

**Remedial Investigation Report and
Interim Remedial Measures
Construction Completion Report
Former Allegany Bitumens Belmont
Asphalt Plant
Brownfield Cleanup Program
Site # C902019
5392 State Route 19
Amity, Allegany County, New York**

Prepared for:

New York State Department of
Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

Prepared on behalf of:

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Prepared by:

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May 2012



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May 30, 2012
File: 190500593

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**RE: Remedial Investigation Report and
Interim Remedial Measures Construction Completion Report
Brownfield Cleanup Program Site # C902019
Former Allegany Bitumens Belmont Asphalt Plant
5392 State Route 19, Amity, New York**

Dear Tony:

On behalf of Blades Holding Company, Inc.(Blades), Stantec Consulting Services Inc. (Stantec) has prepared this combined Revised Remedial Investigation Report (RIR) and Interim Remedial Measures (IRM) Construction Completion Report (CCR) for the former Allegany Bitumens Belmont Asphalt Plant, located at 5392 State Route 19 in the Town of Amity, Allegany County, New York. RIR revisions were made to Stantec's draft July 29, 2011 RIR based on NYSDEC's August 26, 2011 comments and additional investigation work performed at the request of NYSDEC subsequent to the July 2011 draft RIR.

On behalf of Blades, Stantec has also prepared the responses below to NYSDEC's August 26, 2011 e-mail comments on the draft RIR. The comments from the NYSDEC's August 26, 2011 e-mail are transcribed below in bold text. Our response follows each comment.

Comment #1: As mentioned, an AAR needs to be submitted prior to approving this RI.

Response: Stantec plans to submit an AAR concurrent with, or shortly after, the submittal of the revised RI Report.

Comment #2: Section 1.1 - Second to last bullet, please address statement.

Response: The referenced bullet discusses further investigation that the Work Plan said may have been needed based on the initial phase of field work. This bullet will be expanded to explain what work was performed and/or why it was not necessary to perform the work.

Comment #3: Section 2.3 - How deep is the bedrock?

Response: The information available on the depth to bedrock at the site has been added to Section 2.3.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Comment #4: Tables 9, 10, 11, 12 contain numerous results with the note: "concentration exceeds the indicated standard." Why?

Response: The notes indicate that in the cases where the lab data exceed the standards listed on the various tables, the results are bolded and highlighted and the standard that is exceeded is indicated with a superscript letter. The explanation for which standard the superscript letter represents are given in the table notes.

Comment #5: Consider adding X-Sections.

Response: Please see Figure 10 in the revised RI Report. This figure presents a cross-section in the laboratory area.

Comment #6: Need more interpretation of why groundwater concentrations of total cVOC's vary so much from December 2010 to April 2011. Would concentrations be even greater in the fall?

Response: Additional explanation for the suspected reason for the variation in concentrations has been added to Section 4.3.5.

Comment #7: What is the transmissivity of the aquifer unit?

Response: An estimate of transmissivity has been added to Section 4.2.3.

Comment #8: Consider quarterly sampling of select wells.

Response: As per the IRM Work Plan, one round of post-IRM quarterly groundwater sampling was conducted in late March 2012. One to two additional quarterly sampling events are planned. After future sampling, the data will be reviewed with the NYSDEC to assess the effectiveness of the IRM.

Comment #9: All deviations from the September 2010 RIWP should be outlined in this report.

Response: Table 2 summarizes the RI deviations from the September 2010 RIWP.

We thank the Department for its careful review of the draft RI report, and hope that the responses presented above have addressed your comments and questions.

An Alternatives Analysis Report (AAR)/Remedial Action Work Plan (RAWP) will be submitted under separate cover in the near future.

Should you have any questions or require further information, please do not hesitate to call.

Stantec

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Sincerely,

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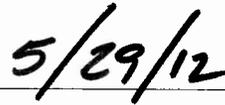
**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

CERTIFICATIONS

I, Peter Nielsen, certify that I am currently a NYS registered professional engineer and that this Remedial Investigation Report 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.



Signature



Date

I, Peter Nielsen, certify that I am currently a NYS registered professional engineer, I had primary direct responsibility for the implementation of the subject construction program, and I certify that the Interim Remedial Measures (IRM) Work Plan was implemented and that all construction activities were completed in substantial conformance with the DER-approved IRM Work Plan.



Signature



Date



**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****Executive Summary**

This report documents the activities, methods and results of the Remedial Investigation (RI) and Interim Remedial Measures (IRM) of the Former Allegany Bitumens Belmont Asphalt Plant Site (Site). The RI and IRM were performed pursuant to the Brownfield Cleanup Agreement (BCA) with the owners of the Site, Blades Holding Company, Inc., that was executed by the New York State Department of Environmental Conservation (NYSDEC or the Department) on October 12, 2010. The RI was completed by Stantec in accordance with the Remedial Investigation Work Plan (RIWP) for the Site that was approved by NYSDEC on October 19, 2010. The IRM was completed by Stantec with TREC Environmental, Inc. in accordance with the Interim Remedial Measures Work Plan (IRMWP) for the Site that was approved by NYSDEC on October 26, 2011.

The RI accomplished the purposes of remedial investigations required by New York State's Brownfield Cleanup Program. The RI defined the nature and extent of contamination at the Site; provided the information necessary to perform a qualitative assessment of related potential human health and ecological exposures, as documented herein; and provided the information necessary for the implementation of final Remedial Measures. With the completion of the IRM, involving soil removal programs and placement of groundwater amendment products, the risk of further impacts to on- and off-site groundwater has been minimized.

REMEDIAL INVESTIGATION – From October 2010 to November 2011**Summary of Findings**

The RI resulted in the following findings: (1) chlorinated VOC impacts were present in subsurface soil and shallow groundwater in the vicinity of the laboratory building; (2) petroleum impacts were present in surface and subsurface soil in two localized areas in the vicinity of the asphalt tanks; and (3) debris is present in the perimeter berms however, no significant "contamination" issues were identified. In addition to the removal and/or demolition of the various equipment and structures that were needed to facilitate addressing items 1 and 2 above, and to prepare the site for future redevelopment, regrading and capping of the berms will be needed.

Chlorinated VOCs in the Laboratory Building Area

All subsurface soil sample sampling results from soil borings were well below 6 NYCRR Part 375 Commercial and Industrial Soil Cleanup Objectives (SCOs). Exceedances of Part 375 Protection of Groundwater (POGW) SCOs (see Section 4.3 for a discussion of use of the POGW SCOs) were reported for chlorinated VOCs in subsurface soil samples from one monitoring well and four soil borings just to the east and southeast of the laboratory building. Trichloroethene (TCE) concentrations in the laboratory source area ranged up to 35 ppm. Concentrations decreased significantly away from the source area.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Shallow overburden groundwater flow was found to flow away from the northwest portion of the Site (Laboratory Building area) toward the north, northeast, east and southeast. Variations in water levels of up to 3.75 ft were observed seasonally.

Two rounds of groundwater sampling were conducted with the first round occurring in January - February 2011. Exceedances of groundwater standards were reported for chlorinated VOCs at, and downgradient from, the laboratory source area with total chlorinated ethene and ethane concentrations, predominantly TCE, ranging up to 12.4 ppm.

The second round of groundwater sampling was conducted in April 2011. Exceedances of groundwater standards were reported for chlorinated VOCs at, and downgradient from, the laboratory source area with total concentrations ranging up to 0.1 ppm. The reduction of VOC concentrations was believed to be related to the higher water table at the time of the second round of sampling.

Petroleum Impacts in the Asphalt Tank Area

Low level petroleum VOC detections below the Commercial and Industrial Part 375 SCOs near the asphalt tanks, corresponded to observations of asphalt pieces with an oily appearance, elevated photoionization detector (PID) readings, a strong petroleum odor, and detections of petroleum VOCs in the passive soil gas (PSG) survey.

To the west of the asphalt storage tanks, low level detections of petroleum VOCs were found in soils. These detections were below SCOs and correspond to near surface elevated PID readings and petroleum odors observed during logging of soils. Overall, there were no petroleum related Part 375 SCO exceedances among the subsurface soil samples.

No petroleum related compounds were reported in any of the groundwater wells at the Site, including downgradient of the above locations, hence there was no indication that petroleum related soil impacts had affected groundwater.

Perimeter Berms

Conditions encountered during test pit excavations included native soils, aggregate stockpiles, solid and non-solidified asphalt materials, remnants of a small fire, and debris. The only exceedance of Part 375 Commercial and Industrial SCOs, in the 12 berm samples analyzed, was for one SVOC. Benzo(a)pyrene, exceeded Commercial and Industrial SCOs. 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, this one PAH exceedance is believed to be related to the presence of the asphalt and is thus not considered to be of concern. Based on the lack of evidence of imminent threat to health or the environment in the areas of the perimeter berms, no IRMs were proposed for this area. Appropriate remedial actions involving the grading and capping of these berms, as needed, are proposed to address this area described in the AAR/RAWP which is being submitted under separate cover.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****Recommendations**

Interim remedial measures were recommended to address Site-related chlorinated VOC impacts in soil and groundwater in the laboratory building source area (Remedial Area of Concern 1 [RAOC-1]), and petroleum impacts in soil around the above ground asphalt storage tanks (RAOC-3) and west of the asphalt tanks (RAOC-2). It was recommended these IRMs be completed in the Fall of 2011 to minimize the risk of further impact to groundwater both on-site and off-site.

In order to implement these interim remedial measures, it was recommended that the buildings and equipment be removed to allow for easy access to impacted areas. This also facilitated evaluation of any additional impacts that may be present beneath these structures and prepare the site for redevelopment.

Since the only exceedance of SCOs within the bermed areas involved one PAH in one sample collected adjacent to asphalt, no interim remedial measures were warranted for these areas. Instead, it was agreed with NYSDEC that remedial alternatives for these bermed areas (RAOC-4) would be addressed in the Alternatives Analysis Report/Remedial Action Work Plan.

INTERIM REMEDIAL MEASURES – From September 2011 to May 2012

IRMs were implemented at RAOC-1, 2, and 3 to provide a timely response to the findings of the RI, and minimize the potential for further spread of contaminants. Supplemental IRM activities were conducted in response to conditions encountered during demolition and dismantling of site structures and buildings.

Site Preparation

Following asbestos abatement on October 4, 2011, the laboratory building and scale house were demolished on October 20 and 21, 2011 to facilitate excavation of RAOC-1. The steel asphalt tanks located in RAOC-3 were removed from the site on November 10, 2011 to provide access for excavation in that area. In addition, 11 RI-related monitoring wells were decommissioned on October 26, 2012.

Silt fence and straw bales were installed as erosion and control measures. Surficial asphalt pavement present in the three RAOCs was stripped and temporarily stockpiled onsite. The pavement materials were ultimately trucked off-site to the K.S. LaForge Excavating Inc. facility in Wellsville, New York for recycling, as approved by NYSDEC.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****IRM Implementation**

Implementation of the IRMs was performed from November 7, 2011 through January 6, 2012 and April 2 through 10, 2012. The work was performed by TREC Environmental, Inc. of Spencerport, New York under Stantec observation. Implementation of the Supplemental IRMs was conducted from April 25 through May 17, 2012. The work was performed by KS LaForge Excavating, Inc. of Wellsville, NY under Stantec observation.

RAOC-1 - Former Laboratory Building Area

Prior to beginning excavation, approximately 20 ft of the property line berm soil was excavated and stockpiled for later use as backfill. This was done because the berm encroached onto the area of planned excavation.

Approximately 1,635 tons of chlorinated VOC-impacted soil was excavated from the source area and disposed offsite. The excavation was 4,800 sq ft with a total sidewall length of 274 ft. Excavation sidewall and bottom confirmatory samples indicated that the excavation sufficiently removed impacted soil, i.e. no exceedences of POGW or Commercial and Industrial Use SCOs were observed in the analyzed samples.

Approximately 36,300 gallons of water was pumped from the excavation into two frac tanks. The stored water was treated onsite with a two-drum granular activated carbon system and discharged onsite, as approved in advance by NYSDEC. Samples obtained before the commencement of discharge of the pre- and post-carbon tank effluent indicated the treatment sufficiently removed VOCs from the water prior to discharge.

In order to enhance reductive dechlorination, approximately 110 gal. of 60% sodium lactate solution was mixed with fresh water and was spread evenly with a hose and mixed with the water remaining at the bottom of the excavation. The base of the excavation was then backfilled to a level above the water table with clean, coarse onsite aggregate material (previously tested for contaminants and approved by NYSDEC as a backfill source). The remainder of the excavation to approximately one foot below ground surface was backfilled with previously-excavated soil from the RAOC-1 area. The approximate top foot of the excavation was backfilled with the clean, coarse aggregate material.

Subsequent to backfill of the source area excavation, a series of trenches designed for placement of sodium lactate to further address the remaining impacted groundwater plume were excavated to approximately two feet below the top of the water table. Unless sufficient groundwater had already flowed into the trenches, fresh water was placed in the trench bottoms and lactate material was added to and mixed with the water prior to backfill.

Replacement well BS-2R was installed and developed subsequent to excavation backfill. Water levels were measured at all existing monitoring wells. Monitoring wells BS-2R, BS-3, MW-8, MW-25, MW-27, and MW-28D were sampled in late March 2012. The March 2012 source area concentration of 54 µg/L total VOCs in BS-2R are significantly lower than the 3,947 - 12,401

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

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 to 19 µg/L, with most of the increase accounted for by the detection of cis-1,2-DCE at 9.9 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, it is expected that total VOC concentrations will decrease.

Given the relatively low VOC concentrations, removal of the source area soils should help with contaminant reduction in groundwater over time. The next quarterly groundwater sampling event is planned for approximately the end of June 2012.

RAOC-2 – West of Asphalt Tank Area

Approximately 75 tons of petroleum impacted soil were excavated from RAOC-2 and stockpiled for offsite disposal. The approximate total sidewall length was 116 ft and the approximate excavation area was 628 sq. ft. The excavation extended to approximately two ft. below grade and did not encounter groundwater.

Excavation sidewall and bottom confirmatory samples indicated that the excavation sufficiently removed impacted soil, i.e. no exceedances of Commercial and Industrial Use SCOs were observed in the analyzed samples. Two of the sidewall samples had slight (67 and 63 µg/kg vs. SCO of 50 µg/kg) exceedances of the POGW SCO for acetone. Acetone is a common laboratory contaminant and in previous groundwater sampling, including at nearby MW-27 and MW-23, there were no exceedances of groundwater standards for acetone. Thus, the presence of acetone in soils above the POGW SCO is not of concern.

RAOC-3 - Asphalt Tank Area

The linear concrete cradle structures located beneath the former asphalt tanks were demolished and the concrete was stockpiled onsite for later removal and offsite crushing/recycling with approval from NYSDEC. Approximately 135 tons of concrete were removed from this area.

Surficial soils in RAOC-3 that did not exhibit evidence of impacts were stockpiled on-site for later reuse as backfill. Impacted soil excavated from RAOC-3 was stockpiled with RAOC-2 impacted soil for offsite disposal.

During excavation of the impacted soil in RAOC-3, it became evident that two sub-areas of impacted soil existed: a western portion (RAOC-3A) and an eastern portion (RAOC-3B). 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. Groundwater was not encountered within this excavation.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

As excavation advanced on the eastern portion, apparent petroleum product was observed within a deposit of coarse gravel and cobbles at depths from approximately 5 ft to 8 ft bgs. The water table was generally encountered at 5 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.

The southwestern portion of the excavation was restricted because of the presence of the asphalt plant structure and base concrete slab. The asphalt plant was removed in March and additional excavation was conducted in this southwestern portion in April 2012 (RAOC-3C).

Including all three sub-areas of RAOC-3, approximately 1,205 tons of soil were excavated from RAOC-3 and stockpiled for later offsite disposal. The excavation totaled approximately 3,400 square feet with approximately 490 ft of sidewall. With the exception of one detection of acetone, which is a common laboratory artifact, results from all bottom and sidewall confirmatory samples collected in the RAOC-3 excavation were below Part 375 POGW, Commercial, and Industrial SCOs. Acetone is a common laboratory contaminant and the acetone detection was above POGW SCOs, but well below Commercial and Industrial SCOs. It should also be noted this sample was collected in an area where additional excavation and impacted soil removal was conducted in April 2012.

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 vacuum product periodically from the surface of the water table; the water/product were containerized.

Approximately 10,500 gallons of water were pumped from the RAOC-3B and RAOC-3C excavations into frac tanks to facilitate excavation below the water and to remove additional LNAPL.

Samples of the LNAPL were collected for analysis of Total Petroleum Hydrocarbon (TPH) products; the material was identified as apparent motor (lube) oil. PCBs were not detected in the sample. The water that accumulated in the excavation underlying the LNAPL was sampled for VOCs, SVOCs and metals but did not exhibit contaminants at concentrations in excess of NYSDEC's groundwater standards.

Analysis of a water sample from the excavation was also performed for evaluation of potential bioremediation options for the petroleum product residue. The results 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 sulfate-reducing bacteria. The use of gypsum was approved by NYSDEC. Approximately 28 tons of granular agricultural-grade gypsum were added to the RAOC-3B and RAOC-3C excavations prior to backfill, along with 100 lbs. of "10:10:10" fertilizer. The base of the excavation in the portion of RAOC-3 where the petroleum product had been present and approximately the top one to two feet of the excavation was then backfilled with onsite aggregate; the remainder was backfilled with previously-excavated overburden material from RAOC-1 and RAOC-3, as approved by NYSDEC to match existing grade.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Monitoring well MW-65 was installed, developed and sampled after excavation backfill. Only one VOC was detected and it was found at a concentration below the groundwater standard. No target SVOC compounds were detected. Anaerobic, reducing conditions, with increased sulfate levels were reported. These are favorable conditions for continued successful sulfate treatment of residual petroleum hydrocarbons.

The next quarterly monitoring event for MW-65 is planned for the end of June 2012. Results will be used to assess future sampling needs.

Supplemental IRM Activities

Stantec observed the demolition and/or dismantling of buildings, structures and equipment, and the removal of surficial debris by KS LaForge Excavating, Inc. from April 25 through May 4, 2012. This included dismantlement, demolition and/or removal of the control tower, maintenance garage, oil storage shed, a discarded heater (previously used to maintain heat in the plant liquid asphalt piping) and sheet piling; the removal of the concrete pad and support columns beneath the former asphalt plant, including segregation of stained concrete and soil for proper off-site disposal; the segregation and sampling of the oil storage shed concrete floor slab and the bottom course of the masonry block walls for proper off-site disposal; the removal of sheet piling and surficial debris throughout the site with screening of soil with a PID; uncovering and sampling the maintenance garage septic system in order to prepare for removal and proper disposal; and the excavation of impacted soils from beneath the discarded heater.

The concrete floor slab and the bottom course of the masonry block walls of the oil storage shed were oil stained; therefore, the stained material was sampled and staged in order to facilitate proper off-site disposal.

A maintenance garage septic system was uncovered and sampled. None of the detections were a cause for concern and the septic tank sludge was contained within the septic tank. Given these factors, no additional sampling appears to be warranted in that area.

During the excavation in the heater area, stained soils with odors and elevated PID readings were removed. In order to facilitate the portion of the excavation beneath the water table, about 200 gallons of groundwater with some product was pumped from the excavation into a poly storage tank. A sample of the impacted material was collected, excavation confirmatory sidewall (4) and bottom (1) samples were collected, and an excavation water sample was collected. There were no exceedances of applicable standards. On this basis, no further remediation or groundwater monitoring is warranted for the heater area. The excavated material and pumped water were properly disposed off-site.

Conclusions

Interim remedial measures were implemented at three RAOCs involving soil removal, excavation dewatering, the application of bioremediation amendments, backfilling, and monitoring well installations and sampling. Remedial activities are completed at RAOC-2.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Quarterly groundwater monitoring will continue at RAOC-1 and RAOC-3 to monitor the progress of the interim remedial measures. The next groundwater monitoring event is scheduled for the end of June 2012. Progress will be evaluated based on the monitoring results and recommendations made for future monitoring, as needed.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Table of Contents

EXECUTIVE SUMMARY	E.1
<hr/>	
1.0 INTRODUCTION	1.1
1.1 GOALS AND OBJECTIVES	1.1
1.1.1 RI	1.1
1.1.2 IRM	1.3
1.2 SCOPE OF WORK	1.3
1.3 REPORT CONTENTS AND ORGANIZATION	1.8
<hr/>	
2.0 BACKGROUND INFORMATION	2.1
2.1 SITE LOCATION, DESCRIPTION, AND SETTING	2.1
2.2 LAND USE	2.2
2.2.1 Current Site and Surrounding Land Uses	2.2
2.2.2 Past Uses of the Site and Adjoining Properties	2.3
2.3 GEOLOGIC AND HYDROGEOLOGIC SETTING	2.7
2.4 PREVIOUS INVESTIGATIONS AND ACTIVITIES	2.8
2.4.1 Phase I Environmental Site Assessment	2.8
2.4.2 Phase II Environmental Site Assessment	2.8
<hr/>	
3.0 REMEDIAL INVESTIGATION PROGRAM	3.1
3.1 BACKGROUND INFORMATION SURVEY	3.1
3.2 SURFACE SOIL SAMPLING	3.2
3.3 TEST PIT EXCAVATION AND SUBSURFACE SOIL SAMPLING	3.4
3.4 PASSIVE SOIL GAS SURVEY	3.5
3.5 MONITORING WELL AND BOREHOLE INSTALLATIONS, AND SUBSURFACE SOIL SAMPLING	3.6
3.5.1 Monitoring Well and Borehole Overview	3.6
3.5.2 Well and Boring Installation and Soil Sampling Procedures	3.7
3.6 UPGRADE OF PHASE II ESA MONITORING WELLS	3.8
3.7 MONITORING WELL DEVELOPMENT	3.8
3.8 GROUNDWATER ELEVATION MEASUREMENT	3.8
3.9 GROUNDWATER SAMPLING	3.8
3.10 WATER SUPPLY WELL INSPECTION AND SAMPLING	3.9
3.11 HYDRAULIC CONDUCTIVITY TESTING	3.10
3.12 SURFACE WATER SAMPLING AND SEDIMENT AND SURFACE SOIL SAMPLING ALONG TUCKERS CREEK	3.10
3.13 DECONTAMINATION	3.10
3.14 INVESTIGATION DERIVED WASTE	3.11
3.15 SAMPLING LOCATION SURVEY	3.11
3.16 FIELD QUALITY CONTROL SAMPLES	3.11

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Table of Contents

4.0 RI RESULTS.....	4.1
4.1 BACKGROUND INFORMATION RESULTS	4.1
4.1.1 Assessment of Area Water Wells and Surface Water Use	4.1
4.1.2 Assessment of Underground Infrastructure	4.2
4.1.3 Hazardous Materials Survey	4.3
4.2 HYDROGEOLOGY	4.4
4.2.1 Geology.....	4.4
4.2.2 Groundwater Elevation and Flow Direction.....	4.5
4.2.3 Hydraulic Conductivity	4.5
4.3 RI SAMPLING AND ANALYTICAL RESULTS.....	4.5
4.3.1 Surface soil	4.6
4.3.2 Test Pits.....	4.7
4.3.3 Passive Soil Gas.....	4.8
4.3.4 Monitoring Well and Borehole Soil.....	4.9
4.3.5 Groundwater	4.10

5.0 RI QA/QC EVALUATION	5.1
5.1 DATA USABILITY SUMMARY REPORTS	5.1

6.0 QUALITATIVE EXPOSURE ASSESSMENT	6.1
6.1 GENERAL CONSIDERATIONS	6.1
6.2 HUMAN HEALTH EXPOSURE ASSESSMENT	6.3
6.2.1 Introduction	6.3
6.2.2 Human Health Exposure Pathways	6.3
6.3 FISH AND WILDLIFE EXPOSURE.....	6.5
6.3.1 Ecological Resources	6.5
6.3.2 Exposure Pathways	6.8

7.0 INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT	7.1
7.1 INTRODUCTION	7.1
7.1.1 Summary of Impacts: Remedial Areas of Concern (RAOCs)	7.1
RAOC-1 – Impacted Soil and Groundwater – Laboratory Building Area	7.1
RAOC-2 – Impacted Shallow Soil – B-31/MW-27 Area	7.2
RAOC-3 – Impacted Shallow Soil - Asphalt Storage Tank Area.....	7.2
7.1.2 Summary of Impacts: Supplemental IRM Activities	7.2
7.2 PROPOSED IRMS.....	7.3
7.3 IRM IMPLEMENTATION	7.4
7.3.1 IRM Preparation Activities.....	7.5
Asbestos Testing and Abatement, Building Demolition, and Removal of Structures	7.5
RAOC-1: Septic Sampling	7.5
RAOC-1: Bench Scale Testing	7.6
RAOC-2 and RAOC-3: Waste Characterization Sampling	7.7

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Table of Contents

	On-site Aggregate Stockpile Sampling	7.7
	Monitoring Well Abandonment.....	7.8
	Fence Installation.....	7.8
7.3.2	IRM Start-up and General IRM Implementation Activities	7.8
7.3.3	RAOC-1 IRM Implementation	7.9
	Preliminary Screening Sampling.....	7.9
	Dry Well	7.9
	Septic Tank Sampling and Removal.....	7.10
	Berm and Shallow Overburden Removal and Sampling.....	7.10
	Waste Characterization Sampling.....	7.11
	Excavation Water.....	7.11
	Soil Excavation and Confirmatory Soil Sampling.....	7.13
	Sodium Lactate Application, Backfilling, and Soil Disposal	7.13
	Trenches.....	7.14
	Well Installation, Development, Water Level Measurement and Sampling	7.14
7.3.4	RAOC-2 IRM Implementation	7.15
7.3.5	RAOC-3 IRM Implementation	7.16
	Soil Boring Programs	7.16
	Shallow Overburden Removal and Sampling	7.17
	Concrete Cradle Removal.....	7.17
	Soil Excavation and Confirmatory Soil Sampling.....	7.17
	Excavation Water and LNAPL	7.19
	Gypsum & Fertilizer Application, Backfilling, and Soil Disposal.....	7.20
	Well Installation, Development and Sampling.....	7.21
7.3.6	Supplemental IRM Activities	7.21
	Observation of Demolition, Dismantling, and Site Cleanup	7.21
	Maintenance Garage Septic System	7.22
	Heater Area Excavation	7.23
7.4	IRM QA/QC EVALUATION	7.25
7.5	SUMMARY OF VARIANCES FROM IRM WORK PLAN	7.25
<hr/>		
8.0	SUMMARY AND CONCLUSIONS	8.1
8.1	REMEDIAL INVESTIGATION.....	8.1
8.2	INTERIM REMEDIAL MEASURES.....	8.3
<hr/>		
9.0	REFERENCES	9.1

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****Table of Contents****List of Figures**

Figure 1	Site Location Map Showing USGS Topographic Information
Figure 2	RI Topographic Survey
Figure 3	Location of Watercourses, Waterwells, and Wetlands in Area
Figure 4	Site Plan and RI Sample Location Map
Figure 5	RI Passive Soil Gas Sample Location Map
Figure 6	Shallow Groundwater Elevation Contour Map, January 4, 2011
Figure 7	Shallow Groundwater Elevation Contour Map, February 22, 2011
Figure 8	Shallow Groundwater Elevation Contour Map, April 20, 2011
Figure 9	Contour Map of Total Chlorinated VOC Concentrations in Soils At or Near the Water Table ($\mu\text{g}/\text{kg}$), 2009-2011
Figure 10	Cross Section of RI Soil Conditions in Laboratory Area
Figure 11	Contour Map of Total Chlorinated VOC Concentrations in Shallow Groundwater ($\mu\text{g}/\text{L}$), Jan. – Feb. 2011
Figure 12	Contour Map of Total Chlorinated VOC Concentrations in Shallow Groundwater ($\mu\text{g}/\text{L}$), April 2011
Figure 13	IRM Site Map
Figure 13A	Enlarged IRM Site Map
Figure 13B	Heater Remedial Area
Figure 14	Post IRM Topographic Survey
Figure 15	Shallow Groundwater Elevation Contour Map, March 28, 2012
Figure 16	Contour Map of Total Chlorinated VOC Concentrations in Shallow Groundwater ($\mu\text{g}/\text{L}$), March 2012

List of Tables

Table 1	RI Field Events Summary
Table 2	Summary of Variances from RI Work Plan
Table 3	RI Soil Sample Summary
Table 4	Monitoring Well Completion Summary
Table 5	Water Level Summary
Table 6	RI Groundwater Sample Summary
Table 7	Summary of Groundwater Field Parameters
Table 8	Summary of Hydraulic Conductivity Test Results
Table 9	Summary of RI Analytical Results in Surface Soil
Table 10	Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Table 11	Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Table 12	Summary of RI Analytical Results in Groundwater
Table 13	Human Exposure Assessment Summary
Table 14	IRM Sample Summary

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Table of Contents

List of Tables (continued)

Table 15	Summary of IRM Analytical Results in Water
Table 16	Summary of IRM Analytical Results for Waste Characterization Soil Samples
Table 17	Summary of IRM Analytical Results for Samples of Excavation Backfill Soil
Table 18	Summary of IRM Analytical Results of Preliminary Screening Soil, Dry Well Soil, and Septic Sludge Samples
Table 19	Summary of IRM Analytical Results of RAOC-1 Excavation Confirmatory Sidewall and Bottom Soil Samples
Table 20	Summary of IRM Analytical Results of RAOC-2 Excavation Confirmatory Sidewall and Bottom Soil Samples
Table 21	Summary of IRM Analytical Results of RAOC-3 Boring and Excavation Confirmatory Sidewall and Bottom Soil Samples
Table 22	Summary of IRM Analytical Results for RAOC-3 LNAPL samples
Table 23	Summary of IRM Analytical Results in Monitoring Well Groundwater
Table 24	Summary of Supplemental IRM Analytical Results of Soils in the Heater Area

List of Appendices

Appendix A	Test Pit Logs
Appendix B	Monitoring Well and Boring Logs
Appendix C	Water Well Video Survey Summary
Appendix D	Aquifer Testing Reports
Appendix E	Remedial Investigation Derived Waste Documentation
Appendix F	Geotechnical Data Report
Appendix G	RI TestAmerica Analytical Data Reports
Appendix H	RI Beacon Analytical Data Report
Appendix I	RI Data Usability Summary Reports
Appendix J	Fish and Wildlife Resources Documents
Appendix K	IRM Bench Scale Testing Results
Appendix L	IRM Analytical Data Reports
Appendix M	IRM Data Usability Summary Reports
Appendix N	IRM Waste Manifests, Disposal Information, and Asbestos Documentation
Appendix O	IRM Photographic Log
Appendix P	IRM CAMP Data

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

1.0 Introduction

On behalf of Blades Holding Company, Inc. (Blades), Stantec Consulting Services Inc. (Stantec) has prepared this combined revised Remedial Investigation Report (RIR) and Interim Remedial Measures (IRM) Construction Completion Report (CCR) for the Former Allegany Bitumens Belmont Asphalt Plant located at 5392 State Route 19 in the Town of Amity, Allegany County, New York (Site).

The Remedial Investigation (RI) and IRM were completed pursuant to a Brownfield Cleanup Agreement (BCA) for the Site between Blades Holding Company, Inc. and the New York State Department of Environmental Conservation (NYSDEC or Department). The BCA was executed by the Department on October 12, 2010. The Site is designated by the Department as Brownfield Cleanup Program Site #C902019.

The RI was performed in accordance with the Remedial Investigation Work Plan (RIWP) dated September 2010, which was revised October 11, 2010 in response to Department comments. The RIWP was approved by the Department on October 19, 2010.

The IRM was conducted in accordance with an Interim Remedial Measures Work Plan (IRMWP). The IRMWP was initially submitted to NYSDEC on September 12, 2011. NYSDEC comments on the IRMWP were provided during the period October 12 through October 21, 2011. A final revised document was submitted to NYSDEC on October 24, 2011. NYSDEC formally approved the IRMWP on October 26, 2011. The IRM was also conducted in accordance with verbal and e-mail correspondence with NYSDEC during implementation of the IRM.

All RI and IRM work conducted on the properties to the north and east of the site were conducted in accordance with access agreements with the respective property owners Edward G. Hanchett and Ralph W. Keesler.

1.1 GOALS AND OBJECTIVES

1.1.1 RI

The goals of the RI were to determine surface and subsurface characteristics of the Site, assess the source(s) and determine the nature and extent of contamination on or migrating from the Site, and identify migration pathways and potential receptors. The information developed by the RI allows for the selection of the remedial measures that will attain conditions which are protective of commercial or industrial use of the Site and are protective of public health, the environment, and fish and wildlife resources.

The following objectives for the RI were specified in the RIWP:

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- to determine the nature and extent of contamination of soil and shallow groundwater in, and migration from, the area where volatile organic compound (VOC) contamination was identified in the Phase II ESA in the vicinity of the laboratory building.
- to investigate potential soil and/or groundwater impacts in areas not previously sampled, including:
 - deep groundwater at the existing on-Site water supply well;
 - soil near electrical transformers;
 - soil and shallow groundwater near the oil house and maintenance garage;
 - soil and shallow groundwater near the asphalt tanks;
 - soil and shallow groundwater near the asphalt plant;
 - soil in the basin below the aggregate hoppers;
 - soil in the berms along the north and east property boundary;
 - surface and subsurface soil across the Site; and
 - shallow groundwater around the perimeter of the Site.
- depending on the outcome of the above activities, investigate the following areas and concerns with a second phase of field work, if applicable. The scope of this work was to be determined based on the results of the activities listed above.
 - deep groundwater impacts. Deep groundwater impacts were investigated via installation and sampling of monitoring well MW-28D;
 - impacts to the surface water pond to the northeast of the laboratory building. Groundwater locations downgradient of the Site and also just upgradient of the pond (i.e. MW-7) had low level or non-detect analytical results. In addition, soil samples taken at the downgradient locations did not show impacts. Given the absence of significant soil and shallow groundwater impacts at the Site's downgradient locations, no further investigation was needed in these downgradient locations; and
 - impacts to the surface water, sediment and surface soil in and along Tuckers Creek. Groundwater locations downgradient of the Site and also just upgradient of Tuckers Creek (i.e. MW-13 and MW-14) had low level or non-detect analytical results. In addition, soil samples taken at these downgradient locations did not show impacts. When presenting our first round of groundwater results to NYSDEC, we proposed one deep well and two additional shallow well locations within the source area. Soil samples taken at these downgradient locations did not show impacts. Given the absence of significant soil and shallow groundwater impacts at the Site's downgradient locations, no further investigation was needed in these downgradient surface water and sediment locations.
- in the event that any of the site's buildings were to be reused, investigate the potential for soil vapor intrusion. However, since there were no plans for building reuse (they have all been razed), this objective was not applicable.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****1.1.2 IRM**

The RI identified the presence of contamination in soil and groundwater at the Site. The contaminants included petroleum-related and chlorinated solvent-related volatile organic compounds (VOCs) in soil and/or groundwater at levels that warranted IRMs. In particular, chlorinated VOCs (CVOCs) were detected in the vicinity of the laboratory building in the northwest corner of the site at concentrations in soil up to 37,500 micrograms per kilogram and in groundwater up to 12,400 micrograms per liter (RAOC-1). CVOCs had migrated in groundwater to the north, east and south from the source area, and extend off-site to the northeast. In addition, shallow, petroleum-impacted soils were identified in two areas to the east of the laboratory building (RAOC-2) and in close proximity to the asphalt plant (RAOC-3). Groundwater did not appear to have been impacted in these two areas. The objective of the IRM was to provide a timely response to these findings. IRMs were designed to minimize the potential for further migration of contaminants and facilitate potential redevelopment of the currently vacant property. Supplemental IRM activities were conducted in response to conditions encountered during demolition and dismantling of site structures and buildings.

1.2 SCOPE OF WORK

To achieve the objectives of the RI, the following investigations were completed:

- completion of a background information survey;
- installation, retrieval and laboratory analysis of passive soil gas (PSG) modules in three areas, including near (8 PSG modules) and downgradient from (12 PSG modules) the laboratory building and surrounding the oil storage house and maintenance garage (8 PSG modules);
- collection of 14 surface soil/former surface soil samples;
- excavation of 23 test pits with logging and field screening of soils and the selection of 26 subsurface soil samples for laboratory analysis of potential chemical contaminants;
- installation of 16 overburden monitoring wells (15 shallow and one deep);
- installation of 12 additional overburden test borings (installed without monitoring wells);
- continuous soil sampling at well and test boring locations, with logging and field screening of the soil samples and selection of 34 sample intervals for laboratory analysis of potential chemical contaminants;
- geotechnical laboratory analysis of two soil samples from one well boring;

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- development of all 16 newly installed wells;
- three full rounds of groundwater level measurements at all on- and off-Site wells, including new and existing monitoring wells that had been installed during the previously reported Phase II Environmental Site Assessment (Phase II ESA) and the existing on-Site water supply well during an initial round of groundwater sampling for laboratory analysis of potential chemical contaminants;
- video inspection of the existing on-Site water supply well;
- collection of groundwater samples from the 16 RI wells, the three Phase II wells, and the one existing water supply well;
- collection of groundwater samples from seven of the RI wells and the three Phase II wells during a second round of groundwater sampling;
- disposal of investigation derived wastes;
- hydrogeologic testing of six wells to determine the hydraulic conductivity of the shallow and deep overburden;
- laboratory analysis of field duplicates, field and laboratory blanks, and matrix spike/matrix spike duplicates (MS/MSD) collected for quality assurance and quality control (QA/QC) purposes; and
- survey of the locations and elevations of wells and, where appropriate, other sampling locations.

To complete the objectives of the IRM, the following principal field activities were completed:

Site Preparation/General Activities

- TREC Environmental Inc. of Spencerport, NY was contracted to conduct IRM activities;
- Eleven of the monitoring wells installed during the RI were decommissioned prior to excavating source-area soils. An additional three wells were removed during excavation activities;
- Silt fence and straw bales were installed and inspected periodically as erosion and control measures;
- Surficial asphalt pavement present in the three RAOs was stripped, temporarily stockpiled onsite, and later trucked off-site for recycling; and

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- Community Air Monitoring, including air monitoring for particulates and VOCs, was conducted during all intrusive work.

RAOC-1

- An asbestos containing building materials (ACBM) survey was performed and confirmed ACBMs in the scale house and control tower were properly abated;
- The laboratory building and scale house were demolished to facilitate excavation;
- Investigation of a dry well with collection of one soil sample;
- Removal of a septic tank and soil immediately surrounding it. Collection of confirmatory sidewall (2) and bottom (1) samples;
- Removal and offsite disposal of approximately 1,635 tons of source-area impacted soil. The excavation area was approximately 4,800 square ft (sq ft) with an approximate sidewall length of 275 ft. The excavation depth ranged from 10 to 14.5 ft bgs;
- Collection of 7 confirmatory bottom and 11 confirmatory sidewall samples.
- Removal and containerization of approximately 36,300 gallons of groundwater entering the excavation, and onsite treatment/discharge. Collection of associated water samples of the containerized water and the on-site treatment system effluent;
- Placement of sodium lactate material in the excavation prior to backfill, to facilitate in-situ remediation of remaining CVOCs in source-area soil and groundwater through enhanced reductive dechlorination (ERD). Bench-scale testing was performed prior to the IRM program to demonstrate the effectiveness of this method;
- Excavation of a series of trenches within the footprint of impacted groundwater that remained outside the source area excavation, and placement of additional sodium lactate material at or just below the water table;
- Backfill of the excavation with clean onsite soil and aggregate material, and backfill of the trenches with excavated material; and
- Post-IRM groundwater monitoring to demonstrate the effectiveness of the ERD.

RAOC-2

- Excavation and offsite disposal of approximately 75 tons of impacted shallow soil. The excavation area was approximately 628 sq ft with a sidewall length of approximately 115 ft. The excavation depth was generally 2 ft bgs;

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- Collection of 1 confirmatory bottom and 4 confirmatory sidewall samples; and
- Backfill with clean onsite aggregate material.

RAOC-3

- The steel asphalt tanks located in RAOC-3 were removed from the site to provide access for excavation in that area;
- Demolition of the concrete cradle structure beneath the former asphalt tanks;
- Excavation and offsite disposal of approximately 1,205 tons of impacted shallow soil from three sub-areas, including a western area (RAOC-3A) with impacts similar to those previously observed around TP-14 (see Sections 3.3 and 4.3.2) and an eastern area (RAOC-3B and RAOC-3C) with additional impacts observed during excavation involving light non-aqueous phase liquid (LNAPL) within a deposit of coarse gravel and cobbles. This portion of the excavation was started in November-December 2011 (RAOC-3B) and completed in April 2012 (RAOC-3C) after structures overlying the excavation area were removed. The overall excavation area was approximately 3,404 square feet with approximately 492 ft of sidewall. The western area was excavated to approximately 4.5 ft and the eastern was generally excavated to about 8 ft bgs;
- Collection of a total of 16 confirmatory excavation sidewall and 10 confirmatory bottom samples;
- Two direct-push boring drilling programs were conducted to more thoroughly delineate the apparent extent of the petroleum product. Twenty-nine shallow borings were completed with field observations made, instrument screening performed, and five soil samples collected;
- Sampling of the excavation water and LNAPL was conducted;
- Removal, containerization and off-site disposal of approximately 10,500 gallons of water from the eastern portion of the excavation with a minor amount of LNAPL;
- Placement of gypsum and fertilizer in the base of the excavation to create favorable conditions for anaerobic degradation of remaining petroleum residue by sulfate-reducing bacteria;
- Backfill with clean onsite aggregate material; and
- Installation, development and sampling of one monitoring well.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**Supplemental IRM Activities

- Dismantling, demolishing and/or removing the control tower, maintenance garage, oil storage shed, a discarded heater and sheet piling;
- Removal of the concrete pad and support columns beneath the former asphalt plant. The segregation of one above grade support column and nearby soils which were oil stained from the conveyor belt operation;
- Staging, sampling and off-site disposal of the oil storage shed concrete floor slab and the bottom course of the masonry block walls, and the above-noted oil stained support column, that were oil stained;
- The removal of surficial debris from various locations across the site with examination and PID screening of soil exposed during clean-up; and
- Uncovering and sampling the maintenance garage septic system in order to prepare for its removal and proper disposal;
- Excavation and sampling of impacted soils from beneath the discarded heater with confirmatory bottom and sidewall excavation soil samples. Sampling of excavation groundwater; and
- Proper off-site disposal of all wastes generated during the supplemental IRM activities.

Subsurface conditions observed during the investigation activities and the IRM program were documented in accordance with standard procedures and the RI and IRM Work Plans. Project soil and water samples were submitted to a state-certified environmental laboratory, TestAmerica Laboratories, Inc. (TestAmerica) of Buffalo, New York for chemical analysis of comprehensive lists of potential Site contaminants. Laboratory analytical results were reviewed by an independent (third party) data validator, ChemWorld Environmental, Inc. (ChemWorld) of Rockville, Maryland or Data Validation Services, Inc. (DVS) of North Creek, New York, using standard data-usability evaluation criteria. Passive soil gas samples were submitted to Beacon Environmental Services Inc. of Bel Air, Maryland (Beacon). IRM bench-scale samples were analyzed by Stantec's laboratory and by SiREM of Guelph, Ontario. One IRM LNAPL sample was analyzed by Paradigm Environmental Services, Inc. of Rochester, NY.

The RI and IRM activities also included implementation of comprehensive site-specific Quality Assurance Project Plans (QAPPs), Health and Safety Plans (HASPs) and the Community Air Monitoring Program (CAMP) that were specified in the RIWP and IRMWP.

Interpretation of field data and laboratory analytical results and qualitative assessments of the potential impacts of Site conditions on human health and fish and wildlife resources are presented in this report. The project data used to evaluate and interpret Site conditions and the nature and extent of contamination at the Site includes the field and laboratory analytical data

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

from the RI activities listed above as well as all Phase II ESA field and laboratory data. The field logging and screening data from Phase II borings and wells and the laboratory analytical data reports for Phase II ESA samples were included in the Phase II Report that was submitted to the Department as part of the Brownfield Cleanup Program (BCP) Application. Phase II soil and groundwater sampling locations and data are included in the RI report figures and summary tables.

1.3 REPORT CONTENTS AND ORGANIZATION

Section 1 has described the purpose, objectives, and scope of the RI and IRM. Section 2 presents a description of the Site and its setting and a summary of the background information that was the basis for the RI and IRM. Section 3 describes the field investigations and laboratory analysis activities performed during the RI. Section 4 describes the results of the RI sampling, monitoring and analytical activities. Section 5 describes the results of the third party validation of project RI analytical data. Section 6 presents qualitative assessments of the human health and ecological risks posed by the Site conditions as observed during the RI. Section 7 presents a description and documentation of the completed IRM activities. Section 8 provides a summary of the findings, conclusions, and recommendations of the RI along with a summary of the IRM. References are listed in Section 9.

Report figures and tables are also presented. The figures include a Site location map, a Site topographic survey, sample location maps, groundwater elevation contour plans, maps showing the extent of Site-related impacts, and maps summarizing the locations of IRM activities. The tables include comprehensive summaries of the project activities and field and lab data.

The report contains the following appendices:

- Logs of test pits,
- Logs of monitoring wells and borings,
- Summary of a water well video survey,
- Aquifer testing data,
- RI investigation derived waste documentation,
- Geotechnical data,
- Laboratory reports for RI analytical data,
- Laboratory report for the passive soil gas survey,
- Data Usability Summary Reports (DUSR) for RI analytical data,
- Fish and wildlife resource documents,
- IRM Bench Scale Testing Results,
- IRM Analytical Data Reports,
- IRM Data Usability Summary Reports,
- IRM Waste Manifests, Disposal Information, and Asbestos Documentation
- IRM Photographic Log, and
- IRM CAMP Data.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

2.0 Background Information

2.1 SITE LOCATION, DESCRIPTION, AND SETTING

The Site is currently a 5.44[±] acre parcel located at 5392 State Route 19 in the Town of Amity, Allegany County, New York (see Figure 1). Until recently, the property (Tax Parcel No. 171-1-60) was occupied by a non-operational asphalt plant. Operations at this asphalt plant ceased in 2005. Redevelopment of the Site is anticipated to involve a commercial or industrial use.

When the Site was originally accepted into the BCP, the property was approximately 4.9 acres in size. Subsequent to the RI test pit excavations (see Sections 3.3 and 4.3.2 and Appendix A), an additional 40-ft wide “strip” of land was purchased by Blades and added to the eastern edge of the Site property. This was done to include the area where historical fill placement had encroached beyond the original asphalt plant property’s eastern boundary onto the adjacent property. Blades negotiated purchase of this property in February 2012 and NYSDEC approved the addition of this the additional 0.54 acres to the BCP-defined Site limits as a minor modification to the Brownfield Cleanup Agreement on May 30, 2012.

According to a Site-specific topographic survey, the subject property elevation ranges from approximately 1,380 feet above mean sea level (amsl) along Route 19 to approximately 1,356 ft amsl on the eastern property line, just to the west of Tuckers Creek (Figure 2). Surface water drainage from the former asphalt manufacturing area is towards a basin adjacent to the former feeder hoppers for the former asphalt plant aggregate conveyor, and this basin acts as a detention pond. An embankment several to 15 feet high along the northern and eastern property lines limits runoff to the creek from the remaining, gravel-surfaced areas of the Site.

The Site is located in the Genesee River valley approximately 1,200 feet west of the river. The Site is elevated on average approximately 15 feet above the valley floor, and is separated from the current flood plain of the river by a levee and railroad embankment located approximately 750 feet east of the property. The FEMA flood zone designation for the property indicates that the property is outside the 500 year flood zone and is protected from 100 year floods by a levee. The channelized segment of Tuckers Creek that is located adjacent to the eastern boundary of the property is designated as being subject to a 1% annual chance of flooding within the stream channel. Surface water bodies and wetlands in the area of the Site are shown on Figure 3. No critical wildlife habitats of threatened or endangered species are known to be present within ½ mile of the property.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****2.2 LAND USE****2.2.1 Current Site and Surrounding Land Uses**

Until the recent dismantling and demolition activities, the subject property was improved with a non-operational asphalt plant, control tower, truck scale, scale house, office and laboratory building, oil storage house, and maintenance garage. In the Fall of 2011, the scale house and office/laboratory building were demolished and the above ground asphalt storage tanks were removed from the Site in preparation for the Interim Remedial Measures (IRM). In March 2012, the majority of the asphalt plant was dismantled in preparation for completion of the IRM. In April/May 2012, the remainder of the asphalt plant, the control tower, oil storage house, and maintenance garage were demolished or dismantled.

A gravel-surfaced aggregate stockpile area is located south of the former asphalt manufacturing plant structures. Paved parking and staging areas are provided adjacent to the former asphalt plant and the former maintenance garage and former laboratory buildings. These features are shown on Figure 2.

The Site is accessible to, and from, existing local and regional infrastructure including highways and gas and electric service. Public water supply and municipal sewer services are not currently available in the immediate area of the property. However, the 2008 Allegany County Comprehensive Plan shows the corridor along Route 19 north of Belmont which includes the property as a proposed future water service area and proposed future sewer service area.

The Site has a water well that supplied water for Site operations and on-Site sanitary uses until plant operations ceased in 2005. The well is located in the approximate center of the north half of the Site adjacent to the former location of the northeast corner of the asphalt plant structure. Surrounding properties rely on private wells for their water supply. Additional information on water supply wells located in the vicinity of the Site is presented below in Sections 3.1 and 4.1.

Land use in the surrounding area is dominated by agricultural uses. Agricultural fields occupy the adjacent property to the east. Agricultural farm houses and 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 from 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 both currently not in use.

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 Tuckers Creek and its small tributaries. These land uses are all visible on the aerial photographic image presented in Figure 3.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

No schools or federal, state, county, municipal or community parks or recreational areas are known to be present in the immediate vicinity of the property.

2.2.2 Past Uses of the Site and Adjoining Properties

Detailed information on, and documentation of, past Site and property uses can be found in Stantec's December 2009 Phase I Environmental Site Assessment (ESA) report, which was presented as an attachment to the July 2010 BCP Application for the Site.

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 disassembled.

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.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

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.

Asphalt Production

One non-operational “batch” hot-mix asphalt production plant was 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.

Aggregate materials (sand and gravel) 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 process waste was recycled back into the production process. The process generated no wastes that required off-Site disposal as solid waste.

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

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

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. Facility personnel were unaware of any significant releases or reportable oil spills associated with the asphalt plant.

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.

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. Apparent oil staining was present on the concrete floor of the oil storage shed at the time of the Phase I ESA site visit.

Used oil and spent parts washer solvent were generated as wastes in the past, but according to facility personnel no wastes from this shop have been generated since the plant became non-operational.

The only wastewater discharge from the garage was domestic sewage from a restroom that discharged to an on-Site septic system. There were no obvious indications of other discharges to the septic system in this building. There were no sumps, floor drains or pits in the garage nor were there any indications of historic sumps, floor drains or pits.

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

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

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.

A 55-gallon supply drum containing 10-15 gallons of TCE was observed inside the laboratory at the time of Stantec's Phase I ESA site visit. Blades subsequently disposed of the drum in accordance with applicable regulations.

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. Most of the piping for the septic system was removed during demolition of the laboratory and scale house buildings in October 2011. This piping was capped and the septic tank was removed in November 2011. Sampling of the water and sludge in the tank and of the soils surrounding the tank was conducted during the IRM (see Sections 7.3.2 and 7.3.3).

At the time of the Phase I ESA site visit, several empty containers and a drum that had been modified for use as a heater or drier were observed on a small outdoor asphalt pad located adjacent to the east end of the laboratory building. Plant personnel indicated that the pad had been used for outdoor storage of solvent waste containers. No visible evidence of past releases was apparent at the time of the Phase I ESA site visit.

Site Utilities and Other Features

Electric and natural gas service was provided to the subject property by Rochester Gas and Electric (RG&E). The on-Site buildings were heated by electric or natural gas heaters, and natural gas was one of the fuels used for the asphalt plant process heaters described above.

Three pole-mounted electrical transformers owned by Rochester Gas and Electric (RG&E) were observed on the subject property during the Phase I ESA site visit. The pole-mounted transformers were not labeled as to PCB content. At the time of the property visit, no visible evidence of transformer leakage, staining or distressed vegetation was observed around the pole-mounted transformers. The transformers were removed from the property by RG&E during the timeframe of the RI field work activities.

There is no public water supply service for the immediate area of the Site. The property is just beyond the northern limit of the service area for the Village of Belmont public water supply service. Bottled water was used for drinking water at the Site. The Site has a water well that

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

supplied water for site operations and on-Site sanitary uses until plant operations ceased in 2005. The primary operational use for the water supply was for a wet wash dust control system used in the 1960s until the early 1970s. This use was discontinued when a bag house dust control system was installed in the early 1970s. The other operational use of the water supply was for occasional rinsing of the bed of aggregate supply trucks to remove sand and gravel from the inside corners at the front of the trailer prior to loading with asphalt.

No process wastewater was generated at the Site. As indicated above, domestic sanitary wastewater at the property was discharged to the two septic systems located at the laboratory building and plant maintenance garage.

A three-inch gas line to the asphalt plant from the former off-Site gas meter house located in the Route 19 right of way, the two septic systems described above, and underground water lines leading from the on-Site water well to the lab building, scale house bathroom, and maintenance garage bathroom were the only underground utility features known to be present at the Site at the time of the RI.

2.3 GEOLOGIC AND HYDROGEOLOGIC SETTING

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) maps the overburden deposits beneath the subject property as 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.

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 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 the Site 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. RI groundwater level monitoring data are described in detail in Section 4 of this report.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****2.4 PREVIOUS INVESTIGATIONS AND ACTIVITIES****2.4.1 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.

2.4.2 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, and 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 4. Results indicated the presence of TCE and related 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.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

3.0 Remedial Investigation Program

This section of the report presents a description of the investigative activities performed, methods used and procedures followed during the RI. Investigation results are described in Section 4.

The RI field program was conducted over the course of numerous field events starting in October 2010 and concluding in November 2011. The locations investigated and dates and purposes of each of the field events are summarized in Table 1. All sampling locations are shown on the Site Plans presented on Figures 4 or 5. This includes sampling locations investigated during the RI as well as those investigated during the Phase II ESA conducted by Stantec in December 2009. A detailed description of the Phase II ESA program activities and procedures was presented in Stantec's Phase I/Phase II ESA Report, which was included in the Brownfield Program Application, and is not repeated herein.

The procedures followed while conducting the RI field program were performed in accordance with NYSDEC's DER-10 and the Department-approved RIWP. Deviations from, and additions to, the program specified in the RIWP are described below in the relevant sections of the report and are summarized in Table 2.

Samples submitted for laboratory analytical testing of potential contaminants and other physical parameters were submitted to TestAmerica of Buffalo, New York. Tables 3 and 6 respectively summarize the soil and groundwater samples collected, including sample dates, sample depths (where applicable), sample analytical parameters, and quality assurance/quality control (QA/QC) samples. As per the RIWP, approximately 20-30% of the originally planned samples were analyzed for a full suite of analyses. Third-party usability reviews of the analytical data reports generated by TestAmerica were performed by ChemWorld or DVS. Passive soil gas samples were submitted to Beacon of Bel Air, Maryland.

3.1 BACKGROUND INFORMATION SURVEY

A background information survey was conducted consisting of the following tasks:

- Assessment of Area Water Wells, Surface Water Use and Underground Infrastructure

A well survey was performed to identify the location, use, and construction of private water supply wells located within $\frac{1}{8}$ mile upgradient and $\frac{1}{4}$ mile down and side gradient from the Site. The RIWP called for the survey to be completed within a $\frac{1}{2}$ mile radius; however, with NYSDEC's concurrence (via an e-mail from Anthony Lopes on March 29, 2011), the survey distances were modified. The range for upgradient locations was limited to $\frac{1}{8}$ mile because there was no reason to believe that upgradient wells have been impacted. The range for the down- and side-gradient locations was limited to $\frac{1}{4}$ mile due to the lack of impacts in groundwater samples from wells on the downgradient side of the Site. Per NYSDEC's request, a Fact Sheet was mailed with the well and surface water surveys. A draft Fact Sheet was

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

prepared and submitted to NYSDEC. The final version of the Fact Sheet was provided by NYSDEC on April 20, 2011.

Information was sought from adjacent landowners to identify both surface water and groundwater uses on their properties, including ponds located to the north of the Site. The well and surface water surveys were mailed to nearby property owners on April 25, 2011. Combined well and surface water surveys were sent to six adjacent property owners. Responses were received from five of these owners. An attempt was made to reach the remaining property owner by phone, but the phone number was no longer in service. Stantec stopped by their home on June 15, 2011, but no one answered the door.

In addition to the surveys sent to the adjacent property owners, well only surveys were sent to eleven nearby property owners. Responses were received from seven of these. Two more responses were obtained via phone conversations. Numerous unsuccessful attempts were made to reach the remaining two property owners via phone and/or fax.

A utility record search was performed to obtain information on any underground utilities that exist along Route 19 or other areas adjacent to the Site by submitting a design call ticket to Dig Safely New York on October 18, 2010. Available information on the on-Site gas and water lines was reviewed with the former plant manager, Larry Mitchell, on October 25, 2010. The available information was evaluated to determine whether underground infrastructure features represent potential pathways for contaminant migration.

The results of the well and surface water surveys and the utility record search are summarized in Section 4.1.

- **Physical Conditions Assessment**

A literature and records search was performed to obtain information to supplement the information presented in the RIWP on the soils, geology, hydrogeology, topography and drainage patterns at the Site and in the surrounding area. This information, information from the Phase II ESA borings, and the information on subsurface conditions collected during the RI field activities have been used to develop a conceptual model of the physical conditions at the Site, as described throughout this report.

- **Hazardous Materials Survey**

A hazardous materials survey was conducted on January 31, 2011. This included a building interiors survey and inspection of tanks and process piping. The findings of the survey are described in Section 4.1.

3.2 SURFACE SOIL SAMPLING

Fourteen surface soil samples were collected from October 25 through 28, 2010 and on February 3, 2011 (see Table 3) at locations planned in the RIWP and at locations added based on NYSDEC requests. Nine surface soil samples were planned and collected from locations distributed across the Site (SS-3 through SS-5 and SS-7 through SS-12) and five surface soil samples were collected from targeted locations:

- SS-6 was a planned location that was collected from the basin adjacent to the aggregate hoppers.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- SS-13 was a location added to the scope of work in response to requests from Bill Murray, the original project manager, of NYSDEC on October 27, 2010 about a compressor unit near the asphalt plant. The sample was taken just down slope of a hose attached to the compressor.
- SS-14 was a location added to the scope of work in response to requests from Bill Murray of NYSDEC on October 27, 2010 about black stained soils accumulated on top of the concrete pad for the empty liquid asphalt storage tanks. The sample was taken just south of the tanks.
- SS-15 was a location added to the scope of work in response to a request from Bill Murray of NYSDEC on October 27, 2010 about staining and potential leaking from a blower at the asphalt plant. This sample was taken as a three point composite, including stained soils on top of the concrete pad on the west side of the blower, topsoil just to the west of the concrete pad (shown jointly as SS-15A on Figure 4), and topsoil from the south side of the blower (shown as SS-15B on Figure 4) from under a stained section of the equipment.
- A drum containing burned materials was observed near the northeast corner of the laboratory building. The drum appeared to be half of a 55-gallon steel drum. The bottom was present, but not connected to the rest of the drum. The materials in the drum were placed in a new 55-gallon steel drum, sampled and disposed of with the other investigation derived waste (IDW) (see Section 3.14). Per the request of Bill Murray of NYSDEC on January 6, 2011, the surface soil under the drum was also sampled (SS-16).

