibration records for each field instrument used on the project should be maintained and a copy kept in the project files.

7.2 Laboratory Instruments

Laboratory calibration procedures are addressed in detail in the laboratory Quality Assurance Manual (QAM), which can be provided upon selection of a laboratory. All calibration procedures will be consistent with the method used for analysis.

8.0 Analytical Procedures

8.1 Field

On-site procedures for analysis of total organic vapor and other field parameters are addressed in the Remedial Investigation Work Plan.

8.2 Laboratory

Specific analytical methods for constituents of interest in soil and groundwater are listed in Table 2. The laboratory will maintain and have available for the appropriate operators standard operating procedures relating to sample preparation and analysis according to the methods stipulated in Table 2.

9.0 Data Reduction and Reporting

QA/QC requirements will be strictly adhered to during sampling and analytical work. All data generated will be reviewed by comparing and interpreting results from chromatograms (responses, stability of retention times), accuracy (mean percent recovery of spiked samples), and precision (reproducibility of results). Refer to Section 10 for a discussion of QA/QC protocol.

Data storage and documentation will be maintained using logbooks and data sheets that will be kept on file. Analytical QC will be documented and included in the analytical testing report. A central file will be maintained for the sampling and analytical effort after the final laboratory report is issued.

All calculations and data manipulations are included in the appropriate methodology references. Control charts and calibration curves will be used to review the data and identify outlying results. Prior to the submission of the report to the client, all data will be evaluated for precision, accuracy, and completeness. Sections 4.0, 8.0, and 13.0 of this document include some of the QC criteria to be used in the data evaluation process.

Laboratory reports will be reviewed by the laboratory supervisor, the QA officer, laboratory manager and/or director, and the project manager. Analytical reports will contain a data tabulation including results and supporting QC information will be provided. Raw data will be available for later inspection, if required, and maintained in the control job file.

All data will be reported to NYSDEC in electronic format in accordance with DER-10 and the NYSDEC's Environmental Data Submission requirements.

10.0 Internal Quality Control Checks

QC data are necessary to determine precision and accuracy and to demonstrate the absence of interferences and/or contamination of glassware and reagents. The procedures to be followed for internal quality control checks are consistent with NYSDEC ASP protocols.

11.0 Performance and System Audits

11.1 Field Audits

The Project QA Director may conduct episodic audits of the operations at the site to ensure that work is being performed in accordance with the work plan and associated standard operating practice. The audit will cover, but not necessarily be limited to, such areas as:

- Conformance to standard operating procedures
- Completeness and accuracy of documentation
- Chain of custody procedures
- Construction specifications

11.2 Laboratory Audits

In addition to any audits required by the NYSDEC, the Project QA Director may chose to audit the laboratory. These additional audits may take the form of performance evaluation samples or on-site inspections of the laboratory. Performance evaluation samples may be either blind samples or samples of known origin to the laboratory. Reasonable notice will be provided if the audit is to include an on-site inspection of the laboratory.

12.0 Preventive Maintenance

12.1 Field

Field personnel assigned to complete the work will be responsible for preventative maintenance of all field instruments. The field sampling personnel will protect the portable total organic vapor monitors, water quality meter, etc. by placing them in portable boxes and/or protective cases.

All field equipment will be subject to a routine maintenance program, prior to and after each use. The routine maintenance program for each piece of equipment will be in accordance with the manufacturer's operations and maintenance manual. All equipment will be cleaned and checked for integrity after each use. Necessary repairs will be performed immediately after any defects are observed, and before the item of equipment is used again. Equipment parts with a limited life (such as batteries, membranes and some electronic components) will be periodically checked and replaced or recharged as necessary according to the manufacturer's specifications.

12.2 Laboratory

The laboratory's preventative maintenance procedures can be provided as outlined in their Laboratory Quality Assurance Manual.

13.0 Data Assessment Procedures

Performance of the following calculations will be completed to evaluate the accuracy, precision and completeness of collected measurement data.

13.1 Precision

Precision of a particular analysis is measured by assessing its performance with duplicate or replicate samples. Duplicate samples are pairs of samples taken in the field and transported to the laboratory as distinct samples. Their identity as duplicates is sometimes not known to the laboratory and usually not known to bench analysts, so their usefulness for monitoring analytical precision at bench level is limited. For most purposes, precision is determined by the analysis of replicate pairs (i.e., two samples prepared at the laboratory from one original sample). Often in replicate analysis the sample chosen for replication does not contain target analytes so that quantification of precision is impossible. Replicate pairs of spiked samples, known as matrix spike/matrix spike duplicate samples, are used for precision studies. This has the advantage that two real positive values for a target analyte can be compared.

Precision is calculated in terms of Relative Percent Difference (RPD), which is expressed as follows:

$$RPD = \frac{(X_1 - X_2)}{(X1 + X2)/2} \times 100$$

where X_1 and X_2 represent the individual values found for the target analyte in the two replicate analyses or in the matrix spike/matrix spike duplicate analyses.

RPDs must be compared to the method RPD for the analysis. The analyst or his supervisor must investigate the cause of RPDs outside stated acceptance limits. This may include a visual inspection of the sample for non-homogeneity, analysis of check samples, etc. Follow-up action may include sample re-analysis or flagging of the data as suspect if problems cannot be resolved.

13.2 Accuracy

Accuracy of a particular analysis is measured by assessing its performance with "known" samples. These "knowns" can take the form of EPA or NBS traceable standards (usually spiked into a pure water matrix), or laboratory prepared solutions of target analytes into a pure water or sample matrix; or (in the case of GC or GC/MS analyses) solutions of surrogate compounds which can be spiked into every sample and are designed to mimic the behavior of target analytes without interfering with their determination. In each case the recovery of the analyte is measured as a percentage, corrected for analytes known to be present in the original sample if necessary, as in the case of a matrix spike analysis. For EPA or NBS supplied known solutions, this recovery is compared to the published data that accompany the solution. For prepared solutions, the recovery is compared to EPA-developed data or historical data as available. For surrogate compounds, recoveries are compared to USEPA CLP acceptable recovery tables. If recoveries do not meet required criteria, then the analytical data for the batch (or, in the case of surrogate compounds, for the individual sample) are considered potentially inaccurate.

For highly contaminated samples, recovery of matrix spike may depend on sample homogeneity. As a rule, analyses are not corrected for recovery of matrix spike or surrogate compounds.

13.3 Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the total amount expected to be obtained under normal conditions. Completeness for each parameter is calculated as:

$$\text{Completeness} = \frac{\text{Number of successful analyses x 100}}{\text{Number of requested analyses}}$$

Target value for completeness for all parameters is 100%. A completeness value of 95% will be considered acceptable. Incomplete results will be reported to the client project officer.

13.4 Representativeness

The characteristic of representativeness is not quantifiable. Subjective factors to be taken into account are as follows:

- The degree of homogeneity of a site;
- The degree of homogeneity of a sample taken from one point in a site; and
- The available information on which a sampling plan is based.

To maximize representativeness of results, sampling techniques and sample locations will be carefully chosen so that they provide laboratory samples representative of the site and the specific area.

14.0 Corrective Action

Corrective actions can be initiated as a result of performance and system audits, laboratory and interfield comparison studies, data validation, and/or a QA program audit. They may also be required as a result of a request from project representatives. All corrective action necessary to resolve analytical problems will be taken. Success or failure of corrective actions will be reported with an estimate of effect on data quality, if any.

Corrective actions may include altering procedures in the field, conducting subsequent audits, or modifying project protocol. Time and type of corrective action, if needed, will depend on the severity of the problem and relative overall project importance. The project manager is responsible for initiating corrective action and the team leader is responsible for its implementation in the correction of field non-conformance corrective actions.

15.0 Quality Assurance Reports

Upon completion of a project sampling effort, analytical and QC data will be included in a Data Usability Summary Report (DUSR) that summarizes the work and provides a data evaluation. A discussion of the usability of the results in the context of QA/QC procedures will be made, as well as a summation of the QA/QC activity. The DUSR will be performed in accordance with the

DEC's "Guidance for the Development of Data Usability Summary Reports," revised 1997 and DER-10.

Serious analytical problems will be reported. Time and type of corrective action, if needed, will depend on the severity of the problem and relative overall project importance. Corrective actions may include altering procedures in the field, conducting an audit, or modifying laboratory protocol. All corrective action will be implemented after notification of the project representatives.