During the execution of the surface soil sampling and test pit excavations on October 25, 2010, Bill Murray of NYSDEC suggested that surface soil samples paired with test pits in areas with asphalt cover or aggregate piles be collected from the native soils under the asphalt or aggregate pile. He also suggested that several samples need not be taken of the aggregate stockpile materials. Samples were collected of the aggregate stockpile materials at locations such as SS-7 and SS-12. As a result of these suggestions:

- At SS-1/TP-1, there was a 1.4 foot cover of asphalt. Samples were taken from the gravel basal materials under the asphalt and from the potential top of native materials per the recommendation of Bill Murray of NYSDEC. These samples were categorized as test pit samples. As a result, a surface soil sample was not taken at this location.
- At SS-2/TP-2, there were aggregate stockpile materials. The test pit was excavated to the deepest depth possible (10 feet below ground surface (ft bgs)); however, aggregate was still present and it did not appear that native materials were reached. As a result, and because the aggregate materials were sampled elsewhere, no surface soil sample was collected at this location.
- The surface soil sample at SS-3 was collected at 6-7 ft bgs at the apparent top of native soils.
- The location of SS-5/TP-5 was covered in asphalt (0-0.4 ft bgs). This was underlain by coarse grained gravel (0.4-1.4 ft bgs) that was too coarse to submit to the laboratory. As a result, SS-5 was collected from potentially native silty clays underlying the gravel.

The remaining surface soil samples were collected as planned from 0-1 or 0-2 inches below vegetative cover, with the exception of SS-12. At SS-12, aggregate stockpile gravels which

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

were too coarse to submit for laboratory analysis were found at 0-1 inches (in) bgs. As a result, the surface soil sample was collected from finer sand and gravel aggregate materials found just under this at 1-3 in bgs.

Samples were collected with a stainless steel spade, which was decontaminated with an Alconox wash and DI rinse between each location. Appropriate QA/QC samples were taken, including a field duplicate sample, a matrix spike/matrix spike duplicate (MS/MSD) and a rinsate blank. The rinsate blank was collected by pouring deionized water provided by the laboratory over the decontaminated stainless steel spade used to collect the surface soil samples.

Sampling parameters were as outlined in the RIWP for the planned samples. Parameters for the added locations were agreed upon with NYSDEC. All parameters are indicated on Table 3.

3.3 TEST PIT EXCAVATION AND SUBSURFACE SOIL SAMPLING

Twenty-three test pits were excavated from October 26 through 29, 2010 and on November 21, 2011 at locations planned in the RIWP (TP-1 through 12), locations added based on NYSDEC requests (TP-13 through TP-15), and locations added to further define the extent of materials encountered in the planned test pits (TP-16 through TP-23) (see Figure 4). The test pits were excavated by TREC Environmental Inc. (TREC) utilizing an excavator. Prior to initiating the excavation program, TREC contacted Dig Safely New York to locate publically owned utilities in these areas. After the completion of each test pit, it was backfilled with the soils that had been removed from it.

Similar to surface soil sampling locations SS-13 through SS-15, test pit locations TP-13 through TP-15 were added in response to requests from Bill Murray of NYSDEC on October 27, 2010 respectively about a compressor unit near the asphalt plant, black stained soils accumulated on top of the concrete pad for the empty liquid asphalt storage tanks, staining and a potential leaking blower near the asphalt plant. TP-13 was excavated down slope of a hose attached to the compressor. TP-14 was excavated at the northwest corner of the asphalt tanks. TP-15 was excavated to the south of the potentially leaking blower. It was not possible to dig directly to the west of the blower as the concrete pad under it extended 3 feet beyond the equipment.

Test pit locations TP-16 through TP-23 were added to further define the extent of the materials observed at TP-7 through TP-10 and TP-12.

The RIWP called for one subsurface soil sample to be taken for laboratory analysis from each of the test pits TP-1 through TP-5 and a minimum of three subsurface soil samples from test pits TP-6 through TP-12. More samples were taken than were called for in the RIWP in order to help define the extent of potential impacts. One to three samples were taken from each test pit, with the exception of TP-6 and TP-16, where no samples were taken as no impacts were observed, and TP-22 and TP-23, where no samples were taken because field observations were similar to nearby test pits TP-12 and TP-18. A total of 26 test pit soil samples were collected. Table 3 details the sample locations, depths and analytical parameters. Appendix A contains detailed logs of the materials observed in the test pits.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Samples were collected from the excavator bucket, which was decontaminated with a high-pressure washer in between each test pit location. All decontamination water was containerized in 55-gallon drums (see Section 3.14). Appropriate QA/QC samples were taken, including two field duplicate samples, a MS/MSD and two rinsate blanks. The rinsate blanks were collected by pouring deionized water provided by the laboratory over the excavator bucket.

3.4 PASSIVE SOIL GAS SURVEY

PSG surveys were conducted in three areas, including two areas surrounding and downgradient from the laboratory building and one surrounding the oil house and maintenance garage (see Figure 5). The PSG surveys were performed to map the potential distribution of VOCs in shallow soil gas.

The first PSG survey consisted of eight PSG modules placed in the vicinity of the lab building (PSG-1 through PSG-8). The second PSG survey included 12 PSG modules (PSG-9 through PSG-20) in a grid pattern that was designed to extend beyond the likely laboratory building source area to the areas north, east and south of the BS-2 and BS-4 test borings to attempt to determine the downgradient extent of contamination in shallow groundwater.

The third PSG survey area covered the area of the oil storage house and maintenance garage. It consisted of eight PSG modules (PSG-21 through PSG-28) surrounding these buildings.

Certain modules were moved slightly in the field from planned locations. Modules PSG-17 and PSG-18 were moved to avoid placement on steep slopes. Modules PSG-24 to PSG-26 were moved slightly to avoid obstructions encountered at the planned locations.

Appropriate QA/QC samples were taken, including two field duplicate samples as well as one trip blank per survey area.

The surveys were performed using PSG sampling modules provided by Beacon Environmental Services Inc. of Bel Air, Maryland. Modules were installed and retrieved per the manufacturer's instructions. As per the typically recommended PSG timeframe, the modules were placed on November 2, 2010 and allowed to passively absorb compounds for approximately two weeks prior to retrieval on November 15, 2010. For the laboratory building area survey, chlorinated VOCs were targeted and for the oil house/maintenance garage area, chlorinated and petroleum VOCs were targeted. The samplers were analyzed by Beacon using EPA Method 8260.

Portions of the PSG survey areas near the laboratory building were on a neighboring property. Access from the neighboring landowner was sought and obtained to allow for installation of the PSG samplers and later test borings and monitoring wells.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****3.5 MONITORING WELL AND BOREHOLE INSTALLATIONS, AND
SUBSURFACE SOIL SAMPLING****3.5.1 Monitoring Well and Borehole Overview**

Soil borings and monitoring well installations proceeded over the course of two field events, as outlined in Table 1. All borings and well locations are shown on Figure 4.

During the initial drilling event in November and December 2010, all of the shallow monitoring wells and borings planned in the RIWP were installed, including borings/monitoring wells B/MW-5 through B/MW-14 and borings B-15 through B-21. Based on the PSG results, the planned locations of MW-5 through MW-7 were modified from those outlined in the RIWP in a November 23, 2010 e-mail to Bill Murray at NYSDEC. At this time, an additional downgradient well was added to the program. This well was initially proposed to be referred to as either MW-5A or MW-5B in the November 23, 2010 e-mail. The location specified for MW-5B was selected in the field as too much surficial water was present at the location specified as MW-5A. Once installed, this well was referred to as MW-22.

During the drilling program, elevated photoionization detector (PID) readings were observed at B-16. This prompted the addition of B/MW-23, B-24, and B/MW-25 to the drilling program.

Based on the groundwater and soil sampling results from the previously installed wells, two additional shallow wells (B/MW-26 and B/MW-27) were proposed in a January 26, 2011 e-mail to NYSDEC to refine the understanding of shallow groundwater impacts. In this e-mail the location and depth of the deep boring/monitoring well planned in the RIWP was also specified. These wells, along with soil borings B-29 to B-32, were installed on February 1-4, 2011. The soil borings were installed to refine understanding of the soil impacts in the area of the laboratory building.

The January 26, 2011 e-mail specified that the “deep well is proposed in the assumed downgradient direction from the lab building with respect to deep groundwater flow. It is not anticipated that this well needs to be installed at the same depth as that of the production well since no chlorinated VOCs were reported in the production well. Therefore, we are proposing to install the deep well at a depth of between 40 and 75 ft and we propose to continuously monitor soil samples from the deep boring. We propose to select the monitoring interval based on the presence of a silt or clay layer or the presence of an interval with elevated vapor readings. If neither of the conditions described above are encountered prior to reaching a depth of 75 ft., we propose to install the well at 75 ft.” During installation of the soil boring at MW-28D, fine soils consisting of clayey silts and silty clays, which got finer with depth were observed. Two geotechnical soil samples were collected from this borehole which demonstrates the finer nature of the deeper soils (see Sections 3.5.2 and 4.2.1). Due to the presence of these fine soils and the absence of field impacts in the borehole soils (which were later supported by laboratory data), it was felt that drilling deeper than 40 feet was not necessary. Stantec shared with Mr. Bill Murray at NYSDEC our observations of soil conditions and the subsequent plan to stop drilling at 40 feet in the field on February 1, 2011.

3.5.2 Well and Boring Installation and Soil Sampling Procedures

Prior to each drilling mobilization, the drilling contractor, Nothnagle Drilling Inc. (Nothnagle), contacted Dig Safely New York to locate publicly owned utilities in these areas. In addition, any additional knowledge of the location of underground utilities was reviewed.

Hollow-stem auger drilling methods were used to advance borings for installing monitoring wells. As detailed above, 15 shallow overburden monitoring wells (B/MW-5 through B/MW-14, B/MW-22, B/MW-23, B/MW-25 through B/MW-27) were installed. The shallow monitoring wells were generally screened across the water table. This was not possible in the wetland areas to the north of the Site where the water table was at the ground surface (B/MW-5, B/MW-8 and B/MW-22).

One deep overburden well (MW-28D) was installed at a depth of 40 ft bgs.

All monitoring well borings were installed using a rotary drill rig, 4¼-inch hollow stem augers and Macrocore samplers.

Twelve soil borings (B-15 through B-21, B-24, and B-29 through B-32) were installed with a rotary drill rig using direct push technology and Macrocore samplers.

Continuous soil samples were collected at each monitoring well and boring location. Soil samples were screened with a calibrated PID for the presence of volatile organic vapors. Soil samples were also visually observed for indications of staining, oils, fill, etc. Soil boring logs, including soil descriptions and PID readings, are presented in Appendix B.

As per the RIWP, amidst the four borings around the oil storage house and maintenance garage, only three samples were required. Thus, as no impacts were observed at B-21, no sample was collected. At all other boring and monitoring well locations, based upon an evaluation of PID readings, visual or olfactory evidence of impacts, and the position of the water table, Stantec selected at least one soil sample for analysis.

A total of 34 soil samples were selected for lab analysis. Table 3 summarizes the analytical parameters for each sample. QA/QC samples collected included one duplicate and one MS/MSD sample.

In addition, as mentioned above, two representative soil samples were collected from the monitoring well boreholes for geotechnical analysis of particle size distribution by Method ASTM D422.

At the completion of the boring for each groundwater monitoring well, a 2-inch diameter, schedule-40 PVC well with 10-ft of 0.010-inch slot well screen was installed. Sand packs consisted of fine sand extended up to 2.5 ft above the well screens. The sand packs were capped with bentonite seals and the remaining annulus was grouted to the surface. A lockable

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

stick-up protective casing was installed at surface grade in a Portland cement concrete mix. An inner well cap was installed on the well riser. Well construction details can be found in Table 4 and on the borehole and well installation logs presented in Appendix B.

The drilling rig and all appurtenances were decontaminated prior to use, between borehole locations, and after final use (see Section 3.13). The decontamination procedure involved the use of a high-pressure washer. All soil cuttings and decontamination water were containerized in 55-gallon drums (see Section 3.14).

3.6 UPGRADE OF PHASE II ESA MONITORING WELLS

Protective casings were installed on Phase II ESA monitoring wells BS-2 through BS-4. In some cases, the inner casing was extended prior to installing the outer protective casing.

3.7 MONITORING WELL DEVELOPMENT

On December 7-9, 2010 and February 4-7, 2011, after allowing the bentonite seals to hydrate and expand for a minimum of 48 hours, the newly installed groundwater monitoring wells were developed in an effort to cleanse them of suspended sediments so that turbidities were reduced to the maximum extent practicable and to allow representative formation water to enter the well. The monitoring wells were developed with either inertial pumping, dedicated polyethylene bailers or a decontaminated submersible pump. Turbidity was monitored during development. In general, at least five well volumes were removed. As agreed with Mr. Bill Murray of NYSDEC on December 7, 2010, in the cases where there were plans to sample the well for metals, attempts were made to either reduce the turbidity to less than 50 nephelometric turbidity units (NTUs) or to remove one to two 55-gallon drums of water in an effort to get turbidity levels down. If water was added during drilling, three times the volume added was removed during development. All well development water was containerized (see Section 3.14).

3.8 GROUNDWATER ELEVATION MEASUREMENT

Three rounds of water level measurements were conducted at the Site during the course of the RI on January 4, 2011, February 22, 2011, and April 20, 2011. The water level measurements are recorded on Table 5.

3.9 GROUNDWATER SAMPLING

Groundwater sampling was conducted a minimum of two weeks after the completion of well development to ensure that the groundwater conditions had stabilized sufficiently. All 16 newly installed wells (B/MW-5 through B/MW-14, B/MW-22, B/MW-23, B/MW-25 through B/MW-27, and MW-28D) and three previously existing wells (BS-2 through BS-4) were sampled in a first round of groundwater sampling conducted on January 4-7, 2011 and February 22, 2011 (see Figure 4 and Tables 1 and 6). A second round of groundwater sampling was conducted at 10 monitoring wells (BS-2 through BS-4, B/MW-5 through B/MW-8, B/MW-22, B/MW-23, and B/MW-25) on April 20-21, 2011.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Where possible, the wells were purged and sampled utilizing low stress/low flow methods with a peristaltic pump with dedicated polyethylene tubing. This was not possible at wells where recharge did not occur quickly enough to maintain a steady water level during low flow pumping. At these locations, the wells were purged on a volumetric basis. Table 7 summarizes the purging and sampling method.

General water quality field parameters (i.e., pH, temperature, specific conductance, oxidation reduction potential, and dissolved oxygen) were monitored during low flow purging using a flow through cell. In accordance with the RIWP, purging was continued until field parameters stabilized. During purging on a volumetric basis, general water quality field parameters (i.e., pH, temperature, and specific conductance) were monitored over the course of at least three wells volumes or until the well went dry. If the well did not go dry, in accordance with the RIWP, purging was continued until field parameters stabilized. Field parameter monitoring results are summarized on Table 7. Turbidity was also monitored and in all cases where metals were sampled for, a turbidity of less than 50 NTUs was obtained prior to sampling the metals portion. At MW-25, the metals sample portion was collected the morning after purging to allow for the fines to settle out of suspension (see Table 7 for details). All well purge water was containerized (see Section 3.14).

During all sampling rounds, samples from each of the wells listed above were analyzed for TCL VOCs using EPA Method 8260B. As outlined in Table 6, select wells were analyzed for additional parameters. QA/QC samples included daily trip blanks for TCL VOCs, two duplicates and two MS/MSDs.

3.10 WATER SUPPLY WELL INSPECTION AND SAMPLING

The Site has a water supply well that has been out of use since operations at the Site were discontinued in 2005. As shown on Figure 4, the well is located approximately 200 feet east-southeast of the location of the laboratory building. No information on well construction was available. Therefore, the existing pump and piping were removed from the well on November 29, 2010 in order to allow for a video inspection of the well to be conducted on December 6, 2010 by Willey Well Drilling, Inc. (WWD) of Sardinia, NY. Appendix C contains WWD's summary report of the video survey. The well was found to be 180 ft deep with a 6-inch diameter casing. It is cased along its entire depth with the casing apparently driven into gravel, which forms the base of the well. The casing joints (approximately every 20 ft) appear to be in good condition.

The groundwater from the well was sampled on December 7, 2010. The RIWP called for purging the well of three volumes of water prior to sampling. However, the well was found to be larger in diameter and deeper than anticipated, and thus purging three well volumes would have produced a large volume of water; therefore, the well was purged and sampled with low flow methods with the approval of NYSDEC (December 7, 2010, telephone conversation confirmed via e-mail). General water quality field parameters (i.e., pH, temperature, specific conductance,

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

oxidation reduction potential, and dissolved oxygen) were monitored during low flow purging using a flow through cell. Purging was continued until field parameters stabilized. The groundwater sample was analyzed for the full suite of parameters (see Table 6).

3.11 HYDRAULIC CONDUCTIVITY TESTING

Testing was performed on six newly installed wells to determine the hydraulic conductivity of the saturated overburden horizons in the immediate vicinity of each well. The wells tested, which represent various depth intervals and locations across the Site, included MW-9, MW-11, MW-12, MW-23, MW-25, and MW-28D.

The tests consisted of the insertion in and/or removal from the water column of a solid slug in order to displace the water level in the well and for monitoring of the recovery of the water level toward a static level. Each test was accomplished by recording water level changes with a pressure transducer (In-Situ Inc. Level TROLL 700) following the insertion (falling head test) and/or withdrawal (rising head test) of the slug. After field tests were completed, the slug test data were analyzed with commercially available software (AQTESOLV) in order to determine approximate hydraulic conductivity values. Results are summarized on Table 8, and data reports for each test are presented in Appendix D.

**3.12 SURFACE WATER SAMPLING AND SEDIMENT AND SURFACE SOIL
SAMPLING ALONG TUCKERS CREEK**

The RIWP called for an evaluation of soil and shallow groundwater monitoring results in order to determine if it was necessary to sample sediment or surface soils along Tuckers Creek (which flows northeast along the eastern Site boundary), or surface water from a pond located approximately 200 feet northeast of the laboratory building and from Tuckers Creek.

Shallow groundwater flow directions vary, depending on the location on-Site, from the north, to the northeast, to the east, and to the southeast. Groundwater locations downgradient of the Site and also just upgradient of the pond (i.e. MW-7) and Tuckers Creek (i.e. MW-13 and MW-14) had low level or non-detect analytical results. In addition, soil samples taken at these downgradient locations did not show impacts. When presenting our first round of groundwater results to NYSDEC, we proposed one deep well and two additional shallow well locations within the source area. However, given the absence of significant soil and shallow groundwater impacts at the Site's downgradient locations, Stantec indicated in an e-mail to Mr. Bill Murray at NYSDEC on January 26, 2011, that no further investigation was needed in these downgradient locations. During a January 28, 2011 follow-up telephone conversation with Mr. Murray, he indicated he had no problems with our proposed well placement.

3.13 DECONTAMINATION

Sampling methods and equipment were chosen to maximize the use of dedicated equipment and thereby minimize the need for decontamination. All non-dedicated equipment was decontaminated prior to and following each use. Decontamination of drilling and excavating

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

equipment was accomplished with a high-pressure washer. Decontamination of smaller equipment (such as trowels) consisted of a wash with Alconox solution and a water rinse. All decontamination water was containerized in 55-gallon drums (see Section 3.14).

3.14 INVESTIGATION DERIVED WASTE

All drill cutting, decontamination water, decontamination pad plastic, development water, and purge water were containerized in 55-gallon drums and securely stored on-Site until they were transported off-Site for disposal on June 15, 2011 by Veolia Environmental Solutions.

Appendix E contains disposal documentation for the 33 drums of waste generated during investigation activities.

3.15 SAMPLING LOCATION SURVEY

Each monitoring well installed during the Phase II ESA and the RI was surveyed for horizontal and vertical control by a licensed Stantec surveyor. Other sampling locations were either surveyed for horizontal and vertical control by a licensed Stantec surveyor or for horizontal control with a GeoXT, which is a handheld global positioning system (GPS) locating instrument with sub-meter accuracy.

3.16 FIELD QUALITY CONTROL SAMPLES

Sections 3.2 through 3.5 and 3.9 and Tables 3 and 6 summarize the field QA/QC samples collected during the field investigation. Field QC samples that were collected included field duplicates, trip blanks, rinsate blanks, and MS/MSDs. Field duplicates and MS/MSDs were collected at a rate of one per 20 field samples per media. Trip blanks were used for aqueous and soil gas matrices only. A trip blank accompanied each aqueous shipment of water or soil gas samples for VOC analysis. One rinsate blank was collected for each piece of non-dedicated sampling equipment used. It was collected by pouring deionized water over decontaminated equipment. All data were reviewed by Ms. Andrea Schuessler of ChemWorld or Ms. Judy Harry of DVS. Section 5 contains a discussion of the data usability review.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****4.0 RI RESULTS**

4.1 BACKGROUND INFORMATION RESULTS**4.1.1 Assessment of Area Water Wells and Surface Water Use**

The responses to the well and surface water surveys mailed to nearby property owners identified thirteen private wells, ranging from 20 feet deep driven or dug wells to 100 feet deep drilled wells. The majority of these wells are to the south and southeast of the Site. Well usage is typically for household use, but also for livestock. One natural spring was also identified that is used for household purposes. One property to the east of the Site contains a well that is owned by the Village of Belmont, which was previously identified in the Brownfield Cleanup Program Application. As stated in the Application, the well is located on the opposite side of the Genesee River approximately 1600 feet east of the northeast corner of the site. It is screened to depths of up to 24 feet in a shallow unconfined aquifer, and based on topographic information it appears that this aquifer would be recharged from upslope areas to the east of the wells.

Surface water described on the forms includes ponding during rain events on certain properties on the west side of Route 19 and previously identified ponds on the property just to the north of the Site. The use of the ponds on the property to the north of the Site was not identified by the property owner on the survey form; however, they indicated that they obtained their drinking water from a driven well located approximately 200 ft west of the ponds.

Based on background research, there is no public water supply service for the immediate area of the Site. The Site is just north of the service area for the Village of Belmont public water supply service. It is therefore presumed that surrounding properties that did not respond to the surveys rely on private wells for their water supply.

It appears very unlikely that private wells and surface water that are known or likely to be present on adjacent properties would be impacted by the groundwater contamination identified at the Site as downgradient monitoring wells had low or no detectable levels of contamination (see Figures 11 and 12).

No designated wellhead protection or groundwater recharge areas are known to be located in proximity to the Site. However, the Site and surrounding area is within the footprint of a "principal aquifer" identified by NYSDEC. Available information on mapping of primary and principal aquifers in the area by NYSDEC and the USGS indicate that the aquifer is a confined aquifer in deep gravel deposits that occur in the Genesee River valley. Nevertheless, as described below, currently available information indicates that there are no private or public off-Site water supply wells located in areas likely to be downgradient of the area of contamination identified at the Site.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

A map showing the location of water supply wells listed in government databases and located within one-half mile of the Site is presented on Figure 3. As shown on that map, the wells are located to the east of the Site on the opposite side of the Genesee River, to the northwest and cross-gradient to the Site or southeast and not directly downgradient of the Site related groundwater contaminant impacts.

Available database information indicates that the Village of Belmont public water supply service operates several other water supply wells at locations to the east and southeast of the Site. The available information appears to indicate that the closest wells to the east (the closest well is located on the opposite side of the Genesee River approximately 1600 feet east of the northeast corner of the Site) are screened to depths of up to 24 feet in a shallow unconfined aquifer. Based on topographic information, it appears that this aquifer would be recharged from upslope areas to the east of the wells. The other water supply wells located east and southeast of the Site appear to be deeper wells (90 to 202 feet deep) screened in the confined aquifer that underlies the Site. However, the topography of the area suggests that the recharge areas for these wells would also be located to the east or southeast, and therefore these wells appear to be located upgradient of the Belmont Asphalt Plant site.

A search of NYSDEC's online database of water well information was also made. (The search was performed using a search radius of 2 minutes of latitude and longitude.) The search identified three wells, all located $\frac{1}{4}$ mile or more west of the Site along Tuckers Corner Road. These wells are 36 to 161 ft deep wells screened in overburden sand and gravel. Topographic information indicates that each of these wells is located upgradient of the Site.

The available well information described above, and the sampling data collected as discussed in the following sections, indicate that there is no reason to suspect that the contamination detected on the Site would impact the documented water supply wells present in the area surrounding the Site.

4.1.2 Assessment of Underground Infrastructure

The utility record search identified the following potential utility holders in the area of the Site: Allegany County Department of Public Works (DPW), Fillmore Gas Company, National Fuel Gas, Rochester Gas and Electric, the Town of Amity, Verizon, and the Village of Belmont. Allegany County DPW does not keep records of utilities along Route 19 since it is a state roadway. Fillmore Gas Company indicated they have no underground utilities in close proximity to the Site. National Fuel marked their utilities in the vicinity of the Site and no markings were observed on-Site. With the possible exception of abandoned gas lines, Rochester Gas and Electric reported they do not have underground gas or electric services near the Site. The Town of Amity indicated that they have no underground utilities. The Village of Belmont is part of the Town of Amity and therefore they too have no underground utilities near the Site. Verizon reported they only have overhead lines in the vicinity.

Information on the on-Site utilities was obtained from the former plant manager, Larry Mitchell, on October 25, 2010:

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- All electric and gas service to the Site had been disconnected. The gas lines previously ran from the gas meter house on Route 19 to the asphalt plant and also from the gas meter house north along Route 19 and then turning in to the laboratory building.
- The water lines from the former pump in the on-Site water supply well, ran from the well to the maintenance garage to the east of the pump and also from the well to the plant and from there toward the laboratory building.
- There are no storm or sanitary sewers on-Site. Sanitary waste was handled by septic systems.

As described below (Section 4.3.5), the groundwater contamination is limited to the vicinity of the laboratory building. Therefore, there is no indication that the utilities in the vicinity of the laboratory building have acted as a conduit to transport contamination off-Site or to other portions of the Site.

4.1.3 Hazardous Materials Survey

A hazardous materials survey was conducted on January 31, 2011, including a building interiors survey and inspection of tanks and process piping.

Throughout the Site's buildings and equipment, there was the potential for asbestos containing materials to be present. As a result, an asbestos survey was completed and reported under separate cover. The potential also existed for universal wastes, such as mercury switches and fluorescent bulbs and ballasts, to exist at the Site. Where present, universal wastes were removed from the Site prior to the recent demolition and dismantling activities. Besides asbestos and universal waste, potential hazardous materials throughout the different areas of the Site included:

- At the laboratory building:
 - Potential oils/greases within any equipment on Site. All equipment was removed from the building prior to its demolition.
 - Various asphalt materials in 5 gallon buckets, quart paint cans, and small (\pm 500 milliliter [mL]) plastic bottles. The quantities of these items were limited. At the time of the survey, the materials that were liquid (or liquid-like) were frozen. All asphalt materials were removed from the building prior to its demolition.
 - Miscellaneous chemicals (approximately one dozen containers 1 quart or smaller). All chemicals were removed from the building prior to its demolition.
- At the control tower:

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- Power transformer. The transformer was removed from site prior to building demolition.
- Electrical switch room, installed in approximately 2000. The electrical switches were removed from site prior to building demolition.
- At the maintenance garage:
 - Potential oils/greases within equipment. All equipment was removed from the building prior to its demolition.
- At the oil house:
 - There was oil staining on the floor. The concrete floor and the first row of concrete blocks of the structures walls, which were also stained, were stockpiled, tested for TCLP analyses, and were taken to Casella's landfill in Angelica, NY.
- At the asphalt tanks and plant:
 - Larry Mitchell, the former plant manager, reported that the piping and tanks were drained to the extent possible when the plant was shut down in 2005. However, he stated that there was likely a minor amount of residual material in the tanks and piping that could not to be drained. When the tanks were moved in Fall 2011 by K.S. LaForge Excavating, Inc., a minor amount of oil was drained from piping. With the approval of NYSDEC this oil was taken by LaForge for use as heating oil in their shop.

4.2 HYDROGEOLOGY**4.2.1 Geology**

Logs for RI soil borings and monitoring wells are presented in Appendix B. Phase II and RI test pit and soil boring data indicate varying thicknesses of surficial fill. The fill consists primarily of aggregate stockpiles, asphalt materials and debris. Aggregate stockpiles are primarily found on the western $\frac{1}{3}$ to $\frac{1}{2}$ of the Site and in berms along the eastern property boundary. Asphalt materials consist predominantly of small to large pieces of hard asphalt within and under the berms along the northern and western property boundary. Debris was found in some of the berms along the northern and eastern property boundaries. Further details on the depths and content of fill can be found in the test pit logs in Appendix A.

Under the fill material, native soils consist of four to eight feet of brown to yellowish brown silts/fine-grained sands and gravels with traces of clay. This is underlain by alternating layers of gray to brownish gray clayey silt/fine-grained sand and silty clay that gets finer with depth. Monitoring well logs show these materials to a depth of at least 40 ft bgs. Geotechnical soil

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

samples were collected of these materials at two depth intervals in B/MW-28D. The geotechnical sample analysis results are found in Appendix F.

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.

4.2.2 Groundwater Elevation and Flow Direction

Water level measurements recorded during the three monitoring events performed during the RI are presented on Table 5. The data indicate that the water table across the Site ranges from at or near the ground surface down to approximately 15 ft bgs. Seasonal variation was observed in water level elevations with variations across the Site ranging from 0.5 to 3.75 ft higher in the spring (April 2011) than in the winter (January and February 2011).

Groundwater elevation contour maps for the Site developed from the data collected during the January 4, 2011, February 22, 2011, and April 20, 2011 monitoring events are presented on Figures 6 through 8. Shallow overburden groundwater was found to flow away from the northeast portion of the Site. Flow is toward the north, northeast, east and southeast.

4.2.3 Hydraulic Conductivity

Hydraulic conductivity test results are summarized on Table 8 and presented in Appendix D.

Hydraulic conductivities for the shallow overburden wells ranged from 10^{-1} centimeters per second (cm/s) to 10^{-4} cm/s. These wells were screened across intervals that typically had gravels or cobbles and sands/silts at the top of the screen interval and clayey silts at the bottom of the screen interval. The range in values reflects these mixed screen interval lithologies and is reflective of variations in thickness of coarse versus fine intervals, as well as the coarseness of the coarser interval (i.e. whether, for example, the coarse interval consisted of cobbles or medium gravel). Based on these hydraulic conductivities and the assumption that the shallow overburden aquifer ranges down to approximately 23 ft bgs at which point the lithology becomes predominately silty clays, the transmissivity ranges from 10^{-1} square centimeters per second (cm^2/s) to 10^2 cm^2/s .

The hydraulic conductivity for the deep overburden well was considerably lower than the shallow overburden wells, in the range of 10^{-5} cm/s. This is reflective of the fact that the deeper well was screened across an interval of silty clays and clayey silts.

4.3 RI SAMPLING AND ANALYTICAL RESULTS

Soil and water samples selected for laboratory analytical testing, including investigation and IDW samples, were submitted to TestAmerica in Buffalo, New York. Copies of the analytical data reports from TestAmerica are presented in Appendix G. Passive soil gas samples were submitted for laboratory analytical testing to Beacon in Bel Air, Maryland. A copy of the data

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

report from Beacon is presented in Appendix H. In addition to the data report, supplemental contour figures prepared by Beacon are included at the end of Appendix H.

Analytical results for Phase II ESA and RI samples are summarized in Tables 9 to 12, which are organized by sample medium and type. Table 9 presents results for surface soil samples, Table 10 presents results for test pit subsurface soil samples, Table 11 presents results from borehole subsurface soil samples and Table 12 presents results from groundwater samples.

Soil results are compared to New York State Codes, Rules and Regulations (NYCRR) Part 375 Restricted Use Soil Cleanup Objectives (SCOs) for Commercial and Industrial Use. In order to be conservative, the subsurface soils from the boreholes are also compared to the Part 375 SCOs for the Protection of Groundwater (POGW). These borehole subsurface soil samples are compared to the POGW SCOs due to contraventions of the groundwater standards for chlorinated VOCs in the area of the laboratory building (See Section 4.3.5). However, pursuant to 6 NYCRR 375-6.5, the POGW SCOs may not be applicable because:

- the groundwater standard contravention is the result of an on-site source which has been addressed by an Interim Remedial Measures (IRM) program,
- we expect that an environmental easement will be put in place for the Site which will restrict groundwater use;
- contaminated groundwater at the site is migrating off-site; but the IRM included treatment and monitoring to address off-site migration, and
- as a result of the IRM, the groundwater quality should continue to improve over time.

Groundwater results are compared to Class GA standards and guidance values listed in NYSDEC's Ambient Water Quality Standards and Guidance Values, Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Memorandum dated October 22, 1993, Reissued June 1998, and addenda dated April 2000 and June 2004.

All RI soil and water analytical data were reviewed by Ms. Andrea Schuessler of ChemWorld or Ms. Judy Harry of DVS. The ChemWorld and DVS data usability summary reports (DUSRs) are presented in Appendix I and discussed in Section 5.

Phase II ESA laboratory data reports were presented to the Department with the Phase I/Phase II ESA Report.

4.3.1 Surface soil

Fourteen surface soil samples were collected from locations distributed across the Site and from targeted locations for the parameters listed in Table 3. Analytical results are summarized in Table 9.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

One VOC, methylene chloride, which is a common laboratory contaminant, was detected in the three surface soil samples submitted for VOC analysis and its concentration was well below the Commercial and Industrial SCOs in each sample.

Semivolatile organic compounds (SVOCs) were detected in two of the 14 surface soil sampling locations. At the two locations with detections, polycyclic aromatic hydrocarbons (PAHs) were detected at concentrations well below the Commercial and Industrial SCOs.

Pesticides were detected in two of the four surface soil samples submitted for analysis. Concentrations were well below the Commercial and Industrial SCOs.

No PCBs were detected in any of the four surface soil samples submitted for analysis.

Metals were detected in each of the four samples submitted for analysis. The only metals detected above Commercial and Industrial SCOs include calcium, iron, and magnesium. Each of these metals is a common naturally occurring metal whose presence in the samples is not considered to be Site-related concern.

4.3.2 Test Pits

Twenty-three test pits were excavated across the Site, predominantly along the berms at the northern and eastern property boundaries, but also in the central portion of the Site (see Figure 4). As described in the test pit logs (see Appendix A), materials encountered included:

- Aggregate stockpiles (TPs-2-4, 9-12, 17, and 18, 22, 23);
- Native soils (TPs-1, 3-8, and 13-16, 19-20);
- Solid (TPs-4, 7-12, 14, 15, 17, and 18, 19, 21-23) and non-solidified (TP-8) 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 (TP-8); and
- Debris (TPs-8, 12, 17, and 18, 22, 23).

Twenty-six subsurface soil samples were collected from the test pits for the parameters listed in Table 3. Analytical results are summarized in Table 10.

Samples from 12 locations were submitted for VOC analysis. At least one VOC was detected in each of these samples. The sample with the highest VOC concentrations was from 3 ft bgs at TP-14 near the asphalt storage tanks, where petroleum related VOCs were detected. As described above and in the Test Pit Log in Appendix A, this interval contained asphalt pieces with an oily appearance, had a strong odor and produced PID readings up to 804 ppm.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

However, there were no exceedances of the Commercial and Industrial SCOs for VOCs at this or other test pit locations.

SVOCs were detected at eight of the 23 SVOC sampling locations. However, the only exceedance of Part 375 Commercial and Industrial SCOs were 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 Commercial and Industrial SCOs. 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 exceedances are believed to be related to the presence of the asphalt and are thus not considered to be of concern.

One pesticide was detected in one of the five sampling locations submitted for these analyses. Also, one PCB was detected in one of the five sampling locations submitted for these analyses. These detections were below the Part 375 Commercial and Industrial SCOs.

Among the five locations sampled for metals, exceedances of Commercial and Industrial SCOs were found at each location. However, the samples with exceedances of the Part 375 Commercial and Industrial SCOs involved aluminum, calcium, iron and magnesium which are considered to be naturally occurring and not Site-related.

4.3.3 Passive Soil Gas

PSG surveys were conducted in three areas, including two areas surrounding and downgradient from the laboratory building and one area surrounding the oil house and maintenance garage (see Figure 5). The PSG laboratory report is presented in Appendix H. The report includes contouring of the analytical results. The PSG survey results showed the presence of chlorinated VOCs, especially TCE, centered around an area just northeast of the laboratory building (at PSG-5 and PSG-12) and extending toward the north. These results were used to help refine the positioning of the monitoring wells in the laboratory area 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 (see Section 4.3.2). In the PSG area near the maintenance garage, no surface (SS-11) or subsurface soil (B-19 through B-21 and B/MW-9) impacts were noted based on laboratory analytical sampling results and field screening (see Sections 4.3.1 and 4.3.4). For both areas with PSG petroleum VOC results, based on groundwater sampling results at nearby and downgradient monitoring well locations (B/MW-6, B/MW-9, B/MW-10, and B/MW-14), there were no petroleum related exceedances in groundwater (see Section 4.3.5 and Table 12).

4.3.4 Monitoring Well and Borehole Soil

A total of 38 subsurface soil samples were submitted from the RI and Phase II monitoring well and soil boreholes for the parameters indicated in Table 3. Analytical results are summarized in Table 9.

Among the 36 sampling locations collected for VOC analysis during the Phase II and RI, 33 had VOCs detected; however, at 16 of these locations, the only VOC detected was a low level of methylene chloride, which is a common laboratory contaminant and not considered to be a Site related contaminant. 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 are to the west of the asphalt storage tanks. The low level detection at B/MW-10 may be related to the PSG results discussed in Section 4.3.3. 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, Industrial and POGW SCOs.

Other locations with detections were predominantly chlorinated VOCs and these locations were in the vicinity of the laboratory building. The chlorinated VOCs reported at or near the water table are contoured on Figure 9 in plan view. Figure 10 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 and Industrial SCOs. The locations with the highest detections are 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 include: 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.

Low concentrations of SVOCs were detected at three of the 11 soil boring samples submitted for SVOC analysis. These concentrations were all below the Part 375 Commercial, Industrial and POGW SCOs.

No pesticides or PCBs were detected in the five soil boring samples submitted for these analyses.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Metals were detected in each of the five soil boring samples submitted for metals analysis. Exceedances of Part 375 Commercial, Industrial, and POGW SCOs were reported for calcium, iron, and magnesium. These metals are considered to be naturally occurring, not Site-related, and thus, not of concern.

4.3.5 Groundwater

A total of 34 Phase II ESA and RI groundwater samples were submitted for laboratory analysis for the parameters indicated on Table 6. Results of laboratory analyses of groundwater samples from the Phase II ESA and RI are summarized in Table 12.

Monitoring of groundwater field parameters was performed during the purging and sampling of each well. A summary of the RI measurements of stabilized field parameters (the last field parameter measurements made prior to collection of each sample or just subsequent to sample collection) is presented in Table 7.

Contouring of the total chlorinated VOC concentrations for the first and second round of RI groundwater sampling is provided on Figures 11 and 12. On these figures, previous results are shown in parentheses for locations not sampled during the respective round of sampling depicted.

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 chlorinated VOCs.

During the 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 11 presents interpolated contours of these chlorinated VOC data in the shallow overburden wells. Similar to the soils, the highest concentrations are east and southeast of the laboratory building. Concentrations diminish rapidly beyond the vicinity of the laboratory building. Downgradient concentrations to the north and downgradient along the eastern property line are low or non-detect.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

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 has not migrated to the deep (40 ft bgs) overburden.

No VOCs were detected in the on-Site water supply well, which is about 180 ft deep.

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 12 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 diminish rapidly. VOC concentrations during the second round of sampling were generally lower than those observed during the first round of sampling. It is presumed that the reduction of VOC concentrations was related to the high water table at the time of sampling. During the weeks prior to sampling precipitation levels were well above average levels. In March the average precipitation at nearby Wellsville, NY is 2.24 inches and the actual precipitation was 3.15 inches, thus the actual was 41% higher than the average. From April 1st to 21st, the average precipitation is 1.77 inches and the actual precipitation was 3.75 inches, thus the actual was more than twice the average amount. Thus, the changes in VOC concentrations represent seasonal variation in concentrations which may have been more extreme due to the particularly high levels of precipitation and the resulting high groundwater levels that caused dilution of the contaminant concentrations.

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 has only been reported in the production 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, we believe that the arsenic in the production well is a naturally occurring condition and no further investigation is necessary.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

5.0 RI QA/QC Evaluation

5.1 DATA USABILITY SUMMARY REPORTS

Laboratory reports received from TestAmerica for all samples submitted for laboratory analysis during the RI were forwarded to ChemWorld or DVS for review of the usability of the laboratory analytical data. Results of the reviews were reported by ChemWorld and DVS in their Data Usability Summary Reports (DUSRs), which are provided in Appendix I.

As documented in the DUSRs, the data usability reviews were completed by ChemWorld or DVS using applicable guidance from the USEPA Region 2 standard operating procedures for data validation and the USEPA National Functional Guidelines for Data Review. Full reviews of the data deliverable summary forms and raw sample data for RI samples and limited reviews of raw QC data were performed in accordance with the above-referenced guidance. The scope of their reviews are described in detail in the DUSRs.

In summary, the laboratory data (analyte values and reporting limits) were generally found to be usable as reported by the lab or usable with qualification as an estimated value due to typical processing or matrix effects. None of the RI data were rejected as unusable.

Examples of issues that required the data to be qualified during data review included detections of compounds in method blanks, outlying recoveries on matrix spikes, continuing calibration values outside the acceptable limit, etc.

The reviewed results described in the DUSR have been incorporated into the various RI data summary tables presented in this report (data presented in Tables 9 through 12).

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****6.0 Qualitative Exposure Assessment**

6.1 GENERAL CONSIDERATIONS

As specified in NYSDEC's Technical Guidance for Site Investigation and Remediation (DER-10, May 2010), a qualitative exposure assessment for both human health and/or fish and wildlife resources qualitatively determines the route, intensity, frequency and duration of actual or potential exposures to contaminants.

The Site is the location of a former asphalt plant. The reasonably foreseeable future uses of the Site are commercial or industrial. The water supply well on the Site is approximately 180 ft deep and is cased throughout its entire length. It is considerably deeper than the shallow overburden wells in the laboratory source area that are contaminated. The water supply well has been sampled and has been demonstrated to be free of Site-related contaminants (see Section 4.3.5). The well is currently not in use and the pump has been removed. In the past, the well was used for on-Site industrial operations and sanitary purposes, but not for drinking water supply. It is anticipated that water from this well and the deeper aquifer generally will be restricted to non-drinking purposes via the Site Management Plan and the Environmental Easement.

Land use in the surrounding area is dominated by agricultural uses. Agricultural fields occupy the adjacent property to the east. Agricultural farm houses and 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 both currently not in use. Land in the surrounding area is likely to continue to be used for the purposes it is currently used for, or, in the case of the other Blades property, to be used for other commercial or industrial purposes.

Immediately downgradient properties include the property to the north and the property to the east of the Site. Based on the well survey (see Sections 3.1 and 4.1), the property to the north has two water supply wells. The closest well is located at the house, which is approximately 275 ft north of the site. This well is approximately 24 ft deep, and is used for household purposes. The second is at the barn, is approximately 20 ft deep, and is used for cattle. The presence of monitoring wells with low level or no impacts (MW-5, MW-7, MW-8, and MW-22) located downgradient from the laboratory source area and upgradient from the water supply wells on the adjacent property to the north, and the distance between the wells (approximately 170 to 360 ft), indicates that there is no reason to suspect that these water supply wells have been impacted by Site-related contamination. The property immediately east of the site is an agricultural field and does not have a water supply well. It is anticipated that future groundwater use on the property to the north would be the same as the current use and that there will continue to be no groundwater use on the property to the east.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

The Site characterization elements of the qualitative exposure assessment for the Former Allegany Bitumens Belmont Asphalt Plant Site are documented in the discussion of results presented in Section 4 of this report. In summary, the RI findings included:

- Subsurface soil in a source area located immediately east and southeast of the former laboratory building (RAOC-1) contained exceedances of POGW SCOs including: TCE at BS-2, BS-4, B-16, B/MW-23, and B-24; 1,1,1-TCA at B-24; and 1,1-DCA at B-16. TCE concentrations ranged up to 35 ppm. These source area soils were excavated and removed from the site as part of the IRM program (see Section 7).
- A groundwater contaminant plume originating at and extending downgradient from the RAOC-1 source area contains exceedances of class GA groundwater standards for TCE and other chlorinated VOCs. This plume includes a limited off-Site area immediately downgradient from the source area (i.e. MW-25). During the IRM, this plume was treated with the application of sodium lactate to enhance the reductive dechlorination of CVOCs. Reductions in CVOC concentrations are expected due to the enhancement of conditions for reductive dechlorination and the removal of the source area soils during the IRM.
- Subsurface soils near the former above ground asphalt storage tanks in test pit TP-14 (RAOC-3), where petroleum odors were detected and petroleum VOCs were found at concentrations below the Part 375 Commercial and Industrial SCOs. In addition, the PSG survey identified petroleum VOCs in this area. During the IRM program, soils in this source area were excavated and disposed of off-site and petroleum LNAPL was pumped out of the excavation. Prior to backfill, agricultural grade gypsum was applied to the groundwater to enhance natural breakdown of residual petroleum impacts in the groundwater by sulfate-reducing bacteria. There were no exceedances of standards in post-IRM groundwater sampling in RAOC-3.
- Near surface soil in the vicinity of B/MW-27 and B-31 (RAOC-2) where there were elevated PID readings, odors, and detections of petroleum-related VOCs below Part 375 SCOs. This area is located to the west of TP-14 and the former above ground asphalt storage tanks. During the IRM program, impacted soils in this area were excavated and disposed of off-site.
- Asphalt and other debris were observed in the subsurface in some test pits in the berms on the northern and eastern property boundaries (RAOC-4), however, only one exceedance of an SCO, believed to be related to the presence of asphalt, was noted in analyzed soil samples. These bermed areas are the subject of the AAR/RAWP document. Earthwork and berm capping is planned to limit risks associated with the asphalt and other debris in the berms.

Therefore, the only RI site characterization elements, i.e. residual exposure risks, that remain to be considered in this qualitative exposure assessment after the completion of the IRM (see Section 7 for details), are the groundwater contaminant plume originating at and extending

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

downgradient from the RAOC-1 source area and the asphalt and other debris observed in the RAOC-4 berms on the northern and eastern property boundaries. The groundwater plume is undergoing remediation and it is anticipated that VOC levels will decrease; however, because the levels have not decreased below the Class GA groundwater standards, the groundwater must be considered as an exposure risk in this qualitative exposure assessment. The berms will be the subject of a remedial action based on the RAWP. When the RAWP is carried out, it is planned that areas of residual impacted soil along the berms will be graded and capped, as needed, with one foot of clean soil and a Site Management Plan will be put in place after grading, capping, and seeding to dictate the terms of maintaining the berm cap and conditions to be followed during future potential sub-surface disturbances. However, since that has not occurred yet, the berm materials must be considered as an exposure risk in this qualitative exposure assessment.

6.2 HUMAN HEALTH EXPOSURE ASSESSMENT

6.2.1 Introduction

A human health exposure assessment identifies areas of concern and chemicals of concern, identifies and evaluates actual or potential exposure pathways, characterizes the potentially exposed receptors (residents, workers, recreational users, etc.), and identifies how any unacceptable exposure pathways might be eliminated or mitigated.

6.2.2 Human Health Exposure Pathways

Possible exposure routes through which on-Site and off-Site receptors may come into contact with the contaminants of concern detected on and still remaining at the Site include:

- Inhalation of volatile substances in vapors released from groundwater in the vicinity of and downgradient from RAOC-1 (remediation worker, construction worker, occupational worker, visitors, etc.). Exposures to remediation workers could occur during remedial work, such as groundwater sampling. Exposures to construction workers could occur in the plume area both on-site in the vicinity of the former laboratory building and immediately downgradient of this area on the property to the north of the site. These potential exposures to remediation and construction workers would be mitigated by use of monitoring equipment, such as PIDs, as well as subsequent use of personal protective equipment (PPE), such as respirators, if needed. Exposures to the occupational workers or visitors at future commercial or industrial buildings on-Site could occur from potential vapor intrusion into buildings. This exposure could be mitigated by use of vapor barriers or sub-slab depressurization systems;
- Ingestion and dermal contact with substances detected in groundwater in the vicinity of and downgradient from RAOC-1 (remediation worker, construction worker). Exposures to remediation workers could occur during remedial work, such as groundwater

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

sampling. Exposures to construction workers could occur in the plume area both on-site in the vicinity of the former laboratory building and immediately downgradient of this area on the property to the north of the site. These exposures to remediation and construction workers could be mitigated through use of PPE and proper work procedures (i.e. no eating, smoking, or drinking in work zones; and removal of PPE and washing prior to eating, smoking, or drinking once outside the work zone);

- Ingestion and dermal contact with substances detected in subsurface soil in the berms (remediation worker, construction worker). Exposures to construction workers may occur during remediation, construction, and other activities that involve earth work or excavation at the Site through direct contact with contaminated soil in the berms. These exposures to remediation and construction workers could be mitigated through use of PPE and proper work procedures (i.e. no eating, smoking, or drinking in works zone, etc.); and
- Inhalation of suspended particles in air when subsurface soils in the berms are regraded and exposed to dispersion mechanisms (remediation worker, construction worker, persons on adjacent properties in close proximity to berms). Mandatory engineering control measures will be required to minimize soil tracking, soil erosion and dispersion of dust during intrusive work on the berms.

Table 13 summarizes environmental media and exposure routes with a human exposure assessment summary.

Because of the specific conditions encountered at and near the Site, the following pathways have been reviewed, but do not represent important pathways of exposure:

- Nearby residences utilize private water supply wells. These wells are either not downgradient of the laboratory source area or they are beyond the understood downgradient edge of the plume, and therefore ingestion or dermal contact of chemicals in groundwater for residents, employees, occupants or visitors does not appear to be a concern at the Site.
- Surface soil contamination has not been documented as a concern at the Site. Inadvertent ingestion or dermal exposure through direct contact with chemicals at the undisturbed surface therefore does not appear to be a concern at the Site.
- Results of the RI PSG and groundwater sampling indicate exposure to local residents through soil vapor intrusion into off-site buildings is very unlikely.
- Transient access by trespassers and local populations during earth moving work could occur; however, fencing installed across the site entrance prior to the IRM activities will limit access and minimize this risk.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Exposure of occupational workers and neighbors to contaminants in extracted groundwater or soil vapor due to possible future installation/operation of remediation systems is unlikely as these types of systems are not planned for use and, if used, they would be closely monitored, readily shut down and engineered to prevent the occurrence of leaks or spills. Gaseous and liquid effluent streams would be treated as per applicable emissions regulations prior to discharge to the atmosphere or waterways.

Summary

Plume treatment and source removal through implementation of remedial measures are addressing the on- and off-Site exposure risks and the potential for further migration of the contaminated groundwater plume associated with the presence of groundwater contamination by VOCs. The non-VOC subsurface impacts are generally insoluble contaminants and avoiding disturbance of the berms would limit potential exposure risks for these subsurface materials. One of the goals of implementation of the RAWP will be the capping of such areas with one foot of clean soil which will further limit future potential exposure risks.

Though unlikely, the potential presence of a post-remediation vapor inhalation exposure pathway for future on-Site occupational workers and commercial/industrial visitors would need to be assessed and, if necessary, addressed with vapor intrusion mitigation measures.

Exposure pathways involving inhalation of contaminants suspended in air in soil particles during berm earthwork or volatilized from groundwater during groundwater sampling would be expected to be temporary, limited to periods of excavation/earth work or groundwater sampling, and mitigated with engineering controls.

Direct exposure by way of ingestion, inhalation or dermal contact with contaminated soils or groundwater will also be transient in nature and will be restricted to periods of earth work and remediation work. Ongoing groundwater remediation along with planned mitigation of on-Site berm issues will allow future commercial or industrial use of the property in accordance with implementation of appropriate institutional and engineering controls and a Site Management Plan.

6.3 FISH AND WILDLIFE EXPOSURE**6.3.1 Ecological Resources**

A qualitative exposure assessment addressing potential impacts to fish and wildlife resources has been performed in accordance with DER-10.

Stantec performed a reconnaissance of the Site and the Site vicinity on April 20, 2011. Tuckers Creek, a Class C stream, flows adjacent to the east of the Site. As depicted in Figure 3, wetland habitat is located on the adjacent property downgradient to the north, and a state wetland is located east of Tuckers Creek approximately 0.3 mile from the Site. The aerial

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

photography in Figure 3 also depicts the land cover within 1/2 mile of the Site, which predominantly consists of agricultural land and several wooded riparian corridors along tributaries to Tuckers Creek.

The Site now consists of asphalt driveways and parking lots, aggregate piles, and gravel covered areas. Narrow strips of trees and shrubs occur along the Site perimeter. No wetlands are present on the Site. The Site is relatively level with the exception of steep downgradient slopes along the northern and eastern property boundaries. The slope along most of the northern and eastern property line is enhanced by a berm that rises approximately 10 feet above the elevation of the adjoining ground surface at the site. At the time of the site reconnaissance it was noted that some of the mature trees at the top of this berm were dead. The cause of death was not apparent, but a link to soil contamination is not indicated, based on:

- elevation of the trees ten to fifteen feet above the contaminant source; and
- presence of healthy shrubs growing on the berm at lower elevations (closer to the contaminant source).

No other indications of stressed vegetation were observed.

Plant species identified on the Site and in the adjacent wetland included:

- Queen Anne's Lace (*Daucus carota*)
- Staghorn Sumac (*Rhus typhina*)
- Teasel (*Dipsacus fullonum*)
- Ash (*Fraxinus sp.*)
- Cottonwood (*Populus deltoides*)
- Japanese knotweed (*Fallopia japonica*)
- Common Mullein (*Verbascum thapsus*)
- Grape (*Vitis sp.*)
- Canada goldenrod (*Solidago canadensis*)
- Red osier dogwood (*Cornus sericea*)
- Common Burdock (*Arctium minus*)
- Primrose (*Primula sp.*)
- Black raspberry (*Rubus occidentalis*)
- Coltsfoot (*Tussilago farfara*)
- Multiflora rose (*Rosa multiflora*)
- Pussy willow (*Salix discolor*)

Fauna observed on or in the vicinity of the Site during the reconnaissance included:

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- Red-winged Blackbird (*Agelaius phoeniceus*)
- American Robin (*Turdus migratorius*);
- European Starling (*Sturnus vulgaris*);
- Downy Woodpecker (*Picoides pubescens*);
- American Crow (*Corvus brachyrhynchos*);
- White-throated Sparrow (*Zonotrichia albicollis*);
- Eastern Phoebe (*Sayornis phoebe*);
- Tree Swallow (*Tachycineta bicolor*);
- Yellow-shafted Flicker (*Colaptes auratus*);
- Common Grackle (*Quiscalus quiscula*); and
- Red-bellied Woodpecker (*Melanerpes carolinus*).

Fauna observed in the adjacent wetland included:

- Muskrat (*Ondatra zibethicus*);
- Red fox (*Vulpes vulpes*); and
- Spring Peeper (chorus) (*Pseudacris crucifer*).

None of these observed species are federally or state listed as threatened, endangered, or special concern species.

A request was sent to the New York Natural Heritage Program and the U.S. Fish and Wildlife Service website was reviewed to determine any known occurrence of rare, endangered and/or threatened species in the vicinity of the Site.

The response from the NYSDEC Natural Heritage Program (letter to B. Wagner dated May 6, 2011) indicated that no rare or state-listed animals or plants, significant natural communities or other significant habitats are known to be present on or in the immediate vicinity of the Site (see Appendix J).

The U.S. Fish and Wildlife Service (USFWS) provides an online searchable database for occurrences of federally listed species by county. The database identifies Bald Eagle (*Haliaeetus leucocephalus*) as a formerly federally listed threatened or endangered species occurring in Allegany County (cover sheet and online database search results, 4/19/2011) (see Appendix J) and notes that the federal listing has been rescinded. Bald Eagle remains listed by New York as a threatened species but, as noted above, the NYSDEC Natural Heritage Program has no records of any state listed species, including Bald Eagle, on or in the vicinity of the Site. Neither individuals nor nesting sites of this species were observed during the site

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

reconnaissance. Per USFWS policy, if a subject site contains no habitat suitable for the subject species, no further investigation is required. Although a stream runs adjacent to the Site, the relatively sparsely wooded character of the Site, the proximity of developed land, and the availability of more suitable habitat outside of the Site vicinity suggest that use of the Site by Bald Eagle is very unlikely. Therefore, no further investigation is needed with respect to threatened or endangered species.

6.3.2 Exposure Pathways

Given the lack of ecological resources on the Site, the results of the RI sampling program, the implementation of the IRM, and the groundwater flow direction interpreted from water level measurements, the potential exposure pathway identified for fish and wildlife is migration of the contaminant plume off-Site to the north, toward the wetlands on the adjacent property. Measured groundwater levels indicate that a connection is likely between groundwater and surface water in the wetland area. However, the RI sampling program in this area identified no soil contaminant concentrations in exceedance of Part 375 Commercial, Industrial, and POGW SCOs and groundwater sampling has demonstrated low level groundwater contaminant concentrations that are expected to decrease as the reductive dechlorination enhanced by the IRM source area proceeds. Therefore, no impacts are anticipated to ecological resources on the Site or adjacent properties due to the contaminant source and exposure pathways for fish and wildlife directly related to those occurrences. Therefore, these resources are not subjected to further evaluation in this assessment. A DER-10 Fish and Wildlife Resources Impact Analysis Decision Key summarizing this conclusion is presented in Appendix J. However, the following observations are provided concerning means of addressing generic potential ecological exposure risks associated with the Site.

Inhalation and contact by ecological receptors with suspended particles in air is not considered a significant risk unless subsurface soils in the berms are excavated and exposed to dispersion mechanisms. Engineering measures approved by NYSDEC will be implemented to control soil tracking, soil erosion and dispersion of dust during earth moving and excavation. Similarly, potential mobilization of contaminants downgradient towards the adjacent wetland or stream during future earthwork activities is a wildlife exposure risk that should be mitigated with best management practices to contain and capture stormwater, soil and sediment within the remedial area and/or by using temporary storage structures.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****7.0 Interim Remedial Measures Construction Completion Report**

7.1 INTRODUCTION

The results of the RI indicated chlorinated VOC contamination in soil and groundwater in the laboratory building area, at levels in excess of NYSDEC cleanup criteria. In addition, petroleum-impacted shallow soil was found in two areas: one adjacent to the asphalt tanks, and one to the west of the tank area. Accordingly, a program of IRMs was proposed by Blades to NYSDEC to provide a timely response to the findings of the RI, and minimize the potential for further spread of contaminants.

An Interim Remedial Measures Work Plan (IRMWP) describing the proposed IRMs was initially submitted to NYSDEC on September 12, 2011. The public comment period on the IRMWP ended on October 19, 2011. NYSDEC comments on the IRMWP were provided during the period October 12 through October 21, 2011 and a final revised document was submitted on October 24, 2011. NYSDEC formally approved the IRMWP on October 26, 2011. Deviations from the IRMWP are described in Section 7.5.

Supplemental IRM activities were conducted in consultation with NYSDEC in response to conditions encountered during the demolition and dismantling of site structures and buildings.

7.1.1 Summary of Impacts: Remedial Areas of Concern (RAOCs)

This section provides a focused summary of impacts which prompted the areas to become RAOCs. These impacts included:

- RAOC-1: Contaminants were found in subsurface soil at levels below NYSDEC 6 NYCRR Part 375 Restricted Commercial/Industrial Use Soil Cleanup Objectives, but above Protection of Groundwater Objectives;
- RAOC-1: Contaminants were found in groundwater at levels above NYSDEC Class GA Water Quality Standards and Guidance Values for groundwater; and
- RAOC-2 and RAOC-3: Nuisance characteristics (strong odors, staining) were observed in soil.

RAOC-1 – Impacted Soil and Groundwater – Laboratory Building Area

Chlorinated volatile organic compounds (CVOCs) were detected in samples of soil and groundwater in RAOC-1 during the Phase II ESA. The extent of CVOc impacts were assessed through passive soil vapor, soil and groundwater sampling and analysis during both the Phase II ESA and RI work.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**Soil

The primary CVOC identified was TCE, which was historically used in the laboratory facility. Figures 9 and 10 show the CVOC concentrations observed in soil in RAOC-1. TCE concentrations in analyzed soil samples ranged up to 37,500 ppb. Two other CVOCs (1,1,1-trichloroethane and 1,1-dichloroethane) were detected in soil samples at levels exceeding the respective Part 375 Cleanup Objectives for Protection of Groundwater. These compounds are generally produced in the environment through natural, anaerobic biological breakdown (reductive dechlorination) of TCE. Their presence was indicative that natural attenuation of the TCE is occurring at the Site.

Groundwater

CVOCs at levels in excess of NYSDEC's TOGS 1.1.1 Groundwater Standards were observed in several wells in RAOC-1. Total CVOC concentrations above groundwater standards ranged from 8.5 ppb in well MW-8 to 12,401 ppb in well BS-2.

RAOC-2 – Impacted Shallow Soil – B-31/MW-27 Area

During the RI sampling program, shallow soils encountered in two test borings (B-31 and MW-27 – see Figure 4) drilled approximately midway between the asphalt plant and the former laboratory building, exhibited nuisance petroleum odors. Laboratory analyses of samples from these borings detected several contaminants of concern (CoCs) (acetone, ethylbenzene, xylene, methylene chloride, cyclohexane and methylcyclohexane) at levels that were below Part 375 Restricted Soil Cleanup Objectives for Commercial or Industrial site usage; however the odors and visible oil contamination were considered a nuisance characteristic in accordance with NYSDEC's CP-51 Soil Cleanup Guidance (2010). Accordingly, these soils required remedial action.

RAOC-3 – Impacted Shallow Soil - Asphalt Storage Tank Area

A soil sample from test pit TP-14 (see Figure 4) in the Asphalt Storage Tank area encountered asphalt pieces with an oily appearance, PID readings up to 804 ppm and a strong petroleum odor at approximately 3 ft bgs. In addition, passive soil vapor sampling performed in this area (see Appendix H) indicated the presence of total petroleum hydrocarbons (TPH) in soil vapor. Although laboratory analyses of a sample from TP-14 did not detect CoCs at levels that exceed Part 375 Restricted Soil Cleanup Objectives for Commercial or Industrial Property, the odors and visible oil contamination were considered a nuisance characteristic in accordance with NYSDEC's CP-51 Soil Cleanup Guidance (2010). Accordingly, these soils required remedial action.

7.1.2 Summary of Impacts: Supplemental IRM Activities

Supplemental IRM activities were conducted in response to conditions encountered during demolition and dismantling of site structures and buildings, including:

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- Staining observed on concrete and soil during the removal of one of the former asphalt plant's above grade support columns;
- Staining observed on the concrete floor slab and the bottom course of masonry block walls of the oil storage shed;
- A low PID reading from, and sheen on, sludge in the maintenance garage septic system;
- Petroleum odor, staining, and elevated PID readings on soils underneath a discarded heater that had formerly been used to maintain heat in the plant liquid asphalt piping.

In addition, potential impacts were monitored for via visual, CAMP, and PID monitoring during invasive works, such as removal of sheet piling and site debris.

7.2 PROPOSED IRMS

The IRMWP designated three RAOCs, and proposed the following remedial measures for each:

- RAOc-1 - Laboratory Building Area
 - Septic tank and leach field removal;
 - Source-area impacted soil removal and offsite disposal;
 - Removal and containerization of groundwater entering the excavation, and onsite treatment/discharge;
 - Placement of sodium lactate material in the excavation prior to backfill, to facilitate in-situ remediation of remaining CVOcs in source-area soil and groundwater through enhanced reductive dechlorination (ERD). Bench-scale testing was performed prior to the IRM program to demonstrate the effectiveness of this method;
 - Excavation of a semi-circular trench within the footprint of impacted groundwater that remained outside the source area excavation, and placement of additional sodium lactate material at the water table;
 - Backfill of the excavation with clean onsite soil and aggregate material, and backfill of the trench with excavated material; and
 - Post-IRM quarterly groundwater monitoring to demonstrate the effectiveness of the ERD.
- RAOc-2 - Vicinity of test borings B/MW-27 and B-31 (west of Asphalt Tank Area)
 - Excavation and offsite disposal of impacted shallow soil; and
 - Backfill with clean onsite aggregate material.
- RAOc-3 - Vicinity of Test Pit TP-14 (Asphalt Tank Area)
 - Removal of the aboveground asphalt tanks;
 - Demolition of the concrete cradle structure beneath the asphalt tanks;
 - Excavation and offsite disposal of impacted shallow soil; and

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- Backfill with clean onsite aggregate material.

The miscellaneous debris on the north and east perimeter berms did not represent an imminent threat to public health or the environment, thus no IRMs were proposed for these areas. The IRMWP indicated that a remedy for these areas would be addressed in the Alternatives Analysis Report, which is being submitted under separate cover.

7.3 IRM IMPLEMENTATION

Activities were conducted in preparation for the IRM in September and October 2011. The implementation of the RAOC-specific IRMs was performed during the period November 7, 2011 through January 6, 2012 and April 2 through 10, 2012. The work was performed by TREC Environmental, Inc. of Spencerport, New York under Stantec's observation. Supplemental IRM activities were conducted from April 25 through May 17, 2012. The work was performed by KS LaForge Excavating, Inc. of Wellsville, New York under Stantec's observation. Unless otherwise indicated, all laboratory analyses were performed by TestAmerica Laboratories, Inc. Data review was performed by Judy Harry of Data Validation Services. Detailed summaries of specific IRM activities, modifications, approvals, and results have been provided to NYSDEC in monthly progress reports.

Table 14 summarizes the IRM samples collected. Tables 15 through 24 summarize the IRM analytical results. In these tables, with the exception of waste characterization data, soil samples are compared to NYCRR Part 375 Restricted Use SCOs for Commercial and Industrial Use. In order to be conservative, the soils data are also compared to the Part 375 SCOs for the POGW. However, pursuant to 6 NYCRR 375-6.5, the POGW SCOs may not be applicable because:

- the groundwater standard contravention is the result of an on-site source that has been addressed by the IRM,
- we expect that an environmental easement will be put in place for the Site which will restrict groundwater use;
- contaminated groundwater at the site is migrating off-site; but the IRM included treatment and monitoring to address off-site migration, and
- as a result of the IRM, groundwater quality should continue to improve over time.

Groundwater results are compared to Class GA standards and guidance values listed in NYSDEC's Ambient Water Quality Standards and Guidance Values, Division of Water TOGS 1.1.1 Memorandum dated October 22, 1993, Reissued June 1998, and addenda dated April 2000 and June 2004.

Figures 13, 13A, and 13B display the locations of IRM activities, sampling, and excavation. Appendix K contains bench scale testing results. Appendix L contains IRM analytical data

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

reports. Appendix M contains IRM Data Usability Summary Reports. Appendix N contains IRM waste manifests and disposal information. Appendix O provides an IRM photographic log.

7.3.1 IRM Preparation Activities**Asbestos Testing and Abatement, Building Demolition, and Removal of Structures**

In preparation for building demolition, an asbestos-containing building materials (ACBM) survey was conducted in July 2011. In August 2011, an ACBM report was completed which identified a limited amount of asbestos present in on-site structures. Asbestos abatement was performed by LaForge Environmental Services, Inc. involving window caulk, floor tile and mastic at the scale house and roof shingles from the control tower on October 4, 2011. (Note: ACBM was not found in any other structures.) During the abatement, asbestos abatement project monitoring was completed by Paradigm Environmental Services. Appendix N contains asbestos documentation, including the demolition notification, demolition permit, Paradigm's monitoring report, and disposal of the non-friable asbestos materials at Casella's Hyland facility in Angelica, NY.

On October 20-21, 2011, the scale house and laboratory building demolition were completed. Stantec observed the demolition of the scale house and the eastern portion of the laboratory building. No odors, staining, or PID hits were observed from the concrete slab or immediately underlying soil at the eastern end of the laboratory building.

Post-demolition, a concrete structure not previously known about was observed under the building footprint to the north of the septic system. At the time it was uncovered, it was not known what the structure was, but it was later identified as a dry well after investigation (see Section 7.3.3).

On November 10, 2011 the above ground asphalt storage tanks were removed from the site to facilitate excavation at RAOC-3.

RAOC-1: Septic Sampling

Prior to demolition of the laboratory building, on October 20, 2011, a sample of the water from the septic tank servicing the laboratory building and scale house (Septic-1) was collected for TCL VOC + TICs (Method 8260) analysis (BA-Septic1-W). The primary purpose of the sampling was to determine the proper method of disposal for the septic tank water.

The results indicated that trace concentrations of 1,1,1-trichloroethane (1,1,1-TCA) (1.1 µg/L) and TCE (5.4 µg/L) were present (see Table 15). Although it is possible these results were due to infiltration of groundwater, the results indicated that the wastes from this tank could not be disposed of by a septic system waste hauler. Instead, the water was pumped from this tank into

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

the Frac Tank that was used to containerize other waste water generated during the IRM (see Section 7.3.3). Given the water results, plans were made to collect a sample of the sludge from this tank to determine the best disposal method for this material (see Section 7.3.3).

RAOC-1: Bench Scale Testing

Collection of groundwater from wells BS-2 and BS-4 was conducted on September 19, 2011 for bench scale testing. Results from the VOC screening of the water samples collected for bench scale testing identified the presence of 15.6 µg/L 1,1-dichloroethane (1,1-DCA) and 384 µg/L TCE. These concentrations are in range of the concentrations previously reported from these wells during prior sampling events.

Borings B-33 through B-35 were installed in the vicinity of BS-2 and B-24 on September 19, 2011 in order to collect soils for bench scale testing (see Figure 13A). A composite of the soil collected from borings B-33 to B-35 for bench scale analysis was also analyzed for VOCs and was found to contain 0.21 mg/kg 1,1-DCA and 6.71 mg/kg TCE.

Boring B-39 was installed in the on-site aggregate stockpile to collect a soil sample (BA-B39-S) for pH analysis to determine if use of the aggregate as backfill would create suitable pH conditions for use of sodium lactate to enhance reductive dechlorination (see Figure 13). It was found that the pH of the aggregate was favorable for reductive dechlorination.

Results of the biological testing of these soil and groundwater samples were received from SiREM (see Appendix K) and identified populations of Dehalococcoides microbes. This suggested that the subsurface conditions should provide for natural reductive dechlorination if supplemented with an electron donor application.

Bench testing results indicated that TCE reduction was observed to be progressing through the generation of its daughter products (cis-1,2-dichloroethene [cis-1,2-DCE] and vinyl chloride [VC]) and subsequently to complete destruction of those intermediate products using lactate-amended samples. Based on these results, sodium lactate was the recommended carbon substrate to promote enhanced reductive dechlorination and thus it was proposed to be placed in the excavation and trenches as conceptually set forth in the IRM Work Plan.

It was proposed to apply approximately 500 lbs. of sodium lactate to the bottom of the RAOC-1 source area excavation. This involved two, 55-gallon drums of 60% sodium lactate.

Within the bottom of the RAOC-1 perimeter trench, it was proposed to apply approximately 250 lbs. of sodium lactate along its length. This involved one, 55-gallon drum of 60% sodium lactate solution.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

RAOC-2 and RAOC-3: Waste Characterization Sampling

Collection of soil samples for waste characterization purposes was conducted on September 19, 2011 in the shallow petroleum impacted areas near MW-27, B-31, and the asphalt storage tanks (RAOC-2 and RAOC-3). The sampling included:

- Two discrete soil samples for TCLP VOC analysis (BA-B36-S and BA-B37-S). One sample was collected from near MW-27/B-31 and one was collected from near TP-14, respectively from B-37 and B-38.
- Two composite soil samples (BA-B36/37/38-S and BA-B36A/37A/38A-S) for TCLP SVOC, TCLP Metals, and flashpoint analyses. Sample portions were collected from three locations including: (1) near MW-27/B-31 (sample locations B-38 and B-38A); (2) from the west side of the asphalt storage tanks near TP-14 (sample locations B-37 and B-37A); and (3) from the east side of the asphalt storage tanks (sample locations B-38 and B-38A). Soil observations from the samples collected in proximity to MW-27/B-31 and TP-14 mirrored past observations in these areas and included petroleum odors and elevated PID readings. Soils were not previously sampled on the east side of the asphalt storage tanks, but as expected, these soils also exhibited evidence of petroleum impacts with PID readings of 29 ppm.

Analytical results indicate that the materials were non-hazardous (see Table 16).

On-site Aggregate Stockpile Sampling

On-site aggregate materials had been brought to the site and stockpiled during the course of plant operation to be used during the asphalt production process. The main area of aggregate stockpiling was on the western portion of the site. The on-site aggregate was proposed for use as IRM excavation backfill material. In order to determine if the aggregate would be appropriate backfill, three composite samples were collected for grain size analysis via soil borings (B-40 through B-48) on September 19, 2011. The results indicate that the aggregate samples ranged from 74.7% to 84.3% larger than a #80 sieve (see Appendix L).

Analytical testing was also conducted to determine the suitability of the aggregate material as backfill. On October 20-21, 2011, as agreed with NYSDEC, one discrete sample was collected for TCL VOC + TICs (Method 8260) analysis (BA-TP-20-S) and one 3-point composite sample was collected for TCL SVOC + TICs (Method 8270), TCL Pesticides/PCBs (Method 8081/8082), and TAL Metals (Method 6010/7074) (BA-TP19/20/21-S) from test pits TP-19(IRM) through TP-21(IRM). The VOC portion was collected from TP-20(IRM). All samples were collected from test pit sidewalls from 0 to approximately 5 ft. bgs (see Figure 13). [Please note: Test pit numbering was accidentally duplicated. The test pits referred to here as TP-19(IRM) through TP-21(IRM) are displayed on Figure 13. These are different test pits than those referred to in Sections 3.3 and 4.3.2 as TP-19 through TP-21, which are displayed on Figure 4.]

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

The only compounds detected included a trace concentration of acetone (8.8 µg/kg) and several metals (see Table 17). Although acetone was not detected in the laboratory method blank, since it is a common glassware cleaning agent used in most laboratories, it is extremely volatile and as a result is a very common laboratory contaminant; its trace presence is likely attributable to laboratory contamination. Regardless of its source, all detected compounds were reported at concentrations below the 6 NYCRR Part 375 restricted Commercial and Industrial Use standards and POGW standards, with the exception of calcium and iron. These two compounds are naturally occurring at high concentrations and are not considered to be of concern. Therefore, with the approval of NYSDEC, the aggregate was used as backfill of the excavated areas.

Monitoring Well Abandonment

On October 26, 2011, 11 monitoring wells were abandoned by Nothnagle Drilling under the observation of Stantec in preparation for IRM activities. As outlined in the IRM Work Plan, this included MW-5 through MW-7, MW-9 through MW-14, MW-22, and MW-26 (see Figure 13). Additional wells (BS-2, BS-4, and MW-23) were removed during excavation of RAOC-1. The wells were abandoned in accordance with NYSDEC's Commissioner Policy CP-43 (November 2009).

Fence Installation

In preparation for securing the site for IRM excavation activities, a temporary construction fence and gate were installed on October 31, 2011 along Rte. 19 by K.S. LaForge Excavating, Inc.

7.3.2 IRM Start-up and General IRM Implementation Activities

General activities conducted during the startup of the IRM that were not necessarily RAOC specific include:

- Mobilization of equipment to the site;
- Setting up poly lined, bermed soil staging areas;
- Removal of a large tree at the planned edge of the excavation area at RAOC-1;
- Installation of a silt fence and straw bales prior to the commencement of excavation activities as erosion control measures. During excavation activities, these were inspected weekly to ensure they remained properly in place;
- Approximately 130 tons of surficial asphalt pavement present in the three RAOCs was stripped and temporarily stockpiled onsite in Stockpile SP-2 during November and December 2011. It was trucked off-site on December 29 to 30, 2011 for recycling at the KS LaForge Excavating Inc. facility in Wellsville, NY. See Appendix N for documentation. In April 2012, approximately three cubic yards of surficial asphalt were removed from RAOC-3C and stockpiled for removal from the site during future clean-up activities at the site;

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- Collection of appropriate QA/QC samples (See Table 14), including a rinsate blank collected by pouring deionized water over the decontaminated excavator bucket, duplicates, matrix spike/matrix spike duplicates (MS/MSDs), and aqueous trip blanks;
- Survey of all newly installed wells and final topography by a licensed surveyor. Survey of all other sampling locations, excavation extents, and site features with a handheld GeoXT GPS unit;
- Upon completion of backfilling of the RAOCs, the aggregate borrow area was re-graded in order to create a smooth final grade (see Figure 14); and
- Community Air Monitoring, including air monitoring for particulates and VOCs, was conducted during all intrusive work. IRM CAMP data for 55 days of field activities are provided in Appendix P. Dust levels were predominantly low and there were no issues with elevated downwind PID readings.

7.3.3 RAO-1 IRM Implementation**Preliminary Screening Sampling**

At the commencement of RAO-1 IRM activities, an exploratory test pit was excavated between monitoring wells BS-2 and BS-4. Preliminary soil screening samples (BA-PS1-S through BA-PS4-S) were collected from this test pit for TCL VOC + TICs by Method 8260 analysis. The samples were collected in order to gather soil samples with PID readings of approximately 1-2 to 5-6 ppm. These samples were used to attempt to establish an approximate correlation between field PID readings and lab results in order to better guide confirmatory sidewall and bottom sampling efforts.

The four soil exploratory test pit samples that were submitted had PID readings up to approximately 6 ppm. Analytical data indicated that these samples had low level impacts (maximum TCE concentration of 270 ppb) which are below the Part 375 POGW SCOs (470 ppb for TCE) (see Table 18). As a result of these analyses, excavation at RAO-1 generally continued until a PID reading of 5 ppm or less had been obtained.

The soil sample identified as BA-PS5-S, which was collected from the west central portion of the excavation during the IRM program to assess suspected petroleum impacted soils prior to the completion of the excavation, exhibited a TCE concentration of 390 ppb and total VOC TIC concentration of 328 ppm (Table 18). These concentrations were below the Part 375 Commercial, Industrial, and POGW SCOs and this area was subsequently excavated.

Dry Well

On November 8, 2011, a dry well (DW-1) was investigated beneath a ± 4 ft diameter concrete slab that was uncovered during laboratory building demolition in October 2011. The concrete slab formed the cover for a non-mortared concrete block structure that appeared to be a dry

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

well. The structure was excavated and the soil surrounding it was examined for visual and olfactory impacts and screened with the PID. The only impacts observed were a PID reading of less than 5 ppm near the base of the structure at 8± ft bgs on the western side of the structure. No impacts were observed further to the west. The soil that produced the low level PID reading was stockpiled for off-site disposal and sampled for TCL VOC + TICs (Method 8260) analysis (BA-DW-1-S). The remaining soil and concrete block that did not show evidence of potential impacts were backfilled into the excavation.

The sample exhibited only trace concentrations of methylene chloride and acetone, which may be laboratory artifacts and which were below POGW, Commercial, and Industrial SCOs and thus this structure is not considered to be a site contamination source (see Table 18).

Septic Tank Sampling and Removal

Based on the presence of VOC compounds in the septic water sample results (see Section 7.3.1), the septic sludge from the septic tank near the laboratory building and scale house (Septic-1) was sampled (BA-SL1-S) on November 8, 2011 for TCL VOCs + TICs (Method 8260) to help determine the best method of disposal of the sludge.

The septic system sludge sample exhibited petroleum compounds and slightly elevated concentrations of acetone and methyl ethyl ketone (MEK) which were present at concentrations above the Part 375 POGW SCOs, but well below Commercial and Industrial SCOs (see Table 18). However, neither of these compounds have been reported to be present at concentrations above groundwater standards in prior groundwater sampling at the site. No TCE was reported to be present in the septic system sludge.

The liquids in the septic tank were pumped into Frac Tank #2 (see below Excavation Water Section for discussion of RAOC-1 water containerization and disposal) and then excavation was conducted at the septic tank on November 28, 2011. The tank and its sludge, which had a PID reading of 1.7 ppm, were excavated and staged for off-site disposal with other soils from RAOC-1 (see discussion later in this section). No leach lines were observed coming out of the tank, thus excavation beyond the immediate area of the tank was not necessary. After completion of the excavation, the sidewall and bottom of the excavation surrounding where the tank had been had PID readings of 0 or 0.1 ppm. Given these readings, the excavation was considered complete and one bottom and two sidewall samples were collected for TCL VOC + TICs (Method 8260) analysis (BA-Septic-EB1-S, BA-Septic-ES1-S, and BA-Septic-ES2-S). With the exception of minor staining on the northern and western sidewalls which may have been natural, no evidence of impacts were observed in the soils surrounding the tanks. No compounds were detected in the sidewall and bottom confirmatory samples (see Table 19).

Berm and Shallow Overburden Removal and Sampling

Berm materials along the northern property line that were overlying the RAOC-1 excavation area and shallow overburden materials at RAOC-1 that resided over contaminated soils, with PID readings below 5 ppm, were moved and staged in Stockpile SP-1. Some black staining,

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

potentially asphalt related, was observed on this soil. Per consultation with Mr. Marty Doster and Mr. Anthony Lopes of NYSDEC, this material was sampled to determine if it was suitable for use as backfill. This sample (BA-R1-SP1-S) was submitted for TCL VOC + TICs (Method 8260) and TCL SVOC + TICs (Method 8270) analyses.

The results from the stockpiled berm and shallow overburden soil were below Part 375 POGW, Commercial, and Industrial SCOs (see Table 17). Therefore, NYSDEC approved use of this material as backfill at RAOC-1 and later at RAOC-3.

Other non-impacted soils from above the contaminated interval were staged in Stockpiles SP-3 and SP-4 and later used as excavation backfill. This included soils with PID readings less than 5 ppm with no apparent staining or odors.

Waste Characterization Sampling

During excavation, soils with PID readings above 5 ppm were stockpiled for future off-site disposal. Three waste characterization samples were collected of this material per landfill requirements (BA-R1-WS1-S, BA-R1-WS3-S and BA-R1-WS4-S). Tony Lopes (NYSDEC) indicated on November 10, 2011 that it was not necessary to continue to pursue the Contained-In Demonstration (CID) that has previously been suggested unless it was required by the landfill. After subsequent discussions with the landfill in which the landfill indicated that the CID was not required, the CID was not pursued.

The waste characterization sampling results are presented in Table 16.

Excavation Water

During the course of excavation, significant quantities of water flowed into the excavation, primarily from the upgradient western side of the excavation. To the extent practicable the water was pumped from the excavation both to remove a significant volume of source-area contamination and to facilitate excavation below the water table. Approximately 36,300 gallons of water were pumped into two Frac tanks. Each of these Frac tanks, as well as water from the excavation, were sampled for TCL VOC + TOCs (Method 8260) (BA-R1-FT1-W, BA-FT2-W, and BA-EW1-W). Frac Tank 1 was sampled when it contained approximately 11,000 gallons of water. Additional water from the RAOC-1 excavation was subsequently added which resulted in total of approximately 20,000 gallons of water being stored in this tank, with approximately 16,300 gallons being placed in Frac Tank 2.

The excavation water and the water from the two Frac tanks had detections of chlorinated compounds typically detected in previous rounds of groundwater sampling. MEK was also detected at 1,600 ppb in Frac Tank 2. This tank was recently epoxy coated and, when questioned, the tank supplier indicated the spray coating process involved the use of MEK. Therefore this was assumed to be the source of the MEK in the sample taken from this tank. The Frac tanks were re-sampled in December to obtain a representative sample from Frac Tank

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

1 after it was full (BA-FT1-W2) and to re-evaluate the presence of MEK in Frac Tank 2 (BA-FT2-W2). The samples were analyzed for TCL VOCs + TICs (Method 8260). The results from Frac Tank 1 were similar to the first round of sampling. The results from Frac Tank #2 were similar with the exception that no MEK was detected.

In order to test the effectiveness of the two-drum granular activated carbon system brought onto the site to treat the water, the water from Frac Tank #1 was run through the carbon drums and sampled in November for TCL VOCs + TICs (Method 8260) (BA-CD1-W). For similar purposes, on December 1, 2011, the water from Frac Tank #2 was run through the carbon drums and sampled for TCL VOCs + TICs (Method 8260) (BA-CD2-W). Due to the presence of MEK in the carbon drum effluent from Frac Tank #1, which was believed to be from an adhesive which contained MEK, that was used by TREC to try and fix leaks in the drum fittings, and due to the system leaks, the carbon treatment system was abandoned and a new system was brought onto site. Effluent through the new carbon drums from both Frac tanks was collected on December 13, 2011 (BA-CD1-W2 and BA-CD2-W2).

The treated samples indicated the new system was successful in removing the chlorinated hydrocarbons and no MEK was present, however carbon disulfide was reported to be present. Sample BA-CD2-W2, which came from FT2 was the first sample collected from the new carbon treatment system. This sample was reported to contain a much higher concentration of carbon disulfide (71 µg/l) when compared to the concentration of carbon disulfide (3 µg/l) from the second treatment sample which came from water from FT1 (BA-CD1-W2). Given these results, Stantec reached out to both the contractor to speak to his carbon supplier and to the lab to see if there may have been a source of the carbon disulfide in the carbon drum system (e.g., new tubing that was used) or in a prior sample at the lab which may have carried over into these samples. The lab indicated they ran the samples twice and the results were consistent so it did not appear to be a lab issue. The contractor indicated there were no materials in the system that should have produced carbon disulfide. Regardless of its source, an additional sample was collected from water run through the carbon treatment system from Frac Tank 2 on December 19, 2011 (BA-CD2-W3) and the results were non-detect for all VOCs.

Permission was obtained from NYSDEC on December 19, 2011 to pump water from Frac Tank #1 through the carbon treatment system and discharge it on-site. Thus, the treatment and discharge of FT#1 water was conducted on December 19 through December 29, 2011. Permission was obtained from NYSDEC on December 29, 2011 to pump water from Frac Tank #2 through the carbon treatment system and discharge it on-site. Thus, the treatment and discharge of FT#2 water was conducted on December 30, 2011 through January 6, 2012. Prior to pumping from FT#2, the upstream carbon drum was changed for a fresh carbon drum.

In order to facilitate completion of the treatment of the water from Frac Tank #2, approximately 1,200 gallons were trucked off-site by Green Environment Specialists, Inc. via vac truck to Environmental & Industrial Contracting Service in Niagara Falls, NY on January 6, 2012.

Frac Tank #1 was cleaned on January 4, 2012. Decon water was pumped into Frac Tank #2. Frac Tank #2 was cleaned on January 6, 2012. Decon water was either treated with the carbon system and discharged on-site or was trucked off-site by Green Environment Specialists, Inc.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

via vac truck to Environmental & Industrial Contracting Service in Niagara Falls, NY on January 6, 2012. See Appendix N for the manifest.

The carbon drums were shipped to Acqua Bella Inc. of Chesterfield, NJ. Acqua Bella reports receipt of approximately 600 lbs. of spent, non-hazardous, recyclable carbon on March 21, 2012 (see Appendix N). Acqua Bella shipped this spent carbon to their supplier on May 7, 2012 for regeneration. After their supplier regenerates the spent carbon, they will receive a Certificate of Regeneration. Their supplier estimates that the spent carbon will be regenerated by the end of May. Once provided, documentation will be supplied in the final version of this report.

Soil Excavation and Confirmatory Soil Sampling

Excavation in RAOC-1 was conducted from November 10, 2011 through November 22, 2011. During the course of excavation, 11 sidewall and 7 bottom confirmatory samples were collected for TCL VOC +TICs (Method 8260) analysis (BA-R1-ES1-S through BA-R1-ES11-S and BA-R1-EB1-S through BA-R1-EB7-S). The approximate total sidewall length was 274 ft and the approximate excavation area was 4,800 sq ft. The mapped excavation limits and confirmatory sampling locations are shown on Figure 13A. The excavation depth varied from approximately 10 ft to 14.5 ft. Excavation was conducted vertically and laterally until PID readings taken from excavated soil were less than 5 ppm.

Results from all bottom and sidewall confirmatory samples collected in the RAOC-1 excavation were below Part 375 POGW, Commercial, and Industrial SCOs (see Table 19).

Sodium Lactate Application, Backfilling, and Soil Disposal

Backfilling of the septic area excavation was completed on December 1, 2011. This excavation was backfilled with the clean materials removed from the excavation.

One hundred and ten gallons of 60% sodium lactate solution was mixed with water in an approximately 250 gallon tank. This mixture was pumped into the RAOC-1 excavation via a fire hose on December 1, 2011 where it mixed with existing excavation water. The volume of water in the excavation was higher than originally anticipated, which resulted in further dilution of the sodium lactate solution once in the excavation.

Backfilling of the main excavation at RAOC-1 was conducted on December 1 to 2, and 5 to 6, 2011. Backfilling below both the water table, and the top foot of the excavation, was completed with on-site aggregate, the use of which was previously approved by NYSDEC. The remaining source of backfill material was from clean soils that were removed from the excavation above the contaminated zone, which were approved for use by NYSDEC. The portion of the excavation that was on the neighboring property to the north will be topped with approximately 4 inches of topsoil and seeded later in 2012 when earth work related to the berms and overall site grading is completed.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Approximately 1,635 tons of impacted soil excavated from RAOC-1 and temporarily stockpiled in SP-5/6/7/8, was trucked off-site to Casella's Hyland facility in Angelica, NY on December 7 to 9 and 12, 2011. See Appendix N for waste manifests and weigh tickets.

Trenches

Subsequent to backfill of the source area excavation, the trench designed for placement of sodium lactate to further address the remaining impacted groundwater plume was excavated on December 22 to 23, 2011. The actual location of the trench was modified from the originally-proposed single, curved configuration to a series of shorter trenches to account for the final footprint of the source area excavation, and to minimize the degree of excavation required through the north property line soil berm and the steep slope north of the property line. NYSDEC indicated that these modifications were acceptable provided the remedial goals were still met. The trenches were excavated to 2 feet below the top of the water table. Due to the variable ground surface elevation along the length of the trench, the trench depths ranged from approximately 2 to 11 ft bgs. Unless sufficient groundwater had already flowed into the trench, fresh water was placed in the trench bottom and 55 gallons of lactate solution was added to and mixed with the water prior to backfill with the material that had been removed from the trench.

Well Installation, Development, Water Level Measurement and Sampling

Replacement monitoring well BS-2R was installed on January 26, 2012. The well was installed to provide a groundwater monitoring point within the limits of the RAOC-1 excavation, since the original well at that location had been removed during excavation. The new well was developed on February 7, 2012. All soil cuttings, decon water and development water were drummed. These drums were picked up for off-site disposal at the Veolia Environmental Services facility in West Carrollton, OH on February 21, 2012. See Appendix N for the waste manifest.

Water levels were measured at all existing monitoring wells on March 28, 2012 (see Table 5). A groundwater elevation contour map was developed and is presented on Figure 15. As with previous rounds of water level measurements, shallow overburden groundwater was found to flow away from the northeast portion of the Site. Flow is toward the north, northeast, east and southeast.

Monitoring wells BS-2R, BS-3, MW-8, MW-25, MW-27, and MW-28D were sampled on March 28-29, 2012 for TCL VOCs + TICs (Method 8260), total organic carbon (TOC) (Method 415.1), total sodium (Method 6010), and dissolved manganese and arsenic (Method 6010, filtered in the field). Results are presented in Table 23. Field parameters included pH, temperature, oxidation-reduction potential (ORP), conductivity, dissolved oxygen and ferrous and total iron (iron portion filtered in field) (see Table 7). Purge water was containerized and will be disposed of after a future sampling round.

Anaerobic conditions are present in all the wells, which is favorable for ERD. While the desired reducing conditions (negative ORP) were only reported in one well (MW-8), the ORP values at all other wells are decreasing and this indicates that the desired reducing conditions should be attained in the future. Total organic carbon (TOC) is another remedial parameter, that was monitored. In general, TOC levels were found to be lower than what is desired under optimal

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

conditions. The low TOC levels were likely caused by the dilution of the sodium lactate by the larger-than-anticipated-volume of water in the excavation. However, this should not impede the effectiveness of the treatment program because the removal of the source area soils should result in reduction in contaminant levels in groundwater over time.

VOCs were generally found at low levels that are near or below standards outside the source area (see Table 23 and Figure 16). However, at downgradient well MW-8, the concentration of total VOCs rose slightly as compared to the most recent previous round (an increase from 8.5 to 19 µg/L), with most of the increase attributable to cis-1,2-DCE at 9.9 µg/L. The increase in concentration of cis-1,2-DCE, a breakdown product of TCE, is a positive development as it 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, it is expected that total VOC concentrations will decrease. (We can't say "continue" to decrease because there was actually an increase at MW-8 and there were not reductions in the source area after application of sodium lactate when compared to the April 2011 results.)

In the source area, *Dehalococcoides* (the microbes most responsible for reductive dechlorination) populations have not shown an increase when compared to baseline sampling (3 x 10³ cfu/mL for both sampling events). This probably reflects the low chlorinated VOC levels, combined with the low TOC levels and the current lack of optimal reducing conditions, which are probably related to the dilution of the sodium lactate. The decreasing trend in ORP values should create reducing conditions in order to establish a more favorable environment for *Dehalococcoides* and the reductive dechlorination of TCE and its daughter products in groundwater. In addition, the removal of the source area soils should result in reduction in contaminant levels in groundwater over time. The next quarterly groundwater sampling event is planned for the end of June 2012 which should provide further information regarding contaminant trends.

7.3.4 RAOC-2 IRM Implementation

Excavation in RAOC-2 was conducted on December 13, 2011. During the course of excavation, four sidewall and one bottom confirmatory samples were collected for TCL VOC +TICs (Method 8260) and TCL SOVC + TICs (Method 8270) analyses (BA-R2-ES1-S through BA-R1-ES4-S and BA-R2-EB1-S). The approximate total sidewall length was 116 ft and the approximate excavation area was 628 sq. ft. The mapped excavation limits and confirmatory sampling locations are shown on Figure 13A. The excavation extended to approximately 2 ft below grade and did not encounter groundwater.

Excavation sidewall and bottom confirmatory samples indicated that the excavation sufficiently removed impacted soil, i.e. no exceedences of Commercial and Industrial Use SCOs were observed in the analyzed samples (see Table 20). Two of the sidewall samples had slight (67 and 63 µg/kg vs. SCO of 50 µg/kg) exceedences of the POGW SCO for acetone. Acetone is a common laboratory contaminant and in previous groundwater sampling, including at nearby MW-27 and MW-23, there were no exceedences of groundwater standards for acetone (see

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Tables 12 and 23). Thus, the presence of acetone in soils above the POGW SCO is not of concern.

Approximately 75 tons of soil were excavated from RAOC-2 and stockpiled with RAOC-3 soil for offsite disposal. This material was trucked off-site to Casella's Hyland facility in Angelica, NY on December 20 and 21, 2011. See Appendix N for manifests and weigh tickets.

7.3.5 RAOC-3 IRM Implementation

During excavation of the impacted soil in RAOC-3, it became evident that two areas of impacted soil existed, an eastern (RAOC-3B) and a western (RAOC-3A) sub-area (see Figures 13 and 13A). Impacts at RAOC-3A 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.

As excavation advanced in RAOC-3B, apparent petroleum product was observed within a deposit of coarse gravel and cobbles at depths from approximately 5 ft to 8 ft bgs. The water table was generally encountered at 5 ft bgs. As the gravel was excavated, a floating layer of light non-aqueous phase liquid (LNAPL) (identified through TPH analysis as motor/lube oil) developed on the water surface in the excavation. Excavation was conducted until the asphalt plant was reached on the southwest side of the eastern excavation. In Spring 2012, the plant was removed, a boring program was conducted to determine the extent of the impacts around the asphalt plant, and excavation resumed in the vicinity of the former plant footprint (RAOC-3C). Soil and groundwater conditions observed in this excavation were very similar to those during excavation of RAOC-3B, with the exception of a markedly-reduced petroleum product presence.

Soil Boring Programs

Two soil boring programs were conducted in the eastern portion of RAOC-3 (RAOC-3B and RAOC-3C) in order to delineate the extent of the LNAPL. The first program was conducted shortly after the LNAPL was found at RAOC-3B. It was conducted on December 5, 2011 to attempt to delineate the extent of the petroleum product. Sixteen Geoprobe borings (B-49 to B-64) were completed (see Figure 13A). Product was observed in borings B-49, B-52, and B-64. A sheen was observed on soils in boring B-59. No impacts were observed in the other borings. Appendix B presents boring logs. Five soil samples were collected at apparently clean locations (BA-R3-B50-S, BA-R3-B51-S, BA-R3-B53-S, BA-R3-B55-S, and BA-R3-B57-S) for analyses for TCL VOC + TICs (Method 8260) and TCL SVOC + TICs (Method 8270). All sample results were below Part 375 POGW, Commercial, and Industrial SCOs (see Table 21).

Subsequent to removal of the asphalt plant in March 2012, an additional boring program was conducted on April 2, 2012 in order to investigate the extent of the petroleum product in the vicinity of the plant. Thirteen Geoprobe borings (B-66 to B-78) were completed. Figure 13A presents boring locations and Appendix B presents boring logs. Product was observed on soils

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

or drilling rods at borings B-69 and B-77. Petroleum product or organic odors were observed at B-74. No impacts were observed in other borings.

The observations made during the boring programs were used to guide subsequent excavation work at RAOC-3C.

Shallow Overburden Removal and Sampling

In November and December 2011, surficial soils from RAOC-3 that did not appear to be impacted were staged in SP-10 and sampled on December 16, 2011 (BA-R3-SP10-S) for TCL VOCs + TICs (Method 8260) and TCL SVOCs + TICs (Method 8270). No compounds were detected above the Part 375 POGW, Commercial and Industrial SCOs. NYSDEC approved re-use of this material as backfill at RAOC-3.

Similarly, during the April 2012 excavation at RAOC-3C, shallow overburden was removed, stockpiled, and later re-used as backfill.

Concrete Cradle Removal

The two linear concrete cradle structures located beneath the former asphalt tanks were demolished and the concrete was stockpiled onsite for later removal and offsite crushing/recycling with approval from NYSDEC. Approximately 135 tons of concrete were removed from site and sent to the KS LaForge Excavating Inc. disposal/recycling facility in Wellsville, NY on December 28 and 29, 2011.

Soil Excavation and Confirmatory Soil Sampling

Soil excavation was conducted at RAOC-3A and RAOC-3B during the period from November 28, 2011 until December 27, 2011. As discussed above, two areas of impacts were found. On the western side of RAOC-3 (RAOC-3A), impacts were associated with those found previously at TP-14 (see Sections 3.3 and 4.3.2 and Appendix A). Elevated PID readings, staining and petroleum product odors were observed at depths ranging down to approximately 4.5 ft bgs. Excavation was generally conducted until PID readings were below 50 ppm with no strong petroleum product odors.

On the eastern side of RAOC-3 (RAOC-3B), LNAPL was discovered within a deposit of coarse gravel and cobbles at 5 to 8 ft bgs, with the water table situated at 5 ft bgs. PID readings were not elevated in this portion of the excavation. In December 2011, excavation was conducted either until the extent of the LNAPL coated gravel was removed (along the northwest, north, east, and southern sidewalls) or until the asphalt plant was reached (along the southern portion of the western sidewall). In March 2012, the plant was removed, and in April 2012, an exploratory Geoprobe program was conducted, and excavation resumed in the former plant

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

footprint (RAOC-3C). In order to facilitate soil removal, two concrete piers that formerly supported the steel dryer cylinder were removed and several concrete piers, footings and slabs were removed from the northern end of the plant. Forty-seven tons of concrete were stockpiled and taken from the site on April 10, 2012 to the KS LaForge Excavating Inc. disposal/recycling facility in Wellsville, NY. See Appendix N for weigh summaries.

Similar to RAOC-3B, the limits of the excavation at RAOC-3C were generally determined by the extent of the LNAPL or significantly-stained soils. The soil types (generally coarse gravel) and the vertical thickness (2-3 ft) of the impacts were similar to those observed at RAOC-3B, however the volume of LNAPL entering the excavation appeared to be significantly less than that previously observed in the December 2011 excavation. A relatively minor amount of impacted soil (approximately 2-3 cubic yards) was left in place in the excavation surrounding the water supply well in order to avoid potentially damaging the well casing. This impacted material is similar to soils sampled in sidewall sample R3-ES6 in December (see below for a discussion of sidewall and bottom sampling and results). With the exception of an exceedance of the POGW SCO for acetone, there were no other exceedances in this sample. The level of acetone was three to four orders of magnitude below the Commercial and Industrial SCOs. Because acetone has not been detected in this area above groundwater standards (including MW-10, MW-11, and MW-65), the acetone in the sidewall sample is not considered to be of concern. 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 order to confirm that the previous (2011) excavation of RAOC-3B had sufficiently removed LNAPL impacted materials along the western periphery, three confirmatory test excavations were performed on April 5, 2012 (see Figure 13A) in that area. These test pits encountered excavation backfill materials (aggregate or sand/gravel backfill, and granular gypsum) from the previous excavation at RAOC-3B or non-impacted materials, such as native silts, that showed no signs of petroleum product, staining, or elevated PID readings. Based on these findings, it was judged that excavation at RAOC-3 was complete.

The excavation at RAOC-3, including all three subareas (RAOC-3A, RAOC-3B, and RAOC-3C), ultimately totaled approximately 3,400 square feet with approximately 490 ft of sidewall. Impacted materials were staged in Stockpiles SP-9, SP-11, and SP-12. Some of the materials removed from the eastern portion of the excavation were removed from beneath the water table. In order to assist with solidification of these materials, lime was added to them prior to disposal.

A total of 16 confirmatory excavation sidewall and 10 bottom samples were obtained in the RAOC-3A/RAOC-3B/RAOC-3C excavation. With the exception of one detection of acetone at sidewall sample BA-R3-ES6-S, results from all bottom and sidewall confirmatory samples collected in the RAOC-3 excavation were below Part 375 POGW, Commercial, and Industrial SCOs (see Table 21). Acetone is a common laboratory contaminant and the acetone detection was above POGW SCOs in sidewall sample BA-R3-ES6-S, but well below Commercial and Industrial SCOs. There have been no exceedances of groundwater guidance values for

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

acetone in this area. It should also be noted that this sample was collected in an area where the additional RAOC-3C excavation was conducted in April 2012.

Excavation Water and LNAPL

LNAPL was present throughout essentially all of the eastern portion of excavation at RAOC-3 (RAOC-3B and RAOC-3C). Throughout the period in which the excavations were open, sorbent pads and booms were placed on the floating LNAPL layer in the excavation and replaced as they became saturated. In addition, in December 2011 to January 2012 a vacuum system was used to periodically vacuum product from the surface of the water table. This water/product was initially pumped into 55-gallon drums. With the exception of one drum, the water/product was then pumped into Frac Tank #3. Residual product, sorbent pads/booms, and the pump and hosing used to pump the product remained in the drum.

The drum containing the oil product and related materials was transported for off-site disposal at the Veolia Environmental Services facility in West Carrollton, OH on February 21, 2012. See Appendix N for the waste manifest.

Approximately 9,500 gallons of a water and oil mixture were pumped from RAOC-3B into Frac Tank #3 to facilitate excavation below the water and to remove additional LNAPL. This water and LNAPL was trucked off-site via Tonawanda Tank Transport Service, Inc. vac trucks on January 3 and 5, 2012 to Green Environmental of Niagara Falls, NY. Decon of Frac Tank #3 was completed on January 5 and 6, 2012. Decon water was trucked off-site via Green Environmental Specialists, Inc. vac truck on January 6, 2012 to Environmental & Industrial Contracting Service of Niagara Falls, NY. See Appendix N for the waste manifests.

Approximately 800 to 1,000 gallons of water with relatively minor amounts of oil product were pumped from RAOC-3C into a Frac Tank #4 to facilitate excavation below the water and to remove additional LNAPL. This water and LNAPL were trucked off-site via a Green Environmental Specialists, Inc. vac truck on April 10, 2012 to Environmental & Industrial Contracting Service's facility in Niagara Falls, NY. Decontamination of Frac Tank #4 was completed after the tank was pumped out and the decon water was transported and disposed of with the water from the excavation. See Appendix N for the waste manifests.

Samples of the LNAPL were collected on December 6, 2011 (BA-R3-PD1-O) and January 3, 2012 (BA-R3-PD2-O) for analysis of Total Petroleum Hydrocarbon Products by NYSDOH Method 310.13. Sample BA-R3-PD2-O was analyzed by Paradigm Environmental Services, Inc. Sample results indicated that the LNAPL was motor/lube oil. Sample BA-R3-PD1-O was also analyzed for PCBs and none were detected (see Table 22).

The water that accumulated in the RAOC-3B excavation underlying the LNAPL was sampled for dissolved iron, total iron, nitrate, sulfate, sulfide, and alkalinity on December 15, 2011 (BA-R3-

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

EW1-W) to assist in evaluating bioremediation options. The portion for dissolved iron was filtered in the field with an in-line 0.45 µ filter. Field test kit analysis of dissolved oxygen (DO) was also conducted. DO was found to be 3.3 mg/L. The excavation water was also sampled on December 21, 2011 (BA-R3-EW2-W) for TCL VOCs + TICs (Method 8260), TCL SVOCs + TICs (Method 8270) and RCRA Metals (Method 6010).

With the exception of an unfiltered iron sample, the water sampling results did not exhibit contaminants at concentrations in excess of NYSDEC's groundwater standards (see Table 15). A filtered iron sample indicated that dissolved iron was not present in the water. In terms of bioremediation options, the results 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 sulfate-reducing bacteria. The use of gypsum was approved by NYSDEC.

Gypsum & Fertilizer Application, Backfilling, and Soil Disposal

Backfilling of RAOC-3A was completed on December 16, 2011. This excavation was backfilled from on-site aggregate stockpiles.

Between December 30, 2011 and January 5, 2012, approximately 22 tons of granular agricultural-grade gypsum were added to the RAOC-3B excavation prior to backfill, along with 50 lbs. of 10:10:10 fertilizer. These were mixed with the groundwater at the base of the excavation. The base of the excavation in the portion of RAOC-3B where the petroleum product had been present and the top approximately one foot of the excavation was then backfilled with onsite aggregate; the remainder was backfilled with previously-excavated overburden material from RAOC-1 and RAOC-3, as approved by NYSDEC to match existing grade.

On April 4, 2012, approximately 6 tons of granular agricultural-grade gypsum as well as 50 lbs. of 10:10:10 fertilizer were added to the excavation at RAOC-3C. These were mixed with the soil in the bottom of the excavation and with whatever water had infiltrated since the de-watering pump was turned off. The bottom foot of the excavation was backfilled with on-site aggregate. Then previously-stripped clean shallow soil was used as backfill. Finally, the top 1 to 2 ft were backfilled with aggregate.

Approximately 960 tons of impacted soil excavated from RAOC-3A and RAOC-3B and temporarily staged in SP-9 and SP-11 were combined with soils from RAOC-2. One truckload of lime was added to the stockpile(s) to absorb free water in the soil prior to transport for disposal. The soil was trucked off-site to Casella's Hyland facility in Angelica, NY on December 20-21 and 28-29, 2011. See Appendix N for waste manifests and weigh tickets.

Approximately 245 tons of impacted soil was excavated from RAOC-3C and temporarily staged in SP-12. One truckload of lime was added to the stockpile to absorb free water in the soil prior

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

to transport for disposal. The material was trucked off-site to Casella's Hyland facility in Angelica, NY on April 10, 2012. See Appendix N for waste manifests and weigh tickets.

Well Installation, Development and Sampling

Monitoring well MW-65 was installed on January 26, 2012 to monitor groundwater in the vicinity of RAOC-3. The well was developed on February 7, 2012. All soil cuttings, decon water and development water were drummed. These drums were picked up for off-site disposal at the Veolia Environmental Services facility in West Carrollton, OH on February 21, 2012. See Appendix N for the waste manifest.

MW-65 was sampled on March 28, 2012 for TCL VOCs + TICs (Method 8260); TCL SVOCs (Method 8270); nitrogen, nitrate (Method 300.0); nitrogen, nitrite (Method 300.0); nitrogen, nitrate-nitrite (Method 300.0); and sulfate (Method 300.0). Field parameters included pH, temperature, oxidation-reduction potential, conductivity, dissolved oxygen and ferrous and total iron (iron portion filtered in field) (see Table 7). Purge water was containerized.

Only one VOC (1,1-DCA) was detected and it was found at a concentration below the groundwater standard (see Table 23). No target SVOC compounds were detected, although some tentatively identified compounds were detected which are not of concern. There are anaerobic, reducing conditions at this well with increased sulfate levels. These are favorable conditions for continued successful sulfate treatment of residual petroleum hydrocarbons.

Purge water was containerized in a 55-gallon drum and will be disposed of after a future sampling round. The next quarterly monitoring event for MW-65 is planned for the end of June 2012.

7.3.6 Supplemental IRM Activities**Observation of Demolition, Dismantling, and Site Cleanup**

Stantec observed the demolition and/or dismantling of buildings, structures and equipment, and the removal of surficial debris by KS LaForge Excavating, Inc. on April 25 through May 4, 2012. This included:

- Dismantlement, demolition and/or removal of the control tower, maintenance garage, oil storage shed, a discarded "heater" (previously used to maintain heat in the plant liquid asphalt piping) and sheet piling. The concrete building slabs were left in place, with the exception of the oil storage shed slab, as described below. During invasive work, such as removal of sheet piling, the Community Air Monitoring Program (CAMP) was implemented. Soil exposed during these activities was visually examined and periodically screened with a PID. Except as noted below, no elevated PID readings or evidence of contamination (i.e. odors, staining, etc.) were noted.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- The removal of the concrete pad and support columns beneath the former asphalt plant was largely completed from April 25 to May 1, 2012. It was not possible to remove the below grade portions of one concrete footer and three sub-slab columns in this area because of their size and high rebar density. One above grade support column was oil stained from the conveyor belt operation. The stained concrete was segregated from the other unstained concrete. The stained concrete was staged on and covered with plastic sheeting. Minor soil staining was observed around the stained column. The stained soil was excavated and staged on and under plastic sheeting. This material was trucked off-site by LaForge Disposal Service, Inc. (LaForge) to Casella's Hyland Landfill in Angelica, New York on May 17, 2012. See Appendix N for waste manifests and weigh tickets.
- The oil storage shed was demolished on April 25, 2012. The concrete floor slab and the bottom course of the masonry block walls were oil stained. The stained material was staged on and covered with plastic sheeting. Small amounts of oil-stained lumber were also included with the staged concrete. No soil staining was observed under the slab.

Pursuant to conversation with a Casella representative, representative concrete samples were analyzed for TCLP VOCs, TCLP SVOCs, TCLP metals and TCLP herbicides (BA-OSF1-S). Results indicate that the concrete rubble is non-hazardous (see Table 16) and suitable for landfill disposal. This was trucked off-site by LaForge to Casella's Hyland Landfill on May 17, 2012. See Appendix N for waste manifests and weigh tickets..

- The sheet piling was removed from April 25 to May 2, 2012. Stantec observed the removal and periodically screened the exposed soil with a PID. No staining or PID readings were observed. Upon completion of the removal of the sheet piling, regrading was completed to create a smooth final grade.
- Surficial debris was removed from various locations across the site (primarily concentrated in the berm areas) on May 2,3, and 17, 2012. The debris included concrete, asphalt, scrap metal, lumber, etc. Soil exposed during clean-up was visually examined and screened by Stantec. No odors, staining or elevated PID readings were observed. Silt fencing was moved to the northeast corner of the site prior to some of the clean-up activities in that portion of the site for erosion control purposes.
- Clean scrap metal from equipment dismantling and salvage activities was transported to Hornell Waste Materials or to LaForge's yard for future re-use or recycling. Sheet piling, straight structural steel, and plate steel were taken to LaForge's facility for sale or re-use. Uncontaminated concrete, asphalt and green waste was transported to LaForge's facility for recycling. Other waste materials from demolition, dismantlement and clean-up activities were either sent to Casella's Hyland Landfill in Angelica, New York or to Southern Tier Kleen Fill Inc. in Wellsville, NY. See Appendix N for documentation.

Maintenance Garage Septic System

A septic tank and an associated dry well previously located west of the maintenance building were uncovered on April 25, 2012. The septic tank was cylindrical and measured approximately

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

four feet in diameter by approximately four feet deep. The septic tank was essentially full of sludge. The dry well was also approximately four feet in diameter. It contained three to four inches of water and sediment/sludge. The septic system served a bathroom in the former maintenance building. There were no obvious indications of floor drain or vehicle bay discharges to it.

Based on a low PID reading (5.3 ppm), a sheen on the sludge in the septic tank, and a discussion with the Wellsville Wastewater Treatment Plant Manager, the sludge in the septic tank (BA-Septic-2-S) and the water in an associated dry well (BA-DW2-W) were sampled for TCL VOCs + TICs (Method 8260) and TCL SVOCs + TICs (Method 8270) on May 1, 2012.

No target analytes were reported in the drywell water sample. There were low estimated concentrations of SVOC TICs (see Table 15) in the dry well water samples. Low concentrations of several non-chlorinated VOCs were reported in the sludge (see Table 18). The only SCO exceedances were an exceedance of the POGW SCO for an estimated concentration of acetone and an exceedance of the POGW, Commercial and Industrial SCOs for total SVOC TICs. Since acetone is commonly detected as a laboratory artifact and since there have been no exceedances of groundwater guidance values for acetone in this area, it is assumed to be an anomaly and is not considered to be an indication of actual contamination. By its nature, sewage contains a variety of non-target organic compounds that are readily degradable and which are not typically associated with petroleum or hazardous material releases. Such compounds are assumed to comprise most or all of the SVOC TICs. It is further noted that the septic tank sludge appears to be contained within the septic tank itself, which discharges only to the drywell. Given these factors, no additional sampling appears to be warranted in that area.

The removal of the septic system and drywell, and their contents was conducted on May 17, 2012. The underlying and surrounding soils were screened and visually evaluated during removal. No impacts were observed during the removal and therefore no confirmatory soil sampling was conducted. The septic sludge and water from the dry well were pumped out by Dan Shea Septic Tank Service of Wellsville, NY prior to removal of the structures and was sent to the Wellsville, New York Wastewater Treatment Plant (WWTP) on May 17, 2012. See Appendix N for documentation.

Heater Area Excavation

The discarded heater was removed from the area to the north of the maintenance garage on April 27, 2012. Stained soil was observed directly beneath it. The stained soil was temporarily covered with plastic sheeting until it was excavated on May 2, 2012.

A petroleum odor was noted during the excavation on May 2, 2012. Groundwater was encountered at approximately 3.5 ft bgs and an oily sheen was observed on the groundwater in the open excavation. Excavation then continued above the water table laterally toward the west and north until visual staining, sheen and PID readings were no longer discernible. During

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

excavation, a sample (BA-Boiler-1-S) of the most impacted soil (based on visual observation, odor and a PID reading of 372 ppm) was collected and subsequently analyzed for TCL VOCs + TICs (Method 8260) and TCL SVOCs + TICs (Method 8270). In addition, an approximately three inch layer of unsolidified asphalt with a petroleum odor and PID reading of about 70 ppm was encountered at a depth of a few inches in the central portion of the excavation.

In order to access the western portion of the impacted area, approximately 5 cy of berm material (non-impacted sand and gravel fill) was relocated to an area immediately east of the excavation on May 3, 2010 (see Figure 13B). The relocated berm material exhibited no odors, staining or elevated PID readings.

The eastern portion of the excavation was further excavated on May 4, 2012. Prior to excavation, approximately 200 gallons of accumulated water were pumped from the excavation into a portable tank. A relatively limited area of impacted material was then excavated until natural soil (brown clayey silt) exhibiting no significant odors, staining or PID readings was encountered both vertically and laterally to the east. Some oil accumulated on the surface of the water; the oil was observed to be leaching from a small pocket or layer of unsolidified asphalt. A water sample (BA-Boiler-W) was collected from the excavation and subsequently analyzed for TCL VOCs + TICs (Method 8260) and TCL SVOCs + TICs (Method 8270).

Kevin Glaser of NYSDEC visited the site several times from May 2 to 4 and observed the conditions first hand. In discussions with Mr. Glaser it was agreed that the asphaltic materials that remained in the excavation did not need to be removed and would be covered with at least one foot of clean soil. This approach is consistent with the intent of the proposed remedial actions for the berms, whereby asphaltic material will be allowed to remain on site if contained and capped with at least one foot of clean soil.

The final excavation measured approximately 410 square feet with roughly 105 linear feet of sidewall. Four sidewall confirmatory soil samples (BA-Boiler-ES2-S through BA-Boiler-ES5-S) were collected (see Figure 13B). A bottom sample was obtained from the central portion of the excavated area. At this location the bottom was deepened slightly to a point below the water table (approximately 5 ft bgs) and natural silt deposits were encountered. No evidence of residual oil or sheen was observed, nor were there elevated PID readings in this area. A sample of this soil was collected as a bottom confirmatory sample (BA-Boiler-EB1-S) for TCL VOCs + TICs (Method 8260) and TCL SVOCs + TICs (Method 8270) analyses.

The analytical results are summarized on Tables 15 and 24. The sample of the impacted material that exhibited the highest (372 ppm) PID reading had no detections of compounds at concentrations in excess of POGW, Commercial and Industrial SCOs or groundwater standards. The excavation bottom and sidewall soil samples also did not contain contaminant concentrations in excess of the standards; in fact some samples were non-detect for all analytes. No VOCs or SVOCs were detected in the groundwater sample.

Based on the analytical results, visual observations and PID screening, the excavation appears to have satisfactorily addressed the impacted area. On that basis, no further remediation or

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

groundwater monitoring is warranted for the heater area. The excavation was backfilled with clean on-site aggregate on May 17, 2012. After removal of aggregate from the borrow area, a smooth final grade was created in the borrow area.

Approximately 87 tons of impacted soils were trucked off-site by LaForge to Casella's Hyland Landfill on May 16, 2012. See Appendix N for waste manifests and weigh tickets. The water pumped from the excavation was transported to the Wellsville WWTP by Dan Shea Septic Tank Service of Wellsville, NY on May 17, 2012 pursuant to approval from the facility manager, Mike Smith. See Appendix N for documentation.

7.4 IRM QA/QC EVALUATION

Laboratory reports received from TestAmerica or Paradigm for all samples submitted for laboratory analysis during the IRM were forwarded to DVS for review of the usability of the laboratory analytical data. Results of the reviews were reported in Data Usability Summary Reports (DUSRs), which are provided in Appendix M.

As documented in the DUSRs, the data usability reviews were completed by DVS using applicable guidance from the USEPA Region 2 standard operating procedures for data validation and the USEPA National Functional Guidelines for Data Review. Full reviews of the data deliverable summary forms and raw sample data for IRM samples and limited reviews of raw QC data were performed in accordance with the above-referenced guidance. The scope of their reviews are described in detail in the DUSRs.

In summary, the laboratory data were generally found to be usable as reported by the lab or usable with qualification. Exceptions include data that were rejected as unusable due to apparent matrix effects. This is limited to seven VOCs in one sample, one SVOC phenolic analyte in one sample and two SVOC phenolic analytes in three other samples.

Examples of issues that required the data to be qualified during data review included poor duplicate correlation, elevated surrogate recoveries, spectral matrix interferences, poor or incorrect spectral match, calibration standards or laboratory control samples (LCS) outside acceptable responses, etc.

The reviewed results described in the DUSR have been incorporated into the various IRM data summary tables presented in this report (data presented in Tables 10 and 15 through 24).