QAPP

TABLES

TABLE 1
SAMPLE SUMMARY
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Type	Sample Location	Sample Matrix	Analytical Parameters
Confirmatory Sidewall and Bottom Sampling	Various	Soil	TCL VOCs + TICs (USEPA Method 8260B)* TLC SVOCs + TICs (USEPA Method 8270B)*
Groundwater Monitoring	BS-2R	Groundwater	TCL VOCs + TICs (USEPA Method 8260B)
	BS-3	Groundwater	
	MW-8	Groundwater	
	MW-25	Groundwater	
	MW-27	Groundwater	
	MW-28D	Groundwater	
	MW-65	Groundwater	TCL VOCs + TICs (USEPA Method 8260B); TCL SVOCs + TICs (USEPA Method 8270B)

* Parameters may vary depending on sampling location.
Key:

SVOCs = Semivolatile Organic Compounds
TCL = Target Compound List
TICs = Tentatively Identified Compounds
USEPA = United State Environmental Protection Agency
VOCs = Volatile Organic Compounds

TABLE 2

REQUIRED SAMPLE CONTAINERS, VOLUMES, PRESERVATION, AND HOLDING TIMES

Site Management Plan

Former Allegany Bitumens Belmont Asphalt Plant

Amity, New York

Media	Type of Analysis	Method	Required Container(s)	Preferred Sample Volume	Preservation	Maximum Holding Time
Soil	TCL VOCs + TICs	EPA 8260	(2) 2 oz.cwm	4 oz.	Cool 4°C	VTSR* + 10 days
	TCL SVOCs	EPA 8270	4 oz.cwm	4 oz.	Cool 4°C	VTSR* + 5 days
Water	TCL VOCs + TICs	EPA 8260	(3) 40 ml glass vials	120 ml	pH<2, HCl	VTSR* + 10 days
	TCL SVOCs + TICs	EPA 8270	(2) 1 L amber glass	2 L	None	VTSR* + 5 days
	TOC	SM 5310D	(2) 40 ml	80 ml	pH<2, HCl	28 days
	Nitrogen (nitritie, nitrate, nitrate-nitritie)	353.2	125 ml plastic bottle	125 ml	None	2 days
	Sulfate	300.0	60 ml plastic bottle	60 ml	None	28 days
	Total Na	6010	250 ml plastic bottle	250 ml	HNO_3	180 days
	Dissolved Mn and As	6010	250 ml plastic bottle	250 ml	HNO_3	180 days

Notes:

*Samples have to be received by the lab within 48 hours of the first sample being taken.

Key:

cwm =clear wide mouth jar.
EPA = U.S. Environmental Protection Agency.
ml = milliliter.
L = liter.
SVOCs = Semivolatile organic compounds.
TCL = Target compound list.
VOCs = Volatile organic compounds.
VTSR = Verified Time of Sample Receipt at laboratory.
Mn = Mangenese.
Na = Sodium.
As = Arsenic.
TOC = Total Organic Carbon.