7.5 SUMMARY OF VARIANCES FROM IRM WORK PLAN

The IRM was conducted largely in conformance with the IRM Work Plan, mainly with the exception of circumstances in which unexpected conditions were encountered. Variances from the IRM Work Plan were conducted with the knowledge and/or approval of NYSDEC and included:

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- The exact outlines of excavation at RAOC-1, RAOC-2 and RAOC-3. The actual excavation extent varied from anticipated extent due to field observations. Variations at RAOC-1 and RAOC-2 were relatively minor. Actual excavation extents were based on PID readings, and visual and olfactory observations. Variations at RAOC-3 were more significant and are discussed below.
- Silt fence placement.
 - Silt fence placement at RAOC-1 was changed to avoid installation of a silt fence upgradient of the excavation on a steep slope.
 - A small vehicle access area was left in the northwest/upgradient side of the silt fence surrounding the on-site aggregate stockpile area.
- At RAOC-1:
 - The collection of the preliminary screening samples from test pits was not originally planned in the IRM WP. With approval from NYSDEC, these samples were used to attempt to establish an approximate correlation between field PID readings and lab results in order to better guide confirmatory sidewall and bottom sampling efforts.
 - The IRM WP called for a portion of the berm overlaying the excavation area to be relocated along the adjacent berm. During the execution of the IRM, and with approval from NYSDEC, it was decided to use the berm soil as backfill. Because some staining was observed on the soils, they were sampled to confirm that it was appropriate to re-use them in the excavation.
 - More excavation groundwater was encountered than anticipated. However, it was managed as described in the IRM WP, with containerization and characterization as needed for disposal.
 - The dry well was not discovered until the laboratory building was demolished. Upon its discovery, investigation proceeded as previously described.
 - The trench position was shifted from the originally-proposed configuration to account for the final footprint of the source area excavation, and to minimize the degree of excavation required through the north property line soil berm and the steep slope north of the property line.
 - Tony Lopes (NYSDEC) indicated on November 10, 2011 that it was not necessary to continue to pursue the previously suggested CID unless it was required by the landfill. After subsequent discussions with the landfill in which the landfill indicated that the CID was not required, the CID was not pursued.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

- At RAOC-3:
 - LNAPL was unexpectedly encountered at RAOC-3B and RAOC-3C. This prompted the performance of two exploratory Geoprobe programs, increased the footprint of the excavation, necessitated collection of LNAPL and excavation water samples, necessitated pumping of groundwater and/or LNAPL into drums and Frac Tanks #3 and #4, prompted the placement of gypsum and fertilizer into the excavation as remedial aides, and gave rise to the need for monitoring well installation, development and sampling.
 - The IRM WP did not describe re-use of shallow non-impacted soils at RAOC-3 because it was not anticipated that there would be shallow non-impacted soils. When these were encountered on the eastern side of ROAC-3, they were sampled to demonstrate their appropriateness for re-use as backfill.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****8.0 Summary and Conclusions**

8.1 REMEDIAL INVESTIGATION

The RI of the former Allegany Bitumens Belmont Asphalt Plant Site resulted in the following findings: (1) chlorinated VOC impacts were present in subsurface soil and shallow groundwater in the vicinity of the laboratory building; (2) petroleum impacts were present in surface and subsurface soil in two localized areas in the vicinity of the asphalt tanks; and (3) although debris is present in the perimeter berms, no significant “contamination” issues were identified. In addition to the removal and/or demolition of the various equipment and structures that were needed to facilitate remediating items 1 and 2 above, and preparing the site for future development, regrading and capping of the berms will be needed.

Chlorinated VOCs in the Laboratory Building Area

Passive soil gas sampling results showed an area of chlorinated VOC detections extending northward from the laboratory building area. The detection of chlorinated VOCs in the soil gas corresponded with detections of these compounds in the soil and in groundwater downgradient from the laboratory building area.

All subsurface soil sample sampling results from the wells and soil borings were well below Commercial and Industrial SCOs. Exceedances of Part 375 POGW SCOs (see Section 4.3 for a discussion of the use of POGW SCOs) were reported for chlorinated VOCs in subsurface soil samples from one monitoring well and four soil borings just to the east and southeast of the laboratory building, including BS-2, BS-4, B-16, B/MW-23, and B-24. Trichloroethene (TCE) concentrations in the laboratory source area ranged up to 35 ppm. Concentrations decreased significantly away from the source area. The area with known exceedances of SCOs was approximately 55 ft in the north - south direction and 30 ft in the east - west direction. Based on PID readings and soil sampling results, the estimated depth of the contaminated soil interval in the source area was approximately 4 to 15 ft bgs.

Shallow overburden groundwater flow was found to flow away from the northwest portion of the Site (Laboratory Building area) toward the north, northeast, east and southeast. Variations in water levels of up to 3.75 ft were observed seasonally.

Two rounds of groundwater sampling were conducted with the first round occurring in January - February 2011. Exceedances of groundwater standards were reported for chlorinated VOCs at four locations at, and downgradient from, the laboratory source area (BS-2, BS-4, MW-23, and MW-25) with total chlorinated ethene and ethane concentrations, predominantly TCE, ranging up to 12.4 ppm. The highest concentrations were at BS-2 and BS-4.

The second round of groundwater sampling was conducted in April 2011. Exceedances of groundwater standards were reported for chlorinated VOCs at four locations at, and

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

downgradient from, the laboratory source area (BS-2, BS-4, MW-8, and MW-25) with total chlorinated ethene and ethane concentrations, predominantly TCE, ranging up to 0.1 ppm. The highest concentrations were again at BS-2 and BS-4. VOC concentrations reported during the second round of sampling were generally lower than those observed during the first round of sampling. The reduction of VOC concentrations was believed to be related to the considerably higher (up to 4.3 feet higher) water table at the time of the second round of sampling.

A deep overburden monitoring well installed in the Laboratory Building source area, and the on-Site water supply well, were both found to be free of Site related groundwater contamination. Therefore, there was no evidence that the chlorinated VOCs contaminants found in the shallow overburden in the vicinity of the laboratory building have migrated downward.

Petroleum Impacts in the Asphalt Tank Area

Passive soil gas sampling results showed an area with low level concentrations of petroleum VOCs near the asphalt tanks and the maintenance garage.

Low level petroleum VOC detections below the Commercial and Industrial Part 375 SCOs at TP-14, located near the asphalt tanks, correspond to observations of asphalt pieces with an oily appearance from approximately 3 ft bgs, photoionization detector (PID) readings up to 804 parts per million (ppm) and a strong petroleum odor, as well as detections of petroleum VOCs in the PSG survey in this area. No impacts were reported in soil and groundwater samples from the maintenance garage area, including at B/MW-9, B-19, and B-20.

To the west of TP-14 and the asphalt storage tanks, low level detections of petroleum VOCs were found in soils at B/MW-27 and B-31. These detections were below SCOs and correspond to near surface (0.3 to 1.1 ft bgs) elevated PID readings (41 to 58 ppm) and petroleum odors observed during logging of soils. Overall, there were no petroleum related Part 375 SCO exceedances among the subsurface soil samples.

Further, no petroleum related compounds were reported in any of the groundwater wells at the Site, including downgradient of the above locations, hence there is no indication that the petroleum related soil impacts had affected groundwater.

Perimeter Berms

Conditions encountered during test pit excavations included native soils, aggregate stockpiles, solid and non-solidified asphalt materials, remnants of a small fire, and debris. The only exceedance of Part 375 Commercial and Industrial SCOs, in the 12 berm samples analyzed, was for one SVOC at TP-10. Benzo(a)pyrene, exceeded Commercial and Industrial SCOs. 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, this one PAH exceedance is believed to be related to the presence of the asphalt and is thus not considered to be of concern. Based on the lack of evidence of imminent threat to health or the environment in the areas of the perimeter berms, no IRMs were proposed for

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

this area. Appropriate remedial actions involving the grading and capping of these berms, as needed, are proposed to address this area as described in the AAR/Remedial Action Work Plan which is being submitted under separate cover.

Conclusions and Recommendations

Chlorinated solvents, primarily TCE, impacted a limited volume of soil to the east and southeast of the laboratory building. TCE was used at the laboratory building for testing asphalt products as required by NYSDOT. This impacted soil in turn resulted in a slightly larger, but limited, shallow chlorinated solvent impacted groundwater plume that has shown seasonal variability. This plume partially extended off-Site to the northeast a limited distance and at low concentrations.

Use of petroleum products in former asphalt production activities resulted in shallow soil impacts in two areas; near-surface soil around the above ground asphalt storage tanks and near surface soil west of the asphalt storage tanks. No groundwater impacts were identified in association with the petroleum impacted soils.

A variety of asphalt and debris was encountered in the berms located along the northern and eastern property boundaries. However, only one SCO exceedance was reported in the 12 samples analyzed from the berms and this finding likely resulted from the presence of asphalt.

The RI concluded that interim remedial measures were recommended to address Site-related chlorinated VOC impacts in soil and groundwater in the laboratory building source area (RAOC-1), petroleum impacts in soil around the above ground asphalt storage tanks (RAOC-3) and west of the asphalt tanks (RAOC-2). It was recommended these IRMs be completed in the Fall of 2011 to minimize the risk of further impact to groundwater both on-site and off-site.

In order to implement the interim remedial measures, it was recommended that the buildings and equipment be removed to allow for easy access to impacted areas. This also facilitated evaluation of any additional impacts that may have been present beneath these structures and prepared the site for redevelopment.

Since the only exceedance of SCOs within the bermed areas involved one PAH compound in one sample collected adjacent to asphalt, no interim remedial measures were warranted for the berms. Instead, it was agreed with NYSDEC that remedial actions for these bermed areas (RAOC-4) would be addressed in the Alternatives Analysis Report/Remedial Action Work Plan.

8.2 INTERIM REMEDIAL MEASURES

Interim remedial measures were implemented to address the Site-related chlorinated VOC impacts in soil in the former laboratory building source area, and petroleum impacts in soil around the former above ground asphalt storage tanks and west of the asphalt tanks that were identified by the RI. In addition, the RI determined that remedial measures were needed to

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

address the shallow chlorinated VOC groundwater impacts in the former laboratory building area. These impacts were addressed by interim remedial measures at RAOCs-1, 2 and 3 to minimize the risk of further impact to groundwater both on-site and off-site and to minimize the potential for further spread of contaminants in a timely manner.

Supplemental IRM activities were conducted in response to conditions encountered during demolition and dismantling of site structures and buildings. Conditions were encountered that required visual or PID monitoring, sampling, and staging and disposal of impacted materials. Remedial measures were implemented to address petroleum impacts or the potential for petroleum impacts on concrete and/or soils at the oil storage shed and asphalt plant, at the maintenance garage septic system, and beneath a storage location for a heater previously used to maintain heat in the plant liquid asphalt piping.

Site Preparation

Following the asbestos abatement on October 4, 2011, the laboratory building and scale house were demolished on October 20 and 21, 2011 to facilitate excavation of RAOC-1. The steel asphalt tanks located in RAOC-3 were removed from the site on November 10, 2011 to provide access for excavation in that area. In addition, 11 RI-related monitoring wells were decommissioned on October 26, 2012.

Silt fence and straw bales were installed as erosion and control measures. Surficial asphalt pavement present in the three RAOCs was stripped and temporarily stockpiled onsite. The pavement materials were ultimately trucked off-site to the K.S. LaForge Excavating Inc. facility in Wellsville, New York for recycling, as approved by NYSDEC.

IRM Implementation

The implementation of the RAOC-specific IRMs was performed from November 7, 2011 through January 6, 2012 and April 2 through 10, 2012. The work was performed by TREC Environmental, Inc. of Spencerport, New York under Stantec observation. Implementation of the Supplemental IRMs was conducted from April 25 through May 17, 2012. The work was performed by KS LaForge Excavating, Inc. of Wellsville, NY under Stantec observation.

RAOC-1 - Former Laboratory Building Area

Prior to beginning excavation, approximately 20 ft of the property line berm soil was excavated and stockpiled for later use as backfill. This was done because the berm encroached onto the area of planned excavation.

Approximately 1,635 tons of chlorinated VOC-impacted soil was excavated from the source area and disposed offsite. The excavation was 4,800 sq ft with a total sidewall length of 274 ft. Excavation sidewall and bottom confirmatory samples indicated that the excavation sufficiently removed impacted soil, i.e. no exceedences of POGW or Commercial and Industrial Use SCOs were observed in the analyzed samples.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

Approximately 36,300 gallons of water was pumped from the excavation into two frac tanks. The stored water was treated onsite with a two-drum granular activated carbon system and discharged onsite, as approved in advance by NYSDEC. Samples obtained before the commencement of discharge of the pre- and post-carbon tank effluent indicated the treatment sufficiently removed VOCs from the water prior to discharge.

In order to enhance reductive dechlorination, approximately 110 gal. of 60% sodium lactate solution was mixed with fresh water and was spread evenly with a hose and mixed with the water remaining at the bottom of the excavation. The base of the excavation was then backfilled to a level above the water table with clean, coarse onsite aggregate material (previously tested for contaminants and approved by NYSDEC as a backfill source). The remainder of the excavation to approximately one foot below ground surface was backfilled with previously-excavated soil from the RAOC-1 area. The approximate top foot of the excavation was backfilled with the clean, coarse aggregate material.

Subsequent to backfill of the source area excavation, a series of trenches designed for placement of sodium lactate to further address the remaining impacted groundwater plume were excavated to approximately two feet below the top of the water table. Unless sufficient groundwater had already flowed into the trenches, fresh water was placed in the trench bottoms and 55 gallons of lactate solution was added to and mixed with the water prior to backfill.

Replacement well BS-2R was installed and developed subsequent to excavation backfill. Water levels were measured at all existing monitoring wells. Monitoring wells BS-2R, BS-3, MW-8, MW-25, MW-27, and MW-28D were sampled. Anaerobic conditions are present in all the wells, which is favorable for ERD. Reducing conditions (negative ORP) were only reported in one well (MW-8); ORP values at all other wells are decreasing and this indicates that the desirable reducing conditions should be attained in the future. Total organic carbon (TOC) is another remedial parameter that was monitored. In general, TOC levels were found to be lower than desired under optimal conditions. The low TOC levels were likely caused by the dilution of the sodium lactate by the larger-than-anticipated-volume of water in the excavation. However, this should not impede the effectiveness of the treatment program because the removal of the source area soils should result in reduction in contaminant levels in groundwater over time.

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 rose slightly from 8.5 to 19 µg/L, with most of the increase accounted for by the detection of cis-1,2-DCE at 9.9 µg/L. The increase in concentration of cis-1,2-DCE, which is a breakdown product of TCE, is a positive development as it 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, it is expected that total VOC concentrations will decrease.

In the source area, *Dehalococcoides* (the microbes most responsible for reductive dechlorination) populations have not shown an increase when compared to baseline sampling

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

(3 x 10³ cfu/mL for both sampling events). This probably reflects the low chlorinated VOC levels, combined with the low TOC levels and the current lack of optimal reducing conditions, which are probably related to the dilution of the sodium lactate. The decreasing trend in ORP values should create reducing conditions in order to establish a more favorable environment for *Dehalococcoides* and the reductive dechlorination of TCE and its daughter products in groundwater. Given the relatively low VOC concentrations, removal of the source area soils should help with contaminant reduction. The next quarterly groundwater sampling event is planned for the end of June 2012.

RAOC-2 - Vicinity of test borings B/MW-27 and B-31

Approximately 75 tons of petroleum impacted soil were excavated from RAOC-2 and stockpiled for offsite disposal. The approximate total sidewall length was 116 ft and the approximate excavation area was 628 sq. ft. The excavation extended to approximately two ft. below grade and did not encounter groundwater.

Excavation sidewall and bottom confirmatory samples indicated that the excavation sufficiently removed impacted soil, i.e. no exceedences of Commercial and Industrial Use SCOs were observed in the analyzed samples. Two of the sidewall samples had slight (67 and 63 µg/kg vs. SCO of 50 µg/kg) exceedences of the POGW SCO for acetone. Acetone is a common laboratory contaminant and in previous groundwater sampling, including at nearby MW-27 and MW-23, there were no exceedences of groundwater standards for acetone. Thus, the presence of acetone in soils above the POGW SCO is not of concern.

RAOC-3 - Vicinity of Test Pit TP-14 (Asphalt Tank Area)

The linear concrete cradle structures located beneath the former asphalt tanks were demolished and the concrete was stockpiled onsite for later removal and offsite crushing/recycling with approval from NYSDEC. Approximately 135 tons of concrete were removed from this area.

Surficial soils in RAOC-3 that did not exhibit evidence of impacts were temporarily stockpiled on site for later reuse as backfill. Impacted soil excavated from RAOC-3 was stockpiled with RAOC-2 impacted soil for offsite disposal.

During excavation of the impacted soil in RAOC-3, it became evident that two sub-areas of impacted soil existed: a western portion (RAOC-3A) and an eastern portion (RAOC-3B). 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. Groundwater was not encountered within this excavation.

As excavation advanced on the eastern portion, apparent petroleum product was observed within a deposit of coarse gravel and cobbles at depths from approximately 5 ft to 8 ft bgs. The water table was generally encountered at 5 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.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

The southwestern portion of the excavation was initially restricted because of the presence of the asphalt plant structure and base concrete slab. The asphalt plant was removed in March and additional excavation was conducted in this southwestern portion in April 2012 (RAOC-3C).

Including all three sub-areas of RAOC-3, approximately 1,205 tons of soil were excavated from RAOC-3 and stockpiled for later offsite disposal. The excavation totaled approximately 3,400 square feet with approximately 490 ft of sidewall. With the exception of one detection of acetone, results from all bottom and sidewall confirmatory samples collected in the RAOC-3 excavation were below Part 375 POGW, Commercial, and Industrial SCOs. Acetone is a common laboratory contaminant and the acetone detection was above POGW SCOs, but well below Commercial and Industrial SCOs. It should also be noted this sample was collected in an area where additional excavation and impacted soil removal was conducted in April 2012.

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 vacuum product periodically from the surface of the water table; the water/product were containerized.

Approximately 10,500 gallons of water were pumped from the RAOC-3B and RAOC-3C excavations into frac tanks to facilitate excavation below the water and to remove additional LNAPL.

Samples of the LNAPL were collected for analysis of Total Petroleum Hydrocarbon (TPH) products; the material was identified as apparent motor (lube) oil. PCBs were not detected in the sample. The water that accumulated in the excavation underlying the LNAPL was sampled for VOCs, SVOCs and metals but did not exhibit contaminants at concentrations in excess of NYSDEC's groundwater standards.

Analysis of a water sample from the excavation was also performed for evaluation of potential bioremediation options for the petroleum product residue. The results 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 sulfate-reducing bacteria. The use of gypsum was approved by NYSDEC. Approximately 28 tons of granular agricultural-grade gypsum were added to the RAOC-3B and RAOC-3C excavations prior to backfill, along with 100 lbs. of "10:10:10" fertilizer. The base of the excavation in the portion of RAOC-3 where the petroleum product had been present and approximately the top one to two feet of the excavation was then backfilled with onsite aggregate; the remainder was backfilled with previously-excavated overburden material from RAOC-1 and RAOC-3, as approved by NYSDEC to match existing grade.

Monitoring well MW-65 was installed, developed and sampled after excavation backfill. Only one VOC was detected and it was found at a concentration well below the groundwater standard. No target SVOC compounds were detected. Anaerobic, reducing conditions with

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

increased sulfate levels were reported. These are favorable conditions for continued successful sulfate treatment of residual petroleum hydrocarbons.

The next quarterly monitoring event for MW-65 is planned for the end of June 2012. Results will be used to determine future sampling needs.

Supplemental IRM Activities

Stantec observed the demolition and/or dismantling of buildings, structures and equipment, and the removal of surficial debris by KS LaForge Excavating, Inc. from April 25 through May 4, 2012. This included dismantlement, demolition and/or removal of the control tower, maintenance garage, oil storage shed, a discarded heater (previously used to maintain heat in the plant liquid asphalt piping) and sheet piling; the removal of the concrete pad and support columns beneath the former asphalt plant, including segregation of stained concrete and soil for proper off-site disposal; the segregation and sampling of the oil storage shed concrete floor slab and the bottom course of the masonry block walls for proper off-site disposal; the removal of sheet piling and surficial debris throughout the site with screening of soil with a PID; uncovering and sampling the maintenance garage septic system in order to prepare for removal and proper disposal; and the excavation of impacted soils from beneath the discarded heater.

The concrete floor slab and the bottom course of the masonry block walls of the oil storage shed were oil stained; therefore, the stained material was sampled and staged in order to facilitate proper off-site disposal.

A maintenance garage septic system was uncovered and sampled. None of the detections were a cause for concern and the septic tank sludge was contained within the septic tank. Given these factors, no additional sampling appears to be warranted in that area.

During the excavation in the heater area, stained soils with odors and elevated PID readings were removed. In order to facilitate the portion of the excavation beneath the water table, about 200 gallons of groundwater with some product was pumped from the excavation into a poly storage tank. A sample of the impacted material was collected, excavation confirmatory sidewall (4) and bottom (1) samples were collected, and an excavation water sample was collected. These samples were all analyzed for TCL VOCs + TOCs (Method 8260) and TCL SVOCs+ TICs (Method 8270) and there were no exceedances of applicable standards. On this basis, no further remediation or groundwater monitoring is warranted for the heater area. The excavated material and pumped water were properly disposed off-site.

Conclusions and Recommendations

Interim remedial measures were implemented at three RAOCs involving soil removal, excavation dewatering, the application of bioremediation amendments, backfilling, and monitoring well installations and sampling. Remedial activities are completed at RAOC-2. Groundwater monitoring will continue at RAOC-1 and RAOC-3 to monitor the progress of the interim measures. The next groundwater monitoring event is scheduled for the end of June

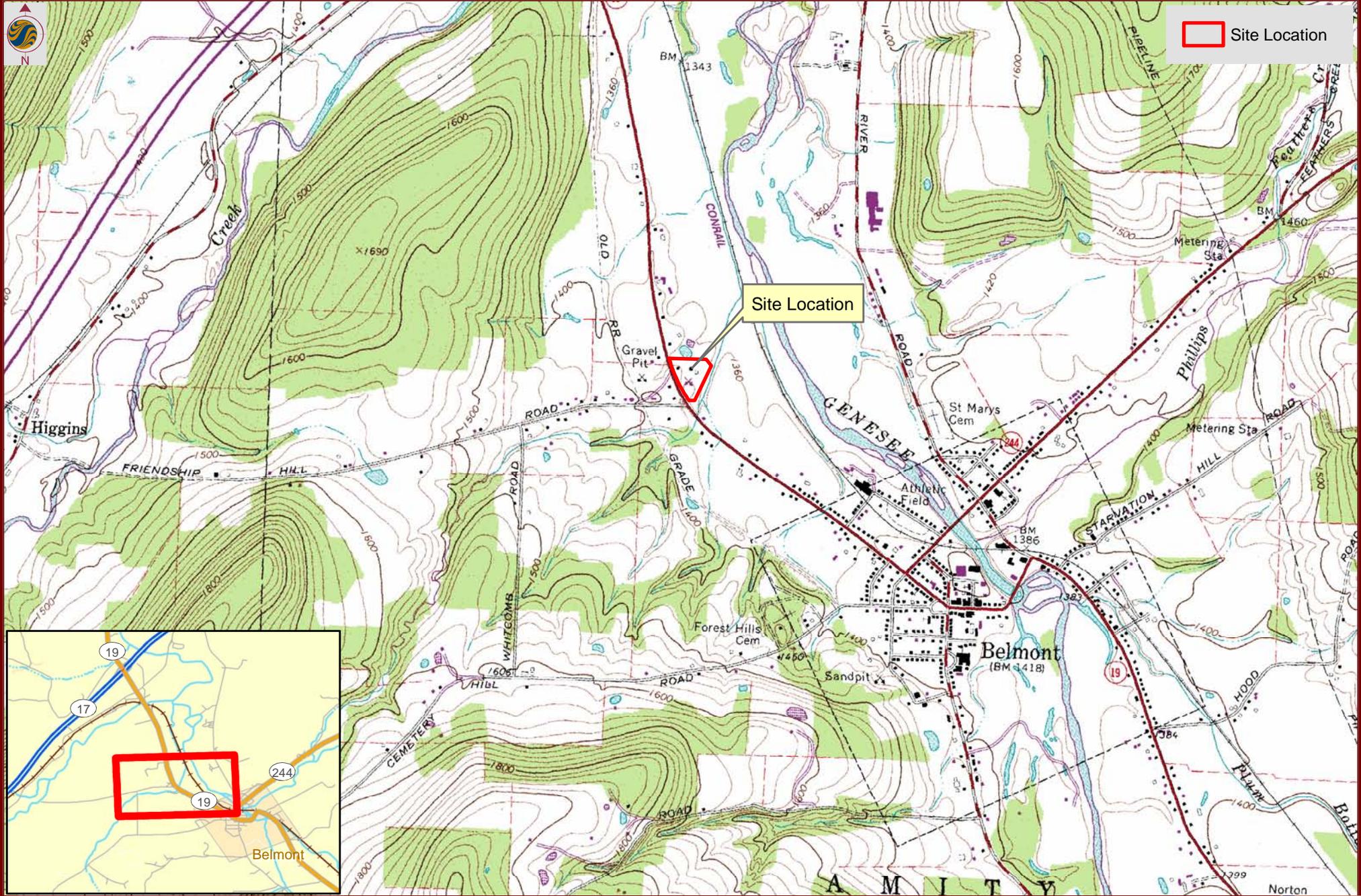
**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT**

2012. Progress will be evaluated based on the monitoring results and recommendations made for future monitoring, as needed.

**REMEDIAL INVESTIGATION REPORT AND
INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT
FORMER ALLEGANY BITUMENS BELMONT ASPHALT PLANT****9.0 References**

1. Remedial Investigation Work Plan, Brownfield Cleanup Program, Site #C902019, Former Allegany Bitumens Belmont Asphalt Plant, 5392 State Route 19, Town of Amity, Allegany County, New York. Stantec Consulting Services Inc., October 11, 2010 revised.
2. Interim Remedial Measures Work Plan, Brownfield Cleanup Program, Site #C902019, Former Allegany Bitumens Belmont Asphalt Plant, 5392 State Route 19, Town of Amity, Allegany County, New York. Stantec Consulting Services Inc., October 24, 2011.
3. Monthly Progress Reports #1 through #19, Brownfield Cleanup Program Remedial Investigation, Site #C902019 Former Allegany Bitumens Belmont Asphalt Plant, 5392 State Route 19, Town of Amity, Allegany County, New York. Stantec, issued monthly from November 2010 through May 2012.
4. Phase I/Phase II Environmental Site Assessment, Former Allegany Bitumens Belmont Asphalt Plant, 5392 State Route 19, Town of Amity, Allegany County, New York. Stantec, July 2010.
5. Technical Guidance for Site Investigation and Remediation (DER-10), NYSDEC, May 2010.
6. NYSDEC's Commissioner Policy CP-51 Soil Cleanup Guidance, NYSDEC, October 21, 2010.
7. NYSDEC's Commissioner Policy CP-43 Groundwater Monitoring Well Decommissioning Policy, NYSDEC, November 3, 2009.

FIGURES



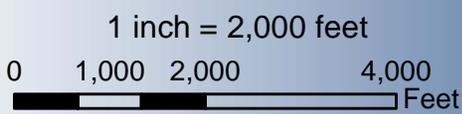
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Map Source : NYSGIS Clearinghouse Web Site

Cartographic Design By: Andrew Less

June 29 2011
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Allegany Bitumens Belmont Asphalt Plant Site

FIGURE 1 : Site Location Map Showing USGS Topographic Information



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Legend

Notes

Revision By Appd. YY.MM.DD

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File Name: Figure 2 Topographic Survey.dwgAPL SRS 12.05
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**ALLEGANY BITUMENS
 BELMONT ASPHALT PLANT**

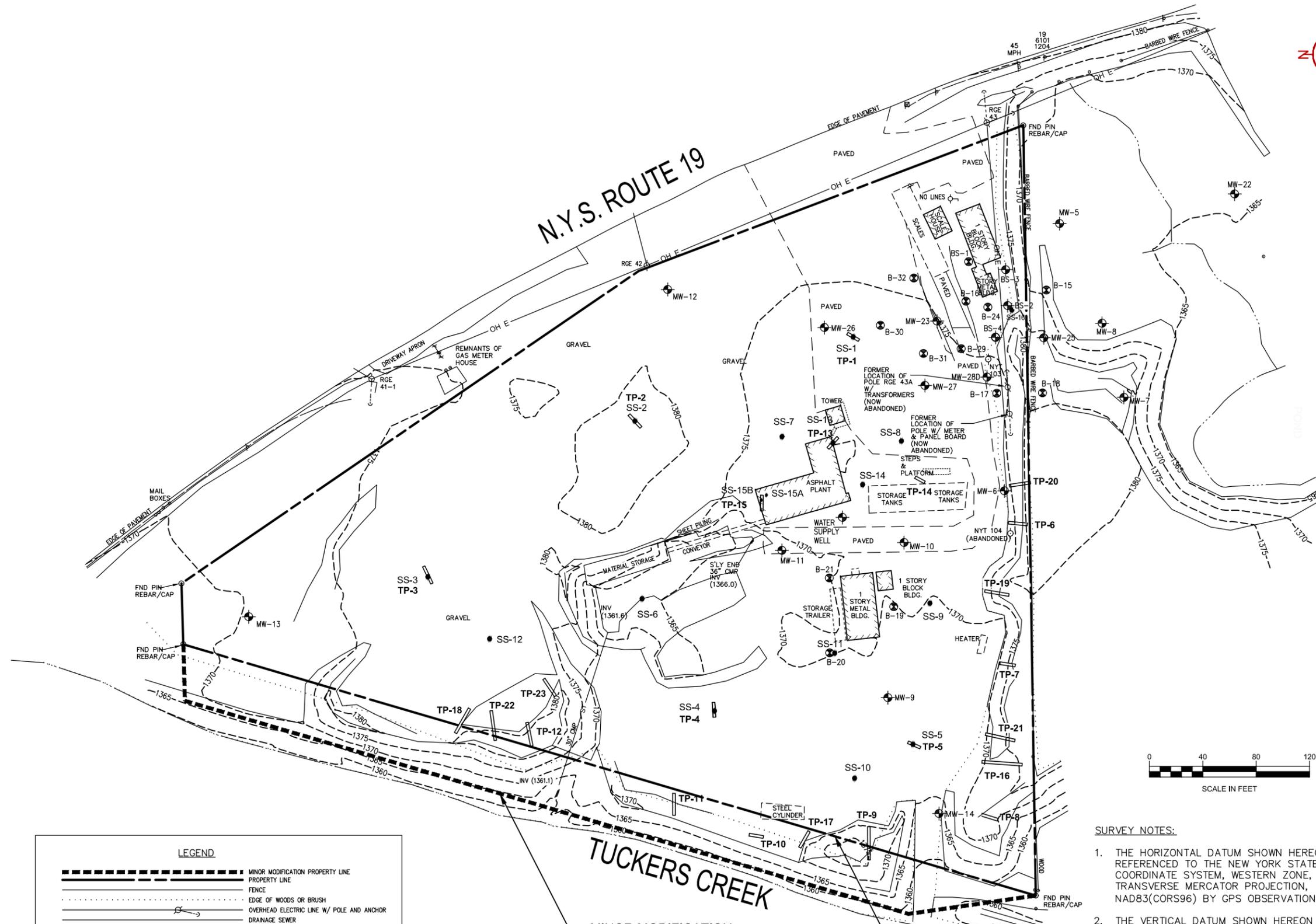
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Title

RI TOPOGRAPHIC SURVEY

Project No. 190500593 Scale AS SHOWN
 Drawing No. Sheet Revision

Figure 2 of



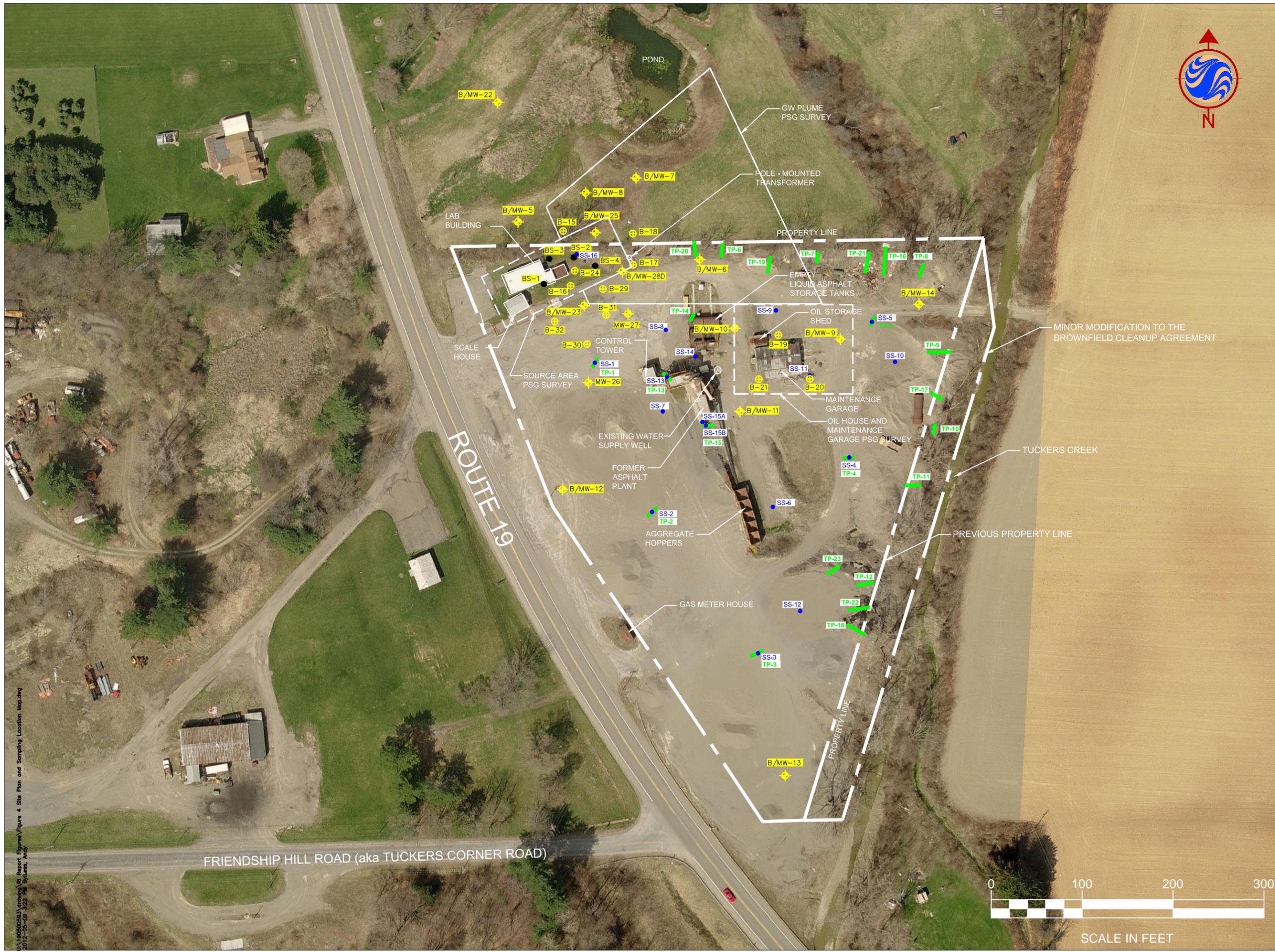
SURVEY NOTES:

1. THE HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, WESTERN ZONE, TRANSVERSE MERCATOR PROJECTION, NAD83(CORS96) BY GPS OBSERVATIONS.
2. THE VERTICAL DATUM SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN DATUM OF 1988 BY GPS OBSERVATIONS.
3. PROPERTY LINES SHOWN HEREON ARE TAKEN FROM A SURVEY MAP PREPARED BY B&R SURVEYING, P.L.L.C, ENTITLED "PLAN OF LANDS OWNED BY ALLEGANY BITUMENS, INC." NOVEMBER 16, 2009 AND HAVING JOB NUMBER 09-067. FINAL SURVEY OF MINOR MODIFICATION HAS NOT BEEN OBTAINED YET.

LEGEND

- MINOR MODIFICATION PROPERTY LINE
- PROPERTY LINE
- FENCE
- EDGE OF WOODS OR BRUSH
- OVERHEAD ELECTRIC LINE W/ POLE AND ANCHOR
- DRAINAGE SEWER
- INDEX AND INTERMEDIATE CONTOUR
- BUILDING OR STRUCTURE
- EDGE OF POND OR DITCH
- SIGNS
- B-19 BOREHOLE
- ⊕ MW-27 MONITORING WELL
- SS-16 SURFACE SOIL SAMPLING LOCATION
- TP-14 TEST PIT

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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
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File Name: Figure 4 Site Plan and Sampling Location Map

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**ALLEGANY BITUMENS
 BELMONT ASPHALT PLANT**

BLADES HOLDING COMPANY, INC.

Title

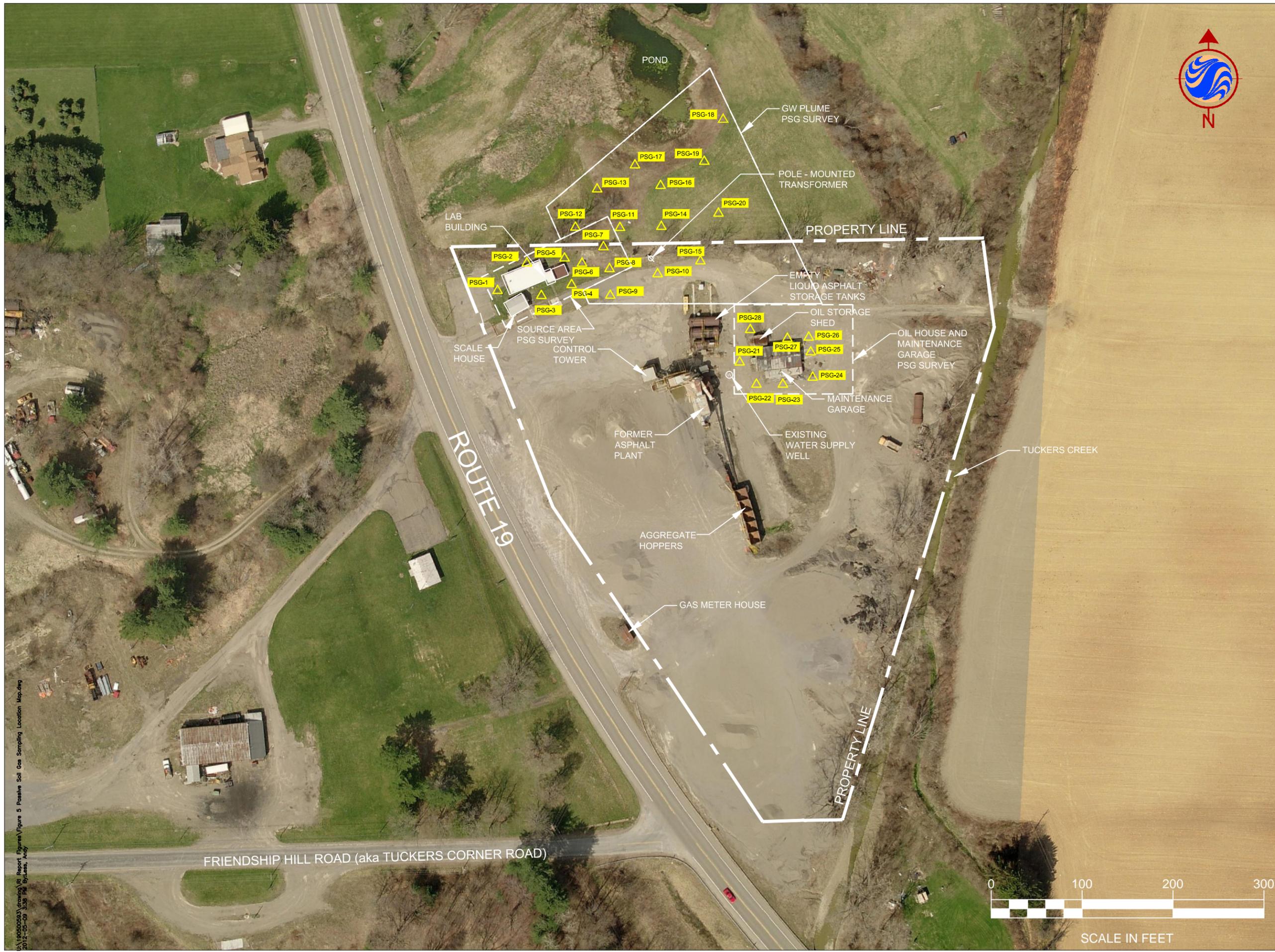
SITE PLAN AND RI SAMPLE LOCATION MAP

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Drawing No.	Sheet	Revision

FIG. 4

of

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Consultants

Legend

- ▲ PSG PASSIVE SOIL GAS SAMPLING LOCATION
- ⊙ EXISTING WATER SUPPLY WELL

Notes

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

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File Name: Figure 5 Passive Soil Gas Sampling Location Map.dwg

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ALLEGANY BITUMENS
 BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title

PASSIVE SOIL GAS
 SAMPLE LOCATION MAP

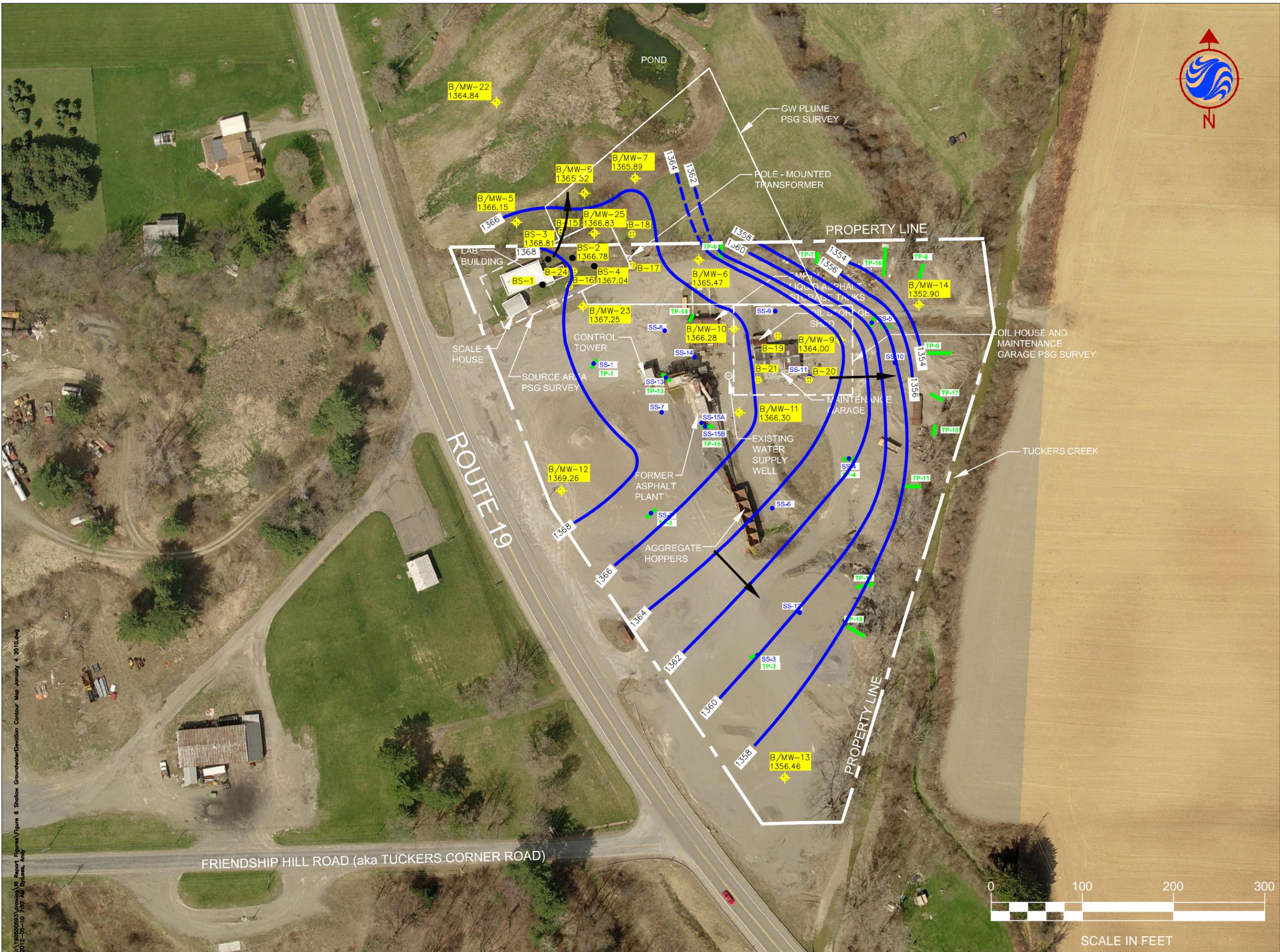
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Drawing No.	Sheet	Revision

FIG. 5

of



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Legend

- PREVIOUS TEST BORING / SHALLOW WELL (2009 PHASE II ESA) WITH GROUNDWATER ELEVATION (FT AMSL)
- ⊙ EXISTING WATER SUPPLY WELL
- ⊕ TEST BORING
- ⊕ RI TEST BORING / SHALLOW MONITORING WELL WITH GROUNDWATER ELEVATION (FT AMSL)
- SURFACE SOIL SAMPLE
- TEST PIT
- GROUNDWATER ELEVATION CONTOUR (FT AMSL) (DASHED WHERE INFERRED)
- 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.

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File Name: Figure 6 Shallow GroundwaterElevation Contour Map January 4 2010

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Project/ Client

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BELMONT ASPHALT PLANT

BLADES HOLDING COMPANY, INC.

Title

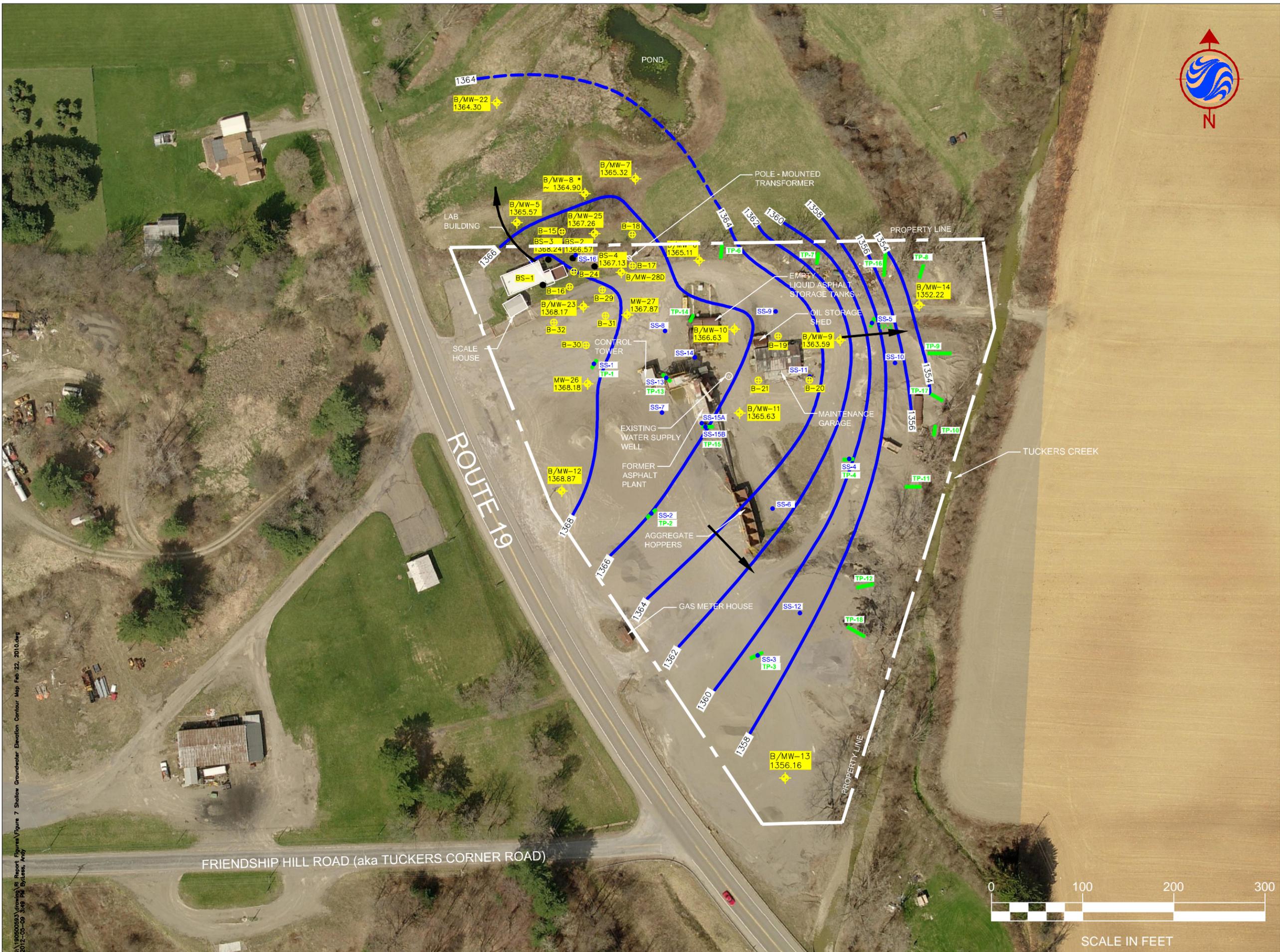
SHALLOW GROUNDWATER ELEVATION
 CONTOUR MAP
 JANUARY 4, 2011

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FIG. 6

of



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Legend

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- ⊙ 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), FEB 22, 2011
- APPARENT DIRECTION OF GROUNDWATER FLOW

Notes

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2. AERIAL MAPPING OBTAINED FROM PICTOMETRY ONLINE 1.10.1 PICTOMETRY INTERNATIONAL CORP DATED 04-19-2006.
3. * ELEVATION FOR B/MW-8 CONSIDERED APPROXIMATE BECAUSE THIS IS THE LEVEL AT WHICH THE WATER WAS FROZEN IN THE WELL.

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File Name: Figure 7 Shallow Groundwater Elevation Contour Map Feb 22, 2010

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**ALLEGANY BITUMENS
 BELMONT ASPHALT PLANT**

BLADES HOLDING COMPANY, INC.

Title
 SHALLOW GROUNDWATER ELEVATION
 CONTOUR MAP
 FEBRUARY 22, 2011

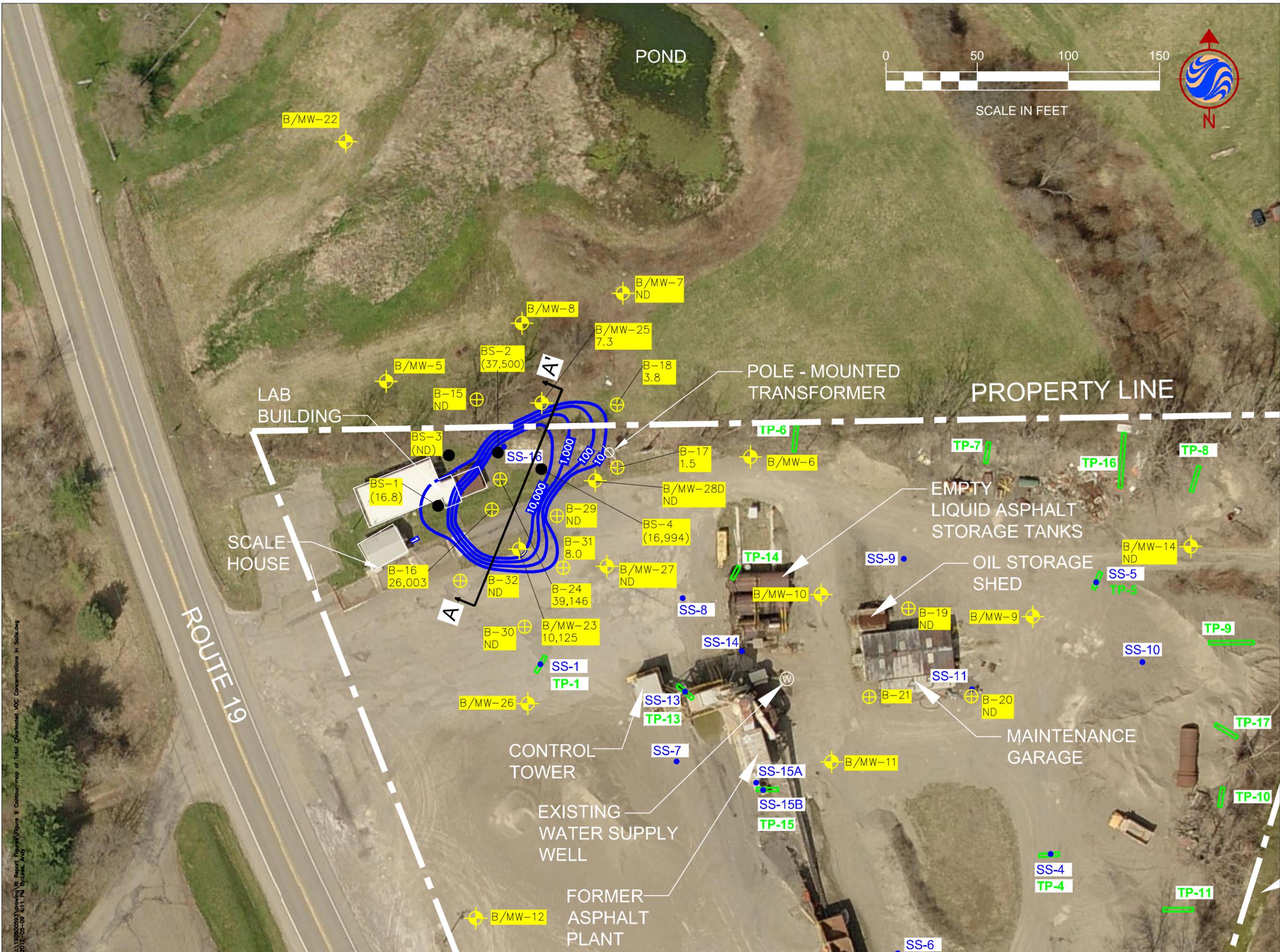
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FIG. 7 of



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- Legend**
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 - ⊕ 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.

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File Name: Figure 9 Contour map of Total Chlorinated VOC Concentrations in Soils

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 BELMONT ASPHALT PLANT**

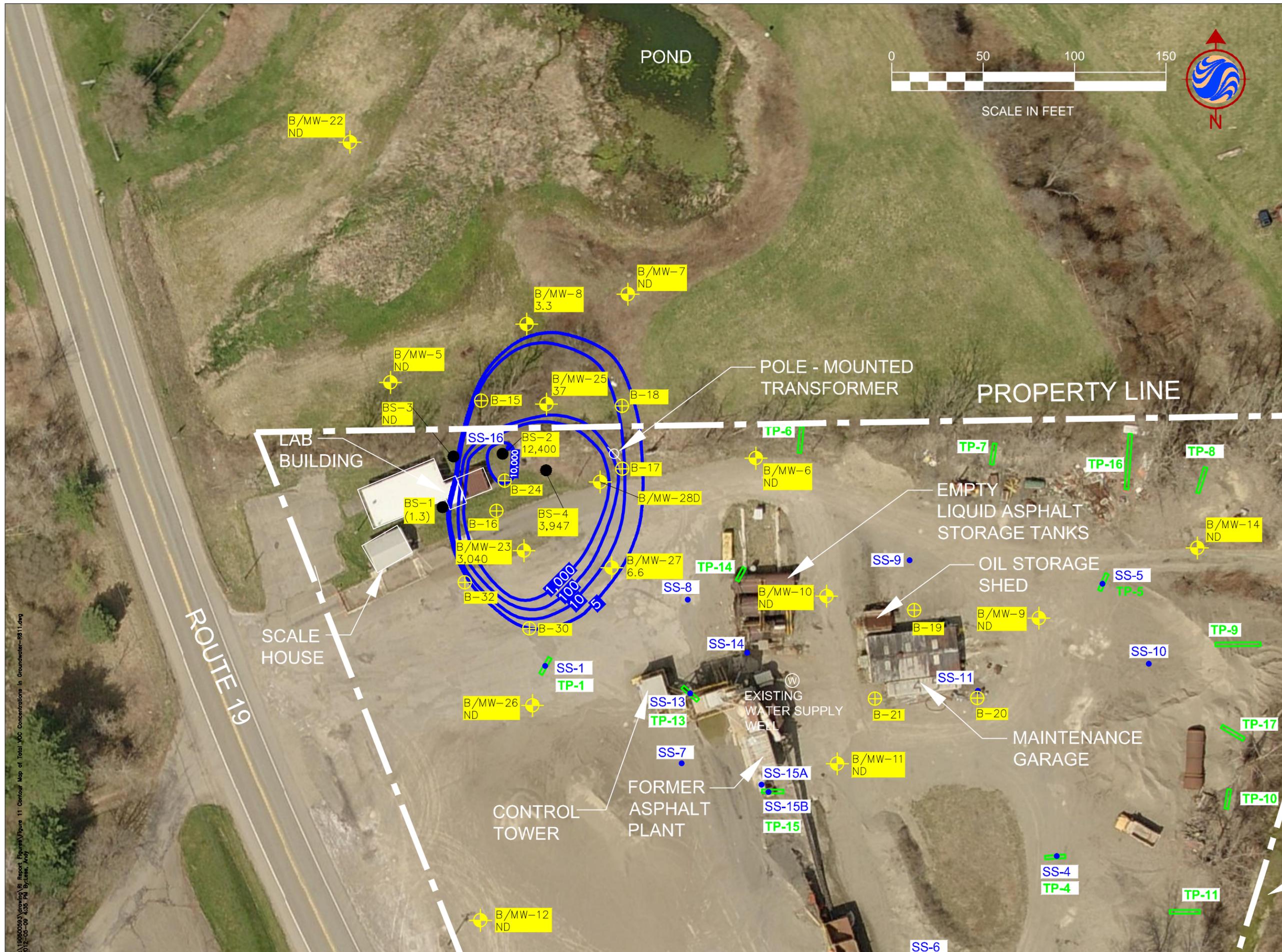
 BLADES HOLDING COMPANY, INC.

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

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FIG. 9 of

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- Legend
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 - ⊕ 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
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, 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.

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Issued	By	Appd.	YY.MM.DD

File Name: Figure 11 Contour Map of Total VOC Concentrations in Groundwater-R811.dwg

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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), JAN - FEB 2011 *

Project No.	Scale	
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Drawing No.	Sheet	Revision

FIG. 11 of

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Legend

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- ⊕ 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.

RI REPORT	SRS	MPS	12.05
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File Name: Figure 12 Total Chlorinated VOC in Groundwater April 2011-RB11

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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.	Scale	
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FIG. 12

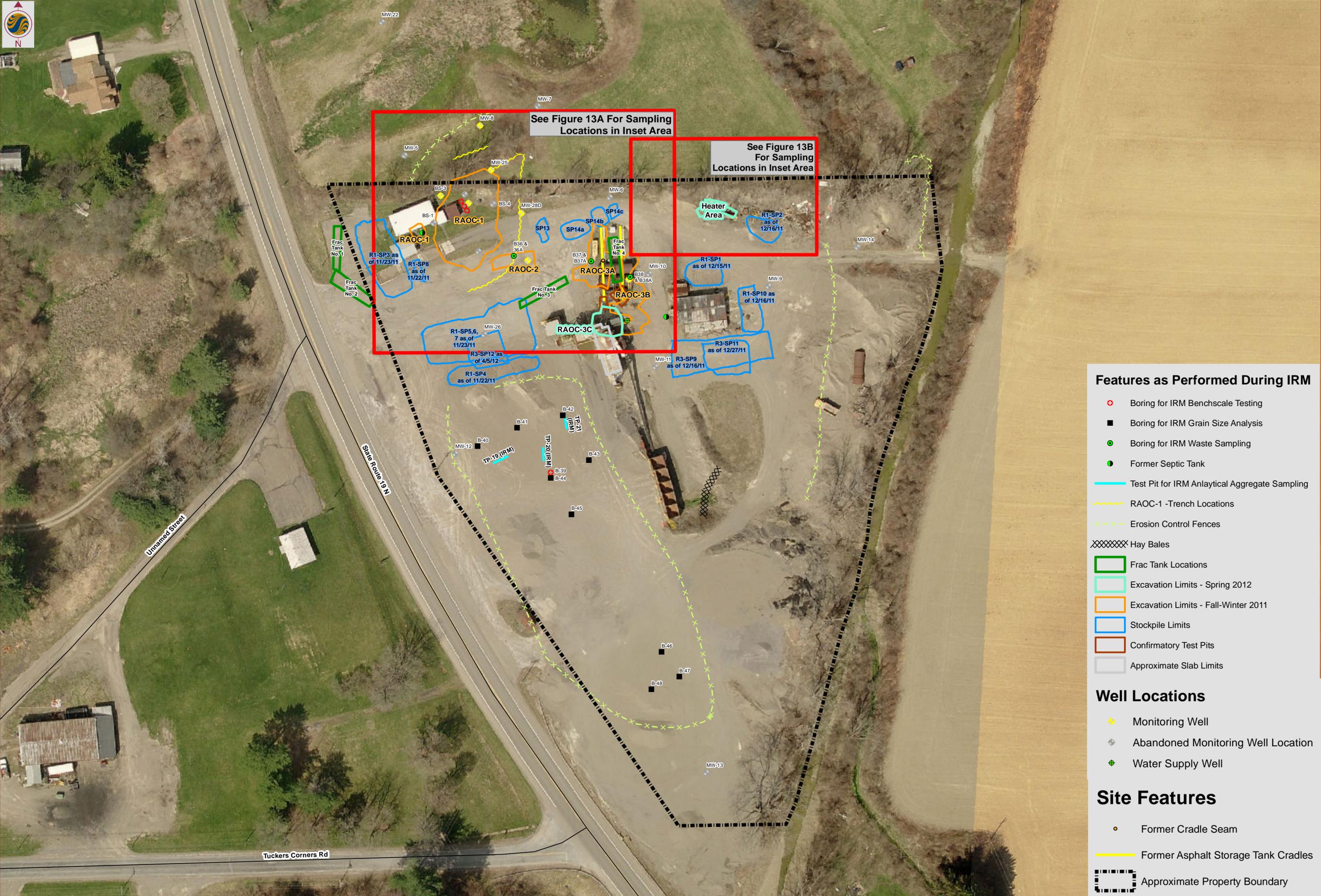
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Features as Performed During IRM

- Boring for IRM Benchscale Testing
- Boring for IRM Grain Size Analysis
- Boring for IRM Waste Sampling
- Former Septic Tank
- Test Pit for IRM Analytical Aggregate Sampling
- - - RAOC-1 -Trench Locations
- x x x Erosion Control Fences
- x x x x Hay Bales
- Frac Tank Locations
- Excavation Limits - Spring 2012
- Excavation Limits - Fall-Winter 2011
- Stockpile Limits
- Confirmatory Test Pits
- Approximate Slab Limits

Well Locations

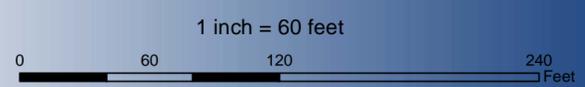
- ◆ Monitoring Well
- ◆ Abandoned Monitoring Well Location
- ◆ Water Supply Well

Site Features

- Former Cradle Seam
- Former Asphalt Storage Tank Cradles
- Approximate Property Boundary



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Cartographic Design By: Travis Money

Date: 5/18/2012

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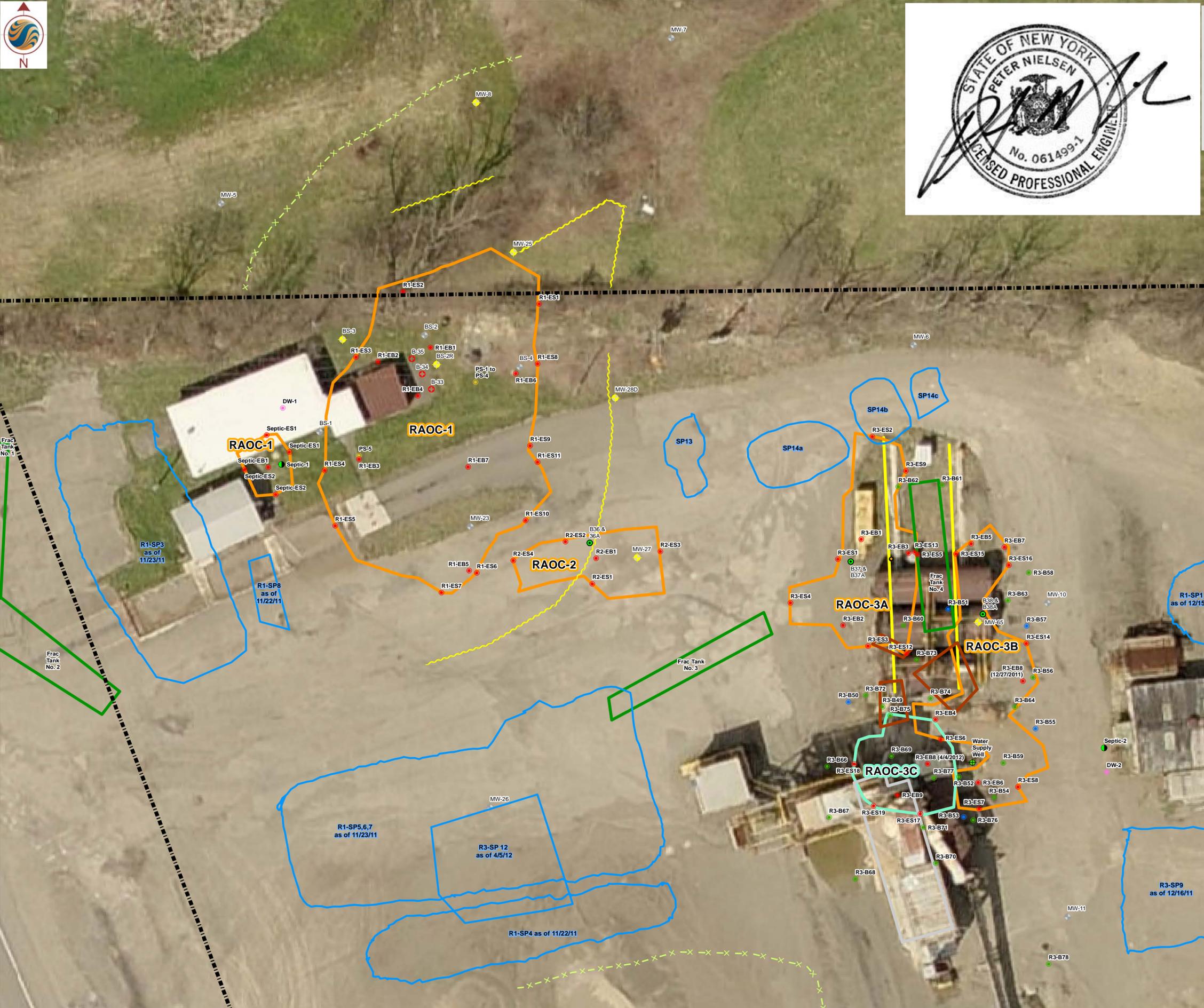
Figure 13: IRM Site Map
 Former Allegany Bitumens Belmont Asphalt Plant Site

This map may contain data from a variety of sources. This map is not intended to replace a survey by a Licensed Surveyor. Stantec does not certify the accuracy of the data. This map is for reference only and should not be used for construction.



RAOC	Approximate Tonnage of Contaminated Soil Removed
1	1,635
2	75
3	1,205

Notes: 1. Approximately 2-3 cubic yards of contaminated soil was left in place surrounding the water supply well in order to avoid potentially damaging the well.
2. Various structures and buildings were demolished or removed at various times during completion of work.



Features as Performed During IRM

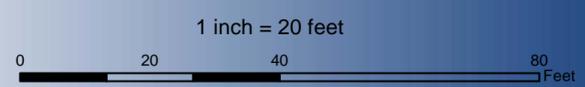
- Excav. Bottom/Sidewall Confirm Samp. Loc.
- Preliminary Screening Samples
- Dry Well
- Boring and Samp. Loc. for IRM LNAPL Delin.
- Boring for IRM LNAPL Delineation
- ⊕ Boring for IRM Benchscale Testing
- Boring for IRM Grain Size Analysis
- Boring for IRM Waste Sampling
- Former Septic Tank
- Test Pit for IRM Analytical Aggregate Sampling
- RAOC-1 Trench Locations
- - - Erosion Control Fences
- XXXXXX Hay Bales
- Stockpile Limits
- Confirmatory Test Pits
- Approximate Slab Limits
- Frac Tank Locations
- Excavation Limits - Spring 2012
- Excavation Limits - Fall-Winter 2011

Well Locations

- ◆ Monitoring Well
- ◆ Abandoned Monitoring Well Location
- ◆ Water Supply Well

Site Features

- Former Cradle Seam
- Former Asphalt Storage Tank Cradles
- Approximate Property Boundary



- Excav. Bottom/Sidewall Confirm Samp. Loc.
- Relocated Berm Materials
- ▣ Approximate Property Boundary
- Stockpile Limits
- Excavation Limits - Spring 2012



Remedial Area	Approximate Tonnage of Contaminated Soil Removed
Heater Area	87

Geographic Information Systems

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Date: 5/29/2012

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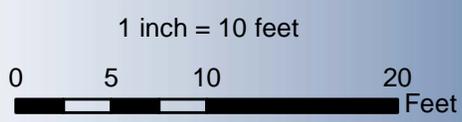


Figure 13B: Heater Remedial Area
 Former Allegany Bitumens Belmont Asphalt Plant Site



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Legend

Notes

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File Name: Figure 14 Post IRM Topographic Survey.dwg
 Dwn. Chkd. Dsgn. YY.MM.DD

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Project/ Client

**ALLEGANY BITUMENS
 BELMONT ASPHALT PLANT**

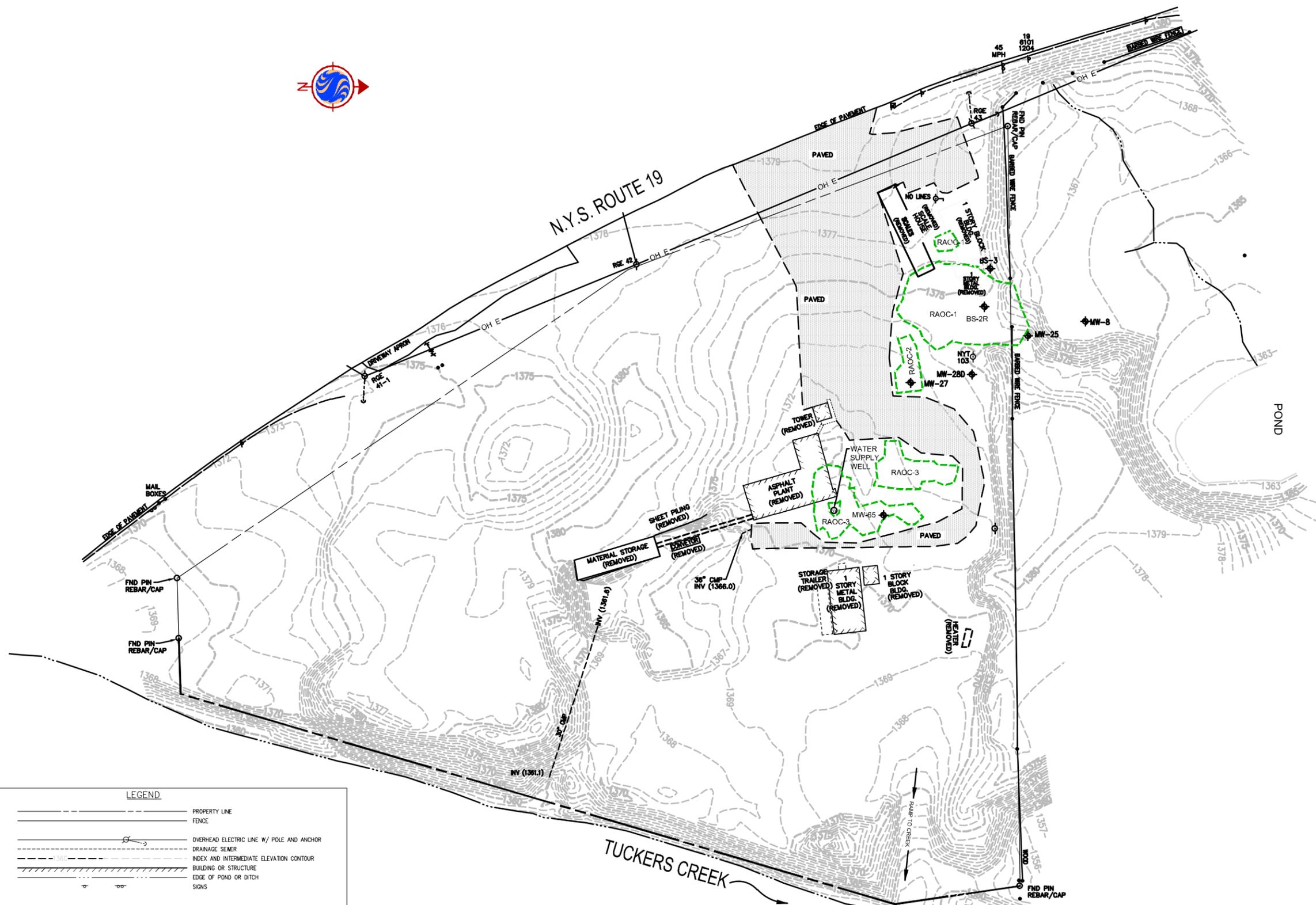
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Title

**POST IRM
 TOPOGRAPHIC SURVEY**

Project No. 190500593 Scale 1"=40'
 Drawing No. _____ Sheet _____ Revision _____

Figure 14 of _____

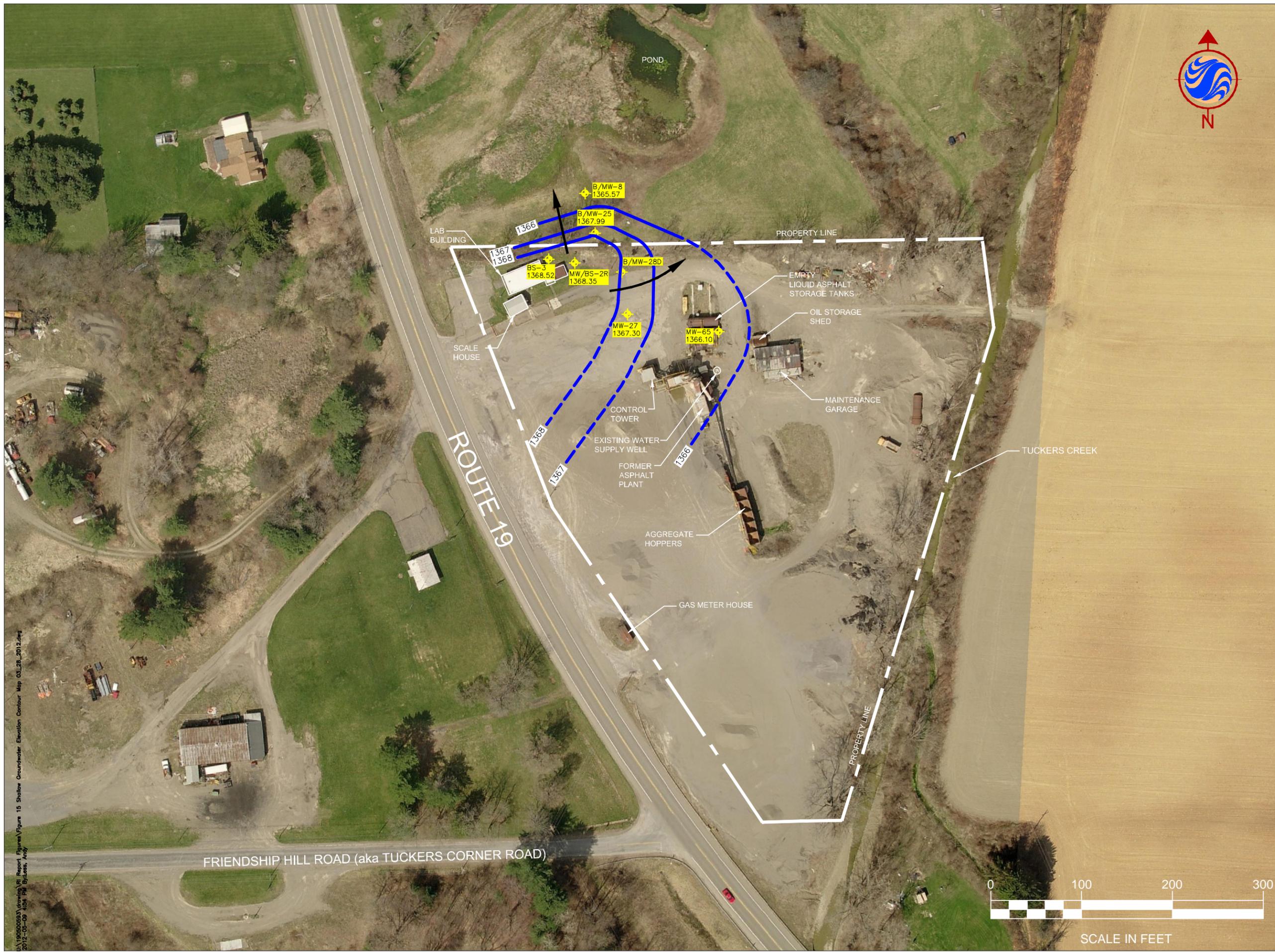


LEGEND

- PROPERTY LINE
- FENCE
- OVERHEAD ELECTRIC LINE W/ POLE AND ANCHOR
- DRAINAGE SEWER
- INDEX AND INTERMEDIATE ELEVATION CONTOUR
- BUILDING OR STRUCTURE
- EDGE OF POND OR DITCH
- SIGNS
- RAOC-1
REMEDIAL AREA OF CONCERN
EXCAVATION
- MW-8
MONITORING WELL
- WATER SUPPLY WELL
- UTILITY POLE



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Legend

-  EXISTING WATER SUPPLY WELL
-  MONITORING WELL WITH GROUNDWATER ELEVATION (ft AMSL)
-  GROUNDWATER ELEVATION CONTOUR (ft AMSL) (DASHED WHERE INFERRED)
-  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.
3. AT THE TIME OF GROUNDWATER ELEVATION MEASUREMENT, SEVERAL SITE STRUCTURES HAD BEEN OR WERE IN THE PROCESS OF BEING REMOVED.

IRM CCR	SRS	MPS	12.05
Issued	By	Appd.	YY.MM.DD

File Name: Figure 15 Shallow Groundwater Elevation Contour Map 03_28_2012

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**ALLEGANY BITUMENS
 BELMONT ASPHALT PLANT**

BLADES HOLDING COMPANY, INC.

Title

SHALLOW GROUNDWATER ELEVATION
 CONTOUR MAP MARCH 28, 2012

Project No.	Scale	
190500593	AS SHOWN	
Drawing No.	Sheet	Revision

FIG. 15

of



U:\190500593\Drawings\111 Report Figures\Figure 15 Shallow Groundwater Elevation Contour Map 03_28_2012.dwg
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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 ELEVATION MEASUREMENT, 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.

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**ALLEGANY BITUMENS
 BELMONT ASPHALT PLANT**

BLADES HOLDING COMPANY, INC.

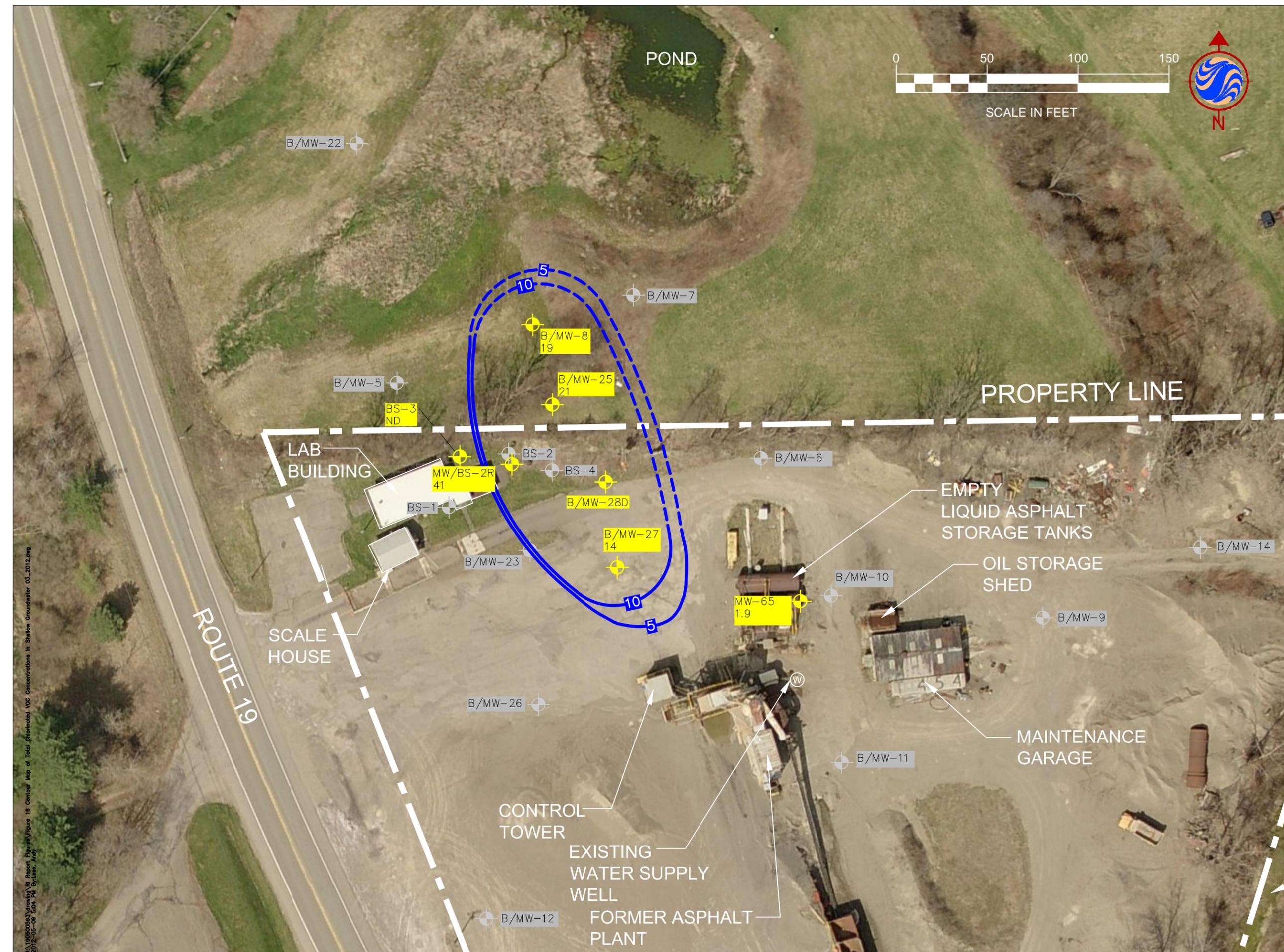
Title

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

Project No.	Scale	
190500593	AS SHOWN	
Drawing No.	Sheet	Revision

FIG. 16

of



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TABLES

Table 1
RI Field Events Summary
Remedial Investigation
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Field Event	Locations	Start Date	End Date
Surface Soil Sampling and Test Pit Excavations	SS-1 to SS-15 and TP-1 to TP-18	10/25/2010	10/29/2010
Passive Soil Gas Module Installation	PSG-1 to PSG-28	11/2/2010	11/2/2010
Passive Soil Gas Module Retrieval	PSG-1 to PSG-28	11/15/2011	11/15/2011
Remove Pump	Existing Water Supply Well (WSW)	11/29/2011	11/29/2011
Monitoring Well and Boring Installation	B/MW-5 through B/MW-14, B/MW-22, B/MW-23, B/MW-25, B-15 through B-21, and B-24	11/29/2010	12/7/2010
Groundwater Sampling	WSW	12/7/2010	12/7/2010
Monitoring Well Development	B/MW-5 through B/MW-14, B/MW-22, B/MW-23, B/MW-25	12/7/2010	12/9/2010
Water Level Measurement	BS-2 through BS-4, B/MW-5 through B/MW-14, B/MW-22, B/MW-23, B/MW-25	1/4/2011	1/4/2011
Groundwater Sampling	BS-2 through BS-4, B/MW-5 through B/MW-14, B/MW-22, B/MW-23, B/MW-25	1/4/2011	1/7/2011
Hazardous Materials Survey	Site buildings and equipment, outdoor areas	1/31/2011	1/31/2011
Monitoring Well and Boring Installation	B/MW-26, B/MW-27, B/MW-28D, B-29 through B-32	2/1/2011	2/4/2011
Surface Soil Sampling	SS-16	2/3/2011	2/3/2011
Monitoring Well Development	B/MW-26, B/MW-27, B/MW-28D	2/4/2011	2/7/2011
Water Level Measurement	BS-2 through BS-4, B/MW-5 through B/MW-14, B/MW-22, B/MW-23, B/MW-25 through B/MW-27, B/MW-28D, WSW	2/22/2011	2/22/2011
Groundwater Sampling	B/MW-26, B/MW-27, B/MW-28D	2/22/2011	2/22/2011
Aquifer Testing	B/MW-9, B/MW-11, B/MW-12, B/MW-23, B/MW-25, MW-28D	2/23/2011	2/24/2011
Ecological Evaluation	Site and Off-Site	4/20/2011	4/20/2011
Water Level Measurement	BS-2 through BS-4, B/MW-5 through B/MW-14, B/MW-22, B/MW-23, B/MW-25 through B/MW-27, B/MW-28D, WSW	4/20/2011	4/20/2011
Groundwater Sampling	BS-2 through BS-4, B/MW-5 through B/MW-8, B/MW-22, B/MW-23, B/MW-25	4/20/2011	4/21/2011
Water Well and Surface Water Survey	Adjoining property	6/15/2011	6/15/2011
Test Pit Excavations	TP-19 through TP-23	11/21/2011	11/21/2011

Table 2
Summary of Variances from RI Work Plan
Remedial Investigation
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Variance Description	Location(s)	Report Section	Rationale
Radii for well survey changed from 1/2 mile to within 1/8 th mile upgradient and 1/4 mile down and side gradient from the site	N/A	3.1	The range for upgradient locations was limited to 1/8 th mile because there was no reason to believe that upgradient wells have been impacted. The range for the down and side gradient locations was limited to 1/4 mile due to the lack of impacts in groundwater samples from wells on the downgradient side of the site.
Surface soil sample not collected	SS-1	3.2	Additional test pit samples taken instead
Surface soil sample not collected	SS-2	3.2	Per NYSDEC recommendations
Additional surface soil samples collected	SS-13 through SS-16	3.2	Per NYSDEC recommendations
Depth of surface soil samples	SS-3, SS-5, SS-12	3.2	Per NYSDEC recommendations or because planned interval was too coarse to sample
Addition of test pits	TP-13 through TP-15	3.3	Per NYSDEC recommendations
Addition of test pits	TP-16 through TP-23	3.3	To further define extent of materials observed at nearby test pits
Addition of subsurface soil samples from test pits	See Table 3	3.3 & 3.5.2	To help define the extent of potential impacts
Location Change	MW-5 through MW-7	3.5.1	Based on results of passive soil gas survey
Installation of additional wells	B/MW-22, B/MW-23, B/MW-25 through B/MW-27	3.5.1	To help define the extent of potential chlorinated VOC groundwater impacts
Installation of additional borings	B-24, B-29 through B-32	3.5.1	To help define the extent of potential chlorinated VOC soil impacts
Depth of deep well	MW-28D	3.5.1	Shallower than proposed due to absence of impacts and predominance of fine soils
Sampling method	Water Supply Well	3.10	To make purge volume manageable
No surface water, sediment or surface soil along Tuckers Creek needed	Pond on property to north and Tuckers Creek	3.12	No significant impacts reported in soil and groundwater upgradient of pond and Tucker Creek

**Table 3 - RI Soil Sample Summary
Remedial Investigation
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York**

Location Purpose	Sample Location	Sample Identification	Sample Date	Depth	Sample Type	Parent Sample	Sampling Company	Laboratory	Laboratory Sample Delivery Group	Analysis Completed										
										TCL Volatile Organic Compounds by EPA Method 8260B	TCL Semivolatile Organic Compounds by EPA Method 8270C	TCL Pesticides by EPA Method 8081A	TCL Polychlorinated Biphenyls by EPA Method 8082	TAL Metals by Methods 6010B/7471A	TCLP Volatiles by EPA Method 8260B	TCLP Metals by EPA Method 1311 & 6000/7000 Series	pH by EPA Method 9045C	Grain Size by Method ASTM D422		
Borehole/Monitoring Well	B/MW-5	BA-B5-S	12/2/2010	8 - 8.7 ft			STANTEC	TALBU	RTK1728	X										
Borehole/Monitoring Well	B/MW-6	BA-B6-S	12/1/2010	2 - 2.8 ft			STANTEC	TALBU	RTK1728	X	X									
Borehole/Monitoring Well	B/MW-7	BA-B7-S	12/2/2010	4.7 - 5.1 ft			STANTEC	TALBU	RTK1728	X										
Borehole/Monitoring Well	B/MW-8	BA-B8-S	12/1/2010	11.5 - 12 ft			STANTEC	TALBU	RTK1728	X										
Borehole/Monitoring Well	B/MW-9	BA-B9-S	11/30/2010	8 - 10 ft			STANTEC	TALBU	RTK1728	X	X	X	X	X						
Borehole/Monitoring Well	B/MW-10	BA-B10-S	11/30/2010	8 - 9.6 ft			STANTEC	TALBU	RTK1728	X	X	X	X	X						
Borehole/Monitoring Well	B/MW-11	BA-B11-S	11/30/2010	8 - 9 ft			STANTEC	TALBU	RTK1728	X	X									
Borehole/Monitoring Well	B/MW-12	BA-B12-S	11/29/2010	8 - 9 ft			STANTEC	TALBU	RTK1728		X									
Borehole/Monitoring Well	B/MW-13	BA-B13-S	11/29/2010	8 - 8.6 ft			STANTEC	TALBU	RTK1728		X									
Borehole/Monitoring Well	B/MW-14	BA-B14-S	11/30/2010	8 - 10 ft			STANTEC	TALBU	RTK1728	X	X	X	X	X						
Borehole	B-15	BA-B15-S	12/2/2010	8 - 10.3 ft			STANTEC	TALBU	RTK1728	X	X	X	X	X						
Borehole	B-16	BA-B16-S	12/3/2010	10.8 - 11.2 ft			STANTEC	TALBU	RTK1728	X										
Borehole	B-16	BA-B16-S2	12/3/2010	17.5 - 18 ft			STANTEC	TALBU	RTK1728	X										
Borehole	B-17	BA-B17-S	12/3/2010	4.6 - 6.6 ft			STANTEC	TALBU	RTK1728	X	X	X	X	X						
Borehole	B-18	BA-B18-S	12/2/2010	9.2 - 9.7 ft			STANTEC	TALBU	RTK1728	X										
Borehole	B-19	BA-B19-S	12/3/2010	4 - 4.9 ft			STANTEC	TALBU	RTK1728	X	X									
Borehole	B-20	BA-B20-S	12/3/2010	4 - 4.8 ft			STANTEC	TALBU	RTK1728	X	X									
Borehole/Monitoring Well	B/MW-22	BA-B22-S	12/3/2010	15.5 - 16 ft			STANTEC	TALBU	RTK1728	X										
Borehole/Monitoring Well	B/MW-23	BA-B23-S2	12/6/2010	10 - 10.6 ft			STANTEC	TALBU	RTK1728	X										
Borehole/Monitoring Well	B/MW-23	BA-B23-S	12/6/2010	8 - 8.5 ft			STANTEC	TALBU	RTK1728	X										
Borehole	B-24	BA-B24-S	12/6/2010	0.2 - 0.6 ft			STANTEC	TALBU	RTK1728	X										
Borehole	B-24	BA-B24-S3	12/6/2010	10 - 10.7 ft			STANTEC	TALBU	RTK1728	X										
Borehole	B-24	BA-B24-S2	12/6/2010	6 - 6.6 ft			STANTEC	TALBU	RTK1728	X										
Borehole/Monitoring Well	B/MW-25	BA-B25-S	12/6/2010	6 - 7 ft			STANTEC	TALBU	RTK1728	X										
Borehole/Monitoring Well	B/MW-26	BA-B26-S	2/3/2011	8 - 8.4 ft			STANTEC	TALBU	480-1342-1	X										
Borehole/Monitoring Well	B/MW-27	BA-B27-S	2/3/2011	0.4 - 1.4 ft			STANTEC	TALBU	480-1342-1	X										
Borehole/Monitoring Well	B/MW-27	BA-B27-S2	2/3/2011	6.5 - 7.3 ft			STANTEC	TALBU	480-1342-1	X										
Borehole/Monitoring Well	B/MW-27	BA-B27-S2/D	2/3/2011	6.5 - 7.3 ft	Duplicate	BA-B27-S2	STANTEC	TALBU	480-1342-1	X										
Borehole/Monitoring Well	B/MW-28D	BA-B28D-S2	2/1/2011	39 - 40 ft	MS/MSD		STANTEC	TALBU	480-1342-1	X										
Borehole/Monitoring Well	B/MW-28D	BA-B28D-S	2/1/2011	5.3 - 5.8 ft			STANTEC	TALBU	480-1342-1	X										
Borehole	B-29	BA-B29-S	2/4/2011	4.5 - 6 ft			STANTEC	TALBU	480-1342-1	X										
Borehole	B-30	BA-B30-S	2/4/2011	4.6 - 5.4 ft			STANTEC	TALBU	480-1342-1	X										
Borehole	B-31	BA-B31-S	2/4/2011	0.3 - 0.9 ft			STANTEC	TALBU	480-1342-1	X										
Borehole	B-31	BA-B31-S2	2/4/2011	8 - 9 ft			STANTEC	TALBU	480-1342-1	X										
Borehole	B-32	BA-B32-S	2/7/2011	6 - 8.4 ft			STANTEC	TALBU	480-1342-1	X										
Geotechnical	B/MW-28D	BA-B28D-GT	2/1/2011	8 - 13 ft			STANTEC	TALBL	480-1363-1											X
Geotechnical	B/MW-28D	BA-B28D-GT2	2/1/2011	24 - 26 ft			STANTEC	TALBL	480-1363-1											X
Phase II Borehole	BS-S-1	BS-S-1	12/10/2009	8 - 9 ft			STANTEC	SPECTRUM	SB05469	X										
Phase II Borehole/Monitoring Well	BS-S-2	BS-S-2	12/10/2009	7 - 8 ft			STANTEC	SPECTRUM	SB05469	X										
Phase II Borehole/Monitoring Well	BS-S-3	BS-S-3	12/11/2009	8 - 9 ft			STANTEC	SPECTRUM	SB05538	X										
Phase II Borehole/Monitoring Well	BS-S-4	BS-S-4	12/11/2009	8 - 10 ft			STANTEC	SPECTRUM	SB05538	X										

**Table 3 - RI Soil Sample Summary
Remedial Investigation
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York**

Location Purpose	Sample Location	Sample Identification	Sample Date	Depth	Sample Type	Parent Sample	Sampling Company	Laboratory	Laboratory Sample Delivery Group	Analysis Completed										
										TCL Volatile Organic Compounds by EPA Method 8260B	TCL Semivolatile Organic Compounds by EPA Method 8270C	TCL Pesticides by EPA Method 8081A	TCL Polychlorinated Biphenyls by EPA Method 8082	TAL Metals by Methods 6010B/7471A	TCLP Volatiles by EPA Method 8260B	TCLP Metals by EPA Method 1311 & 6000/7000 Series	pH by EPA Method 9045C	Grain Size by Method ASTM D422		
Surface Soil	SS-3	BA-SS3-S	10/26/2010	6 - 7 ft			STANTEC	TALBU	RTJ1956		X									
Surface Soil	SS-4	BA-SS-4-S	10/26/2010	0 - 2 in			STANTEC	TALBU	RTJ1956		X									
Surface Soil	SS-5	BA-SS5-S	10/27/2010	1.4 - 1.4 ft			STANTEC	TALBU	RTJ1956		X									
Surface Soil	SS-6	BA-SS-6-S	10/25/2010	0 - 2 in			STANTEC	TALBU	RTJ1956		X	X	X	X						
Surface Soil	SS-6	BA-SS-6-S/D	10/25/2010	0 - 2 in	Duplicate	BA-SS-6-S	STANTEC	TALBU	RTJ1956		X									
Surface Soil	SS-7	BA-SS-7-S	10/25/2010	0 - 2 in	MS/MSD		STANTEC	TALBU	RTJ1956		X									
Surface Soil	SS-8	BA-SS-8-S	10/25/2010	0 - 2 in			STANTEC	TALBU	RTJ1956		X	X	X	X						
Surface Soil	SS-9	BA-SS-9-S	10/26/2010	0 - 2 in			STANTEC	TALBU	RTJ1956		X									
Surface Soil	SS-10	BA-SS-10-S	10/25/2010	0 - 2 in			STANTEC	TALBU	RTJ1956		X									
Surface Soil	SS-11	BA-SS-11-S	10/25/2010	0 - 2 in			STANTEC	TALBU	RTJ1956		X									
Surface Soil	SS-12	BA-SS-12-S	10/25/2010	1 - 3 in			STANTEC	TALBU	RTJ1956		X	X	X	X						
Surface Soil	SS-13	BA-SS13-S	10/28/2010	0 - 2 in			STANTEC	TALBU	RTJ1956		X	X	X							
Surface Soil	SS-14	BA-SS14-S	10/28/2010	0 - 1 in			STANTEC	TALBU	RTJ1956		X	X								
Surface Soil	SS-15	BA-SS15-S	10/28/2010	0 - 2 in			STANTEC	TALBU	RTJ1956		X	X								
Surface Soil	SS-16	BA-SS16-S	2/3/2011	0 - 2 in			STANTEC	TALBU	480-1342-1		X	X	X	X						
Surface Soil	N/A	BA-SS-RB-W	10/25/2010	-	Rinsate		STANTEC	TALBU	RTJ1956		X	X	X	X						
Test Pit	TP-1	BA-TP-1-S	10/26/2010	1.4 - 1.8 ft			STANTEC	TALBU	RTJ1956		X									
Test Pit	TP-1	BA-TP-1-S2	10/26/2010	2.5 - 3 ft			STANTEC	TALBU	RTJ1956		X									
Test Pit	TP-2	BA-TP2-S	10/26/2010	9.5 - 10 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-3	BA-TP3-S	10/26/2010	10 - 18.5 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-4	BA-TP4-S	10/26/2010	9 - 9.5 ft			STANTEC	TALBU	RTJ2029		X	X	X	X	X					
Test Pit	TP-5	BA-TP5-S	10/27/2010	3.5 - 4 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-7	BA-TP7-S	10/27/2010	0.5 - 2.5 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-7	BA-TP7-S2	10/27/2010	2.5 - 3 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-8	BA-TP8-S	10/27/2010	2 - 4 ft			STANTEC	TALBU	RTJ2029		X	X	X	X	X					
Test Pit	TP-8	BA-TP8-S/D	10/27/2010	2 - 4 ft	Duplicate	BA-TP8-S	STANTEC	TALBU	RTJ2029		X	X	X	X	X					
Test Pit	TP-8	BA-TP8-S2	10/27/2010	4.5 - 5 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-8	BA-TP8-S3	10/27/2010	5 - 5.5 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-9	BA-TP9-S	10/27/2010	0 - 3 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-10	BA-TP10-S	10/27/2010	6 - 6.5 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-11	BA-TP11-S	10/28/2010	4 - 5 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-11	BA-TP11-S2	10/28/2010	5 - 5.5 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-12	BA-TP12-S	10/28/2010	4 - 5 ft			STANTEC	TALBU	RTJ2029		X									
Test Pit	TP-13	BA-TP13-S	10/29/2010	2 - 2.5 ft			STANTEC	TALBU	RTJ2029			X	X	X						
Test Pit	TP-13	BA-TP13-S	10/29/2010	2 - 2.5 ft	MS/MSD		STANTEC	TALBU	RTJ2029		X	X								
Test Pit	TP-14	BA-TP14-S	10/29/2010	3 ft			STANTEC	TALBU	RTJ2029		X	X								
Test Pit	TP-14	BA-TP14-S/D	10/29/2010	3 ft	Duplicate	BA-TP14-S	STANTEC	TALBU	RTJ2029		X	X								
Test Pit	TP-14	BA-TP14-S2	10/29/2010	6 ft			STANTEC	TALBU	RTJ2029		X	X								
Test Pit	TP-15	BA-TP15-S	10/29/2010	4 - 4.5 ft			STANTEC	TALBU	RTJ2029		X	X								
Test Pit	TP-17	BA-TP17-S	10/29/2010	3.5 - 4 ft			STANTEC	TALBU	RTJ2029		X	X	X	X	X					
Test Pit	TP-18	BA-TP18-S	10/29/2010	9.5 - 10 ft			STANTEC	TALBU	RTJ2029		X	X	X	X	X					
Test Pit	N/A	BA-TP-RB-W	10/26/2010	-	Rinsate		STANTEC	TALBU	RTJ1956		X	X	X	X	X					

**Table 3 - RI Soil Sample Summary
Remedial Investigation
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York**

Location Purpose	Sample Location	Sample Identification	Sample Date	Depth	Sample Type	Parent Sample	Sampling Company	Laboratory	Laboratory Sample Delivery Group	Analysis Completed											
										TCL Volatile Organic Compounds by EPA Method 8260B	TCL Semivolatile Organic Compounds by EPA Method 8270C	TCL Pesticides by EPA Method 8081A	TCL Polychlorinated Biphenyls by EPA Method 8082	TAL Metals by Methods 6010B/7471A	TCLP Volatiles by EPA Method 8260B	TCLP Metals by EPA Method 1311 & 6000/7000 Series	pH by EPA Method 9045C	Grain Size by Method ASTM D422			
Test Pit	TP-19	BA-TP19-S	11/21/2011	5 - ft			STANTEC	TALBU	480-13114-1	X											
Test Pit	TP-20	BA-TP20-S	11/21/2011	0 - 1 ft			STANTEC	TALBU	480-13114-1	X	X										
Test Pit	TP-20	BA-TP20-S2	11/21/2011	4 - ft			STANTEC	TALBU	480-13114-1	X											
Test Pit	TP-21	BA-TP21-S	11/21/2011	0 - 1 ft			STANTEC	TALBU	480-13114-1	X											
Test Pit	TP-RB	BA-RB112811-W	11/28/2011	-	Rinsate		STANTEC	TALBU	480-13227-1	X	X										
Waste Characterization	IDW Drums	BA-DRUM8/9-S	1/31/2011	-			STANTEC	TALBU	480-1355-1							X					
	Burn Drum	BA-DRUM32-S	2/24/2011	-			STANTEC	TALBU	480-2035-1	X	X		X					X	X		

Notes:
EPA United States Environmental Protection Agency
MS Matrix Spike
MSD Matrix Spike Duplicate
Rinsate Rinsate Blank
TALBL Test America Laboratories, Inc., Burlington, VT
TALBU Test America Laboratories, Inc., Buffalo, NY
SPECTRUM Spectrum Analytical Inc., Agawam, MA
N/A Not applicable
TCL Target Compound List
TAL Target Analyte List
TCLP Toxicity Characteristic Leachate Procedure
in inch
ft feet

Table 4
Monitoring Well Completion Summary
Remedial Investigation and Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Well ID	Installation Date	Event	Northing	Easting	Ground Elevation (ft AMSL)	TOIC Elevation (ft AMSL)	Well Diameter (in)	Total Depth (ft bgs)	Screen Interval (ft bgs)	Sand Interval (ft bgs)	Bentonite Interval (ft bgs)
BS-2	12/10/2009	Phase II	814078.59	1292607.50	1375.39	1378.06*	1.0	14	4 - 14	2 - 14	0 - 2
BS-2R	1/26/2012	IRM	814073.00	1292609.34	1374.70	1377.79	2.0	14.5	4.5 - 14.5	3.5 - 14.5	0 - 3.5
BS-3	12/11/2009	Phase II	814077.11	1292580.60	1376.00	1379.24*	1.0	14	4 - 14	2 - 14	0 - 2
BS-4	12/11/2009	Phase II	814069.57	1292631.24	1375.28	1378.31*	1.0	14	4 - 14	2 - 14	0 - 2
MW-5	12/2/2010	RI	814117.55	1292546.17	1367.57	1370.24	2.0	13	3 - 13	2.5 - 13	1.5 - 2.5
MW-6	12/1/2010	RI	814076.20	1292746.04	1372.72	1375.40	2.0	13	3 - 13	2.3 - 13	1.5 - 2.3
MW-7	12/2/2010	RI	814165.77	1292676.08	1375.64	1378.68	2.0	14	4 - 14	3 - 14	1.5 - 3
MW-8	12/1/2010	RI	814149.38	1292620.72	1365.91	1368.70	2.0	13	3 - 13	2.5 - 13	1.4 - 2.5
MW-9	11/30/2010	RI	813988.92	1292900.73	1368.80	1371.68	2.0	13	3 - 13	2.5 - 13	1.5 - 2.5
MW-10	11/30/2010	RI	814000.98	1292784.66	1370.90	1373.76	2.0	13	3 - 13	2.4 - 13	1.5 - 2.4
MW-11	11/30/2010	RI	813909.43	1292790.53	1369.87	1372.39	2.0	13	3 - 13	2.5 - 13	1.5 - 2.5
MW-12	11/29/2010	RI	813823.90	1292595.43	1378.46	1381.50	2.0	16	6 - 16	4 - 16	1.6 - 4
MW-13	11/29/2010	RI	813509.88	1292840.19	1371.24	1374.00	2.0	16	6 - 16	3.8 - 16	2 - 3.8
MW-14	11/30/2010	RI	814027.22	1292987.36	1363.62	1366.54	2.0	20	10 - 20	7.5 - 20	5.3 - 7.5
MW-22	12/3/2010	RI	814248.82	1292524.03	1365.66	1368.32	2.0	13	3 - 13	2.5 - 13	1.5 - 2.5
MW-23	12/7/2010	RI	814025.72	1292619.12	1374.46	1377.59	2.0	13	3 - 13	2.4 - 13	1.5 - 2.4
MW-25	12/6/2010	RI	814105.71	1292631.54	1376.07	1378.52	2.0	16	6 - 16	4 - 16	2 - 4
MW-26	2/4/2011	RI	813941.31	1292623.84	1373.07	1375.79	2.0	15	5 - 15	3.2 - 15	2 - 3.2
MW-27	2/3/2011	RI	814016.67	1292667.17	1372.76	1375.28	2.0	15	5 - 15	3.1 - 15	2 - 3.1
MW-65	1/26/2012	IRM	813997.80	1292765.65	1371.40	1374.33	2.0	13	3 - 13	2.5 - 13	0 - 2.5
MW-28D	2/1/2011	RI	814063.23	1292660.84	1374.40	1377.17	2.0	40	30 - 40	27.7 - 40	25 - 27.7

Notes:

ft AMSL Feet above mean sea level (NAVD 88)

ft bgs Feet below ground surface

in Inches

IRM Interim Remedial Measure

RI Remedial Investigation

* Well casing stick-ups were extended prior to the installation of an outer casing in December 2010. Elevations given herein reflect this extension and are therefore different from the elevation at the time of well installation in December 2009.

Table 5
Water Level Summary
Remedial Investigation and Interim Remedial Measures
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	
				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
BS-2R	1374.70	1377.79	Shallow	NM	NM	NM	NM	NM	NM	9.44	1368.35
BS-3	1376.00	1379.24	Shallow	10.43	1368.81	11	1368.24	9.505	1369.74	10.72	1368.52
BS-4	1375.28	1378.31	Shallow	11.27	1367.04	11.18	1367.13	8.35	1369.96	NM	NM
MW-5	1367.57	1370.24	Shallow	4.09	1366.15	4.73	1365.51	3.18	1367.06	NM	NM
MW-6	1372.72	1375.40	Shallow	9.93	1365.47	10.29	1365.11	8.61	1366.79	NM	NM
MW-7	1375.64	1378.68	Shallow	12.79	1365.89	13.36	1365.32	9.04	1369.64	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
MW-9	1368.80	1371.68	Shallow	7.68	1364.00	8.09	1363.59	6.40	1365.28	NM	NM
MW-10	1370.90	1373.76	Shallow	7.48	1366.28	7.13	1366.63	6.64	1367.12	NM	NM
MW-11	1369.87	1372.39	Shallow	6.09	1366.30	6.76	1365.63	5.29	1367.1	NM	NM
MW-12	1378.46	1381.50	Shallow	12.24	1369.26	12.63	1368.87	11.32	1370.18	NM	NM
MW-13	1371.24	1374.00	Shallow	17.54	1356.46	17.84	1356.16	15.87	1358.13	NM	NM
MW-14	1363.62	1366.54	Shallow	13.64	1352.90	14.32	1352.22	12.26	1354.28	NM	NM
MW-22	1365.66	1368.32	Shallow	3.48	1364.84	4.02	1364.3	2.96	1365.36	NM	NM
MW-23	1374.46	1377.59	Shallow	10.34	1367.25	8.82	1368.77	7.58	1370.01	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
MW-26	1373.07	1375.79	Shallow	NM	NM	7.61	1368.18	6.18	1369.61	NM	NM
MW-27	1372.76	1375.28	Shallow	NM	NM	7.41	1367.87	5.85	1369.43	7.98	1367.30
MW-65	1371.40	1374.33	Shallow	NM	NM	NM	NM	NM	NM	8.23	1366.10
MW-28D	1374.40	1377.17	Deep	NM	NM	18.93	1358.24	16.90	1360.27	17.72	1359.45
WSW	1370.79	1371.01	Deep	NM	NM	12.15	1358.86	10.85	1360.16	10.79	1360.22

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

**Table 6 - RI Groundwater Sample Summary
Remedial Investigation
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York**

Location Purpose	Sample Location	Sample Identification	Sample Date	Sample Type	Parent Sample	Sampling Company	Laboratory	Laboratory Sample Delivery Group	Analysis Completed					
									TCL Volatile Organic Compounds by EPA Method 8260B	TCL Semivolatile Organic Compounds by EPA Method 8270C	TCL Pesticides by EPA Method 8081A	TCL Polychlorinated Biphenyls by EPA Method 8082	TAL Metals by Methods 6010B/7471A	
Monitoring Well	BS-2	BA-BS2-W	1/5/2011			STANTEC	TALBU	480-548-1	X					
Monitoring Well	BS-2	BA-BS2-R2-W	4/21/2011			STANTEC	TALBU	480-4050-1	X					
Monitoring Well	BS-3	BA-BS3-W	1/5/2011			STANTEC	TALBU	480-548-1	X					
Monitoring Well	BS-3	BA-BS3-R2-W	4/21/2011			STANTEC	TALBU	480-4050-1	X					
Monitoring Well	BS-4	BA-BS4-W	1/4/2011			STANTEC	TALBU	480-548-1	X					
Monitoring Well	BS-4	BA-BS4-R2-W	4/21/2011			STANTEC	TALBU	480-4050-1	X					
Monitoring Well	B/MW-5	BA-MW5-W	1/5/2011			STANTEC	TALBU	480-548-1	X					
Monitoring Well	B/MW-5	BA-MW5-RW-W	4/20/2011			STANTEC	TALBU	480-4050-1	X					
Monitoring Well	B/MW-6	BA-MW6-W	1/6/2011			STANTEC	TALBU	480-548-1	X					
Monitoring Well	B/MW-6	BA-MW6-R2-W	4/21/2011			STANTEC	TALBU	480-4050-1	X					
Monitoring Well	B/MW-7	BA-MW7-W	1/5/2011			STANTEC	TALBU	480-548-1	X					
Monitoring Well	B/MW-7	BA-MW7-R2-W	4/20/2011			STANTEC	TALBU	480-4050-1	X					
Monitoring Well	B/MW-8	BA-MW8-W	1/7/2011			STANTEC	TALBU	480-548-1	X					
Monitoring Well	B/MW-8	BA-MW8-R2-W	4/20/2011	MS/MSD		STANTEC	TALBU	480-4050-1	X					
Monitoring Well	B/MW-9	BA-MW9-W	1/5/2011			STANTEC	TALBU	480-548-1	X	X	X	X	X	
Monitoring Well	B/MW-9	BA-MW9-W/D	1/5/2011	Duplicate	BA-MW9-W	STANTEC	TALBU	480-548-1	X	X	X	X	X	X
Monitoring Well	B/MW-10	BA-MW10-W	1/6/2011			STANTEC	TALBU	480-548-1	X	X				
Monitoring Well	B/MW-11	BA-MW11-W	1/6/2011			STANTEC	TALBU	480-548-1	X	X	X	X	X	
Monitoring Well	B/MW-12	BA-MW12-W	1/6/2011			STANTEC	TALBU	480-548-1	X	X				
Monitoring Well	B/MW-13	BA-MW13-W	1/6/2011			STANTEC	TALBU	480-548-1	X	X				
Monitoring Well	B/MW-14	BA-MW14-W	1/6/2011			STANTEC	TALBU	480-548-1	X	X				
Monitoring Well	B/MW-22	BA-MW22-W	1/5/2011			STANTEC	TALBU	480-548-1	X					
Monitoring Well	B/MW-22	BA-MW22-R2-W	4/20/2011			STANTEC	TALBU	480-4050-1	X					
Monitoring Well	B/MW-23	BA-MW23-W	1/7/2011			STANTEC	TALBU	480-548-1	X					
Monitoring Well	B/MW-23	BA-MW23-R2-W	4/21/2011			STANTEC	TALBU	480-4050-1	X					
Monitoring Well	B/MW-23	BA-MW23-R2-W/D	4/21/2011	Duplicate	BA-MW23-R2-W	STANTEC	TALBU	480-4050-1	X					
Monitoring Well	B/MW-25	BA-MW25-W	1/5/2011			STANTEC	TALBU	480-548-1	X	X	X	X	X	
Monitoring Well	B/MW-25	BA-MW-25-R2-W	4/20/2011			STANTEC	TALBU	480-4050-1	X					
Monitoring Well	B/MW-26	BA-MW26-W	2/22/2011	MS/MSD		STANTEC	TALBU	480-1891-1	X					
Monitoring Well	B/MW-27	BA-MW27-W	2/22/2011			STANTEC	TALBU	480-1891-1	X					
Monitoring Well	B/MW-27	BA-MW27-W/D	2/22/2011	Duplicate		STANTEC	TALBU	480-1891-1	X					
Monitoring Well	B/MW-28D	BA-MW28D-W	2/22/2011			STANTEC	TALBU	480-1891-1	X					
Monitoring Well	Trip Blank	BA-TB	12/7/2010	Trip Blank		STANTEC	TALBU	RTL0627	X					
Monitoring Well	Trip Blank	BA-TB010411-W	1/4/2011	Trip Blank		STANTEC	TALBU	480-548-1	X					
Monitoring Well	Trip Blank	BA-TB010511-W	1/5/2011	Trip Blank		STANTEC	TALBU	480-548-1	X					
Monitoring Well	Trip Blank	BA-TB010611-W	1/6/2011	Trip Blank		STANTEC	TALBU	480-548-1	X					
Monitoring Well	Trip Blank	BA-TB022211-W	2/22/2011	Trip Blank		STANTEC	TALBU	480-1891-1	X					
Monitoring Well	Trip Blank	BA-TB-042011-W	4/20/2011	Trip Blank		STANTEC	TALBU	480-4050-1	X					
Phase II Temporary Monitoring Well	BS-1	BS-GW-1	12/10/2009			STANTEC	SPECTRUM	SB05469	X					
Phase II Monitoring Well	BS-2	BS-GW-2	12/10/2009			STANTEC	SPECTRUM	SB05469	X					
Phase II Monitoring Well	BS-3	BS-GW-3	12/11/2009			STANTEC	SPECTRUM	SB05538	X					
Phase II Monitoring Well	BS-4	BS-GW-4	12/11/2009			STANTEC	SPECTRUM	SB05538	X					
Phase II Monitoring Well	Trip Blank	TRIP BLANK	12/11/2009	Trip Blank		STANTEC	SPECTRUM	SB05538	X					
Water Supply Well	WSW	BA-WSW-W	12/7/2010	MS/MSD		STANTEC	TALBU	RTL0627	X	X	X	X	X	X

See notes on next page.