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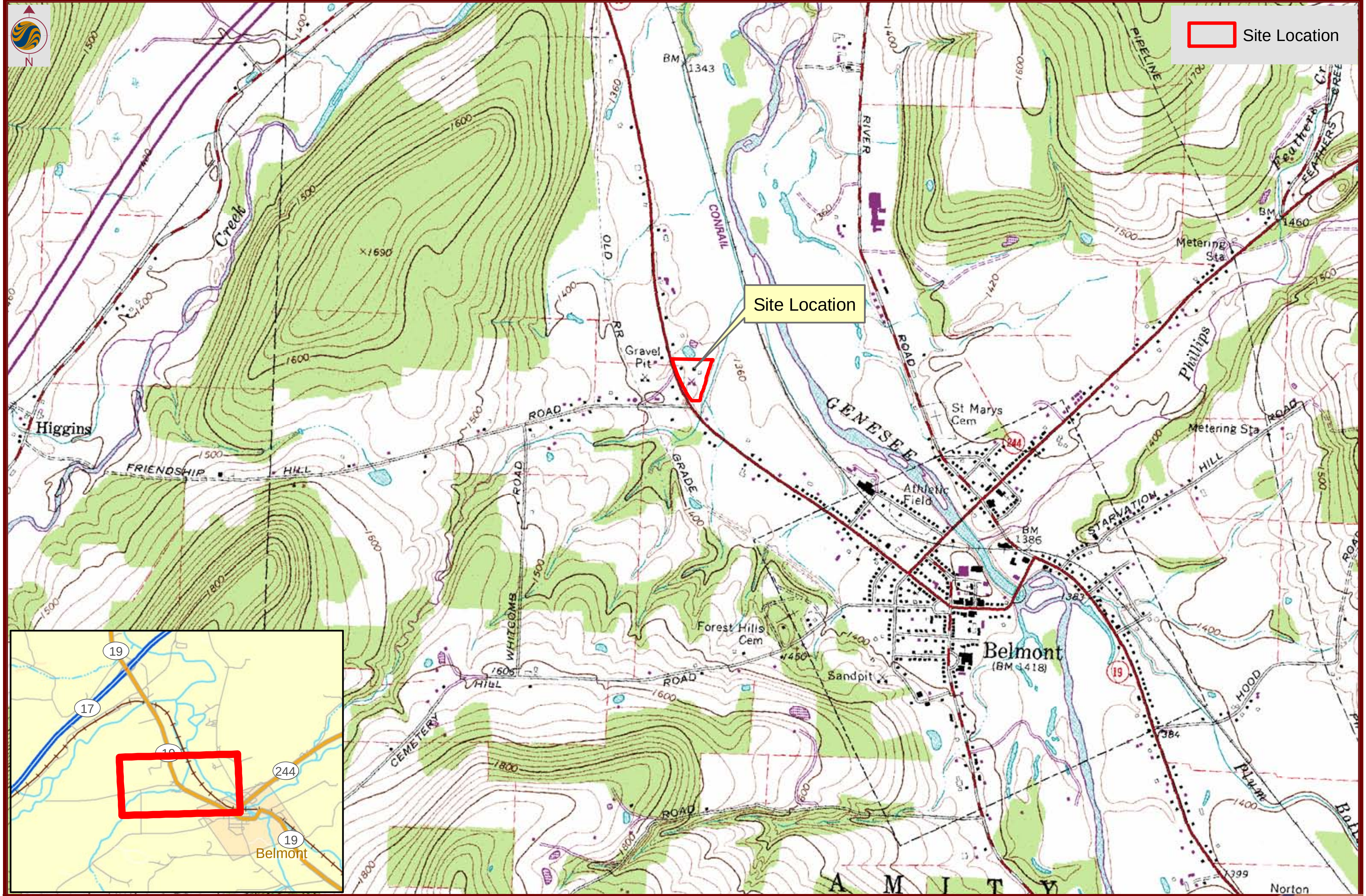
TABLE 3
SUMMARY OF QUALITY CONTROL CHECKS
Site Management Plan
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Type of QC Check	Frequency	Min. Number Required	Remarks
Laboratory Quality Control Guidelines			
Method Blanks	1 per sample batch	1 or 5% of batch size	Batch may include samples from other projects
Reagent/Solvent Blanks	1 per lot	1	
Standard Reference Blanks	1 per sample batch	1 or 5% of batch size	Batch may include samples from other projects
Matrix Spike Blanks	1 per sample batch	1 or 5% of batch size	Batch may include samples from other projects
Matrix Spike/Matrix Spike Duplicate	1 per 20 field samples per media	1	
Field Quality Control Guidelines			
Field Duplicates	1 per 20 field samples per media	1	Sample to be selected based on field screening
Trip Blanks	1 per shpiment for each cooler in which aqueous samples for VOC analysis are shipped	1	
Rinsate Blanks	1 per non-dedicated equipment set	1	
Laboratory Replicates	1 per batch	1	None planned but may be required to perform additional analyses on a sample

QAPP

FIGURES



Geographic Information Systems

Map Source : NYSGIS Clearinghouse Web Site

Cartographic Design By: Andrew Less

June 29,2011
U:\190500593\drawing\RI Report Figures\Figure 1_Site Location Map.mxd

Stantec

Stantec Consulting
61 Commercial Street
Rochester, NY 14614
Phone 585.475.1440 Fax 585.272.1814
www.stantec.com

1 inch = 2,000 feet

0 1,000 2,000 4,000
Feet

Allegany Bitumens Belmont Asphalt Plant Site

FIGURE 1 : Site Location Map Showing USGS Topographic Information

Appendix I

Community Air Monitoring Plan

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

> **Continuous monitoring** will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.
>
> **Periodic monitoring** for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.