Table 6 - RI Groundwater Sample Summary
Remedial Investigation
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Notes:
EPA United States Environmental Protection Agency
Rinsate Rinsate Blank
TALBU Test America Laboratories, Inc., Buffalo, NY
SPECTRUM Spectrum Analytical Inc., Agawam, MA
TCL Target Compound List
TAL Target Analyte List

Table 7
Summary of Groundwater Field Parameters
Former Allegany Bitumens Belmont Asphalt Plant Remedial Investigation
5392 State Route 19
Amity, NY

Sample Location		WSW	BS-2	BS-3	BS-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
Sample Date		7-Dec-10	5-Jan-11	5-Jan-11	4-Jan-11	5-Jan-11	6-Jan-11	5-Jan-11	7-Jan-11	5-Jan-11	6-Jan-11
Purge Methodology		Low Flow	Volumetric	Volumetric	Volumetric	Low Flow	Volumetric	Volumetric	Low Flow	Low Flow	Low Flow
Purge Method		Grundfos Pump	Bailer	Bailer	Bailer	Peristaltic Pump	Bailer	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump
Sampling Method		Grundfos Pump	Bailer	Bailer	Bailer	Peristaltic Pump	Bailer	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump
Field Parameters	Units										
Conductivity	mS/cm	0.90	0.657	0.946	0.790	1.01	0.843	0.528	1.04	0.373	0.445
Dissolved Oxygen	mg/L	1.96	-	-	-	0.14	7.05	4.29	0.06	5.72	0.48
Oxidation Reduction Potential	mV	-201	142	105	260	-112	73	115	40	253	54
pH	S.U.	7.97	7.35	6.87	8.58	7.76	7.45	7.50	6.40	6.32	6.68
Temperature	deg c	11.22	7.44	8.81	7.59	4.17	8.28	8.43	4.33	4.12	5.84
Turbidity	NTU	6.77	>1000	>1000	>1000	16.2	210	4.14	3.84	0.00	1.00
Sample Location		MW-11	MW-12	MW-13	MW-14	MW-22	MW-23	MW-25	MW-26	MW-27	MW-28D
Sample Date		6-Jan-11	6-Jan-11	6-Jan-11	6-Jan-11	5-Jan-11	7-Jan-11	4-Jan-11	22-Feb-11	22-Feb-11	22-Feb-11
Purge Methodology		Low Flow	Volumetric	Volumetric	Volumetric	Low Flow	Volumetric	Volumetric	Low Flow	Low Flow	Volumetric
Purge Method		Peristaltic Pump	Peristaltic Pump	Bailer	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Bailer
Sampling Method		Peristaltic Pump	Peristaltic Pump	Bailer	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Bailer
Field Parameters	Units										
Conductivity	mS/cm	0.462	1.87	1.02	0.605	0.586	0.746	0.203	0.632	0.626	0.461
Dissolved Oxygen	mg/L	1.25	0.39	-	0.25	0.11	4.28	-	0.00	0.00	-
Oxidation Reduction Potential	mV	71	20	-58	-18	-60	145	246	18	98	79
pH	S.U.	6.75	6.45	6.91	6.98	7.46	6.65	9.08	6.45	6.56	7.18
Temperature	deg c	4.19	9.78	10.53	11.25	3.95	11.11	6.23	4.63	3.01	9.16
Turbidity	NTU	0.46	19.3	87.1	57.3	9.61	10.76	>1000 / 24.4 ¹	28.6	1.57	>1000
Sample Location		BS-2	BS-3	BS-4	MW-5	MW-6	MW-7	MW-8	MW-22	MW-23	MW-25
Sample Date		21-Apr-11	21-Apr-11	21-Apr-11	20-Apr-11	21-Apr-11	20-Apr-11	20-Apr-11	20-Apr-11	21-Apr-11	20-Apr-11
Purge Methodology		Volumetric	Volumetric	Volumetric	Low Flow	Volumetric	Volumetric	Low Flow	Low Flow	Volumetric	Volumetric
Purge Method		Bailer	Bailer	Bailer	Peristaltic Pump	Bailer	Bailer	Peristaltic Pump	Peristaltic Pump	Bailer	Bailer
Sampling Method		Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Peristaltic Pump	Peristaltic Pump	Bailer	Bailer
Field Parameters	Units										
Conductivity	mS/cm	0.500	0.919	0.687	1.45	0.737	0.144	0.9-0.999 ²	0.9-0.999 ²	0.424	0.089
Dissolved Oxygen	mg/L	-	-	-	0.00	-	-	0.00	0.00	-	-
Oxidation Reduction Potential	mV	138	140	149	-128	100	60	95	-37	136	105
pH	S.U.	7.12	6.85	6.84	7.22	7.40	7.66	6.42	7.1	6.78	6.50
Temperature	deg c	5.18	5.92	5.31	7.98	5.89	6.08	9.04	7.95	6.24	5.58
Turbidity	NTU	1224	>4000	>4000	9.1	38.9	3096	5.43	2.19	59.6	>4000

Table 7
Summary of Groundwater Field Parameters
Former Allegany Bitumens Belmont Asphalt Plant Remedial Investigation
5392 State Route 19
Amity, NY

Sample Location		BS-2R	BS-3	MW-8	MW-25	MW-27	MW-28D	MW-65
Sample Date		29-Mar-12	29-Mar-12	29-Mar-12	29-Mar-12	28-Mar-12	28-Mar-12	28-Mar-12
Purge Methodology		Low Flow	Low Flow	Low Flow	Volumetric	Volumetric	Volumetric	Low Flow
Purge Method		Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Bailer	Bailer	Bailer	Peristaltic Pump
Sampling Method		Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Bailer	Bailer	Bailer	Peristaltic Pump
Field Parameters	Units							
Conductivity	mS/cm	1.01	1.91	1.11	0.555	0.790	0.171	0.76
Dissolved Oxygen	mg/L	0.27	0.52	0.21	3.28 ³	3.80 ³	3.84 ³	0.13
Oxidation Reduction Potential	mV	70.3	75.3	-58.8	30.0	55.4	64.9	-83.7
pH	S.U.	7.10	6.29	6.85	7.28	7.39	7.87	6.95
Temperature	deg c	7.3	6.9	7.2	6.1	11.4	13.1	9.0
Turbidity	NTU	1.88	3.37	2.22	72.0 ⁴	617 ⁴	107.4	1.79
Ferrous Iron ⁵	ppm	0.2	0.0	3.3	0.0	0.1	0.2	4.6
Total Iron ⁵	ppm	0.2	1.0	3.5	0.0	0.2	0.2	4.8

¹Turbidity at the time of sampling on 1/4/2011 for all paramters except metals was >1000 NTUs. The turbidity at the time of sampling on 1/5/2011 for metals was 28.4 NTUs.

²Conductivity reading could not be precisely determined. Reading was likely at the low point or high point of one of the instrument's sensor ranges. Sensor checked with calibration standard and it read precisely.

³Sample purging attempted with low flow methods and a flow cell prior to switching to use of a bailer once water levels dropped. Dissolved oxygen value listed represents last reading taken with flow cell, which may still be an overestimation of dissolved oxygen.

⁴Turbidity not recorded at time of sampling. Turbidity listed represents the last measurement taken during purging before the well went dry.

⁵Ferrous iron and total iron analyzed with a LaMotte Smart 3 Colorimeter on a filtered sample.

Notes:

- not measured
deg c degrees Celsius
mg/l milligrams per liter
mS/cm milliSiemens per centimeter
mV millivolts
NTU nephelometric turbidity unit
ppm parts per million
S.U. standard units
WSW water supply well

TABLE 8
SUMMARY OF HYDRAULIC CONDUCTIVITY TEST RESULTS

Remedial Investigation
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, NY

MONITORING WELLS	TEST TYPE	HYDRAULIC CONDUCTIVITY (cm/s)	AVERAGE HYDRAULIC CONDUCTIVITY (cm/s)
MW-9	Falling Head	9.8×10^{-3}	9.8×10^{-3}
	Rising Head	9.0×10^{-3}	9.2×10^{-3}
	Rising Head	9.4×10^{-3}	
MW-11	Falling Head	1.3×10^{-1}	1.3×10^{-1}
	Rising Head	1.6×10^{-1}	1.6×10^{-1}
	Rising Head	1.6×10^{-1}	
MW-12	Falling Head	1.4×10^{-3}	1.4×10^{-3}
	Rising Head	3.1×10^{-3}	3.1×10^{-3}
	Rising Head	3.2×10^{-3}	
MW-23	Falling Head	2.3×10^{-2}	2.3×10^{-2}
	Rising Head	1.7×10^{-2}	1.7×10^{-2}
	Rising Head	1.7×10^{-2}	
MW-25	Falling Head	4.9×10^{-4}	4.9×10^{-4}
	Rising Head	8.3×10^{-3}	8.6×10^{-3}
	Rising Head	8.9×10^{-3}	
MW-28D	Falling Head	4.9×10^{-5}	4.9×10^{-5}
	Rising Head	3.4×10^{-5}	3.4×10^{-5}

Notes:

1. Testing conducted with solid PVC slugs.
2. All data analysis completed using AQUTESOLV 4.02 Professional (2006) and the Bouwer-Rice Method (1976).

Key:

cm/s = centimeters per second

Table 9
Summary of RI Analytical Results in Surface Soil
Remedial Investigation
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 1000000 ^d	31 U	27 U	28 U
Benzene	µg/kg	44000 ^A 89000 ^B	6.2 U	5.3 U	5.5 U
Bromodichloromethane	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Bromoform (tribromomethane)	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Bromomethane (Methyl bromide)	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Carbon Disulfide	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B	6.2 U	5.3 U	5.5 U
Chlorinated Fluorocarbon (Freon 113)	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Chloroform	µg/kg	350000 ^A 700000 ^B	6.2 U	5.3 U	5.5 U
Chloromethane	µg/kg	500000 ^c 1000000 ^d	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 1000000 ^d	6.2 U	5.3 U	5.5 U
Dichlorobenzene, 1,2-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B	6.2 U	5.3 U	5.5 U
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B	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 480000 ^B	6.2 U	5.3 U	5.5 U
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B	6.2 U	5.3 U	5.5 U
Dichloroethylene, 1,1-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Dichloroethylene, cis-1,2-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Dichloroethylene, trans-1,2-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Dichloropropane, 1,2-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Dichloropropene, cis-1,3-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Dichloropropene, trans-1,3-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Ethylbenzene	µg/kg	390000 ^A 780000 ^B	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 1000000 ^d	31 U	27 U	28 U
Isopropylbenzene	µg/kg	500000 ^c 1000000 ^d	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 1000000 ^d	31 U	27 U	28 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^c 1000000 ^d	31 U	27 U	28 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^c 1000000 ^d	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 1000000 ^d	7.5	9.0	8.2
Styrene	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B	6.2 U	5.3 U	5.5 U
Toluene	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Trichloroethane, 1,1,1-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Trichloroethane, 1,1,2-	µg/kg	500000 ^c 1000000 ^d	6.2 U	5.3 U	5.5 U
Trichloroethylene (TCE)	µg/kg	200000 ^A 400000 ^B	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 27000 ^B	6.2 U	5.3 U	5.5 U
Xylenes, Total	µg/kg	500000 ^c 1000000 ^d	12 U	11 U	11 U
Total VOCs	µg/kg	500000 ^c 1000000 ^d	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
- ^B NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial
- 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.
- J Indicates estimated value.
- TALBU Test America Laboratories Inc., Buffalo New York
- in inches

Table 9
Summary of RI Analytical Results in Surface Soil
Remedial Investigation
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	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-SS4-S	BA-SS5-S	BA-SS6-S	BA-SS6-S/D	BA-SS7-S	BA-SS8-S	BA-SS9-S	BA-SS10-S	BA-SS11-S	BA-SS12-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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 11000 ^B	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 ^A 1100 ^B	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 11000 ^B	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 ^A 1000000 ^B	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 110000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 110000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 1100 ^B	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 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 9
Summary of RI Analytical Results in Surface Soil
Remedial Investigation
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	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-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	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	
Laboratory			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	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	
Sample Type	Units	6NYCRR					Field Duplicate										
Semi-Volatile Organic Compounds (cont'd)																	
Dinitrophenol, 2,4-	µg/kg	500000 ^c 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 12000 ^B	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 11000 ^B	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 55000 ^B	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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 1000000 ^d	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
 - ^B NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial
 - 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.
 - 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 9
Summary of RI Analytical Results in Surface Soil
Remedial Investigation
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			SS-6	SS-8	SS-12	SS-13	SS-16
Sample Date			25-Oct-10	25-Oct-10	25-Oct-10	28-Oct-10	3-Feb-11
Sample ID			BA-SS-6-S	BA-SS-8-S	BA-SS-12-S	BA-SS13-S	BA-SS16-S
Sample Depth			0 - 2 in	0 - 2 in	1 - 3 in	0 - 2 in	0 - 2 in
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory Work Order			RTJ1956	RTJ1956	RTJ1956	RTJ1956	480-1342-1
Laboratory Sample ID			RTJ1956-01	RTJ1956-03	RTJ1956-08	RTK0340-01	480-1409-5
Sample Type	Units	6NYCRR					
Metals							
Aluminum	mg/kg	10000 ^{AB}	3720 J	2540 J	1110 J	-	9640
Antimony	mg/kg	10000 ^{AB}	16.5 U	15.7 U	16.1 U	-	15.0 U
Arsenic	mg/kg	16 ^{AB}	3.9	2.5	2.1	-	10.2
Barium	mg/kg	400 ^A 10000 ^B	24.7	17.3	5.52	-	133
Beryllium	mg/kg	590 ^A 2700 ^B	0.168 J	0.116 J	0.059 J	-	0.47
Cadmium	mg/kg	9.3 ^A 60 ^B	0.135 J	0.096 J	0.076 J	-	0.27
Calcium	mg/kg	10000 ^{AB}	78900 BD ^{AB}	40600 B ^{AB}	208000 BD ^{AB}	-	6740
Chromium (Total)	mg/kg	NS,q ^{AB}	5.85	3.80	3.94	-	11.5
Cobalt	mg/kg	10000 ^{AB}	3.46	2.15	1.01	-	8.4
Copper	mg/kg	270 ^A 10000 ^B	12.0 B	7.5 B	3.9 B	-	19.3
Iron	mg/kg	10000 ^{AB}	9190 B	5950 B	2760 B	-	21800 ^{AB}
Lead	mg/kg	1000 ^A 3900 ^B	8.4 B	4.5 B	2.5 U	-	49.0
Magnesium	mg/kg	10000 ^{AB}	25500 B ^{AB}	6710 B	6830 B	-	3420
Manganese	mg/kg	10000 ^{AB}	541 B	288 B	128 B	-	1020
Mercury	mg/kg	2.8 ^k 5.7 ^k	0.0228 U	0.0219 U	0.0218 U	-	0.12
Nickel	mg/kg	310 ^A 10000 ^B	9.23	5.80	5.36	-	19.1
Potassium	mg/kg	10000 ^{AB}	569	468	452	-	1570
Selenium	mg/kg	1500 ^A 6800 ^B	4.4 U	4.2 U	0.7 J	-	4.0 U
Silver	mg/kg	1500 ^A 6800 ^B	0.549 U	0.523 U	0.536 U	-	0.50 U
Sodium	mg/kg	10000 ^{AB}	86.3 J	77.2 J	116 J	-	140 U
Thallium	mg/kg	10000 ^{AB}	6.6 U	6.3 U	6.4 U	-	6.0 U
Vanadium	mg/kg	10000 ^{AB}	7.25	5.11	3.64	-	13.3
Zinc	mg/kg	10000 ^{AB}	38.9 B	30.3 B	9.5 B	-	85.1
Pesticides							
Aldrin	µg/kg	680 ^A 1400 ^B	91 U DJ	87 U DJ	1.8 U J	-	2.7 U
BHC, alpha-	µg/kg	3400 ^A 6800 ^B	91 U DJ	87 U DJ	1.8 U J	-	2.0 U
BHC, beta-	µg/kg	3000 ^A 14000 ^B	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
BHC, delta-	µg/kg	500000 ^c 1000000 ^d	91 U DJ	87 U DJ	1.0 J	-	6.5
Camphechlor (Toxaphene)	µg/kg	500000 ^c 1000000 ^d	910 U DJ	870 U DJ	18 U J	-	65 U
Chlordane (Total)	µg/kg	500000 ^c 1000000 ^d	910 U DJ	870 U DJ	18 JN	-	18 JN
Chlordane, alpha-	µg/kg	24000 ^A 47000 ^B	91 U DJ	87 U DJ	1.8 U J	-	5.5 U
Chlordane, gamma-	µg/kg	500000 ^c 1000000 ^d	91 U DJ	87 U DJ	1.7 JN	-	3.5 U
DDD (p,p'-DDD)	µg/kg	92000 ^A 180000 ^B	91 U DJ	87 U DJ	1.8 U J	-	2.2 U
DDE (p,p'-DDE)	µg/kg	62000 ^A 120000 ^B	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
DDT (p,p'-DDT)	µg/kg	47000 ^A 94000 ^B	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
Dieldrin	µg/kg	1400 ^A 2800 ^B	91 U DJ	87 U DJ	1.0 JN	-	2.7 U
Endosulfan I	µg/kg	200000 ^A 920000 ^B	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
Endosulfan II	µg/kg	200000 ^A 920000 ^B	91 U DJ	87 U DJ	1.3 JN	-	2.0 U
Endosulfan Sulfate	µg/kg	200000 ^A 920000 ^B	91 U DJ	87 U DJ	1.8 U J	-	4.9
Endrin	µg/kg	89000 ^A 410000 ^B	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
Endrin Aldehyde	µg/kg	500000 ^c 1000000 ^d	91 U DJ	87 U DJ	1.8 U J	-	2.9 U
Endrin Ketone	µg/kg	500000 ^c 1000000 ^d	91 U DJ	87 U DJ	1.8 U J	-	5.5
Heptachlor	µg/kg	15000 ^A 29000 ^B	91 U DJ	87 U DJ	1.8 U J	-	1.7 U
Heptachlor Epoxide	µg/kg	500000 ^c 1000000 ^d	91 U DJ	87 U DJ	1.8 U J	-	2.9 U
Lindane (Hexachlorocyclohexane, gamma)	µg/kg	9200 ^A 23000 ^B	91 U DJ	87 U DJ	0.99 J	-	8.0 U
Methoxychlor (4,4'-Methoxychlor)	µg/kg	500000 ^c 1000000 ^d	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 ^A 25000 ^B	18 U	17 U	18 U	100 U D	17 U
Aroclor 1221	µg/kg	1000 ^A 25000 ^B	18 U	17 U	18 U	100 U D	17 U
Aroclor 1232	µg/kg	1000 ^A 25000 ^B	18 U	17 U	18 U	100 U D	17 U
Aroclor 1242	µg/kg	1000 ^A 25000 ^B	18 U	17 U	18 U	100 U D	17 U
Aroclor 1248	µg/kg	1000 ^A 25000 ^B	18 U	17 U	18 U	100 U D	17 U
Aroclor 1254	µg/kg	1000 ^A 25000 ^B	18 U	17 U	18 U	100 U D	17 U
Aroclor 1260	µg/kg	1000 ^A 25000 ^B	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
 - ^B NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial
 - 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.
 - ^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.
 - ^{AB} This SCO is the sum of endosulfan I, endosulfan II, and endosulfan sulfate.
 - ^j The criterion is applicable to total PCBs, and the individual aroclors should be added for comparison.
 - ^o Analyte was detected in the associated Method Blank.
 - ^B Reported result taken from diluted sample analysis.
 - ^D Indicates estimated value.
 - ^J Presumptively present at an approximated quantity.
 - ^{JN} Test America Laboratories Inc., Buffalo New York
 - TALBU in inches

Table 10
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Remedial Investigation
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	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 ^A 1000000 ^B	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 89000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 44000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 700000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 560000 ^B	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 250000 ^B	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 480000 ^B	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 60000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 780000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 300000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 400000 ^B	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 ^A 1000000 ^B	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 27000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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.

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 Human Health - Industrial
- 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.
- D Reported result taken from diluted sample analysis.
- J Indicates estimated value.
- TALBU Test America Laboratories, Inc., Buffalo, NY
- ft feet
- ND Not detected

Table 10
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Remedial Investigation
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	TP-1		TP-2	TP-3	TP-4	TP-5	TP-7		TP-8			TP-9	TP-10	TP-11			
											26-Oct-10 BA-TP-1-S	26-Oct-10 BA-TP-1-S2	26-Oct-10 BA-TP2-S	26-Oct-10 BA-TP3-S	26-Oct-10 BA-TP4-S	27-Oct-10 BA-TP5-S	27-Oct-10 BA-TP7-S	27-Oct-10 BA-TP7-S2	27-Oct-10 BA-TP8-S	27-Oct-10 BA-TP8-S/D	27-Oct-10 BA-TP8-S2	27-Oct-10 BA-TP8-S3	27-Oct-10 BA-TP9-S	27-Oct-10 BA-TP10-S	28-Oct-10 BA-TP11-S	28-Oct-10 BA-TP11-S2	
											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	
											STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
											TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
											RTJ1956	RTJ1956	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029
											RTJ1956-14	RTJ1956-15	RTJ2029-01	RTJ2029-02	RTJ2029-03	RTJ2029-06	RTJ2137-05	RTJ2137-06	RTJ2137-01	Field Duplicate	RTJ2137-02	RTJ2137-03	RTJ2137-04	RTJ2137-07	RTJ2137-08	RTK0343-01	RTK0343-02
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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 11000 ^B	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 ^A 1100 ^B	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 ^{AB}	8600 U D	920 U D									
Benzo(b)fluoranthene	µg/kg	5600 ^A 11000 ^B	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 ^A 1000000 ^B	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 110000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 110000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 1100 ^B	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 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 10
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Remedial Investigation
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	TP-1		TP-2	TP-3	TP-4	TP-5	TP-7		TP-8			TP-9	TP-10	TP-11		
											26-Oct-10 BA-TP-1-S 1.4 - 1.8 ft STANTEC TALBU RTJ1956 RTJ1956-14	26-Oct-10 BA-TP-1-S2 2.5 - 3 ft STANTEC TALBU RTJ1956 RTJ1956-15	26-Oct-10 BA-TP2-S 9.5 - 10 ft STANTEC TALBU RTJ2029 RTJ2029-01	26-Oct-10 BA-TP3-S 10 - 18.5 ft STANTEC TALBU RTJ2029 RTJ2029-02	26-Oct-10 BA-TP4-S 9 - 9.5 ft STANTEC TALBU RTJ2029 RTJ2029-03	27-Oct-10 BA-TP5-S 3.5 - 4 ft STANTEC TALBU RTJ2029 RTJ2029-06	27-Oct-10 BA-TP7-S 0.5 - 2.5 ft STANTEC TALBU RTJ2029 RTJ2137-05	27-Oct-10 BA-TP7-S2 2.5 - 3 ft STANTEC TALBU RTJ2029 RTJ2137-06	27-Oct-10 BA-TP8-S 2 - 4 ft STANTEC TALBU RTJ2029 RTJ2137-01	27-Oct-10 BA-TP8-S/D 2 - 4 ft STANTEC TALBU RTJ2029 RTJ2137-02 Field Duplicate	27-Oct-10 BA-TP8-S2 4.5 - 5 ft STANTEC TALBU RTJ2029 RTJ2137-03	27-Oct-10 BA-TP8-S3 5 - 5.5 ft STANTEC TALBU RTJ2029 RTJ2137-04	27-Oct-10 BA-TP9-S 0 - 3 ft STANTEC TALBU RTJ2029 RTJ2137-07	27-Oct-10 BA-TP10-S 6 - 6.5 ft STANTEC TALBU RTJ2029 RTJ2137-08	28-Oct-10 BA-TP11-S 4 - 5 ft STANTEC TALBU RTJ2029 RTK0343-01	28-Oct-10 BA-TP11-S2 5 - 5.5 ft STANTEC TALBU RTJ2029 RTK0343-02
Semi-Volatile Organic Compounds (cont'd)																										
Di-n-Octyl phthalate	µg/kg	500000 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 12000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 11000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 55000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									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 ^A 1000000 ^B									None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None

See last page for notes.

Table 10
 Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
 Remedial Investigation
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location			TP-12	TP-13	TP-14	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	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	
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	
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Laboratory			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	
Laboratory Work Order			RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	RTJ2029	
Laboratory Sample ID			RTK0343-03	RTK0343-04	RTK0343-07	RTK0343-08	RTK0343-09	RTK0343-10	RTK0343-11	RTK0343-12	
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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 11000 ^B	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 ^A 1100 ^B	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 11000 ^B	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 ^A 1000000 ^B	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 110000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 110000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 1100 ^B	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 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 10
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Remedial Investigation
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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 12000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 11000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 55000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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 ^A 1000000 ^B	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

^B NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial

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.

D Reported result taken from diluted sample analysis.

J Indicates estimated value.

TALBU Test America Laboratories, Inc., Buffalo, NY

ft feet

Table 10
Summary of RI Analytical Results in Subsurface Soils from Test Pit Locations
Remedial Investigation
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			TP-4	TP-8	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 ^{AB}	7700 J	4290 J	3030 J	13000 J ^{AB}	5550 J	6230 J
Antimony	mg/kg	10000 ^{AB}	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	5.6 J	5.8 B	4.0 U	7.6	5.5	4.5
Barium	mg/kg	400 ^A 10000 ^B	39.0 J	46.7	61.2	80.5 J	35.0	29.0
Beryllium	mg/kg	590 ^A 2700 ^B	0.357	0.203 J	0.129 J	0.633 J	0.219	0.265
Cadmium	mg/kg	9.3 ^A 60 ^B	0.204 J	0.390	0.330	0.234 J	0.832	0.169 J
Calcium	mg/kg	10000 ^{AB}	31000 B ^{AB}	120000 BD ^{AB}	69600 BD ^{AB}	31200 B ^{AB}	85300 BD ^{AB}	53100 B ^{AB}
Chromium (Total)	mg/kg	NS,q ^{AB}	10.2	8.77	28.1	15.8 J	7.08	7.56
Cobalt	mg/kg	10000 ^{AB}	8.42	4.69	3.34	11.5	5.16	4.63
Copper	mg/kg	270 ^A 10000 ^B	17.1	21.5	18.9	21.4	19.6	14.4
Iron	mg/kg	10000 ^{AB}	16900 ^{AB}	13400 ^{AB}	12000 ^{AB}	25100 ^{AB}	21800 ^{AB}	13100 ^{AB}
Lead	mg/kg	1000 ^A 3900 ^B	10.8	47.5	149	13.0	14.0	6.7
Magnesium	mg/kg	10000 ^{AB}	12400 ^{AB}	7560	6590	13800 ^{AB}	11900 ^{AB}	13900 ^{AB}
Manganese	mg/kg	10000 ^{AB}	486 J	421 B	348 B	563 B	787 B	375 B
Mercury	mg/kg	2.8 ^k 5.7 ^k	0.0227 U	0.0227 U	0.0112 J	0.0240 U	1.22 D	0.0212 U
Nickel	mg/kg	310 ^A 10000 ^B	19.0	14.1	9.48	26.5	13.1	13.4
Potassium	mg/kg	10000 ^{AB}	1080 J	608	535	2390 J	795	910
Selenium	mg/kg	1500 ^A 6800 ^B	4.6 U	4.6 U	4.8 U	5.1 U	4.3 U	4.3 U
Silver	mg/kg	1500 ^A 6800 ^B	0.570 U	0.580 U	0.606 U	0.631 U	0.539 U	0.532 U
Sodium	mg/kg	10000 ^{AB}	88.3 J	102 J	78.8 J	130 J	97.5 J B	114 J B
Thallium	mg/kg	10000 ^{AB}	6.8 U	7.0 U	7.3 U	7.6 U	6.5 U	6.4 U
Vanadium	mg/kg	10000 ^{AB}	11.5	8.40	6.10	19.1 J	9.97	9.84
Zinc	mg/kg	10000 ^{AB}	44.7 B	99.7 B	80.9 B	62.4 B	62.3 B	46.1 B
Pesticides								
Aldrin	µg/kg	680 ^A 1400 ^B	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 6800 ^B	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 14000 ^B	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 1000000 ^B	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 1000000 ^B	19 U J	20000 U DJ	19000 U DJ	21 U J	1800 U DJ	890 U DJ
Chlordane, alpha-	µg/kg	24000 ^A 47000 ^B	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 1000000 ^B	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 180000 ^B	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 120000 ^B	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 94000 ^B	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 2800 ^B	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 ^A 920000 ^B	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 ^A 920000 ^B	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 ^A 920000 ^B	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 410000 ^B	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 1000000 ^B	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 1000000 ^B	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 29000 ^B	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 1000000 ^B	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 23000 ^B	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 1000000 ^B	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 ^A 25000 ^B	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1221	µg/kg	1000 ^A 25000 ^B	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1232	µg/kg	1000 ^A 25000 ^B	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1242	µg/kg	1000 ^A 25000 ^B	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1248	µg/kg	1000 ^A 25000 ^B	19 U	200 U D	190 U D	21 U	90 U D	18 U
Aroclor 1254	µg/kg	1000 ^A 25000 ^B	19 U	200 U D	190 U D	21 U	19 JDN	18 U
Aroclor 1260	µg/kg	1000 ^A 25000 ^B	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
- ^B NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial
- 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.
- ^c For commercial use, these are 1500 and 400 mg/kg respectively.
- ^d The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
- ^e 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.
- ^{AB} 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 the laboratory 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 11
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
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						
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	RTL0493-04	RTL0315-01	RTL0315-02	RTL0493-03	RTL0493-04	RTL0522-04	RTL0522-05	RTL0522-03	RTL0493-03
Sample Type		Units	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		6NYCRR																	
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 ^A 1000000 ^B 50 ^C	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 89000 ^B 60 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^B 12000 ^C	5.1 U	288 U	4.8 U	57.7 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, tert-	µg/kg	500000 ^A 1000000 ^B 5900 ^C	5.9 U	334 U	5.6 U	66.9 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Disulfide	µg/kg	500000 ^A 1000000 ^{BC}	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 44000 ^B 760 ^C	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 ^A 1000000 ^B 1100 ^C	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 ^A 1000000 ^{BC}	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 700000 ^B 370 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^B 1100 ^C	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 560000 ^B 2400 ^C	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 250000 ^B 1800 ^C	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 480000 ^B 270 ^C	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 ^C	6.0 U	6.0 U	6.1 U
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	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 ^A 1000000 ^B 330 ^C	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 ^A 1000000 ^B 250 ^C	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 ^A 1000000 ^B 190 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 250000 ^B 100 ^C	102 U	5830 U	98.0 U	1170 U	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

Table 11
 Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
 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	RTL0493-04	RTL0315-01	RTL0315-02	RTL0493-03	RTL0493-04	RTL0522-04	RTL0522-05	RTL0522-03	RTL0493-03	
Sample Type	Units	6NYCRR	1	1	1	1														
Volatiles 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 780000 ^B 1000 ^C	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 1000000 ^d	4.7 U	267 U	4.5 U	53.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hexanone, 2-	µg/kg	500000 ^C 1000000 ^d	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 1000000 ^d	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 1000000 ^d 120 ^C	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 1000000 ^d	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 1000000 ^d 930 ^C	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 1000000 ^d 50 ^C	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 1000000 ^d 12000 ^C	5.1 U	288 U	4.8 U	60.6 J	-	-	-	-	-	-	-	-	-	-	-	-	-	
Phenylbutane, 2- (sec-Butylbenzene)	µg/kg	500000 ^C 1000000 ^d 11000 ^C	4.3 U	243 U	4.1 U	48.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	
Propylbenzene, n-	µg/kg	500000 ^C 1000000 ^d 3900 ^C	4.5 U	257 U	4.3 U	51.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-	
Styrene	µg/kg	500000 ^C 1000000 ^d	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 1000000 ^d	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 300000 ^B 1300 ^C	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 1000000 ^d 700 ^C	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 1000000 ^d	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 1000000 ^d 680 ^C	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	1.5 J	6.0 U	6.0 U	6.1 U	
Trichloroethane, 1,1,2-	µg/kg	500000 ^C 1000000 ^d	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 400000 ^B 470 ^C	16.8	37500 ^C	5.8 U	16800 ^C	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	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 1000000 ^d	5.2 U	299 U	5.0 U	59.9 U	-	-	-	-	-	-	-	-	-	-	-	-	-	
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^C 1000000 ^d	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 380000 ^B 3600 ^C	4.8 U	274 U	4.6 U	54.9 U	-	-	-	-	-	-	-	-	-	-	-	-	-	
Trimethylbenzene, 1,3,5-	µg/kg	190000 ^A 380000 ^B 8400 ^C	5.9 U	334 U	5.6 U	66.9 U	-	-	-	-	-	-	-	-	-	-	-	-	-	
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	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 1000000 ^d 1600 ^p	9.9 U	562 U	9.5 U	113 U	-	-	-	-	-	-	-	-	-	-	-	-	-	
Xylene, o-	µg/kg	500000 ^C 1000000 ^d 1600 ^p	3.9 U	221 U	3.7 U	44.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-	
Xylenes, Total	µg/kg	500000 ^C 1000000 ^d 1600 ^C	-	-	-	-	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 1000000 ^d	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 11
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
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 ^A 1000000 ^B 50 ^C	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 89000 ^B 60 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^B 12000 ^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylbenzene, tert-	µg/kg	500000 ^A 1000000 ^B 5900 ^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Disulfide	µg/kg	500000 ^A 1000000 ^{BC}	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 44000 ^B 760 ^C	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 ^A 1000000 ^B 1100 ^C	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 ^A 1000000 ^{BC}	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 700000 ^B 370 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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 ^A 1000000 ^{BC}	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 ^A 1000000 ^B 1100 ^C	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 560000 ^B 2400 ^C	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 250000 ^B 1800 ^C	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 480000 ^B 270 ^C	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 60000 ^B 20 ^C	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 ^A 1000000 ^B 330 ^C	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 ^A 1000000 ^B 250 ^C	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 ^A 1000000 ^B 190 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropane, 2,2-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, 1,1-	µg/kg	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 250000 ^B 100 ^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

Table 11
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
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 780000 ^B 1000 ^C	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 1000000 ^d	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexanone, 2-	µg/kg	500000 ^c 1000000 ^d	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 1000000 ^d	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 1000000 ^d 120 ^C	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 1000000 ^d	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 1000000 ^d 930 ^C	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 1000000 ^d 50 ^C	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 1000000 ^d 12000 ^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenylbutane, 2- (sec-Butylbenzene)	µg/kg	500000 ^c 1000000 ^d 11000 ^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylbenzene, n-	µg/kg	500000 ^c 1000000 ^d 3900 ^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	µg/kg	500000 ^c 1000000 ^d	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 1000000 ^d	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 300000 ^B 1300 ^C	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 1000000 ^d 700 ^C	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 1000000 ^d	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 1000000 ^d 680 ^C	6.8 U	6.5 U	6.0 U	12	18	5.4 U	4000 D ^C	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 1000000 ^d	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 400000 ^B 470 ^C	6.8 U	6.5 U	6.0 U J	10000 ^C	89	2.3 J	35000 D ^C	5100 ^C	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 1000000 ^d	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^c 1000000 ^d	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 380000 ^B 3600 ^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	µg/kg	190000 ^A 380000 ^B 8400 ^C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	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} 1000000 ^{d,p} 1600 ^p	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene, o-	µg/kg	500000 ^{c,p} 1000000 ^{d,p} 1600 ^p	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/kg	500000 ^c 1000000 ^d 1600 ^C	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 1000000 ^d	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.

Table 11
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location	Units	6NYCRR	B-31		B-32
			4-Feb-11 BA-B31-S 0.3 - 0.9 ft STANTEC TALBU 480-1342-1 480-1418-3	4-Feb-11 BA-B31-S2 8 - 9 ft STANTEC TALBU 480-1342-1 480-1418-4	7-Feb-11 BA-B32-S 6 - 8.4 ft STANTEC TALBU 480-1342-1 480-1441-1
General Chemistry					
Total Solids	%	n/v	-	-	-
Volatile Organic Compounds					
Acetone	µg/kg	500000 ^c 1000000 ^d 50 ^c	25 U	25 U	25 U
Acrylonitrile	µg/kg	n/v	-	-	-
Benzene	µg/kg	44000 ^A 89000 ^B 60 ^C	5.0 U	5.0 U	5.0 U
Bromobenzene	µg/kg	n/v	-	-	-
Bromodichloromethane	µg/kg	500000 ^c 1000000 ^d BC	5.0 U	5.0 U	5.0 U
Bromoform (tribromomethane)	µg/kg	500000 ^c 1000000 ^d BC	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/kg	500000 ^c 1000000 ^d BC	5.0 U	5.0 U	5.0 U
Butylbenzene, n-	µg/kg	500000 ^c 1000000 ^d 12000 ^C	-	-	-
Butylbenzene, tert-	µg/kg	500000 ^c 1000000 ^d 5900 ^C	-	-	-
Carbon Disulfide	µg/kg	500000 ^c 1000000 ^d BC	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B 760 ^C	5.0 U	5.0 U	5.0 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^c 1000000 ^d 1100 ^C	5.0 U	5.0 U	5.0 U
Chlorobromomethane	µg/kg	n/v	-	-	-
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^c 1000000 ^d BC	5.0 U	5.0 U	5.0 U
Chloroform	µg/kg	350000 ^A 700000 ^B 370 ^C	5.0 U	5.0 U	5.0 U
Chloromethane	µg/kg	500000 ^c 1000000 ^d BC	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 1000000 ^d BC	-	-	-
Dibromo-3-Chloropropane (DBCP), 1,2-	µg/kg	n/v	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/kg	500000 ^c 1000000 ^d BC	5.0 U	5.0 U	5.0 U
Dibromomethane (Methylene Bromide)	µg/kg	n/v	-	-	-
Dichlorobenzene, 1,2-	µg/kg	500000 ^c 1000000 ^d 1100 ^C	5.0 U	5.0 U	5.0 U
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B 2400 ^C	5.0 U	5.0 U	5.0 U
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B 1800 ^C	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 480000 ^B 270 ^C	5.0 U	8.0	5.0 U
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	5.0 U	5.0 U	5.0 U
Dichloroethylene, 1,1-	µg/kg	500000 ^c 1000000 ^d 330 ^C	5.0 U	5.0 U	5.0 U
Dichloroethylene, cis-1,2-	µg/kg	500000 ^c 1000000 ^d 250 ^C	5.0 U	5.0 U	5.0 U
Dichloroethylene, trans-1,2-	µg/kg	500000 ^c 1000000 ^d 190 ^C	5.0 U	5.0 U	5.0 U
Dichloropropane, 1,2-	µg/kg	500000 ^c 1000000 ^d BC	5.0 U	5.0 U	5.0 U
Dichloropropane, 1,3-	µg/kg	500000 ^c 1000000 ^d BC	-	-	-
Dichloropropane, 2,2-	µg/kg	n/v	-	-	-
Dichloropropene, 1,1-	µg/kg	n/v	-	-	-
Dichloropropene, cis-1,3-	µg/kg	500000 ^c 1000000 ^d BC	5.0 U	5.0 U	5.0 U
Dichloropropene, trans-1,3-	µg/kg	500000 ^c 1000000 ^d BC	5.0 U	5.0 U	5.0 U
Diisopropyl Ether	µg/kg	n/v	-	-	-
Dioxane, 1,4-	µg/kg	130000 ^A 250000 ^B 100 ^C	-	-	-

See last page for notes.

Table 11
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location	Units	6NYCRR	B-31		B-32
			4-Feb-11 BA-B31-S 0.3 - 0.9 ft STANTEC TALBU 480-1342-1 480-1418-3	4-Feb-11 BA-B31-S2 8 - 9 ft STANTEC TALBU 480-1342-1 480-1418-4	7-Feb-11 BA-B32-S 6 - 8.4 ft STANTEC TALBU 480-1342-1 480-1441-1
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 780000 ^B 1000 ^C	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 1000000 ^d	-	-	-
Hexanone, 2-	µg/kg	500000 ^c 1000000 ^d	25 U	25 U	25 U
Isopropylbenzene	µg/kg	500000 ^c 1000000 ^d	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 1000000 ^d 120 ^C	25 U	25 U	25 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^c 1000000 ^d	25 U	25 U	25 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^c 1000000 ^d 930 ^C	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 1000000 ^d 50 ^C	5.2	5.0 U	10
Naphthalene	µg/kg	500000 ^c 1000000 ^d 12000 ^C	-	-	-
Phenylbutane, 2- (sec-Butylbenzene)	µg/kg	500000 ^c 1000000 ^d 11000 ^C	-	-	-
Propylbenzene, n-	µg/kg	500000 ^c 1000000 ^d 3900 ^C	-	-	-
Styrene	µg/kg	500000 ^c 1000000 ^d	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 1000000 ^d	5.0 U	5.0 U	5.0 U
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B 1300 ^C	5.0 U	5.0 U	5.0 U
Tetrahydrofuran	µg/kg	n/v	-	-	-
Toluene	µg/kg	500000 ^c 1000000 ^d 700 ^C	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 1000000 ^d	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 1000000 ^d 680 ^C	5.0 U	5.0 U	5.0 U
Trichloroethane, 1,1,2-	µg/kg	500000 ^c 1000000 ^d	5.0 U	5.0 U	5.0 U
Trichloroethylene (TCE)	µg/kg	200000 ^A 400000 ^B 470 ^C	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 1000000 ^d	-	-	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^c 1000000 ^d	5.0 U	5.0 U	5.0 U
Trimethylbenzene, 1,2,4-	µg/kg	190000 ^A 380000 ^B 3600 ^C	-	-	-
Trimethylbenzene, 1,3,5-	µg/kg	190000 ^A 380000 ^B 8400 ^C	-	-	-
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	5.0 U	5.0 U	5.0 U
Xylene, m & p-	µg/kg	500000 ^{c,p} 1000000 ^{d,p} 1600 ^p	-	-	-
Xylene, o-	µg/kg	500000 ^{c,p} 1000000 ^{d,p} 1600 ^p	-	-	-
Xylenes, Total	µg/kg	500000 ^c 1000000 ^d 1600 ^C	22	10 U	10 U
Total VOC	µg/kg	500000 ^c 1000000 ^d	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 Human Health - Industrial
- ^C 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

Table 11
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
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									
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 ^A 1000000 ^B 98000 ^C	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 ^A 1000000 ^B 107000 ^C	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 ^A 1000000 ^{BC}	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 11000 ^B 1000 ^C	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 ^A 1100 ^B 2200 ^C	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 11000 ^B 1700 ^C	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 ^A 1000000 ^{BC}	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 110000 ^B 1700 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 110000 ^B 1000 ^C	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 ^A 1000000 ^B 330 ^C	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 ^A 1000000 ^B 330 ^C	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 1100 ^B 1000000 ^C	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 1000000 ^B 210000 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 11
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^B 386000 ^C	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 12000 ^B 3200 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 11000 ^B 8200 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^B 12000 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 55000 ^B 800 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^B 330 ^C	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 ^A 1000000 ^{BC}	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 Human Health - Industrial
 - ^C 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.
 - ^{AC} 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 11
Summary of RI Analytical Results in Subsurface Soil from Boring and Monitoring Well Locations
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 ^{ABC}	7130	6900	8810	8980 B	7490
Antimony	mg/kg	10000 ^{ABC}	19.1 U J	17.6 U J	19.3 U J	1.0 J	18.4 U J
Arsenic	mg/kg	16 ^{ABC}	7.5	6.9	9.5	7.7	7.0
Barium	mg/kg	400 ^A 10000 ^B 820 ^C	53.2	50.9	45.8	69.6	46.9
Beryllium	mg/kg	590 ^A 2700 ^B 47 ^C	0.360	0.359	0.450	0.439	0.377
Cadmium	mg/kg	9.3 ^A 60 ^B 7.5 ^C	0.141 J	0.146 J	0.149 J	0.145 J	0.140 J
Calcium	mg/kg	10000 ^{ABC}	26300 B ^{ABC}	24100 B ^{ABC}	25200 B ^{ABC}	28600 B ^{ABC}	26200 B ^{ABC}
Chromium (Total)	mg/kg	NS,q ^{ABC}	9.24	9.09	11.5	12.7	10.1
Cobalt	mg/kg	10000 ^{ABC}	7.68	7.40	9.78	9.88	8.49
Copper	mg/kg	270 ^A 10000 ^B 1720 ^C	17.2	15.3	17.5	18.1	15.9
Iron	mg/kg	10000 ^{ABC}	17000 B ^{ABC}	16400 B ^{ABC}	21100 B ^{ABC}	20200 B ^{ABC}	17600 B ^{ABC}
Lead	mg/kg	1000 ^A 3900 ^B 450 ^C	10.2	9.6	11.7	11.0	9.3
Magnesium	mg/kg	10000 ^{ABC}	11300 ^{ABC}	10500 ^{ABC}	11700 ^{ABC}	12600 ^{ABC}	11300 ^{ABC}
Manganese	mg/kg	10000 ^{AB} 2000 ^C	432 B	409 B	482 B	597 B	378
Mercury	mg/kg	2.8 ^k 5.7 ^k 0.73 ^C	0.0241 U	0.0238 U	0.0256 U	0.0255 U	0.0246 U
Nickel	mg/kg	310 ^A 10000 ^B 130 ^C	17.0	16.4	21.5	21.9	18.8
Potassium	mg/kg	10000 ^{ABC}	1430 J	1310 J	1580 J	1570 J	1300 J
Selenium	mg/kg	1500 ^A 6800 ^B 4 ^C	5.1 U	4.7 U	5.1 U	5.0 U	4.9 U
Silver	mg/kg	1500 ^A 6800 ^B 8.3 ^C	0.637 U	0.585 U	0.643 U	0.631 U	0.615 U
Sodium	mg/kg	10000 ^{ABC}	96.4 J	111 J	88.4 J	120 J	78.2 J
Thallium	mg/kg	10000 ^{ABC}	7.6 U	7.0 U	7.7 U	7.6 U	7.4 U
Vanadium	mg/kg	10000 ^{ABC}	11.2	10.7	13.3	14.5	12.7
Zinc	mg/kg	10000 ^{AB} 2480 ^C	46.2 B	45.0 B	52.3 B	50.1 B	43.6
Pesticides							
Aldrin	µg/kg	680 ^A 1400 ^B 190 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
BHC, alpha-	µg/kg	3400 ^A 6800 ^B 20 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
BHC, beta-	µg/kg	3000 ^A 14000 ^B 90 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
BHC, delta-	µg/kg	500000 ^A 1000000 ^B 250 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Camphechlor (Toxaphene)	µg/kg	500000 ^A 1000000 ^B	21 U	20 U	21 U J	21 U	21 U
Chlordane (Total)	µg/kg	500000 ^A 1000000 ^B	21 U	-	21 U J	-	-
Chlordane, alpha-	µg/kg	24000 ^A 47000 ^B 2900 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Chlordane, gamma-	µg/kg	500000 ^A 1000000 ^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 180000 ^B 14000 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
DDE (p,p'-DDE)	µg/kg	62000 ^A 120000 ^B 17000 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
DDT (p,p'-DDT)	µg/kg	47000 ^A 94000 ^B 136000 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Dieldrin	µg/kg	1400 ^A 2800 ^B 100 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endosulfan I	µg/kg	200000 ^A 920000 ^B 102000 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endosulfan II	µg/kg	200000 ^A 920000 ^B 102000 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endosulfan Sulfate	µg/kg	200000 ^A 920000 ^B 1000000 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endrin	µg/kg	89000 ^A 410000 ^B 60 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endrin Aldehyde	µg/kg	500000 ^A 1000000 ^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Endrin Ketone	µg/kg	500000 ^A 1000000 ^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Heptachlor	µg/kg	15000 ^A 29000 ^B 380 ^C	2.1 U	2.0 U J	2.1 U J	2.1 U J	2.1 U J
Heptachlor Epoxide	µg/kg	500000 ^A 1000000 ^B	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Lindane (Hexachlorocyclohexane, gamma)	µg/kg	9200 ^A 23000 ^B 100 ^C	2.1 U	2.0 U	2.1 U J	2.1 U	2.1 U
Methoxychlor (4,4'-Methoxychlor)	µg/kg	500000 ^A 1000000 ^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 ^A 25000 ^B 3200 ^C	21 U J	20 U J	21 U J	21 U J	21 U J
Aroclor 1221	µg/kg	1000 ^A 25000 ^B 3200 ^C	21 U	20 U	21 U	21 U	21 U
Aroclor 1232	µg/kg	1000 ^A 25000 ^B 3200 ^C	21 U	20 U	21 U	21 U	21 U
Aroclor 1242	µg/kg	1000 ^A 25000 ^B 3200 ^C	21 U	20 U	21 U	21 U	21 U
Aroclor 1248	µg/kg	1000 ^A 25000 ^B 3200 ^C	21 U	20 U	21 U	21 U	21 U
Aroclor 1254	µg/kg	1000 ^A 25000 ^B 3200 ^C	21 U	20 U	21 U	21 U	21 U
Aroclor 1260	µg/kg	1000 ^A 25000 ^B 3200 ^C	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 Human Health - Industrial
C 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.
AB The SCOs for metals were capped at a maximum value of 10,000 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3.
e ABC 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.
q
AB This SCO is the sum of endosulfan I, endosulfan II, and endosulfan sulfate.
j ABC The criterion is applicable to total PCBs, and the individual aroclors should be added for comparison.
o B Analyte was detected in the associated Method Blank.
J Indicates estimated value.
TALBU Test America Laboratories Inc., Buffalo, New York
ft feet

Table 12
Summary of RI Analytical Results in Groundwater
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	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	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	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 12
 Summary of RI Analytical Results in Groundwater
 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.

Table 12
 Summary of RI Analytical Results in Groundwater
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location	Units	TOGS	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		
			7-Jan-11 BA-MW8-W	20-Apr-11 BA-MW8-R2-W	5-Jan-11 BA-MW9-W	5-Jan-11 BA-MW9-W/D	6-Jan-11 BA-MW10-W	6-Jan-11 BA-MW11-W	6-Jan-11 BA-MW12-W	6-Jan-11 BA-MW13-W*	6-Jan-11 BA-MW14-W	5-Jan-11 BA-MW22-W	20-Apr-11 BA-MW22-R2-W	7-Jan-11 BA-MW23-W	21-Apr-11 BA-MW23-R2-W	21-Apr-11 BA-MW23-R2-W/D
Sample Date			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Sample ID			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
Sampling Company			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	480-548-1	480-4050-1	480-548-1	480-4050-1
Laboratory			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
Laboratory Work Order						Field Duplicate										Field Duplicate
Laboratory Sample ID																
Sample Type																
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 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	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	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	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 ^{pB}	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 ^{pB}	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 12
 Summary of RI Analytical Results in Groundwater
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location	Units	TOGS	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		
			7-Jan-11 BA-MW8-W	20-Apr-11 BA-MW8-R2-W	5-Jan-11 BA-MW9-W	5-Jan-11 BA-MW9-W/D	6-Jan-11 BA-MW10-W	6-Jan-11 BA-MW11-W	6-Jan-11 BA-MW12-W	6-Jan-11 BA-MW13-W*	6-Jan-11 BA-MW14-W	5-Jan-11 BA-MW22-W	20-Apr-11 BA-MW22-R2-W	7-Jan-11 BA-MW23-W	21-Apr-11 BA-MW23-R2-W	21-Apr-11 BA-MW23-R2-W/D
Sample Date			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Sample ID			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	
Sampling Company			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	480-548-1	480-548-1	480-4050-1	
Laboratory			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	
Laboratory Work Order																
Laboratory Sample ID																
Sample Type						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 12
 Summary of RI Analytical Results in Groundwater
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location	Units	TOGS	B/MW-25		B/MW-26	B/MW-27		B/MW-28D	WSW	TP-RB		Trip Blank				
			4-Jan-11 BA-MW25-W	20-Apr-11 BA-MW25-R2-W	22-Feb-11 BA-MW26-W	22-Feb-11 BA-MW27-W	22-Feb-11 BA-MW27-W/D	22-Feb-11 BA-MW28D-W	7-Dec-10 BA-WSW-W	26-Oct-10 BA-TP-RB-W	28-Nov-11 BA-RB112811-W	8-Dec-09 TRIP BLANK	11-Dec-09 TRIP BLANK	7-Dec-10 BA-TB	4-Jan-11 BA-TB010411-W	5-Jan-11 BA-TB010511-W
Sample Date																
Sample ID																
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	480-1891-1	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							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	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	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	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	-	5.0 U	5.0 U	5.0 U	5.0 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 ^{pB}	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 ^{pB}	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.

Table 12
 Summary of RI Analytical Results in Groundwater
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location	Units	TOGS	B/MW-25		B/MW-26	B/MW-27		B/MW-28D	WSW	TP-RB		Trip Blank				
			4-Jan-11 BA-MW25-W	20-Apr-11 BA-MW25-R2-W	22-Feb-11 BA-MW26-W	22-Feb-11 BA-MW27-W	22-Feb-11 BA-MW27-W/D	22-Feb-11 BA-MW28D-W	7-Dec-10 BA-WSW-W	26-Oct-10 BA-TP-RB-W	28-Nov-11 BA-RB112811-W	8-Dec-09 TRIP BLANK	11-Dec-09 TRIP BLANK	7-Dec-10 BA-TB	4-Jan-11 BA-TB010411-W	5-Jan-11 BA-TB010511-W
Sample Date			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Sample ID			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
Sampling Company			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			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
Laboratory Work Order																
Laboratory Sample ID																
Sample Type							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	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	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 12
Summary of RI Analytical Results in Groundwater
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location Sample Date Sample ID Sampling Company Laboratory Laboratory Work Order Laboratory Sample ID Sample Type	Units	TOGS	Trip Blank		
			6-Jan-11 BA-TB010611-W STANTEC TALBU 480-548-1 480-689-8 Trip Blank	22-Feb-11 BA-TB-022211-W STANTEC TALBU 480-1891-1 480-1891-5 Trip Blank	20-Apr-11 BA-TB-042011-W STANTEC TALBU 480-4050-1 480-4050-1 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 ^{pB}	1.0 U	1.0 U	1.0 U
Dichloropropene, trans-1,3-	µg/L	0.4 ^{pB}	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.

Table 12
Summary of RI Analytical Results in Groundwater
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location					
Sample Date			6-Jan-11	Trip Blank	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 12
Summary of RI Analytical Results in Groundwater
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location	Units	TOGS	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
			5-Jan-11 BA-MW9-W STANTEC TALBU 480-548-1 480-548-5	5-Jan-11 BA-MW9-W/D STANTEC TALBU 480-548-1 480-548-6 Field Duplicate	6-Jan-11 BA-MW10-W STANTEC TALBU 480-548-1 480-689-1	6-Jan-11 BA-MW11-W STANTEC TALBU 480-548-1 480-633-7	6-Jan-11 BA-MW12-W STANTEC TALBU 480-548-1 480-689-3	6-Jan-11 BA-MW13-W STANTEC TALBU 480-548-1 480-689-4	6-Jan-11 BA-MW14-W STANTEC TALBU 480-548-1 480-689-2	4-Jan-11 BA-MW25-W STANTEC TALBU 480-548-1 480-548-2	7-Dec-10 BA-WSW-W STANTEC TALBU RTL0627 RTL0627-01	25-Oct-10 BA-SS-RB-W STANTEC TALBU RTJ1956 RTJ1956-10 Material Rinse Blank	26-Oct-10 BA-TP-RB-W STANTEC TALBU RTJ1956 RTJ1956-13 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.

Table 12
Summary of RI Analytical Results in Groundwater
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location	Units	TOGS	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
			5-Jan-11 BA-MW9-W STANTEC TALBU 480-548-1 480-548-5	5-Jan-11 BA-MW9-W/D STANTEC TALBU 480-548-1 480-548-6 Field Duplicate	6-Jan-11 BA-MW10-W STANTEC TALBU 480-548-1 480-689-1	6-Jan-11 BA-MW11-W STANTEC TALBU 480-548-1 480-633-7	6-Jan-11 BA-MW12-W STANTEC TALBU 480-548-1 480-689-3	6-Jan-11 BA-MW13-W STANTEC TALBU 480-548-1 480-689-4	6-Jan-11 BA-MW14-W STANTEC TALBU 480-548-1 480-689-2	4-Jan-11 BA-MW25-W STANTEC TALBU 480-548-1 480-548-2	7-Dec-10 BA-WSW-W STANTEC TALBU RTL0627 RTL0627-01	25-Oct-10 BA-SS-RB-W STANTEC TALBU RTJ1956 RTJ1956-10 Material Rinse Blank	26-Oct-10 BA-TP-RB-W STANTEC TALBU RTJ1956 RTJ1956-13 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 12
Summary of RI Analytical Results in Groundwater
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location Sample Date Sample ID Sampling Company Laboratory Laboratory Work Order Laboratory Sample ID Sample Type	Units	TOGS	B/MW-9		B/MW-11	B/MW-25		WSW	SS-RB		TP-RB	
			5-Jan-11 BA-MW9-W STANTEC TALBU 480-548-1 480-548-5	5-Jan-11 BA-MW9-W/D STANTEC TALBU 480-548-1 480-548-6 Field Duplicate	6-Jan-11 BA-MW11-W STANTEC TALBU 480-548-1 480-633-7	4-Jan-11 BA-MW25-W STANTEC TALBU 480-548-1 480-548-2	5-Jan-11 BA-MW25-W STANTEC TALBU 480-548-1 480-548-4	7-Dec-10 BA-WSW-W STANTEC TALBU RTL0627 RTL0627-01	25-Oct-10 BA-SS-RB-W STANTEC TALBU RTJ1956 RTJ1956-10 Material Rinse Blank	25-Oct-10 BA-SS-RB-W STANTEC TALBU RTJ1956 RTJ1956-10RE1 Material Rinse Blank	26-Oct-10 BA-TP-RB-W STANTEC TALBU RTJ1956 RTJ1956-13 Material Rinse Blank	26-Oct-10 BA-TP-RB-W STANTEC TALBU RTJ1956 RTJ1956-13RE1 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 12
Summary of RI Analytical Results in Groundwater
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location Sample Date Sample ID Sampling Company Laboratory Laboratory Work Order Laboratory Sample ID Sample Type	Units	TOGS	B/MW-9		B/MW-11	B/MW-25		WSW	SS-RB		TP-RB	
			5-Jan-11 BA-MW9-W STANTEC TALBU 480-548-1 480-548-5	5-Jan-11 BA-MW9-W/D STANTEC TALBU 480-548-1 480-548-6 Field Duplicate	6-Jan-11 BA-MW11-W STANTEC TALBU 480-548-1 480-633-7	4-Jan-11 BA-MW25-W STANTEC TALBU 480-548-1 480-548-2	5-Jan-11 BA-MW25-W STANTEC TALBU 480-548-1 480-548-4	7-Dec-10 BA-WSW-W STANTEC TALBU RTL0627-01	25-Oct-10 BA-SS-RB-W STANTEC TALBU RTJ1956 RTJ1956-10 Material Rinse Blank	25-Oct-10 BA-SS-RB-W STANTEC TALBU RTJ1956 RTJ1956-10RE1 Material Rinse Blank	26-Oct-10 BA-TP-RB-W STANTEC TALBU RTJ1956 RTJ1956-13 Material Rinse Blank	26-Oct-10 BA-TP-RB-W STANTEC TALBU RTJ1956 RTJ1956-13RE1 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 13
Human Exposure Assessment Summary
Remedial Investigation and Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, NY

Environmental Media & Exposure Route	Human Exposure Assessment
Direct contact with surface soils (and incidental ingestion)	Surface soil at the site was not demonstrated to be contaminated, therefore contact with it would not provide an exposure route to contamination.
Direct contact with subsurface soils (and incidental ingestion)	People can come into contact with contaminated subsurface soil if they complete ground-intrusive work in the berms.
Ingestion of groundwater	People can come into contact with contaminated groundwater if shallow private water supply wells are installed on the property or on the property to the north in the vicinity of RAOC-1. The deep water supply well on the property is not being used now and in the past was not used for a drinking water supply. It is anticipated that the Site Management Plan and Environmental Easement will limit uses of groundwater from shallow aquifer and the deeper aquifer to non-drinking purposes.
Direct contact with groundwater	People can come into contact with shallow groundwater contamination if they complete ground-intrusive work.
Inhalation of air (exposure related to soil vapor intrusion)	This is not a current concern because there are no buildings on-site. However, it is possible that people may come into contact with contaminated air if they occupy any site buildings that may be constructed in the former laboratory area during re-development, and groundwater contaminant concentrations have not been sufficiently reduced by the time of building occupation.

Table 14
IRM Sample Summary
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample ID	Sample Location	RAOC	Sample description	Matrix	Sample Date	Sample Depth (ft bgs)	PID Reading (ppm, miniRAE 3000)	Analyses																				QC	Comments
								TCL VOCs + TICs (8260)	TCL SVOCs + TICs (8270)	TAL Metals (6010)	8 RCRA Metals	PCBs (8082)	Herbicides (8151)	TCLP VOCs	TCLP SVOCs	TCLP Metals	TCLP Herbicides	Total Pesticides	Flashpoint	Reactivity	Method 310.13	Grain size	Benchscale	pH	Diss. & Total Fe, NO3, SO4, S2-, Alk	TOC, Na, Dis. Mn & As	GT		

Key:

- | | |
|---|--|
| <p>Alk = Alkalinity
As = Arsenic
D = Duplicate
Diss. = Dissolved
DO = Dissolved oxygen
eV = Electrovolt
Fe = Iron
ft bgs = Feet below ground surface
GT = Gene-Trac DhC & Gene-Trac VC
LNAPL = Light non-aqueous phase liquid
M = Matrix spike/matrix spike duplicate
mg/L = Milligrams per liter
Mn = Manganese
N = Nitrogen
Na = Sodium</p> | <p>NO2 = Nitrite
NO3 = Nitrate
PCBs = Polychlorinated biphenyls
PID = Photoionization detector
QC = Quality control
RAOC = Remedial area of concern
RCRA = Resource conservation and recovery act
S2- = Sulfide
SO4 = Sulfate
SVOCs = Semivolatile organic compounds
TCL = Target compound list
TCLP = Toxicity characteristic leachate procedure
TICs = Tentatively identified compounds
TOC = Total organic carbon
VOCs = Volatile organic compounds</p> |
|---|--|

Table 15
 Summary of IRM Analytical Results in Water
 Interim Remedial Measures
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location	Units	TOGS	SEPTIC-1	Frac Tank 1		Frac Tank 2		Carbon Drums					RAOC-3	RAOC-1	DW-2	Heater area Excavation	TP-RB
			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
RAOC			20-Oct-11	18-Nov-11	2-Dec-11	23-Nov-11	2-Dec-11	28-Nov-11	1-Dec-11	13-Dec-11	13-Dec-11	19-Dec-11	21-Dec-11	23-Nov-11	1-May-12	4-May-12	28-Nov-11
Sample Date			BA-SEPTIC1-W	BA-R1-FT1-W	BA-FT1-W2	BA-FT2-W	BA-FT2-W2	BA-CD1-W	BA-CD2-W	BA-CD1-W2	BA-CD2-W2	BA-CD2-W3	BA-R3-EW2-W	BA-EW1-W	BW-DW2-W	BA-BOILER-W	BA-RB112811-W
Sample ID			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Sampling Company			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	
Laboratory			480-11640-1	480-13030-1-rev	480135041	480131871	480135041	480-13227-1-rev	480-13424-1-rev	480-14061-1-rev	480-14061-1-rev	480142851	480143811	480131871	480-19418-1	480-19614-1	480-13227-1-rev
Laboratory Work Order			480-11640-1	480-13030-2	480-13504-	480-13187-	480-13504-	480-13227-2	480-13424-3	480-14061-7	480-14061-6	480-14285-	480-14381-2	480-13187-	480-19418-17	480-19614-21	480-13227-6
Laboratory Sample ID			480-11640-1	480-13030-2	480-13504-	480-13187-	480-13504-	480-13227-2	480-13424-3	480-14061-7	480-14061-6	480-14285-	480-14381-2	480-13187-	480-19418-17	480-19614-21	480-13227-6
Sample Type																	Material Rinse Blank
Volatile Organic Compounds																	
Acetone	µg/L	50 ^A	5.0 U J	10 U	10 U	12 U	10 U	28	16 J	5.0 U	5.0 U	5.0 U	10	10 U	10 U	10 U	5.0 U
Benzene	µg/L	1 ^B	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	50 ^A	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform (Tribromomethane)	µg/L	50 ^A	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	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	2.0 U J	1.0 U J	1.6 U	1.0 U	1.0 U	1.0 U J	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
Carbon Disulfide	µg/L	60 ^A	1.0 U	2.0 U J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	71 ^A	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	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	1.0 U	1.0 U	1.0 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	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	1.0 U	1.0 U
Chloroethane (Ethyl Chloride)	µg/L	5 ^B	1.0 U	2.0 U	1.0 U	2.3 U	1.0 U	1.0 U	1.0 U	1.0 U J	1.0 U J	1.0 U	1.0 U	1.0 U	1.0 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	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	1.0 U	1.0 U
Chloromethane	µg/L	5 ^B	1.0 U	2.0 U	1.0 U	1.1 U	1.0 U	1.2	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
Cyclohexane	µg/L	n/v	1.0 U	2.0 U J	1.0 U J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/L	0.04 ^B	1.0 U	2.0 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 J	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	50 ^A	1.0 U	2.0 U	1.0 U	1.0 U	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	1.0 U	1.0 U
Dichlorobenzene, 1,2-	µg/L	3 ^B	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	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	2.0 U	1.0 U	1.1 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	1.0 U	1.0 U	1.0 U
Dichlorobenzene, 1,4-	µg/L	3 ^B	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (Freon 12)	µg/L	5 ^B	1.0 U	2.0 U	1.0 U	1.5 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	1.0 U	1.0 U	1.0 U
Dichloroethane, 1,1-	µg/L	5 ^B	1.0 U	5.8 ^B	5.8 ^B	1.0 U	3.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.9	1.0 U	1.0 U	1.0 U
Dichloroethane, 1,2-	µg/L	0.6 ^B	1.0 U	2.0 U	1.0 U	1.2 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	1.0 U	1.0 U	1.0 U
Dichloroethene, 1,1-	µg/L	5 ^B	1.0 U	2.0	2.1	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	1.0 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	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	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/L	5 ^B	1.0 U	2.0 U	1.0 U	1.0 U	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	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/L	1 ^B	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropene, cis-1,3-	µg/L	0.4 ^B	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloropropene, trans-1,3-	µg/L	0.4 ^B	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	5 ^B	1.0 U	2.0 U	1.0 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	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	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexanone, 2- (Methyl Butyl Ketone)	µg/L	50 ^A	5.0 U	10 U	10 U	10 U J	10 U	5.0 U J	5.0 U	5.0 U	5.0 U	5.0 U	10 U J	5.0 U	5.0 U	5.0 U	5.0 U J
Isopropylbenzene	µg/L	5 ^B	1.0 U	2.0 U	1.0 U J	1.1 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	1.0 U	1.0 U	1.0 U
Methyl Acetate	µg/L	n/v	1.0 U J	4.0 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	1.0 U	1.0 U	2.0 U
Methyl Ethyl Ketone (MEK)	µg/L	50 ^A	5.0 U	10 U J	10 U	1600 J ^A	10 U	55 J ^A	12 J	5.0 U	5.0 U	5.0 U J	5.0 U	10 U J	10 U	10 U	5.0 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	5.0 U	10 U	10 U	10 U J	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U J	5.0 U	5.0 U	5.0 U	5.0 U J
Methyl tert-butyl ether (MTBE)	µg/L	10 ^A	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	µg/L	n/v	1.0 U	2.0 U J	1.0 U J	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	1.0 U	1.0 U
Methylene Chloride (Dichloromethane)	µg/L	5 ^B	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	5 ^B	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	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	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/L	5 ^B	1.0 U	2.4	2.1	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	1.0 U	1.0 U	1.0 U
Toluene	µg/L	5 ^B	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,4-	µg/L	5 ^B	1.0 U	2.0 U	1.0 U J	2.2 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	1.0 U	1.0 U
Trichloroethane, 1,1,1-	µg/L	5 ^B	1.1	180 J ^B	160 ^B	12 ^B	17 ^B	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	26 ^B	1.0 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	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	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/L	5 ^B	5.4 ^B	540 ^B	490 ^B	66 ^B	81 ^B	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	120 ^B	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	µg/L	5 ^B	1.0 U	2.0 U J	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	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorotrifluoroethane (Freon 113)	µg/L	5 ^B	1.0 U	2.0 U J	1.0 U	1.4 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	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	2 ^B	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, Total	µg/L	5 ^B	1.0 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	2.0 U	2.0 U	3.0 U
Total VOC	µg/L	n/v	6.5	730.2	660	1678	101.1	84.2	28	3.0	71	ND	12.4	149.9	ND	ND	ND
VOC Tentatively Identified Compounds																	
Total VOC TICs	µg/L	n/v	34.6	ND	ND	ND	ND	203	40.7	ND	ND	ND	ND	ND	ND	38.3	ND

See notes on next page.

Table 15
 Summary of IRM Analytical Results in Water
 Interim Remedial Measures
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location	Units	TOGS	Trip Blank								
			1			3			N/A		
RAOC											
Sample Date											
Sample ID											
Sampling Company											
Laboratory											
Laboratory Work Order											
Laboratory Sample ID											
Sample Type											
Volatile Organic Compounds											
Acetone	µg/L	50 ^A	5.0 U	10 U	5.0 U	5.0 U	10 U J	5.0 U	5.0 U	5.0 U	10 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
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
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	1.0 U J
Bromomethane (Methyl bromide)	µg/L	5 ^B	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U J	1.0 U	1.0 U J	1.0 U	1.0 U
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	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
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
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 J	1.0 U	1.0 U	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	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
Cyclohexane	µg/L	n/v	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
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 J	1.0 U	1.0 U	1.0 U J	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
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
Dichlorobenzene, 1,3-	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
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
Dichlorodifluoromethane (Freon 12)	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
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	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
Dichloroethene, 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	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	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
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
Dichloropropene, cis-1,3-	µg/L	0.4 ^p	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
Dichloropropene, trans-1,3-	µg/L	0.4 ^p	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
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
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
Hexanone, 2- (Methyl Butyl Ketone)	µg/L	50 ^A	5.0 U	10 U J	5.0 U J	5.0 U	10 U J	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	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
Methyl Acetate	µg/L	n/v	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Methyl Ethyl Ketone (MEK)	µg/L	50 ^A	5.0 U J	10 U J	5.0 U J	5.0 U J	10 U J	5.0 U	5.0 U J	5.0 U	10 U
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	5.0 U	10 U J	5.0 U J	5.0 U	10 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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	µg/L	n/v	1.0 U J	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
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
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	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
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	1.0 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	1.0 U
Trichlorobenzene, 1,2,4-	µg/L	5 ^B	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
Trichloroethane, 1,1,1-	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	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
Trichloroethylene (TCE)	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
Trichlorofluoromethane (Freon 11)	µg/L	5 ^B	1.0 U J	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	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
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
Xylenes, Total	µg/L	5 ^B	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	2.0 U
Total VOC	µg/L	n/v	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOC Tentatively Identified Compounds											
Total VOC TICs	µg/L	n/v	ND	ND	ND	ND	ND	ND	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.
- * Indicates analysis is not within the quality control limits.
- J Indicates an Estimated Value for TICs.
- UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
- The principal organic contaminant standard for groundwater of 5 µg/L (described elsewhere in the TOGS table) applies to this substance.
- ^p Applies to the sum of cis- and trans-1,3-dichloropropene.

TALBU Test America Laboratories Inc., Buffalo, NY

Table 15
Summary of IRM Analytical Results in Water
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location	Units	TOGS	DW-2	Heater area Excavation	RAOC-3		TP-RB
			N/A	N/A	3		1-3
RAOC			1-May-12	4-May-12	15-Dec-11	21-Dec-11	28-Nov-11
Sample Date			BW-DW2-W	BA-BOILER-W	BA-R3-EW1-W	BA-R3-EW2-W	BA-RB112811-W
Sample ID			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Sampling Company			TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory			480-19418-1	480-19614-1	480141801	480143811	480-13227-1-rev
Laboratory Work Order			480-19418-	480-19614-21	480-14180-1	480-14381-2	480-13227-6
Laboratory Sample ID							Material Rinse Blank
Sample Type							
General Chemistry							
Alkalinity, Total (As CaCO3)	mg/L	n/v	-	-	223	-	-
Nitrate	mg/L	n/v	-	-	0.057	-	-
Sulfate	mg/L	250 ^B	-	-	5.1	-	-
Sulfide	mg/L	0.05 ^A	-	-	1.0 U	-	-
Metals							
Arsenic	µg/L	25 ^B	-	-	-	5.0 U	-
Barium	µg/L	1000 ^B	-	-	-	200 U	-
Cadmium	µg/L	5 ^B	-	-	-	5.0 U	-
Chromium (Total)	µg/L	50 ^B	-	-	-	10.0 U	-
Iron, Total	µg/L	300 ^B	-	-	1490 ^B	-	-
Iron, Dissolved	mg/L	0.3 ^B	-	-	0.15 U	-	-
Lead	µg/L	25 ^B	-	-	-	5.0 U	-
Mercury	mg/L	0.0007 ^B	-	-	-	0.00020 U	-
Selenium	µg/L	10 ^B	-	-	-	10.0 U	-
Silver	µg/L	50 ^B	-	-	-	10.0 U	-
Semi-Volatile Organic Compounds							
Acenaphthene	µg/L	20 ^B	5.0 U	5.0 U	-	10 U	10 U
Acenaphthylene	µg/L	n/v	5.0 U	5.0 U	-	10 U	10 U
Acetophenone	µg/L	n/v	5.0 U	5.1 U	-	-	10 U
Anthracene	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Atrazine	µg/L	7.5 ^B	5.0 U	5.0 UJ	-	-	10 U
Benzaldehyde	µg/L	n/v	5.0 U	5.0 U	-	-	10 U *
Benzo(a)anthracene	µg/L	0.002 ^A	5.0 U	5.0 U	-	1.0 U	1.0 U
Benzo(a)pyrene	µg/L	n/v	5.0 U	5.0 U	-	1.0 U	1.0 U
Benzo(b)fluoranthene	µg/L	0.002 ^A	5.0 U	5.0 U	-	1.0 U	1.0 U
Benzo(g,h,i)perylene	µg/L	n/v	5.0 UJ	5.0 U	-	10 U	10 U
Benzo(k)fluoranthene	µg/L	0.002 ^A	5.0 U	6.9 U	-	1.0 U	1.0 U
Biphenyl, 1,1'- (Biphenyl)	µg/L	5 ^B	5.0 U	6.2 U	-	-	10 U
Bis(2-Chloroethoxy)methane	µg/L	5 ^B	5.0 U	5.0 U	-	10 U	10 U
Bis(2-Chloroethyl)ether	µg/L	1 ^B	5.0 U	5.0 U	-	1.0 U	1.0 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/L	5 ^B	5.0 U	5.0 U	-	10 U	10 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	5 ^B	5.0 U	17 U	-	10 U	10 U
Bromophenyl Phenyl Ether, 4-	µg/L	n/v	5.0 U	5.0 U	-	10 U	10 U
Butyl Benzyl Phthalate	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Caprolactam	µg/L	n/v	5.0 U	21 UJ	-	-	10 U
Carbazole	µg/L	n/v	5.0 U	5.0 U	-	10 U	10 U
Chloro-3-methyl phenol, 4-	µg/L	n/v	5.0 U	5.0 U	-	-	10 U
Chloroaniline, 4-	µg/L	5 ^B	5.0 U	5.6 U	-	10 U	10 U
Chloronaphthalene, 2-	µg/L	10 ^B	5.0 U	5.0 U	-	10 U	10 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/L	n/v	5.0 U	5.0 U	-	-	10 U
Chlorophenyl Phenyl Ether, 4-	µg/L	n/v	5.0 U	5.0 U	-	10 U	10 U
Chrysene	µg/L	0.002 ^A	5.0 U	5.0 U	-	10 U	10 U
Cresol, o- (Methylphenol, 2-)	µg/L	n/v	5.0 U	5.0 U	-	-	10 U
Cresol, p- (Methylphenol, 4-)	µg/L	n/v	10 U	10 U	-	-	10 U
Dibenzo(a,h)anthracene	µg/L	n/v	5.0 U	5.0 U	-	1.0 U	1.0 U
Dibenzofuran	µg/L	n/v	10 U	10 U	-	10 U	10 U
Dibutyl Phthalate (DBP)	µg/L	50 ^B	5.0 U	5.0 U	-	10 U	10 U
Dichlorobenzene, 1,4-	µg/L	3 ^B	-	-	-	10 U	-
Dichlorobenzidine, 3,3'-	µg/L	5 ^B	5.0 U	5.0 U	-	20 U	20 U
Dichlorophenol, 2,4-	µg/L	5 ^B	5.0 U	5.0 U	-	-	10 U
Diethyl Phthalate	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Dimethyl Phthalate	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Dimethylphenol, 2,4-	µg/L	50 ^A	5.0 U	5.0 U	-	-	10 U
Dinitro-o-cresol, 4,6-	µg/L	n/v	10 UJ	21 U	-	-	30 U
Dinitrophenol, 2,4-	µg/L	10 ^A	10 U *	21 U *	-	-	30 U
Dinitrotoluene, 2,4-	µg/L	5 ^B	5.0 U	5.0 U	-	2.0 U	2.0 U
Dinitrotoluene, 2,6-	µg/L	5 ^B	5.0 U	5.0 U	-	2.0 U	2.0 U
Di-n-Octyl phthalate	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Fluoranthene	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Fluorene	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Hexachlorobenzene	µg/L	0.04 ^B	5.0 U	5.0 U	-	1.0 U	1.0 U
Hexachlorobutadiene	µg/L	0.5 ^B	5.0 U	6.4 U	-	2.0 U	2.0 U
Hexachlorocyclopentadiene	µg/L	5 ^B	5.0 U	5.6 U	-	10 U	10 U
Hexachloroethane	µg/L	5 ^B	5.0 U	5.6 U	-	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	0.002 ^A	5.0 U *	5.0 U	-	1.0 U	1.0 U
Isophorone	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Methylnaphthalene, 2-	µg/L	n/v	5.0 U	5.7 U	-	10 U	10 U
Naphthalene	µg/L	10 ^B	5.0 U	7.2 U	-	10 U	10 U
Nitroaniline, 2-	µg/L	5 ^B	10 U	10 U	-	20 U	20 U
Nitroaniline, 3-	µg/L	5 ^B	10 U	10 U	-	20 U	20 U
Nitroaniline, 4-	µg/L	5 ^B	10 U	10 U	-	20 U *	20 U
Nitrobenzene	µg/L	0.4 ^B	5.0 U	5.0 U	-	1.0 U	1.0 U
Nitrophenol, 2-	µg/L	n/v	5.0 U	5.0 U	-	-	10 U
Nitrophenol, 4-	µg/L	n/v	10 U	14 U	-	-	30 U
N-Nitrosodi-n-Propylamine	µg/L	n/v	5.0 U	5.1 U	-	1.0 U	1.0 U
n-Nitrosodiphenylamine	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Pentachlorophenol	µg/L	1.0 ^B	10 U *	21 U	-	-	30 U
Phenanthrene	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Phenol	µg/L	1.0 ^B	5.0 U	5.0 U	-	-	10 U
Pyrene	µg/L	50 ^A	5.0 U	5.0 U	-	10 U	10 U
Trichlorophenol, 2,4,5-	µg/L	n/v	5.0 U	5.0 U	-	-	10 U
Trichlorophenol, 2,4,6-	µg/L	n/v	5.0 U	5.8 U	-	-	10 U
SVOC Tentatively Identified Compounds							
Total SVOC TICs	µg/L	n/v	354.6	ND	-	NA	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.

* Indicates analysis is not within the quality control limits.

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

^B The standard for Iron and Manganese is 500 µg/L, which applies to the sum of these substances. As individual standards, the standard is 300 µg/L.

.. The principal organic contaminant standard for groundwater of 5 µg/L (described elsewhere in the TOGS table) applies to this substance.

TALBU Test America Laboratories Inc., Buffalo, NY

Table 16
Summary of IRM Analytical Results for Waste Characterization Soil Samples
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location RAOC	Units	EPA	B-36,B-37,B-38	B-36A,B-37A,B-38A	B-36	B-37	SP-5,6,7			Oil Storage Shed
			2-3	2-3	2-3	2-3	1			N/A
Sample Date			19-Sep-11	19-Sep-11	19-Sep-11	19-Sep-11	15-Nov-11	18-Nov-11	23-Nov-11	25-Apr-12
Sample ID			BA-B36/37/38-S	BA-B36A/37A/38A-S	BA-B36-S	BA-B37-S	BA-R1-WS1-S	BA-R1-WS3-S	BA-R1-WS4-S	BA-OSF1-S
Sample Depth			0.5 - 3 ft	0.5 - 3 ft	0.5 - 1.5 ft	0.5 - 3 ft				
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory Work Order			480-10054-1	480-10054-1	480-10054-1	480-10054-1	480128041	480130341	480-13187-2	480-19196-1
Laboratory Sample ID			480-10054-18	480-10054-19	480-10054-16	480-10054-17	480-12804-1	480-13034-1	480-13187-4	480-19196-16
Sample Type										
General Chemistry										
Burn Rate	mm/sec	n/v	-	-	-	-	2.20 U	2.20 U	2.20 U	-
Cyanide (Reactive)	mg/kg	n/v	-	-	-	-	25.0 U *	25.0 U *	25.0 U *	-
Flashpoint	deg F	n/v	> 176.0	> 176.0	-	-	-	-	-	-
Sulfide (Reactive)	mg/kg	n/v	-	-	-	-	20.0 U	20.0 U	20.0 U	-
Metals - TCLP										
Arsenic	mg/L	5.0 ^A	0.010 U	0.010 U	-	-	0.0186 U	0.0186 U	0.0186 U	0.010 U
Barium	mg/L	100.0 ^A	1.1 B	0.93 B	-	-	0.967	0.812	0.904	0.16 B
Cadmium	mg/L	1.0 ^A	0.0017	0.0016	-	-	0.005 U	0.005 U	0.005 U	0.0010 U
Chromium (Total)	mg/L	5.0 ^A	0.0040 U	0.0040 U	-	-	0.0223 U	0.0223 U	0.0223 U	0.011 B
Copper	mg/L	n/v	-	-	-	-	-	-	0.0392 U	-
Lead	mg/L	5.0 ^A	0.0054	0.0050 U	-	-	0.0201 U	0.0592	0.0201 U	0.0079
Mercury	mg/L	0.2 ^A	0.00020 U	0.00020 U	-	-	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Nickel	mg/L	n/v	-	-	-	-	-	-	0.04 U	-
Selenium	mg/L	1.0 ^A	0.015 U	0.015 U	-	-	0.0288 U	0.0288 U	0.0288 U	0.015 U
Silver	mg/L	5.0 ^A	0.0030 U	0.0030 U	-	-	0.010 U	0.010 U	0.010 U	0.0030 U
Zinc	mg/L	n/v	-	-	-	-	-	-	0.03 U	-
Herbicides/Pesticides										
2,4,5-TP (Silvex)	µg/kg	n/v	-	-	-	-	17 U	17 U *	17 U	0.0020 U
Camphechlor (Toxaphene)	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Chlordane (Total)	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Dichlorophenoxy acetic acid, 2,4- (2,4-D)	µg/kg	n/v	-	-	-	-	17 U	17 U *	17 U	0.0020 U
Endrin	µg/kg	n/v	-	-	-	-	6.7 U	6.7 U	6.7 U	-
Heptachlor	µg/kg	n/v	-	-	-	-	6.7 U	6.7 U	6.7 U	-
Heptachlor Epoxide	µg/kg	n/v	-	-	-	-	6.7 U	6.7 U	6.7 U	-
Lindane (Hexachlorocyclohexane, gamma)	µg/kg	n/v	-	-	-	-	6.7 U	6.7 U	6.7 U	-
Methoxychlor (4,4'-Methoxychlor)	µg/kg	n/v	-	-	-	-	6.7 U	6.7 U	6.7 U	-
Polychlorinated Biphenyls										
Aroclor 1016	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Aroclor 1221	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Aroclor 1232	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Aroclor 1242	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Aroclor 1248	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Aroclor 1254	µg/kg	n/v	-	-	-	-	67 U	67 U	110	-
Aroclor 1260	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Aroclor 1262	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Aroclor 1268	µg/kg	n/v	-	-	-	-	67 U	67 U	67 U	-
Volatile Organic Compounds - TCLP										
Benzene	mg/L	0.5 ^A	-	-	0.0041 U	0.0041 U	0.0013 U	0.0013 U	0.0013 U	0.0041 U
Carbon Tetrachloride (Tetrachloromethane)	mg/L	0.5 ^A	-	-	0.0027 U	0.0027 U	0.0019 U	0.0019 U	0.0019 U	0.0027 U
Chlorobenzene (Monochlorobenzene)	mg/L	100.0 ^A	-	-	0.0075 U	0.0075 U	0.0016 U	0.0016 U	0.0016 U	0.0075 U
Chloroform (Trichloromethane)	mg/L	6.0 ^A	-	-	0.011 B	0.012 B	0.0015 U	0.0015 U	0.0015 U	0.0034 U
Dichloroethane, 1,2-	mg/L	0.5 ^A	-	-	0.0021 U	0.0021 U	0.0024 U	0.0024 U	0.0024 U	0.0021 U
Dichloroethane, 1,1-	mg/L	0.7 ^A	-	-	0.0029 U	0.0029 U	0.0014 U	0.0014 U	0.0014 U	0.0029 U
Methyl Ethyl Ketone (MEK)	mg/L	200.0 ^A	-	-	0.013 U	0.013 U	0.010 U	0.010 U	0.010 U	0.013 U
Tetrachloroethylene (PCE)	mg/L	0.7 ^A	-	-	0.0036 U	0.0036 U	0.0020 U	0.0020 U	0.0020 U	0.0036 U
Trichloroethylene (TCE)	mg/L	0.5 ^A	-	-	0.0046 U	0.0046 U	0.046	0.14	0.024	0.0046 U
Vinyl chloride	mg/L	0.2 ^A	-	-	0.0090 U	0.0090 U	0.0013 U	0.0013 U	0.0013 U	0.0090 U
Semi-Volatile Organic Compounds - TCLP										
Cresol, m & p- (Methylphenol, 3&4-)	mg/L	n/v	-	-	-	-	0.040 U	0.040 U	0.040 U	-
Cresol, m- (Methylphenol, 3-)	mg/L	200.0 ^{s1}	0.010 U	0.010 U	-	-	-	-	-	0.010 U
Cresol, o- (Methylphenol, 2-)	mg/L	200.0 ^{s1}	0.0050 U	0.0050 U	-	-	0.040 U	0.040 U	0.040 U	0.0050 U
Cresol, p- (Methylphenol, 4-)	mg/L	200.0 ^{s1}	0.010 U	0.010 U	-	-	-	-	-	0.010 U
Dichlorobenzene, 1,4-	mg/L	7.5 ^A	0.010 U	0.010 U	-	-	0.040 U	0.040 U	0.040 U	0.010 U
Dinitrotoluene, 2,4-	mg/L	0.13 ^{s2}	0.0050 U	0.0050 U	-	-	0.0080 U	0.0080 U	0.0080 U	0.0050 U
Hexachlorobenzene	mg/L	0.13 ^{s2}	0.0050 U	0.0050 U	-	-	0.0040 U	0.0040 U	0.0040 U	0.0050 U
Hexachlorobutadiene	mg/L	0.5 ^A	0.0050 U	0.0050 U	-	-	0.0080 U	0.0080 U	0.0080 U	0.0050 U
Hexachloroethane	mg/L	3.0 ^A	0.0050 U	0.0050 U	-	-	0.0040 U	0.0040 U	0.0040 U	0.0050 U
Nitrobenzene	mg/L	2.0 ^A	0.0050 U	0.0050 U	-	-	0.0040 U	0.0040 U	0.0040 U	0.0050 U
Pentachlorophenol	mg/L	100.0 ^A	0.010 U	0.010 U	-	-	0.12 U	0.12 U	0.12 U	0.010 U
Pyridine	mg/L	5.0 ^{s2}	0.025 U	0.025 U	-	-	0.040 U	0.040 U	0.040 U	0.025 U
Trichlorophenol, 2,4,5-	mg/L	400.0 ^A	0.0050 U	0.0050 U	-	-	0.040 U	0.040 U	0.040 U	0.0050 U
Trichlorophenol, 2,4,6-	mg/L	2.0 ^A	0.0050 U	0.0050 U	-	-	0.040 U	0.040 U	0.040 U	0.0050 U

- Notes:**
- EPA MCC Regulatory Levels
 - ^A Maximum Concentration of Contaminants for Characteristics of TCLP Toxicity
 - 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.
 - ^{s1} If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used.
 - ^{s2} If the quantitation limit is greater than the calculated regulatory level, it therefore becomes the regulatory level.
 - ^{s3} Value refers to Heptachlor and its hydroxide.
 - * Indicates analysis is not within the quality control limits.
 - > Greater than.
 - B Indicates analyte was found in associated blank, as well as in the sample.
 - TALBU Test America Laboratories Inc., Buffalo, NY

Table 17
Summary of IRM Analytical Results for Samples of Excavation Backfill Soil
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location RAOC	Units	6NYCRR	R1-SP1	R3-SP10	Aggregate Stockpile
			1	3	NA
Sample Date			16-Nov-11	16-Dec-11	20-Oct-11
Sample ID			BA-R1-SP1-S	BA-R3-SP10-S	BA-TP20-S
Sample Depth					2 ft
Sampling Company			STANTEC	STANTEC	STANTEC
Laboratory			TALBU	TALBU	TALBU
Laboratory Work Order			480-12868-1-rev	480141801	480-11643-1-rev
Laboratory Sample ID			480-12868-2	480-14180-5	480-11643-3
Sample Type					
Volatile Organic Compounds					
Acetone	µg/kg	500000 ^c 1000000 ^d 50 ^C	9.7 U	11 U	8.8
Benzene	µg/kg	44000 ^A 89000 ^B 60 ^C	0.97 U	1.1 U	5.2 U
Bromodichloromethane	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Bromoform (Tribromomethane)	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Bromomethane (Methyl bromide)	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Carbon Disulfide	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B 760 ^C	0.97 U	1.1 U	5.2 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^c 1000000 ^d 1100 ^C	0.97 U	1.1 U	5.2 U
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Chloroform (Trichloromethane)	µg/kg	350000 ^A 700000 ^B 370 ^C	0.97 U	1.1 U	5.2 U
Chloromethane	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Cyclohexane	µg/kg	n/v	0.97 U	1.1 U	5.2 U
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	0.97 U	1.1 U	5.2 U
Dibromochloromethane	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Dichlorobenzene, 1,2-	µg/kg	500000 ^c 1000000 ^d 1100 ^C	0.97 U	1.1 U	5.2 U
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B 2400 ^C	0.97 U	1.1 U	5.2 U
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B 1800 ^C	0.97 U	1.1 U	5.2 U
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	0.97 U	1.1 U	5.2 U
Dichloroethane, 1,1-	µg/kg	240000 ^A 480000 ^B 270 ^C	0.97 U	1.1 U	5.2 U
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	0.97 U	1.1 U	5.2 U
Dichloroethene, 1,1-	µg/kg	500000 ^c 1000000 ^d 330 ^C	0.97 U	1.1 U	5.2 U
Dichloroethylene, cis-1,2-	µg/kg	500000 ^c 1000000 ^d 250 ^C	0.97 U	1.1 U	5.2 U
Dichloroethylene, trans-1,2-	µg/kg	500000 ^c 1000000 ^d 190 ^C	0.97 U	1.1 U	5.2 U
Dichloropropane, 1,2-	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Dichloropropene, cis-1,3-	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Dichloropropene, trans-1,3-	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Ethylbenzene	µg/kg	390000 ^A 780000 ^B 1000 ^C	0.97 U	1.1 U	5.2 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	0.97 U	1.1 U	5.2 U
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	500000 ^c 1000000 ^d BC	9.7 U	11 U	5.2 U
Isopropylbenzene	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Methyl Acetate	µg/kg	n/v	0.97 U	1.1 U	5.2 U J
Methyl Ethyl Ketone (MEK)	µg/kg	500000 ^c 1000000 ^d 120 ^C	9.7 U J	11 U J	5.2 U J
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^c 1000000 ^d BC	9.7 U	11 U	5.2 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^c 1000000 ^d 930 ^C	0.97 U	1.1 U	5.2 U
Methylcyclohexane	µg/kg	n/v	0.97 U	1.1 U	5.2 U
Methylene Chloride (Dichloromethane)	µg/kg	500000 ^c 1000000 ^d 50 ^C	0.97 U	5.7	5.2 U
Styrene	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B 1300 ^C	0.97 U	1.1 U	5.2 U
Toluene	µg/kg	500000 ^c 1000000 ^d 700 ^C	0.97 U	1.1 U	5.2 U
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Trichloroethane, 1,1,1-	µg/kg	500000 ^c 1000000 ^d 680 ^C	0.97 U	1.1 U	5.2 U
Trichloroethane, 1,1,2-	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Trichloroethylene (TCE)	µg/kg	200000 ^A 400000 ^B 470 ^C	8.1	1.1 U	5.2 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	0.97 U	1.1 U	5.2 U
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^c 1000000 ^d BC	0.97 U	1.1 U	5.2 U
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	0.97 U	1.1 U	5.2 U
Xylenes, Total	µg/kg	500000 ^c 1000000 ^d 1600 ^C	2.9 U	3.3 U	5.2 U
Total VOC	µg/kg	500000 ^c 1000000 ^d BC	8.1	5.7	8.8
VOC Tentatively Identified Compounds					
Total VOC TICs	µg/kg	500000 ^c 1000000 ^d BC	ND	ND	ND

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 Human Health - Industrial
- ^C 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. See 6 NYCRR Part 375 TSD Section 9.3.
- J Indicates estimated value.
- TALBU Test America Laboratories Inc., Buffalo, NY

Table 17
Summary of IRM Analytical Results for Samples of Excavation Backfill Soil
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location RAOC Sample Date Sample ID Sample Depth Sampling Company Laboratory Laboratory Work Order Laboratory Sample ID Sample Type	Units	6NYCRR	R1-SP1	R3-SP10	Aggregate Stockpile
			1	3	NA
			16-Nov-11 BA-R1-SP1-S STANTEC TALBU 480-12868-1-rev 480-12868-2	16-Dec-11 BA-R3-SP10-S STANTEC TALBU 480141801 480-14180-5	20-Oct-11 BA-TP19/20/21-S 0 - 5 ft STANTEC TALBU 480-11643-1-rev 480-11643-2
Semi-Volatile Organic Compounds					
Acenaphthene	µg/kg	500000 ^c 1000000 ^d 98000 ^c	370 U	370 U	350 U
Acenaphthylene	µg/kg	500000 ^c 1000000 ^d 107000 ^c	370 U	370 U	350 U
Acetophenone	µg/kg	n/v	370 U	370 U	350 U
Anthracene	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Atrazine	µg/kg	n/v	370 U	370 U	350 U
Benzaldehyde	µg/kg	n/v	370 U	370 U	350 U
Benzo(a)anthracene	µg/kg	5600 ^A 11000 ^B 1000 ^g C	37 U	37 U	350 U
Benzo(a)pyrene	µg/kg	1000 ^g 1100 ^B 22000 ^C	37 U	37 U	350 U
Benzo(b)fluoranthene	µg/kg	5600 ^A 11000 ^B 1700 ^C	37 U	37 U	350 U
Benzo(g,h,i)perylene	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Benzo(k)fluoranthene	µg/kg	56000 ^A 110000 ^B 1700 ^C	37 U	37 U	350 U
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	370 U	370 U	350 U
Bis(2-Chloroethoxy)methane	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Bis(2-Chloroethyl)ether	µg/kg	500000 ^c 1000000 ^d BC	37 U	37 U	350 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Butyl Benzyl Phthalate	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Caprolactam	µg/kg	n/v	370 U	370 U	350 U
Carbazole	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Chloro-3-methyl phenol, 4-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Chloroaniline, 4-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Chloronaphthalene, 2-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Chrysene	µg/kg	56000 ^A 110000 ^B 1000 ^g C	370 U	370 U	350 U
Cresol, o- (Methylphenol, 2-)	µg/kg	500000 ^c 1000000 ^d 330 ^C	370 U	370 U J	350 U
Cresol, p- (Methylphenol, 4-)	µg/kg	500000 ^c 1000000 ^d 330 ^C	370 U	370 U	-
Dibenzo(a,h)anthracene	µg/kg	560 ^A 1100 ^B 1000000 ^C	37 U	37 U	350 U
Dibenzofuran	µg/kg	350000 ^A 1000000 ^d 210000 ^C	370 U	370 U	350 U
Dibutyl Phthalate (DBP)	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Dichlorobenzidine, 3,3'-	µg/kg	500000 ^c 1000000 ^d BC	750 U	740 U	350 U
Dichlorophenol, 2,4-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Diethyl Phthalate	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Dimethyl Phthalate	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Dimethylphenol, 2,4-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Dinitro-o-cresol, 4,6-	µg/kg	500000 ^c 1000000 ^d BC	1100 U	1100 U	880 U
Dinitrophenol, 2,4-	µg/kg	500000 ^c 1000000 ^d BC	1100 U	1100 U	880 U
Dinitrotoluene, 2,4-	µg/kg	500000 ^c 1000000 ^d BC	75 U	74 U	350 U
Dinitrotoluene, 2,6-	µg/kg	500000 ^c 1000000 ^d BC	75 U	74 U	350 U
Di-n-Octyl phthalate	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Fluoranthene	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Fluorene	µg/kg	500000 ^c 1000000 ^d 386000 ^C	370 U	370 U	350 U
Hexachlorobenzene	µg/kg	6000 ^A 12000 ^B 3200 ^C	37 U	37 U	350 U
Hexachlorobutadiene	µg/kg	500000 ^c 1000000 ^d BC	75 U	74 U	350 U
Hexachlorocyclopentadiene	µg/kg	500000 ^c 1000000 ^d BC	370 U J	370 U	350 U
Hexachloroethane	µg/kg	500000 ^c 1000000 ^d BC	37 U	37 U	350 U
Indeno(1,2,3-cd)pyrene	µg/kg	5600 ^A 11000 ^B 8200 ^C	37 U	37 U	350 U
Isophorone	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Methylnaphthalene, 2-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Naphthalene	µg/kg	500000 ^c 1000000 ^d 12000 ^C	370 U	370 U	350 U
Nitroaniline, 2-	µg/kg	500000 ^c 1000000 ^d BC	750 U	740 U	880 U
Nitroaniline, 3-	µg/kg	500000 ^c 1000000 ^d BC	750 U	740 U	880 U
Nitroaniline, 4-	µg/kg	500000 ^c 1000000 ^d BC	750 U	740 U	880 U
Nitrobenzene	µg/kg	500000 ^c 1000000 ^d BC	37 U	37 U	350 U
Nitrophenol, 2-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Nitrophenol, 4-	µg/kg	500000 ^c 1000000 ^d BC	1100 U	1100 U	880 U
N-Nitrosodi-n-Propylamine	µg/kg	500000 ^c 1000000 ^d BC	37 U	37 U	350 U
n-Nitrosodiphenylamine	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	410 U
Pentachlorophenol	µg/kg	6700 ^A 55000 ^B 800 ^C	1100 U	1100 U	880 U
Phenanthrene	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Phenol	µg/kg	500000 ^c 1000000 ^d 330 ^C	370 U	370 U	350 U
Pyrene	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
Trichlorophenol, 2,4,5-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	880 U
Trichlorophenol, 2,4,6-	µg/kg	500000 ^c 1000000 ^d BC	370 U	370 U	350 U
SVOC Tentatively Identified Compounds					
Total SVOC TICs	µg/kg	500000 ^c 1000000 ^d BC	2500	ND	264

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 Human Health - Industrial
- ^C 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. 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 Indicates estimated value.
- TALBU Test America Laboratories Inc., Buffalo, NY

Table 17
Summary of IRM Analytical Results for Samples of Excavation Backfill Soil
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location RAOC	Units	6NYCRR	Aggregate Stockpile
			NA
Sample Date			20-Oct-11
Sample ID			BA-TP19/20/21-S
Sample Depth			0 - 5 ft
Sampling Company			STANTEC
Laboratory			TALBU
Laboratory Work Order			480-11643-1-rev
Laboratory Sample ID			480-11643-2
Sample Type			
Metals			
Aluminum	mg/kg	10000 ^e A 10000 ^d BC	4030 J
Antimony	mg/kg	10000 ^e A 10000 ^d BC	6.0 U
Arsenic	mg/kg	16 ^g ABC	3.8
Barium	mg/kg	400 ^A 10000 ^B 820 ^C	22.6
Beryllium	mg/kg	590 ^A 2700 ^B 47 ^C	0.50 U
Cadmium	mg/kg	9.3 ^A 60 ^B 7.5 ^C	0.50 U
Calcium	mg/kg	10000 ^e A 10000 ^d BC	50400 J ^{ABC}
Chromium (Total)	mg/kg	^{NS,q} ^A ^B ^C ^{NS,q} ^{NS,q} ^{NS,q}	5.0 J
Cobalt	mg/kg	10000 ^e A 10000 ^d BC	5.0 U
Copper	mg/kg	270 ^A 10000 ^B 1720 ^C	13.3
Iron	mg/kg	10000 ^e A 10000 ^d BC	10600 J ^{ABC}
Lead	mg/kg	1000 ^A 3900 ^B 450 ^C	5.7
Magnesium	mg/kg	10000 ^e A 10000 ^d BC	6400 J
Manganese	mg/kg	10000 ^e AB 2000 ^C	382 J
Mercury	mg/kg	2.8 ^k A 5.7 ^k B 0.73 ^C	0.033 U
Nickel	mg/kg	310 ^A 10000 ^B 130 ^C	7.5
Potassium	mg/kg	10000 ^e A 10000 ^d BC	498 U
Selenium	mg/kg	1500 ^A 6800 ^B 4 ^C	3.5 U
Silver	mg/kg	1500 ^A 6800 ^B 8.3 ^C	1.0 U
Sodium	mg/kg	10000 ^e A 10000 ^d BC	498 U
Thallium	mg/kg	10000 ^e A 10000 ^d BC	2.5 U
Vanadium	mg/kg	10000 ^e A 10000 ^d BC	6.1 J
Zinc	mg/kg	10000 ^e AB 2480 ^C	44.9 J
Pesticides			
Aldrin	µg/kg	680 ^A 1400 ^B 190 ^C	1.8 U
BHC, alpha-	µg/kg	3400 ^A 6800 ^B 20 ^C	1.8 U
BHC, beta-	µg/kg	3000 ^A 14000 ^B 90 ^C	1.8 U
BHC, delta-	µg/kg	500000 ^c A 1000000 ^B 250 ^C	1.8 U
Campechlor (Toxaphene)	µg/kg	500000 ^c A 1000000 ^B BC	180 U
Chlordane, alpha-	µg/kg	24000 ^A 47000 ^B 2900 ^C	1.8 U
Chlordane, gamma-	µg/kg	500000 ^c A 1000000 ^B BC	1.8 U
DDD (p,p'-DDD)	µg/kg	92000 ^A 180000 ^B 14000 ^C	3.4 U
DDE (p,p'-DDE)	µg/kg	62000 ^A 120000 ^B 17000 ^C	3.4 U
DDT (p,p'-DDT)	µg/kg	47000 ^A 94000 ^B 136000 ^C	3.4 U
Dieldrin	µg/kg	1400 ^A 2800 ^B 100 ^C	3.4 U
Endosulfan I	µg/kg	200000 ^j A 920000 ^B 102000 ^C	1.8 U
Endosulfan II	µg/kg	200000 ^j A 920000 ^B 102000 ^C	3.4 U
Endosulfan Sulfate	µg/kg	200000 ^j A 920000 ^B 1000000 ^d C	3.4 U
Endrin	µg/kg	89000 ^A 410000 ^B 60 ^C	3.4 U
Endrin Aldehyde	µg/kg	500000 ^c A 1000000 ^B BC	3.4 U
Endrin Ketone	µg/kg	500000 ^c A 1000000 ^B BC	3.4 U
Heptachlor	µg/kg	15000 ^A 29000 ^B 380 ^C	1.8 U
Heptachlor Epoxide	µg/kg	500000 ^c A 1000000 ^B BC	1.8 U
Lindane (Hexachlorocyclohexane, gamma)	µg/kg	9200 ^A 23000 ^B 100 ^C	1.8 U
Methoxychlor (4,4'-Methoxychlor)	µg/kg	500000 ^c A 1000000 ^B BC	18 U
Polychlorinated Biphenyls			
Aroclor 1016	µg/kg	1000 ^A 25000 ^B 3200 ^C	18 U
Aroclor 1221	µg/kg	1000 ^A 25000 ^B 3200 ^C	18 U
Aroclor 1232	µg/kg	1000 ^A 25000 ^B 3200 ^C	18 U
Aroclor 1242	µg/kg	1000 ^A 25000 ^B 3200 ^C	18 U
Aroclor 1248	µg/kg	1000 ^A 25000 ^B 3200 ^C	18 U
Aroclor 1254	µg/kg	1000 ^A 25000 ^B 3200 ^C	18 U
Aroclor 1260	µg/kg	1000 ^A 25000 ^B 3200 ^C	18 U
Aroclor 1262	µg/kg	n/v	18 U
Aroclor 1268	µg/kg	n/v	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
- ^B NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Industrial
- 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.
- ^{BC} No SCO has been established for this compound. No SCO has been established for total chromium; however, see standards for trivalent and hexavalent chromium.
- ^{NS,q} ^A No SCO has been established for this compound. No SCO has been established for total chromium; however, see standards for trivalent and hexavalent chromium.
- ^c For commercial use, these are 1500 and 400 mg/kg respectively.
- ^d The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
- ^e ^{AB} The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3.
- ^g ^{ABC} 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 ^{AB} 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 ^{AB} This SCO is the sum of endosulfan I, endosulfan II, and endosulfan sulfate.
- ^o ^{AB} 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.
- ^J ^{AB} The criterion is applicable to total PCBs, and the individual aroclors should be added for comparison.
- J Indicates estimated value.
- TALBU Test America Laboratories Inc., Buffalo, NY

Table 18
 Summary of IRM Analytical Results of Preliminary Screening Soil, Dry Well Soil, and Septic Sludge Samples
 Interim Remedial Measures
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location RAOC	Units	6NYCRR	DW-1	PS-1	PS-2	PS-3	PS-4	PS-5	Septic-1	Septic-2	
			1	1	1	1	1	1	1	1	N/A
Sample Date			8-Nov-11	8-Nov-11	8-Nov-11	8-Nov-11	8-Nov-11	8-Nov-11	15-Nov-11	8-Nov-11	1-May-12
Sample ID			BA-DW1-S	BA-PS1-S	BA-PS2-S	BA-PS3-S	BA-PS4-S	BA-R1-PS5-S	BA-SL1-S	BA-SEPTIC2-S	
Sample Depth			8 ft	4.5 ft	4.5 ft	5.5 ft	6 ft	10 ft			
Sampling Company			STANTEC	STANTEC							
Laboratory			TALBU	TALBU							
Laboratory Work Order			480-12500-1-rev	480-12500-1-rev	480-12500-1-rev	480-12500-1-rev	480-12500-1-rev	480-12868-1-rev	480-12500-1-rev	480-19418-1	
Laboratory Sample ID			480-12500-5	480-12500-1	480-12500-2	480-12500-3	480-12500-4	480-12868-1	480-12500-6	480-19418-16	
Sample Type											
General Chemistry											
Moisture Content	percent	n/v	-	-	-	-	-	-	-	-	82 J
Percent Solids	percent	n/v	-	-	-	-	-	-	-	-	18 J
Volatile Organic Compounds											
Acetone	µg/kg	500000 ^A 1000000 ^B 50 ^C	24	12 U	12 U	21	15	590 U J	3400 J ^C	79 J ^C	
Benzene	µg/kg	44000 ^A 89000 ^B 60 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Bromodichloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Bromofom (Tribromomethane)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	14 UJ	
Bromomethane (Methyl bromide)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Carbon Disulfide	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	130 J	14 UJ	
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B 760 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	6.2 UJ	
Chloroform (Trichloromethane)	µg/kg	350000 ^A 700000 ^B 370 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Chloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U J	12 U J	5.0 UJ	
Cyclohexane	µg/kg	n/v	1.1 U *	1.2 U *	1.2 U *	1.1 U *	1.2 U *	120 U	12 U J	5.0 UJ	
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U J	12 U J	14 UJ	
Dibromochloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichlorobenzene, 1,2-	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B 2400 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B 1800 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichloroethane, 1,1-	µg/kg	240000 ^A 480000 ^B 270 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichloroethane, 1,1-	µg/kg	500000 ^A 1000000 ^B 330 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichloroethylene, cis-1,2-	µg/kg	500000 ^A 1000000 ^B 250 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichloroethylene, trans-1,2-	µg/kg	500000 ^A 1000000 ^B 190 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichloropropane, 1,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	14 UJ	
Dichloropropene, cis-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Dichloropropene, trans-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	12 UJ	
Ethylbenzene	µg/kg	390000 ^A 780000 ^B 1000 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	130 J	6.9 J	
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	500000 ^A 1000000 ^{BC}	11 U	12 U	12 U	11 U	12 U	590 U	120 U J	25 UJ	
Isopropylbenzene	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	46 J	5.0 UJ	
Methyl Acetate	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	240 U	12 U J	5.1 UJ	
Methyl Ethyl Ketone (MEK)	µg/kg	500000 ^A 1000000 ^B 120 ^C	11 U J	12 U J	12 U J	11 U J	12 U J	590 U J	810 J ^C	25 UJ	
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^A 1000000 ^{BC}	11 U	12 U	12 U	11 U	12 U	590 U	120 U J	25 UJ	
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^A 1000000 ^B 930 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Methylcyclohexane	µg/kg	n/v	1.1 U *	1.2 U *	1.2 U *	1.1 U *	1.2 U *	120 U	12 J	5.0 UJ	
Methylene Chloride (Dichloromethane)	µg/kg	500000 ^A 1000000 ^B 50 ^C	4.2	15	17	22	20	120 U	16 J	13 UJ	
Styrene	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B 1300 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Toluene	µg/kg	500000 ^A 1000000 ^B 700 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	200 J	5.0 UJ	
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Trichloroethane, 1,1,1-	µg/kg	500000 ^A 1000000 ^B 680 ^C	1.1 U	13	7.1	48	10	120 U	12 U J	5.0 UJ	
Trichloroethane, 1,1,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Trichloroethylene (TCE)	µg/kg	200000 ^A 400000 ^B 470 ^C	1.1 U	73	74	270	86	390	12 U J	6.1 UJ	
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U *	1.2 U *	1.2 U *	1.1 U *	1.2 U *	120 U	12 U J	6.3 UJ	
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	120 U	12 U J	5.0 UJ	
Xylenes, Total	µg/kg	500000 ^A 1000000 ^B 1600 ^C	3.4 U	3.5 U	3.5 U	3.4 U	3.5 U	350 U	420 J	24 J	
Total VOC	µg/kg	500000 ^A 1000000 ^{BC}	28.2	101	98.1	361	131	390	5164	109.9 J	
VOC Tentatively Identified Compounds											
Total VOC TICs	µg/kg	500000 ^A 1000000 ^{BC}	319	ND	ND	ND	ND	328000	11310	3380	

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 Human Health - Industrial
- ^C 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.
- * Indicates analysis is not within the quality control limits.
- J Indicates estimated value.
- UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
- ^c The SCOs for commercial use were capped at a maximum value of 500 mg/kg.
- ^d 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.
- ^d The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 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.

TALBU Test America Laboratories Inc., Buffalo, NY

Table 18
Summary of IRM Analytical Results of Preliminary Screening Soil, Dry Well Soil, and Septic Sludge Samples
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location RAOC Sample Date Sample ID Sample Depth Sampling Company Laboratory Laboratory Work Order Laboratory Sample ID Sample Type	Units	6NYCRR	PS-5	Septic-2
			1	N/A
			15-Nov-11 BA-R1-PS5-S 10 ft STANTEC TALBU 480-12868-1-rev 480-12868-1	1-May-12 BA-SEPTIC2-S STANTEC TALBU 480-19418-1 480-19418-16
Semi-Volatile Organic Compounds				
Acenaphthene	µg/kg	500000 ^A 1000000 ^B 98000 ^C	400 U	170 UJ
Acenaphthylene	µg/kg	500000 ^A 1000000 ^B 107000 ^C	400 U	170 UJ
Acetophenone	µg/kg	n/v	400 U	170 UJ
Anthracene	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Atrazine	µg/kg	n/v	400 U	170 UJ
Benzaldehyde	µg/kg	n/v	400 U	170 UJ
Benzo(a)anthracene	µg/kg	5600 ^A 11000 ^B 1000 ^C	40 U	170 UJ
Benzo(a)pyrene	µg/kg	1000 ^A 1100 ^B 22000 ^C	40 U	170 UJ
Benzo(b)fluoranthene	µg/kg	5600 ^A 11000 ^B 1700 ^C	40 U	170 UJ
Benzo(g,h,i)perylene	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Benzo(k)fluoranthene	µg/kg	56000 ^A 110000 ^B 1700 ^C	40 U	170 UJ
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	400 U	170 UJ
Bis(2-Chloroethoxy)methane	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Bis(2-Chloroethyl)ether	µg/kg	500000 ^A 1000000 ^B	40 U J	170 UJ
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000 ^A 1000000 ^B	400 U	1300 J
Bromophenyl Phenyl Ether, 4-	µg/kg	500000 ^A 1000000 ^B	400 U	290 UJ
Butyl Benzyl Phthalate	µg/kg	500000 ^A 1000000 ^B	400 U	250 UJ
Caprolactam	µg/kg	n/v	400 U	400 UJ
Carbazole	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Chloro-3-methyl phenol, 4-	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Chloroaniline, 4-	µg/kg	500000 ^A 1000000 ^B	400 U	270 UJ
Chloronaphthalene, 2-	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Chrysene	µg/kg	56000 ^A 110000 ^B 1000 ^C	400 U	170 UJ
Cresol, o- (Methylphenol, 2-)	µg/kg	500000 ^A 1000000 ^B 330 ^C	400 U	170 UJ
Cresol, p- (Methylphenol, 4-)	µg/kg	500000 ^A 1000000 ^B 330 ^C	400 U	330 UJ
Dibenzo(a,h)anthracene	µg/kg	560 ^A 1100 ^B 1000000 ^C	40 U	170 UJ
Dibenzofuran	µg/kg	350000 ^A 1000000 ^B 210000 ^C	400 U	170 UJ
Dibutyl Phthalate (DBP)	µg/kg	500000 ^A 1000000 ^B	400 U	320 UJ
Dichlorobenzidine, 3,3'-	µg/kg	500000 ^A 1000000 ^B	820 U	810 UJ
Dichlorophenol, 2,4-	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Diethyl Phthalate	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Dimethyl Phthalate	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Dimethylphenol, 2,4-	µg/kg	500000 ^A 1000000 ^B	400 U	250 UJ
Dinitro-o-cresol, 4,6-	µg/kg	500000 ^A 1000000 ^B	1200 U	330 UJ
Dinitrophenol, 2,4-	µg/kg	500000 ^A 1000000 ^B	1200 U	330 UJ
Dinitrotoluene, 2,4-	µg/kg	500000 ^A 1000000 ^B	82 U	170 UJ
Dinitrotoluene, 2,6-	µg/kg	500000 ^A 1000000 ^B	82 U	230 UJ
Di-n-Octyl phthalate	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Fluoranthene	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Fluorene	µg/kg	500000 ^A 1000000 ^B 386000 ^C	400 U	170 UJ
Hexachlorobenzene	µg/kg	6000 ^A 12000 ^B 3200 ^C	40 U	170 UJ
Hexachlorobutadiene	µg/kg	500000 ^A 1000000 ^B	82 U	170 UJ
Hexachlorocyclopentadiene	µg/kg	500000 ^A 1000000 ^B	400 U J	280 UJ
Hexachloroethane	µg/kg	500000 ^A 1000000 ^B	40 U	170 UJ
Indeno(1,2,3-cd)pyrene	µg/kg	5600 ^A 11000 ^B 8200 ^C	40 U	170 UJ
Isophorone	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Methylnaphthalene, 2-	µg/kg	500000 ^A 1000000 ^B	400 U	7700 J
Naphthalene	µg/kg	500000 ^A 1000000 ^B 12000 ^C	400 U	170 UJ
Nitroaniline, 2-	µg/kg	500000 ^A 1000000 ^B	820 U	330 UJ
Nitroaniline, 3-	µg/kg	500000 ^A 1000000 ^B	820 U	330 UJ
Nitroaniline, 4-	µg/kg	500000 ^A 1000000 ^B	820 U	330 UJ
Nitrobenzene	µg/kg	500000 ^A 1000000 ^B	40 U	170 UJ
Nitrophenol, 2-	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Nitrophenol, 4-	µg/kg	500000 ^A 1000000 ^B	1200 U	330 UJ
N-Nitrosodi-n-Propylamine	µg/kg	500000 ^A 1000000 ^B	40 U	170 UJ
n-Nitrosodiphenylamine	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
Pentachlorophenol	µg/kg	6700 ^A 55000 ^B 800 ^C	1200 U	330 UJ
Phenanthrene	µg/kg	500000 ^A 1000000 ^B	400 U	1300 J
Phenol	µg/kg	500000 ^A 1000000 ^B 330 ^C	400 U	170 UJ
Pyrene	µg/kg	500000 ^A 1000000 ^B	400 U	200 J
Trichlorophenol, 2,4,5-	µg/kg	500000 ^A 1000000 ^B	400 U	200 UJ
Trichlorophenol, 2,4,6-	µg/kg	500000 ^A 1000000 ^B	400 U	170 UJ
SVOC Tentatively Identified Compounds				
Total SVOC TICs	µg/kg	500000 ^A 1000000 ^B	590	2146000^{ABC}

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 Human Health - Industrial
- ^C 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.
- J Indicates estimated value.
- UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
- ^c The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
- ^C 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.
- ^d The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3.
- ⁱ For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value.
- ^{AC} 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.
- TALBU Test America Laboratories Inc., Buffalo, NY

Table 19
 Summary of IRM Analytical Results of RAOC-1 Excavation Confirmatory Sidewall and Bottom Soil Samples
 Interim Remedial Measures
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location			R1-EB1 11-Nov-11 BA-R1-EB1-S 14 ft STANTEC TALBU 480-12691-1-rev 480-12691-1	R1-EB2 15-Nov-11 BA-R1-EB2-S 11.5 ft STANTEC TALBU 480-12804-2-rev 480-12804-2	R1-EB3 16-Nov-11 BA-R1-EB3-S 13 ft STANTEC TALBU 480-12868-1-rev 480-12868-4	R1-EB4 16-Nov-11 BA-R1-EB4-S 13.5 ft STANTEC TALBU 480-12868-1-rev 480-12868-6	R1-EB5 17-Nov-11 BA-R1-EB5-S 11.5 ft STANTEC TALBU 480-13030-1-rev 480-13030-1	R1-EB6 22-Nov-11 BA-R1-EB6-S 14 - 14.5 ft STANTEC TALBU 480-13120-1-rev 480-13120-1	R1-EB7 22-Nov-11 BA-R1-EB7-S 13 ft STANTEC TALBU 480-13120-1-rev 480-13120-5	R1-ES1 11-Nov-11 BA-R1-ES1-S 8 - 10 ft STANTEC TALBU 480-12691-1-rev 480-12691-2	R1-ES2 11-Nov-11 BA-R1-ES2-S 7 - 9 ft STANTEC TALBU 480-12691-1-rev 480-12691-3	R1-ES3 15-Nov-11 BA-R1-ES3-S 10 ft STANTEC TALBU 480-12804-2-rev 480-12804-3 15-Nov-11 BA-R1-ES3-S/D 10 ft STANTEC TALBU 480-12804-2-rev 480-12804-4 Field Duplicate		R1-ES4 16-Nov-11 BA-R1-ES4-S 10 ft STANTEC TALBU 480-12868-1-rev 480-12868-5	R1-ES5 17-Nov-11 BA-R1-ES5-S 10 ft STANTEC TALBU 480-12960-1-rev 480-12960-2	R1-ES6 18-Nov-11 BA-R1-ES6-S 7 - 9 ft STANTEC TALBU 480-13030-1-rev 480-13030-4	R1-ES7 18-Nov-11 BA-R1-ES7-S 9 ft STANTEC TALBU 480-13030-1-rev 480-13030-5	
Sample ID	Units	6NYCRR																
Volatiles Organic Compounds																		
Acetone	µg/kg	500000 ^A 1000000 ^B 50 ^C	12 U	11 U	13 U	11 U	12 U	11 U	31	10 U	13 U	12 U	11 U	9.7 U	11 U J	11 U	10 U	10 U
Benzene	µg/kg	44000 ^A 89000 ^B 60 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Bromodichloromethane	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Bromoform (Tribromomethane)	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Carbon Disulfide	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.3	1.1 U	1.2 U	1.0 U	1.5	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B 760 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/kg	350000 ^A 700000 ^B 370 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Chloromethane	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Cyclohexane	µg/kg	n/v	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dibromochloromethane	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichlorobenzene, 1,2-	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B 2400 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B 1800 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichloroethane, 1,1-	µg/kg	240000 ^A 480000 ^B 270 ^C	1.5	1.1 U	1.3 U	1.1 U	1.2 U	6.3	5.8	200	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichloroethene, 1,1-	µg/kg	500000 ^A 1000000 ^B 330 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	2.6	3.2	130	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichloroethylene, cis-1,2-	µg/kg	500000 ^A 1000000 ^B 250 ^C	3.9	1.1 U	1.3 U	1.1 U	1.4	1.6	6.2	2.9	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichloroethylene, trans-1,2-	µg/kg	500000 ^A 1000000 ^B 190 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichloropropane, 1,2-	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichloropropene, cis-1,3-	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Dichloropropene, trans-1,3-	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Ethylbenzene	µg/kg	390000 ^A 780000 ^B 1000 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Ethylene Dibromide (Dibromoethane, 1,1-)	µg/kg	n/v	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	500000 ^A 1000000 ^B 50 ^C	12 U J	11 U J	13 U J	11 U J	12 U J	11 U	12 U	10 U J	13 U J	12 U	11 U	9.7 U J	11 U J	11 U J	10 U J	10 U J
Isopropylbenzene	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Methyl Acetate	µg/kg	n/v	1.2 U J	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U J	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Methyl Ethyl Ketone (MEK)	µg/kg	500000 ^A 1000000 ^B 120 ^C	12 U J	11 U J	13 U J	11 U J	12 U J	11 U	12 U	10 U J	13 U J	12 U J	11 U J	9.7 U J	11 U J	11 U J	10 U J	10 U J
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^A 1000000 ^B 50 ^C	12 U J	11 U J	13 U J	11 U J	12 U J	11 U	12 U	10 U J	13 U J	12 U J	11 U	9.7 U J	11 U J	11 U J	10 U J	10 U J
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^A 1000000 ^B 930 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Methylcyclohexane	µg/kg	n/v	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Methylene Chloride (Dichloromethane)	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	2.3	1.3 U	1.1 U	1.2	1.3	17	1.0 U	1.3 U	1.5	3.6	0.97 U	1.1 U	2.7	1.9	1.9
Styrene	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B 1300 ^C	1.2 U	5.1	2.9	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Toluene	µg/kg	500000 ^A 1000000 ^B 700 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Trichloroethane, 1,1,1-	µg/kg	500000 ^A 1000000 ^B 680 ^C	1.2 U	37	7.9	1.1 U	2.9	1.1 U	2.0	1.0 U	1.8	1.2 U	1.2	0.97 U	1.1 U	5.0	1.0 U	1.0 U
Trichloroethane, 1,1,2-	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Trichloroethylene (TCE)	µg/kg	200000 ^A 400000 ^B 470 ^C	8.3	370	56	220	76	210	420	4.1	240	12	16	0.97 U	1.1 U	30	24	24
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	1.2 U	1.1 U	1.3 U	1.1 U	1.2 U	1.1 U	1.2 U	1.0 U	1.3 U	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U	1.0 U	1.0 U
Xylenes, Total	µg/kg	500000 ^A 1000000 ^B 1600 ^C	3.7 U	3.3 U	4.0 U	3.2 U	3.7 U	3.4 U	3.7 U	3.1 U	4.0 U	3.5 U	3.2 U	2.9 U	3.4 U	3.4 U	3.0 U	3.0 U
Total VOC	µg/kg	500000 ^A 1000000 ^B 50 ^C	13.7	414.4	66.8	221.7	82.8	221.8	485.2	337	243.3	13.5	2					

Table 19
 Summary of IRM Analytical Results of RAOC-1 Excavation Confirmatory Sidewall and Bottom Soil Samples
 Interim Remedial Measures
 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		R1-ES8		R1-ES9	R1-ES10	R1-ES11	SEPTIC-EB1	SEPTIC-ES1	SEPTIC-ES2			
				22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	22-Nov-11	
				BA-R1-ES8-S	BA-R1-ES8-S/D	BA-R1-ES9-S	BA-R1-ES10-S	BA-R1-ES11-S	BA-SEPTIC-EB1-S	BA-SEPTIC-ES1-S	BA-SEPTIC-ES2-S										
				11 ft	11 ft	11 ft	11 ft	11 ft	8 ft	4 - 6 ft	4 - 6 ft	8 ft	4 - 6 ft	4 - 6 ft	8 ft	4 - 6 ft	4 - 6 ft	8 ft	4 - 6 ft	4 - 6 ft	
				STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
				TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	
				480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	480-13120-1-rev	
				480-13120-2	480-13120-3	480-13120-4	480-13120-6	480-13120-7	480-13227-3	480-13227-4	480-13227-5	480-13227-3	480-13227-4	480-13227-5	480-13227-3	480-13227-4	480-13227-5	480-13227-3	480-13227-4	480-13227-5	
Volatiles Organic Compounds																					
Acetone	µg/kg	500000 ^A	1000000 ^B	50 ^C	13 U	11 U	12 U	12 U	12 U	11 U	10 U	11 U									
Benzene	µg/kg	44000 ^A	89000 ^B	60 ^C	1.3 U	1.1 U	1.9	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Bromodichloromethane	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Bromoform (Tribromomethane)	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Bromomethane (Methyl bromide)	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Carbon Disulfide	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A	44000 ^B	760 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^A	1000000 ^B	1100 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Chloroform (Trichloromethane)	µg/kg	350000 ^A	700000 ^B	370 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Chloromethane	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Cyclohexane	µg/kg	n/v	n/v	n/v	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	n/v	n/v	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dibromochloromethane	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichlorobenzene, 1,2-	µg/kg	500000 ^A	1000000 ^B	1100 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichlorobenzene, 1,3-	µg/kg	280000 ^A	560000 ^B	2400 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichlorobenzene, 1,4-	µg/kg	1300000 ^A	2500000 ^B	1800 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	n/v	n/v	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichloroethane, 1,1-	µg/kg	240000 ^A	480000 ^B	270 ^C	38	27	6.9	24	26	1.1 U	1.0 U	1.1 U									
Dichloroethane, 1,2-	µg/kg	30000 ^A	60000 ^B	20 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichloroethene, 1,1-	µg/kg	500000 ^A	1000000 ^B	330 ^C	8.5 J	5.4 J	4.7	12	15	1.1 U	1.0 U	1.1 U									
Dichloroethylene, cis-1,2-	µg/kg	500000 ^A	1000000 ^B	250 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichloroethylene, trans-1,2-	µg/kg	500000 ^A	1000000 ^B	190 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichloropropane, 1,2-	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichloropropene, cis-1,3-	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Dichloropropene, trans-1,3-	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Ethylbenzene	µg/kg	390000 ^A	780000 ^B	1000 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Ethylene Dibromide (Dibromoethane, 1,1-)	µg/kg	n/v	n/v	n/v	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	13 U	11 U	12 U	12 U	12 U	11 U	10 U	11 U									
Isopropylbenzene	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Methyl Acetate	µg/kg	n/v	n/v	n/v	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Methyl Ethyl Ketone (MEK)	µg/kg	500000 ^A	1000000 ^B	120 ^C	13 U	11 U	12 U	12 U	12 U	11 U	10 U	11 U									
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	13 U	11 U	12 U	12 U	12 U	11 U	10 U	11 U									
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^A	1000000 ^B	930 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Methylcyclohexane	µg/kg	n/v	n/v	n/v	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Methylene Chloride (Dichloromethane)	µg/kg	500000 ^A	1000000 ^B	50 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Styrene	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Tetrachloroethylene (PCE)	µg/kg	150000 ^A	300000 ^B	1300 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Toluene	µg/kg	500000 ^A	1000000 ^B	700 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Trichloroethane, 1,1,1-	µg/kg	500000 ^A	1000000 ^B	680 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Trichloroethane, 1,1,2-	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Trichloroethylene (TCE)	µg/kg	200000 ^A	400000 ^B	470 ^C	3.6	2.2	67	110	230	1.1 U	1.0 U	1.1 U									
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	n/v	n/v	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Vinyl chloride	µg/kg	13000 ^A	27000 ^B	20 ^C	1.3 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.0 U	1.1 U									
Xylenes, Total	µg/kg	500000 ^A	1000000 ^B	1600 ^C	3.9 U	3.2 U	3.6 U	3.6 U	3.5 U	3.3 U	3.1 U	3.3 U									
Total VOC	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	50.1	34.6	86.1	146	271	ND	ND	ND									
VOC Tentatively Identified Compounds																					
Total VOC TICs	µg/kg	500000 ^A	1000000 ^B	1000000 ^{BC}	ND	ND	ND	ND	ND	ND	ND	ND									

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</

Table 20
Summary of IRM Analytical Results of RAOC-2 Excavation Confirmatory Sidewall and Bottom Soil Samples
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			R2-EB1 13-Dec-11 BA-R2-EB1 1.7 ft STANTEC TALBU 480-14061-1-rev 480-14061-8	R2-ES1 13-Dec-11 BA-R2-ES1-S 1 ft STANTEC TALBU 480-14061-1-rev 480-14061-9	R2-ES2 13-Dec-11 BA-R2-ES2-S 1.1 ft STANTEC TALBU 480-14061-1-rev 480-14061-10	R2-ES3 13-Dec-11 BA-R2-ES3-S 1.1 ft STANTEC TALBU 480-14061-1-rev 480-14061-11	R2-ES4 13-Dec-11 BA-R2-ES4-S 1.1 ft STANTEC TALBU 480-14061-1-rev 480-14061-12
Sample Date							
Sample ID							
Sample Depth							
Sampling Company							
Laboratory							
Laboratory Work Order							
Laboratory Sample ID							
Sample Type	Units	6NYCRR					
Volatile Organic Compounds							
Acetone	µg/kg	500000 ^A 1000000 ^B 50 ^C	10 U	27	67 ^C	63 ^C	26
Benzene	µg/kg	44000 ^A 89000 ^B 60 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Bromodichloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Bromoform (Tribromomethane)	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Bromomethane (Methyl bromide)	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U J
Carbon Disulfide	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B 760 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Chloroform (Trichloromethane)	µg/kg	350000 ^A 700000 ^B 370 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Chloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Cyclohexane	µg/kg	n/v	1.0 U	0.99 U	1.0 U	2.8	0.99 U
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dibromochloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichlorobenzene, 1,2-	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B 2400 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B 1800 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichloroethane, 1,1-	µg/kg	240000 ^A 480000 ^B 270 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichloroethene, 1,1-	µg/kg	500000 ^A 1000000 ^B 330 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichloroethylene, cis-1,2-	µg/kg	500000 ^A 1000000 ^B 250 ^C	1.0 U	0.99 U	1.0	1.0 U	0.99 U
Dichloroethylene, trans-1,2-	µg/kg	500000 ^A 1000000 ^B 190 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichloropropane, 1,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichloropropene, cis-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Dichloropropene, trans-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Ethylbenzene	µg/kg	390000 ^A 780000 ^B 1000 ^C	1.0 U	0.99 U	1.0 U	9.3	0.99 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	500000 ^A 1000000 ^{BC}	10 U	9.9 U	10 U	10 U	9.9 U
Isopropylbenzene	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	2.7	0.99 U
Methyl Acetate	µg/kg	n/v	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Methyl Ethyl Ketone (MEK)	µg/kg	500000 ^A 1000000 ^B 120 ^C	10 U	9.9 U J	10 U J	10 U J	9.9 U J
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^A 1000000 ^{BC}	10 U	9.9 U	10 U	10 U	9.9 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^A 1000000 ^B 930 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Methylcyclohexane	µg/kg	n/v	1.0 U	0.99 U	1.0 U	8.6	0.99 U
Methylene Chloride (Dichloromethane)	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Styrene	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B 1300 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Toluene	µg/kg	500000 ^A 1000000 ^B 700 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Trichloroethane, 1,1,1-	µg/kg	500000 ^A 1000000 ^B 680 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Trichloroethane, 1,1,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Trichloroethylene (TCE)	µg/kg	200000 ^A 400000 ^B 470 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^A 1000000 ^{BC}	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	1.0 U	0.99 U	1.0 U	1.0 U	0.99 U
Xylenes, Total	µg/kg	500000 ^A 1000000 ^B 1600 ^C	3.1 U	3.0 U	3.0 U	3.1 U	3.0 U
Total VOC	µg/kg	500000 ^A 1000000 ^{BC}	ND	27	68	86.4	26
VOC Tentatively Identified Compounds							
Total VOC TICs	µg/kg	500000 ^A 1000000 ^{BC}	ND	ND	ND	930	6.4

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 Human Health - Industrial
- ^C 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.
- ^B The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 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 Indicates estimated value.
- TALBU Test America Laboratories Inc., Buffalo, NY

Table 20
Summary of IRM Analytical Results of RAOC-2 Excavation Confirmatory Sidewall and Bottom Soil Samples
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			R2-EB1 13-Dec-11 BA-R2-EB1 1.7 ft STANTEC TALBU 480-14061-1-rev 480-14061-8	R2-ES1 13-Dec-11 BA-R2-ES1-S 1 ft STANTEC TALBU 480-14061-1-rev 480-14061-9	R2-ES2 13-Dec-11 BA-R2-ES2-S 1.1 ft STANTEC TALBU 480-14061-1-rev 480-14061-10	R2-ES3 13-Dec-11 BA-R2-ES3-S 1.1 ft STANTEC TALBU 480-14061-1-rev 480-14061-11	R2-ES4 13-Dec-11 BA-R2-ES4-S 1.1 ft STANTEC TALBU 480-14061-1-rev 480-14061-12
Sample Date							
Sample ID							
Sample Depth							
Sampling Company							
Laboratory							
Laboratory Work Order							
Laboratory Sample ID							
Sample Type	Units	6NYCRR					
Semi-Volatile Organic Compounds							
Acenaphthene	µg/kg	500000 ^A 1000000 ^B 98000 ^C	360 U	360 U	370 U	720 U	720 U
Acenaphthylene	µg/kg	500000 ^A 1000000 ^B 107000 ^C	360 U	360 U	370 U	720 U	720 U
Acetophenone	µg/kg	n/v	360 U	360 U	370 U	720 U	720 U
Anthracene	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Atrazine	µg/kg	n/v	360 U	360 U	370 U	720 U	720 U
Benzaldehyde	µg/kg	n/v	360 U	360 U	370 U	720 U	720 U
Benzo(a)anthracene	µg/kg	5600 ^A 11000 ^B 1000 ^C	36 U	36 U	37 U	72 U	72 U
Benzo(a)pyrene	µg/kg	1000 ^A 1100 ^B 22000 ^C	36 U *	36 U *	37 U *	72 U *	72 U *
Benzo(b)fluoranthene	µg/kg	5600 ^A 11000 ^B 1700 ^C	36 U	36 U	37 U	72 U	72 U
Benzo(g,h,i)perylene	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Benzo(k)fluoranthene	µg/kg	56000 ^A 110000 ^B 1700 ^C	36 U	36 U	37 U	72 U	72 U
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	360 U	360 U	370 U	720 U	720 U
Bis(2-Chloroethoxy)methane	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Bis(2-Chloroethyl)ether	µg/kg	500000 ^A 1000000 ^{BC}	36 U	36 U	37 U	72 U	72 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Butyl Benzyl Phthalate	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Caprolactam	µg/kg	n/v	360 U	360 U	370 U	720 U	720 U
Carbazole	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Chloro-3-methyl phenol, 4-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Chloroaniline, 4-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Chloronaphthalene, 2-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Chrysene	µg/kg	56000 ^A 110000 ^B 1000 ^C	360 U	360 U	370 U	720 U	720 U
Cresol, o- (Methylphenol, 2-)	µg/kg	500000 ^A 1000000 ^B 330 ^C	360 U	360 U	370 U	720 U	720 U
Cresol, p- (Methylphenol, 4-)	µg/kg	500000 ^A 1000000 ^B 330 ^C	360 U	360 U	370 U	720 U	720 U
Dibenzo(a,h)anthracene	µg/kg	560 ^A 1100 ^B 1000000 ^C	36 U	36 U	37 U	72 U	72 U
Dibenzofuran	µg/kg	350000 ^A 1000000 ^B 210000 ^C	360 U	360 U	370 U	720 U	720 U
Dibutyl Phthalate (DBP)	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Dichlorobenzidine, 3,3'-	µg/kg	500000 ^A 1000000 ^{BC}	730 U	740 U	760 U	1500 U	1500 U
Dichlorophenol, 2,4-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Diethyl Phthalate	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Dimethyl Phthalate	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Dimethylphenol, 2,4-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Dinitro-o-cresol, 4,6-	µg/kg	500000 ^A 1000000 ^{BC}	1100 U	1100 U	1100 U	2200 U	2200 U
Dinitrophenol, 2,4-	µg/kg	500000 ^A 1000000 ^{BC}	1100 U	1100 U	1100 U	2200 U	2200 U
Dinitrotoluene, 2,4-	µg/kg	500000 ^A 1000000 ^{BC}	73 U	74 U	76 U	150 U	150 U
Dinitrotoluene, 2,6-	µg/kg	500000 ^A 1000000 ^{BC}	73 U	74 U	76 U	150 U	150 U
Di-n-Octyl phthalate	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Fluoranthene	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Fluorene	µg/kg	500000 ^A 1000000 ^B 386000 ^C	360 U	360 U	370 U	760	720 U
Hexachlorobenzene	µg/kg	6000 ^A 12000 ^B 3200 ^C	36 U	36 U	37 U	72 U	72 U
Hexachlorobutadiene	µg/kg	500000 ^A 1000000 ^{BC}	73 U	74 U	76 U	150 U	150 U
Hexachlorocyclopentadiene	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Hexachloroethane	µg/kg	500000 ^A 1000000 ^{BC}	36 U	36 U	37 U	72 U	72 U
Indeno(1,2,3-cd)pyrene	µg/kg	5600 ^A 11000 ^B 8200 ^C	36 U	36 U	37 U	72 U	72 U
Isophorone	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Methylnaphthalene, 2-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	5500	720 U
Naphthalene	µg/kg	500000 ^A 1000000 ^B 12000 ^C	360 U	360 U	370 U	790	720 U
Nitroaniline, 2-	µg/kg	500000 ^A 1000000 ^{BC}	730 U	740 U	760 U	1500 U	1500 U
Nitroaniline, 3-	µg/kg	500000 ^A 1000000 ^{BC}	730 U	740 U	760 U	1500 U	1500 U
Nitroaniline, 4-	µg/kg	500000 ^A 1000000 ^{BC}	730 U	740 U	760 U	1500 U	1500 U
Nitrobenzene	µg/kg	500000 ^A 1000000 ^{BC}	36 U	36 U	37 U	72 U	72 U
Nitrophenol, 2-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Nitrophenol, 4-	µg/kg	500000 ^A 1000000 ^{BC}	1100 U	1100 U	1100 U	2200 U	2200 U
N-Nitrosodi-n-Propylamine	µg/kg	500000 ^A 1000000 ^{BC}	36 U	36 U	37 U	72 U	72 U
n-Nitrosodiphenylamine	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Pentachlorophenol	µg/kg	6700 ^A 55000 ^B 800 ^C	1100 U	1100 U	1100 U	2200 U	2200 U
Phenanthrene	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	2800	720 U
Phenol	µg/kg	500000 ^A 1000000 ^B 330 ^C	360 U	360 U	370 U	720 U	720 U
Pyrene	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Trichlorophenol, 2,4,5-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
Trichlorophenol, 2,4,6-	µg/kg	500000 ^A 1000000 ^{BC}	360 U	360 U	370 U	720 U	720 U
SVOC Tentatively Identified Compounds							
Total SVOC TICs	µg/kg	500000 ^A 1000000 ^{BC}	ND	4380	2910	137300	7820

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 Human Health - Industrial
^C 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.
^B The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg. 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.
^{AC} 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.
* Indicates analysis is not within the quality control limits.
TALBU Test America Laboratories Inc., Buffalo, NY

Table 21
Summary of IRM Analytical Results of RAOC-3 Boring & Excavation Confirmatory Sidewall & Bottom Soil Samples
Interim Remedial Measures
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	R3-B50		R3-B51	R3-B53	R3-B55	R3-B57	R3-B65	R3-EB1	R3-EB2	R3-EB3	R3-EB4	R3-EB5	R3-EB6	R3-EB7			
											5-Dec-11 BA-R3-B50-S 1.5 - 4.5 ft STANTEC TALBU 480-13601-1-rev 480-13601-1	5-Dec-11 BA-R3-B50-S/D 1.5 - 4.5 ft STANTEC TALBU 480-13601-1-rev 480-13601-2 Field Duplicate	5-Dec-11 BA-R3-B51-S 4 - 7.7 ft STANTEC TALBU 480-13601-1-rev 480-13601-3	5-Dec-11 BA-R3-B53-S 4 - 6.1 ft STANTEC TALBU 480-13601-1-rev 480-13601-4	5-Dec-11 BA-R3-B55-S 4 - 8.5 ft STANTEC TALBU 480-13601-1-rev 480-13601-5	5-Dec-11 BA-R3-B57-S 4.6 - 8.6 ft STANTEC TALBU 480-13601-1-rev 480-13601-6	26-Jan-12 BA-R3-B65-S 8 - 9.4 ft STANTEC TALBU 480-15496-1-rev 480-15496-17	29-Nov-11 BA-R3-EB1-S 4.5 ft STANTEC TALBU 480-13292-1-rev 480-13292-2	29-Nov-11 BA-R3-EB2-S 4.5 ft STANTEC TALBU 480-13292-1-rev 480-13292-6	29-Nov-11 BA-R3-EB3-S 4.5 ft STANTEC TALBU 480-13292-1-rev 480-13292-9	30-Nov-11 BA-R3-EB4-S 8 ft STANTEC TALBU 480-13377-1-rev 480-13377-1	30-Nov-11 BA-R3-EB5-S 5 ft STANTEC TALBU 480-13424-1-rev 480-13424-2	13-Dec-11 BA-R3-EB6-S 8 ft STANTEC TALBU 480-14061-1-rev 480-14061-3	27-Dec-11 BA-R3-EB-7S 5 ft STANTEC TALBU 480-14485-1-rev 480-14485-2	27-Dec-11 BA-R3-ES-7S/D 5 ft STANTEC TALBU 480-14485-1-rev 480-14485-4 Field Duplicate		
Volatile Organic Compounds																											
Acetone	µg/kg	500000 ^A 1000000 ^B 50 ^C	11 U	12 U	12 U	12 U	14 U	11 U	12 U	11 U	14	12 U	23	11 U	12 U	19	11 U										
Benzene	µg/kg	44000 ^A 89000 ^B 60 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Bromodichloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Bromoform (Tribromomethane)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Bromomethane (Methyl bromide)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Carbon Disulfide	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B 760 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Chloroform (Trichloromethane)	µg/kg	350000 ^A 700000 ^B 370 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Chloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Cyclohexane	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	24	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dibromochloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichlorobenzene, 1,2-	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B 2400 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B 1800 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichloroethane, 1,1-	µg/kg	240000 ^A 480000 ^B 270 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichloroethene, 1,1-	µg/kg	500000 ^A 1000000 ^B 330 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichloroethylene, cis-1,2-	µg/kg	500000 ^A 1000000 ^B 250 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichloroethylene, trans-1,2-	µg/kg	500000 ^A 1000000 ^B 190 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichloropropane, 1,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichloropropene, cis-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Dichloropropene, trans-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Ethylbenzene	µg/kg	390000 ^A 780000 ^B 1000 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	500000 ^A 1000000 ^{BC}	11 U	12 U	12 U	12 U	14 U	11 U	12 U	11 U	11 U	12 U	12 U	11 U	12 U	13 U	11 U										
Isopropylbenzene	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Methyl Acetate	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Methyl Ethyl Ketone (MEK)	µg/kg	500000 ^A 1000000 ^B 120 ^C	11 U	12 U	12 U	12 U	14 U	11 U	12 U	11 U	11 U	12 U	12 U	11 U	12 U	13 U	11 U										
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^A 1000000 ^{BC}	11 U	12 U	12 U	12 U	14 U	11 U	12 U	11 U	11 U	12 U	12 U	11 U	12 U	13 U	11 U										
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^A 1000000 ^B 930 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Methylcyclohexane	µg/kg	n/v	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Methylene Chloride (Dichloromethane)	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	2.6	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Styrene	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B 1300 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Toluene	µg/kg	500000 ^A 1000000 ^B 700 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U										
Trichloroethane, 1,1,1-	µg/kg	500000 ^A 1000000 ^B 680 ^C	1.1 U	1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1													

Table 21
Summary of IRM Analytical Results of RAOC-3 Boring & Excavation Confirmatory Sidewall & Bottom Soil Samples
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			R3-EB8 (12/27/11)	R3-EB8 (4/4/12)	R3-EB9	R3-ES1	R3-ES2	R3-ES3	R3-ES4	R3-ES5	R3-ES6	R3-ES7	R3-ES8	R3-ES9	R3-ES12	R3-ES13	R3-ES14
Sample Date			27-Dec-11	4-Apr-12	4-Apr-12	29-Nov-11	29-Nov-11	29-Nov-11	29-Nov-11	29-Nov-11	30-Nov-11	13-Dec-11	13-Dec-11	15-Dec-11	16-Dec-11	16-Dec-11	27-Dec-11
Sample ID			BA-R3-EB-8S	BA-R3-EB-8S	BA-R3-EB-9S	BA-R3-ES1-S	BA-R3-ES2-S	BA-R3-ES3-S	BA-R3-ES4-S	BA-R3-ES5-S	BA-R3-ES6-S	BA-R3-ES7-S	BA-R3-ES8-S	BA-R3-ES9-S	BA-R3-ES12-S	BA-R3-ES13-S	BA-R3-ES14S
Sample Depth			6 ft	7 ft	7.5 ft	3 - 4 ft	3.5 - 4 ft	3.5 - 4 ft	2.5 - 3 ft	3.5 ft	6 ft	6 ft	7 ft	3.5 - 4 ft	3 - 4 ft	4 ft	4.5 ft
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			480-14485-1-rev	480-18110-1	480-18110-1	480-13292-1-rev	480-13292-1-rev	480-13292-1-rev	480-13292-1-rev	480-13292-1-rev	480-13377-1-rev	480-14061-1-rev	480-14061-1-rev	480141801	480-14301-1-rev	480-14301-1-rev	480-14485-1-rev
Laboratory Sample ID			480-14485-3	480-18110-18	480-18110-20	480-13292-4	480-13292-5	480-13292-7	480-13292-8	480-13292-10	480-13377-2	480-14061-1	480-14061-4	480-14180-2	480-14301-2	480-14301-3	480-14485-5
Sample Type		Units	6NYCRR														
Volatile Organic Compounds																	
Acetone	µg/kg	500000 ^A 1000000 ^B 50 ^C	12 U	31 U	34 U	13	20 NJ	12 U	18	12 U	100 J ^C	11 U	10 U	13 U	11 U	34	9.8 U
Benzene	µg/kg	44000 ^A 89000 ^B 60 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Bromodichloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Bromoform (Tribromomethane)	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U J	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Bromomethane (Methyl bromide)	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Carbon Disulfide	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U J	6.7 U J	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U J	1.0 U J	0.98 U
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B 760 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U J	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Chloroform (Trichloromethane)	µg/kg	350000 ^A 700000 ^B 370 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Chloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Cyclohexane	µg/kg	n/v	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	27	1.1 U	1.0 U	0.98 U
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 R	1.1 U	1.0 U	1.3 U	1.1 U J	1.0 U J	0.98 U
Dibromochloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U J	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichlorobenzene, 1,2-	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 R	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B 2400 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 R	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B 1800 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 R	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichloroethane, 1,1-	µg/kg	240000 ^A 480000 ^B 270 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichloroethene, 1,1-	µg/kg	500000 ^A 1000000 ^B 330 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichloroethylene, cis-1,2-	µg/kg	500000 ^A 1000000 ^B 250 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichloroethylene, trans-1,2-	µg/kg	500000 ^A 1000000 ^B 190 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichloropropane, 1,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichloropropene, cis-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Dichloropropene, trans-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U J	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Ethylbenzene	µg/kg	390000 ^A 780000 ^B 1000 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	100	1.1 U	21	1.2 U J	1.1 U	1.0 U	22	1.1 U	1.0 U	0.98 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U J	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	31 U	34 U	10 U	13 U	12 U	11 U	12 U	12 U J	11 U	10 U	13 U	11 U	10 U	9.8 U
Isopropylbenzene	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	27	1.1 U	8.7	4.8 NJ	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Methyl Acetate	µg/kg	n/v	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.4 U	1.1 U	1.0 U	0.98 U
Methyl Ethyl Ketone (MEK)	µg/kg	500000 ^A 1000000 ^B 120 ^C	12 U J	31 U	34 U	10 U J	13 U J	12 U J	11 U J	12 U J	22 NJ	11 U J	10 U J	13 U J	11 U	10 U	9.8 U J
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	31 U	34 U	10 U	13 U	12 U	11 U	12 U	12 U	11 U	10 U	13 U	11 U	10 U	9.8 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^A 1000000 ^B 930 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Methylcyclohexane	µg/kg	n/v	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	170	1.1 U	80	71 J	1.1 U	1.0 U	1.3 U	1.1 U	2.1	0.98 U
Methylene Chloride (Dichloromethane)	µg/kg	500000 ^A 1000000 ^B 50 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	6.0	2.7	3.6	1.4
Styrene	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U J	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 R	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B 1300 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U J	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Toluene	µg/kg	500000 ^A 1000000 ^B 700 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U J	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 R	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Trichloroethane, 1,1,1-	µg/kg	500000 ^A 1000000 ^B 680 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Trichloroethane, 1,1,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U J	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Trichloroethylene (TCE)	µg/kg	200000 ^A 400000 ^B 470 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^A 1000000 ^{BC}	1.2 U	6.2 U J	6.7 U J	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	1.2 U	6.2 U	6.7 U	1.0 U	1.3 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	1.0 U	1.3 U	1.1 U	1.0 U	0.98 U
Xylenes, Total	µg/kg	500000 ^A 1000000 ^B 1600 ^C	3.5 U	12 U	13 U	3.0 U	3.8 U	190 J	3.4 U	66	11 J	3.4 U	3.1 U	60	3.3 U	3.1 U	3.0 U
Total VOC	µg/kg	500000 ^A 1000000 ^{BC}	ND	ND	ND	13	20	487	19.6	175.7	208.8	ND	ND				

Table 21
Summary of IRM Analytical Results of RAOC-3 Boring & Excavation Confirmatory Sidewall & Bottom Soil Samples
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			R3-ES15 27-Dec-11	R3-ES16 27-Dec-11	R3-ES17 4-Apr-12	R3-ES18 4-Apr-12	R3-ES19 4-Apr-12
Sample Date			BA-R3-ES-15S	BA-R3-ES-16S	BA-R3-ES-17S	BA-R3-ES-18S	BA-R3-ES-19S
Sample ID			4.5 ft	4.5 ft	5.5 ft	5.5 ft	2 - 5.5 ft
Sample Depth			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Sampling Company			TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory			480-14485-1-rev	480-14485-1-rev	480-18110-1	480-18110-1	480-18110-1
Laboratory Work Order			480-14485-6	480-14485-7	480-18110-16	480-18110-17	480-18110-19
Laboratory Sample ID							
Sample Type	Units	6NYCRR					
Volatile Organic Compounds							
Acetone	µg/kg	500000 ^A 1000000 ^B 50 ^C	34	9.4 U	30 U	35 U	27 U
Benzene	µg/kg	44000 ^A 89000 ^B 60 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Bromodichloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Bromoform (Tribromomethane)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Bromomethane (Methyl bromide)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Carbon Disulfide	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U J	7.0 U J	5.4 U J
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B 760 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Chloroform (Trichloromethane)	µg/kg	350000 ^A 700000 ^B 370 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Chloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Cyclohexane	µg/kg	n/v	3.4	0.94 U	5.9 U	7.0 U	5.4 U
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dibromochloromethane	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichlorobenzene, 1,2-	µg/kg	500000 ^A 1000000 ^B 1100 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B 2400 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B 1800 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichloroethane, 1,1-	µg/kg	240000 ^A 480000 ^B 270 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichloroethene, 1,1-	µg/kg	500000 ^A 1000000 ^B 330 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichloroethylene, cis-1,2-	µg/kg	500000 ^A 1000000 ^B 250 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichloroethylene, trans-1,2-	µg/kg	500000 ^A 1000000 ^B 190 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichloropropane, 1,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichloropropene, cis-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Dichloropropene, trans-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Ethylbenzene	µg/kg	390000 ^A 780000 ^B 1000 ^C	18	0.94 U	5.9 U	7.0 U	5.4 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	500000 ^A 1000000 ^{BC}	11 U	9.4 U	30 U	35 U	27 U
Isopropylbenzene	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Methyl Acetate	µg/kg	n/v	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Methyl Ethyl Ketone (MEK)	µg/kg	500000 ^A 1000000 ^B 120 ^C	11 U J	9.4 U J	30 U	35 U	27 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^A 1000000 ^{BC}	11 U	9.4 U	30 U	35 U	27 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^A 1000000 ^B 930 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Methylcyclohexane	µg/kg	n/v	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Methylene Chloride (Dichloromethane)	µg/kg	500000 ^A 1000000 ^B 50 ^C	3.5	0.94 U	5.9 U	7.0 U	5.4 U
Styrene	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B 1300 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Toluene	µg/kg	500000 ^A 1000000 ^B 700 ^C	1.6	0.94 U	5.9 U	7.0 U	5.4 U
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Trichloroethane, 1,1,1-	µg/kg	500000 ^A 1000000 ^B 680 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Trichloroethane, 1,1,2-	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Trichloroethylene (TCE)	µg/kg	200000 ^A 400000 ^B 470 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^A 1000000 ^{BC}	1.1 U	0.94 U	5.9 U J	7.0 U J	5.4 U J
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	1.1 U	0.94 U	5.9 U	7.0 U	5.4 U
Xylenes, Total	µg/kg	500000 ^A 1000000 ^B 1600 ^C	8.2	2.8 U	12 U	14 U	11 U
Total VOC	µg/kg	500000 ^A 1000000 ^{BC}	68.7	ND	ND	ND	ND
VOC Tentatively Identified Compounds							
Total VOC TICs	µg/kg	500000 ^A 1000000 ^{BC}	31	ND	16.4	ND	ND

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 Human Health - Industrial
^C 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^C} 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.
^{d^B} The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 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 Indicates estimated value.
R The data are unusable. The analyte may or may not be present.
TALBU Test America Laboratories Inc., Buffalo, NY

Table 21
 Summary of IRM Analytical Results of RAOC-3 Boring & Excavation Confirmatory Sidewall & Bottom Soil Samples
 Interim Remedial Measures
 Former Allegany Bitumens Belmont Asphalt Plant
 Amity, New York

Sample Location	Sample Date	R3-EB8 (12/27/11)	R3-EB8 (4/4/12)	R3-EB9	R3-ES1	R3-ES2	R3-ES3	R3-ES4	R3-ES5	R3-ES6	R3-ES7		R3-ES8	R3-ES9	R3-ES12	R3-ES13	R3-ES14	R3-ES15	
Sample ID	Sample Depth	BA-R3-EB-8S	BA-R3-EB-8S	BA-R3-EB-9S	BA-R3-ES1-S	BA-R3-ES2-S	BA-R3-ES3-S	BA-R3-ES4-S	BA-R3-ES5-S	BA-R3-ES6-S	BA-R3-ES7-S	BA-R3-ES7-S/D	BA-R3-ES8-S	BA-R3-ES9-S	BA-R3-ES12-S	BA-R3-ES13-S	BA-R3-ES14S	BA-R3-ES15S	
Sampling Company	Laboratory	6 ft	7 ft	7.5 ft	3 - 4 ft	3.5 - 4 ft	3.5 - 4 ft	2.5 - 3 ft	3.5 ft	6 ft	6 ft	6 ft	7 ft	3.5 - 4 ft	3 - 4 ft	4 ft	4.5 ft	4.5 ft	
Laboratory Work Order	Laboratory Sample ID	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	
Sample Type	Units	480-14485-1-rev	480-18110-1	480-18110-1	480-13292-1-rev	480-14061-1-rev	480-14061-1-rev	480-14061-1-rev	480-14061-1-rev	480-14061-1-rev	480-14061-1-rev								
Sample Type	Units	480-14485-3	480-18110-18	480-18110-20	480-13292-4	480-13292-5	480-13292-7	480-13292-8	480-13292-10	480-13377-2	480-14061-1	480-14061-2	480-14061-4	480-14180-2	480-14301-2	480-14301-3	480-14485-5	480-14485-6	
Sample Type	Units	6NYCRR										Field Duplicate							
Semi-Volatile Organic Compounds																			
Acenaphthene	µg/kg	500000 ^A 1000000 ^B 98000 ^C	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Acenaphthylene	µg/kg	500000 ^C 1000000 ^B 107000 ^C	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Acetophenone	µg/kg	n/v	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Anthracene	µg/kg	500000 ^C 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Atrazine	µg/kg	n/v	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Benzaldehyde	µg/kg	n/v	410 U J	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U J	380 U	390 U	360 U	450 U	410 U J	400 U J	370 U J	420 U J
Benzo(a)anthracene	µg/kg	5600 ^A 11000 ^B 1000 ^C	41 U	230 U	230 U	37 U	43 U	42 U	41 U	46 U	220 U	38 U	39 U	36 U	45 U	41 U	40 U	37 U	42 U
Benzo(a)pyrene	µg/kg	1000 ^A 1100 ^B 22000 ^C	41 U	230 U	230 U	37 U	43 U	42 U	41 U	46 U	220 U	38 U *	39 U *	36 U *	45 U	41 U	40 U	37 U	42 U
Benzo(b)fluoranthene	µg/kg	5600 ^A 11000 ^B 1700 ^C	41 U	230 U	230 U	37 U	43 U	42 U	41 U	46 U	220 U	38 U	39 U	36 U	45 U	41 U	40 U	37 U	42 U
Benzo(g,h,i)perylene	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Benzo(k)fluoranthene	µg/kg	56000 ^A 110000 ^B 1700 ^C	41 U	230 U	230 U	37 U	43 U	42 U	41 U	46 U	220 U	38 U	39 U	36 U	45 U	41 U	40 U	37 U	42 U
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Bis(2-Chloroethoxy)methane	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Bis(2-Chloroethyl)ether	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	41 U	230 U	230 U	37 U	43 U	42 U	41 U	46 U	220 U	38 U	39 U	36 U	45 U	41 U	40 U	37 U	42 U
Bis(2-Chloroisopropyl)ether (2,2-oxobis(1-Chloropropane))	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000 ^C 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Butyl Benzyl Phthalate	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Caprolactam	µg/kg	n/v	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Carbazole	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Chloro-3-methyl phenol, 4-	µg/kg	500000 ^C 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Chloroaniline, 4-	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Chloronaphthalene, 2-	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	500000 ^C 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Chrysene	µg/kg	56000 ^A 110000 ^B 1000 ^C	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Cresol, o- (Methylphenol, 2-)	µg/kg	500000 ^C 1000000 ^B 330 ^C	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U J	410 U	400 U	370 U	420 U
Cresol, p- (Methylphenol, 4-)	µg/kg	500000 ^A 1000000 ^B 330 ^C	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Dibenzo(a,h)anthracene	µg/kg	560 ^A 1100 ^B 1000000 ^{BC}	41 U	230 U	230 U	37 U	43 U	42 U	41 U	46 U	220 U	38 U	39 U	36 U	45 U	41 U	40 U	37 U	42 U
Dibenzofuran	µg/kg	350000 ^A 1000000 ^B 210000 ^C	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Dibutyl Phthalate (DBP)	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Dichlorobenzidine, 3,3'-	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	830 U	230 U	230 U	760 U	870 U	840 U	840 U	940 U	4500 U	780 U	790 U	730 U	900 U	830 U	800 U	760 U	850 U
Dichlorophenol, 2,4-	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Diethyl Phthalate	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Dimethyl Phthalate	µg/kg	500000 ^C 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Dimethylphenol, 2,4-	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Dinitro-o-cresol, 4,6-	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	1200 U	440 U	450 U	1100 U	1300 U	1300 U	1300 U	1400 U	6700 U	1200 U	1200 U	1100 U	1400 U	1200 U	1100 U	1300 U	1300 U
Dinitrophenol, 2,4-	µg/kg	500000 ^C 1000000 ^B 1000000 ^{BC}	1200 U	440 U J	450 U J	1100 U J	1300 U J	1300 U J	1300 U J	1400 U J	6700 U	1200 U	1200 U	1100 U	1400 U	1200 U	1100 U	1300 U	1300 U
Dinitrotoluene, 2,4-	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	83 U	230 U	230 U	76 U	84 U	84 U	84 U	94 U	450 U	78 U	79 U	73 U	90 U	83 U	80 U	76 U	85 U
Dinitrotoluene, 2,6-	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	83 U	230 U	230 U	76 U	87 U	84 U	84 U	94 U	450 U	78 U	79 U	73 U	90 U	83 U	80 U	76 U	85 U
Di-n-Octyl phthalate	µg/kg	500000 ^C 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Fluoranthene	µg/kg	500000 ^A 1000000 ^B 1000000 ^{BC}	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Fluorene	µg/kg	500000 ^C 1000000 ^B 386000 ^C	410 U	230 U	230 U	370 U	430 U	420 U	410 U	460 U	2200 U	380 U	390 U	360 U	450 U	410 U	400 U	370 U	420 U
Hexachlorobenzene	µg/kg	6000 ^A 12000 ^B 3200 ^C	41 U	230 U	230 U	37 U	43 U	42 U	41 U	46 U	220 U	38 U	39 U	36 U	45 U	41 U	40 U	37 U	42 U
Hexachlorobutadiene	µg/kg	500000 ^A 100																	

Table 21
Summary of IRM Analytical Results of RAOC-3 Boring & Excavation Confirmatory Sidewall & Bottom Soil Samples
Interim Remedial Measures
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	R3-ES16 27-Dec-11 BA-R3-ES-16S 4.5 ft STANTEC TALBU 480-14485-1-rev 480-14485-7	R3-ES17 4-Apr-12 BA-R3-ES-17S 5.5 ft STANTEC TALBU 480-18110-1 480-18110-16	R3-ES18 4-Apr-12 BA-R3-ES-18S 5.5 ft STANTEC TALBU 480-18110-1 480-18110-17	R3-ES19 4-Apr-12 BA-R3-ES-19S 2 - 5.5 ft STANTEC TALBU 480-18110-1 480-18110-19
Semi-Volatile Organic Compounds						
Acenaphthene	µg/kg	500000 ^A 1000000 ^B 98000 ^C	370 U	2000 U	220 U	200 U
Acenaphthylene	µg/kg	500000 ^C 1000000 ^B 107000 ^C	370 U	2000 U	220 U	200 U
Acetophenone	µg/kg	n/v	370 U	2000 U	220 U	200 U
Anthracene	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Atrazine	µg/kg	n/v	370 U	2000 U	220 U	200 U
Benzaldehyde	µg/kg	n/v	370 U J	2000 U	220 U	200 U
Benzo(a)anthracene	µg/kg	5600 ^A 11000 ^B 1000 ^C	37 U	2000 U	220 U	200 U
Benzo(a)pyrene	µg/kg	1000 ^A 1100 ^B 22000 ^C	37 U	2000 U	220 U	200 U
Benzo(b)fluoranthene	µg/kg	5600 ^A 11000 ^B 1700 ^C	37 U	2000 U	220 U	200 U
Benzo(g,h,i)perylene	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Benzo(k)fluoranthene	µg/kg	56000 ^A 110000 ^B 1700 ^C	37 U	2000 U	220 U	200 U
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	370 U	2000 U	220 U	200 U
Bis(2-Chloroethoxy)methane	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Bis(2-Chloroethyl)ether	µg/kg	500000 ^C 1000000 ^B	37 U	2000 U	220 U	200 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Butyl Benzyl Phthalate	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Caprolactam	µg/kg	n/v	370 U	2000 U	220 U	200 U
Carbazole	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Chloro-3-methyl phenol, 4-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Chloroaniline, 4-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Chloronaphthalene, 2-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Chrysene	µg/kg	56000 ^A 110000 ^B 1000 ^C	370 U	2000 U	220 U	200 U
Cresol, o- (Methylphenol, 2-)	µg/kg	500000 ^C 1000000 ^B 330 ^C	370 U	2000 U	220 U	200 U
Cresol, p- (Methylphenol, 4-)	µg/kg	500000 ^C 1000000 ^B 330 ^C	370 U	3800 U	430 U	400 U
Dibenzo(a,h)anthracene	µg/kg	560 ^A 1100 ^B 1000000 ^C	37 U	2000 U	220 U	200 U
Dibenzofuran	µg/kg	350000 ^A 1000000 ^B 210000 ^C	370 U	2000 U	220 U	200 U
Dibutyl Phthalate (DBP)	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Dichlorobenzidine, 3,3'-	µg/kg	500000 ^C 1000000 ^B	750 U	2000 U	220 U	200 U
Dichlorophenol, 2,4-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Diethyl Phthalate	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Dimethyl Phthalate	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Dimethylphenol, 2,4-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Dinitro-o-cresol, 4,6-	µg/kg	500000 ^C 1000000 ^B	1100 U	3800 U	430 U	400 U
Dinitrophenol, 2,4-	µg/kg	500000 ^C 1000000 ^B	1100 U	3800 U J	430 U J	400 U J
Dinitrotoluene, 2,4-	µg/kg	500000 ^C 1000000 ^B	75 U	2000 U	220 U	200 U
Dinitrotoluene, 2,6-	µg/kg	500000 ^C 1000000 ^B	75 U	2000 U	220 U	200 U
Di-n-Octyl phthalate	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Fluoranthene	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Fluorene	µg/kg	500000 ^C 1000000 ^B 386000 ^C	370 U	2000 U	220 U	200 U
Hexachlorobenzene	µg/kg	6000 ^A 12000 ^B 3200 ^C	37 U	2000 U	220 U	200 U
Hexachlorobutadiene	µg/kg	500000 ^C 1000000 ^B	75 U	2000 U	220 U	200 U
Hexachlorocyclopentadiene	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Hexachloroethane	µg/kg	500000 ^C 1000000 ^B	37 U *	2000 U	220 U	200 U
Indeno(1,2,3-cd)pyrene	µg/kg	5600 ^A 11000 ^B 8200 ^C	37 U	2000 U	220 U	200 U
Isophorone	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Methylnaphthalene, 2-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Naphthalene	µg/kg	500000 ^C 1000000 ^B 12000 ^C	370 U	2000 U	220 U	200 U
Nitroaniline, 2-	µg/kg	500000 ^C 1000000 ^B	750 U	3800 U	430 U	400 U
Nitroaniline, 3-	µg/kg	500000 ^C 1000000 ^B	750 U	3800 U	430 U	400 U
Nitroaniline, 4-	µg/kg	500000 ^C 1000000 ^B	750 U	3800 U	430 U	400 U
Nitrobenzene	µg/kg	500000 ^C 1000000 ^B	37 U	2000 U	220 U	200 U
Nitrophenol, 2-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Nitrophenol, 4-	µg/kg	500000 ^C 1000000 ^B	1100 U J	3800 U	430 U	400 U
N-Nitrosodi-n-Propylamine	µg/kg	500000 ^C 1000000 ^B	37 U	2000 U	220 U	200 U
n-Nitrosodiphenylamine	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Pentachlorophenol	µg/kg	6700 ^A 55000 ^B 800 ^C	1100 U	3800 U	430 U	400 U
Phenanthrene	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Phenol	µg/kg	500000 ^C 1000000 ^B 330 ^C	370 U	2000 U	220 U	200 U
Pyrene	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Trichlorophenol, 2,4,5-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
Trichlorophenol, 2,4,6-	µg/kg	500000 ^C 1000000 ^B	370 U	2000 U	220 U	200 U
SVOC Tentatively Identified Compounds						
Total SVOC TICs	µg/kg	500000 ^A 1000000 ^B	ND	2500	2900	3040

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 Human Health - Industrial
- ^C 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 ^C 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.
- ^B ^d The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg. 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.
- * Indicates analysis is not within the quality control limits.
- TALBU Test America Laboratories Inc., Buffalo, NY

Table 23
Summary of IRM Analytical Results in Monitoring Well Groundwater
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location RAOC	Units	TOGS	BS-2R	BS-3	B/MW-8	B/MW-25	B/MW-27		B/MW-28D	B/MW-65	N/A	
			1	1	1	1	1	1	1	3	1	1
Sample Date			29-Mar-12	29-Mar-12	29-Mar-12	29-Mar-12	28-Mar-12	28-Mar-12	28-Mar-12	28-Mar-12	28-Mar-12	29-Mar-12
Sample ID			BA-BS2R-R3	BA-BS3-R3	BA-MW8-R3	BA-MW25-R3	BA-MW27-R3	BA-MW27-R3	BA-MW28D-R3	BA-MW65-R3	BA-TB-328	BA-TB-329
Sampling Company			W	W	W	W	W	W/D	W	W	W	W
Laboratory			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory Work Order			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory Sample ID			480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1
Sample Type			480-17880-2	480-17880-1	480-17880-3	480-17880-4	480-17823-3	480-17823-6	480-17823-4	480-17823-1	480-17823-5	480-17880-5
Sample Type							Field Duplicate				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	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	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	1.0 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	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	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	1.0 U
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	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	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	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	1.0 U
Chloroethane (Ethyl Chloride)	µg/L	5 ^{-B}	1.0 U J	1.0 U J	1.0 U J	1.0 U J	1.0 U J	1.0 U J	1.0 U J	1.0 U J	1.0 U J	1.0 U J
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	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	1.0 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	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	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	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	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	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	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethane, 1,1-	µg/L	5 ^{-B}	1.6	1.0 U	1.4	3.0	5.7 ^B	6.1 ^B	1.0 U	1.9	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	1.0 U
Dichloroethene, 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	1.0 U	1.0 U	1.0 U
Dichloroethylene, cis-1,2-	µg/L	5 ^{-B}	3.8	1.0 U	9.9 ^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}	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	1.0 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	1.0 U
Dichloropropene, cis-1,3-	µg/L	0.4 ^p	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	1.0 U
Dichloropropene, trans-1,3-	µg/L	0.4 ^p	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	1.0 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	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	1.0 U	1.0 U
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	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	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	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	5.0 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	1.0 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	1.0 U	1.0 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	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	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	1.0 U	1.0 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	1.0 U	1.0 U
Trichloroethane, 1,1,1-	µg/L	5 ^{-B}	5.7 ^B	1.0 U	2.0	1.9	2.0	2.0	1.0 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	1.0 U
Trichloroethylene (TCE)	µg/L	5 ^{-B}	30 ^B	1.0 U	5.7 ^B	16 ^B	5.6 ^B	5.7 ^B	1.0 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	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	1.0 U	1.0 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	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	1.0 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
Total VOC	µg/L	n/v	41.1	ND	19	20.9	13.3	13.8	ND	1.9	ND	ND
VOC Tentatively Identified Compounds												
Total VOC TICs	µg/L	n/v	ND	ND	ND	ND	ND	ND	ND	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 standard for Iron and Manganese is 500 µg/L, which applies to the sum of these substances. As individual standards, the standard is 300 µg/L.
- The principal organic contaminant standard for groundwater of 5 µg/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 an Estimated Value for TICs.
- UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.

Table 23
Summary of IRM Analytical Results in Monitoring Well Groundwater
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

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

- 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.
 - .. The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance.
 - ρ Applies to the sum of cis- and trans-1,3-dichloropropene.
 - J Indicates an Estimated Value for TICs.
 - UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.

Table 23
Summary of IRM Analytical Results in Monitoring Well Groundwater
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location RAOC	Units	TOGS	BS-2R	BS-3	B/MW-8	B/MW-25	B/MW-27		B/MW-28D	B/MW-65	
			1	1	1	1	1		1	3	
Sample Date			29-Mar-12	29-Mar-12	29-Mar-12	29-Mar-12	28-Mar-12	28-Mar-12	28-Mar-12	28-Mar-12	28-Mar-12
Sample ID			BA-BS2R-R3- W	BA-BS3-R3- W	BA-MW8-R3- W	BA-MW25-R3- W	BA-MW27-R3- W	BA-MW27-R3- W/D	BA-MW28D-R3- W	BA-MW65-R3- W	BA-MW65-R3- W/D
Sampling Company Laboratory			STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU
Laboratory Work Order			480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1	480-17823-1
Laboratory Sample ID			480-17880-2	480-17880-1	480-17880-3	480-17880-4	480-17823-3	480-17823-6	480-17823-4	480-17823-1	480-17823-2
Sample Type								Field Duplicate			Field Duplicate
General Chemistry											
Nitrate (as N)	mg/L	10 ^B	-	-	-	-	-	-	-	0.050 U	0.050 U
Nitrate + Nitrite (as N)	mg/L	10 ^B	-	-	-	-	-	-	-	0.050 U	0.050 U
Nitrite (as N)	mg/L	1 ^B	-	-	-	-	-	-	-	0.050 U	0.050 U
Sulfate	mg/L	250 ^B	-	-	-	-	-	-	-	162	161
Total Organic Carbon	mg/L	n/v	1.3	1.8	4.7	1.4	6.7	6.5	1.0 U	-	-
Metals											
Dissolved Arsenic	mg/L	0.025 ^B	0.010 U	0.010 U	0.014	0.010 U	0.010 U	0.010 U	0.020	-	-
Dissolved Manganese	mg/L	0.3 ^B	2.1^B	2.0^B	4.3^B	0.052	0.83^B	0.85^B	0.080	-	-
Total Sodium	mg/L	20 ^B	86.2^B	198^B	103^B	29.7^B	40.7^B	39.8^B	24.3^B	-	-

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.
- .. 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.

Table 24
Summary of Supplemental IRM Analytical Results of Soils in the Heater Area
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location	Units	6NYCRR	Heater Area, Boiler-1	Heater area, Boiler-EB1	Heater area, Boiler-ES2	Heater area, Boiler-ES3		Heater area, Boiler-ES4	Heater area, Boiler-ES5
			2-May-12	4-May-12	3-May-12	3-May-12	3-May-12	4-May-12	4-May-12
Sample Date			BA-BOILER-1-S	BA-BOILER-EB1-S	BA-BOILER-ES2-S	BA-BOILER-ES3-S	BA-BOILER-ES3-S/D	BA-BOILER-ES4-S	BA-BOILER-ES5-S
Sample ID			1 ft	5 ft	1.5 ft	1 ft	1 ft	3 ft	4 ft
Sample Depth			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Sampling Company			TALBU	TALBU	TALBU	TALBU	TALBU	TALBU	TALBU
Laboratory			480-19559-1	480-19614-1	480-19559-1	480-19614-1	480-19614-1	480-19614-1	480-19614-1
Laboratory Work Order			480-19559-16	480-19614-18	480-19559-17	480-19614-16	480-19614-17	480-19614-19	480-19614-20
Laboratory Sample ID									
Sample Type							Field Duplicate		
Volatile Organic Compounds									
Acetone	µg/kg	500000 ^A 1000000 ^B 50 ^C	28 U	25 U	28 U	25 U	25 U	25 U	25 U
Benzene	µg/kg	44000 ^A 89000 ^B 60 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform (Tribromomethane)	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 UJ	5.7 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	22000 ^A 44000 ^B 760 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene (Monochlorobenzene)	µg/kg	500000 ^A 1000000 ^B 1100 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane (Ethyl Chloride)	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/kg	350000 ^A 700000 ^B 370 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	µg/kg	n/v	5.6 U	5.0 U	5.7 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	n/v	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorobenzene, 1,2-	µg/kg	500000 ^A 1000000 ^B 1100 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorobenzene, 1,3-	µg/kg	280000 ^A 560000 ^B 2400 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorobenzene, 1,4-	µg/kg	130000 ^A 250000 ^B 1800 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (Freon 12)	µg/kg	n/v	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethane, 1,1-	µg/kg	240000 ^A 480000 ^B 270 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethane, 1,2-	µg/kg	30000 ^A 60000 ^B 20 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethene, 1,1-	µg/kg	500000 ^A 1000000 ^B 330 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethylene, cis-1,2-	µg/kg	500000 ^A 1000000 ^B 250 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloroethylene, trans-1,2-	µg/kg	500000 ^A 1000000 ^B 190 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloropropane, 1,2-	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloropropene, cis-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichloropropene, trans-1,3-	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/kg	390000 ^A 780000 ^B 1000 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	n/v	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	500000 ^A 1000000 ^{BC}	28 U	25 U	28 U	25 U	25 U	25 U	25 U
Isopropylbenzene	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl Acetate	µg/kg	n/v	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl Ethyl Ketone (MEK)	µg/kg	500000 ^A 1000000 ^B 120 ^C	28 U	25 U	28 U	25 U	25 U	25 U	25 U
Methyl Isobutyl Ketone (MIBK)	µg/kg	500000 ^A 1000000 ^{BC}	28 U	25 U	28 U	25 U	25 U	25 U	25 U
Methyl tert-butyl ether (MTBE)	µg/kg	500000 ^A 1000000 ^B 930 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	µg/kg	n/v	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride (Dichloromethane)	µg/kg	500000 ^A 1000000 ^B 50 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethane, 1,1,2,2-	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethylene (PCE)	µg/kg	150000 ^A 300000 ^B 1300 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/kg	500000 ^A 1000000 ^B 700 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorobenzene, 1,2,4-	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethane, 1,1,1-	µg/kg	500000 ^A 1000000 ^B 680 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethane, 1,1,2-	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethylene (TCE)	µg/kg	200000 ^A 400000 ^B 470 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (Freon 11)	µg/kg	n/v	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorotrifluoroethane (Freon 113)	µg/kg	500000 ^A 1000000 ^{BC}	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	µg/kg	13000 ^A 27000 ^B 20 ^C	5.6 U	5.0 U	5.7 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes, Total	µg/kg	500000 ^A 1000000 ^B 1600 ^C	11 U	10 U	11 U	10 U	10 U	10 U	10 U
Total VOC	µg/kg	500000 ^A 1000000 ^{BC}	ND	ND	ND	ND	ND	ND	ND
VOC Tentatively Identified Compounds									
Total VOC TICs	µg/kg	500000 ^A 1000000 ^{BC}	958	ND	46	ND	ND	ND	ND

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 Human Health - Industrial
- ^C 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.
- UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
- ^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.
- ^B The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 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.
- TALBU Test America Laboratories Inc., Buffalo, NY

Table 24
Summary of Supplemental IRM Analytical Results of Soils in the Heater Area
Interim Remedial Measures
Former Allegany Bitumens Belmont Asphalt Plant
Amity, New York

Sample Location			Heater Area, Boiler-1 2-May-12	Heater area, Boiler-EB1 4-May-12	Heater area, Boiler-ES2 3-May-12	Heater area, Boiler-ES3		Heater area, Boiler-ES4 4-May-12	Heater area, Boiler-ES5 4-May-12
Sample Date						3-May-12	3-May-12		
Sample ID			BA-BOILER-1-S	BA-BOILER- EB1-S	BA-BOILER- ES2-S	BA-BOILER- ES3-S	BA-BOILER-ES3- S/D	BA-BOILER- ES4-S	BA-BOILER- ES5-S
Sample Depth			1 ft	5 ft	1.5 ft	1 ft	1 ft	3 ft	4 ft
Sampling Company			STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU	STANTEC TALBU
Laboratory			480-19559-1	480-19614-1	480-19559-1	480-19614-1	480-19614-1	480-19614-1	480-19614-1
Laboratory Work Order			480-19559-16	480-19614-18	480-19559-17	480-19614-16	480-19614-17	480-19614-19	480-19614-20
Laboratory Sample ID									
Sample Type	Units	6NYCRR					Field Duplicate		
Semi-Volatile Organic Compounds									
Acenaphthene	µg/kg	500000 ^c 1000000 ^d 98000 ^c	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Acenaphthylene	µg/kg	500000 ^c 1000000 ^d 107000 ^c	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Acetophenone	µg/kg	n/v	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Anthracene	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Atrazine	µg/kg	n/v	3900 U	170 UJ	1900 U	170 UJ	170 UJ	170 UJ	170 UJ
Benzaldehyde	µg/kg	n/v	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Benzo(a)anthracene	µg/kg	5600 ^A 11000 ^B 1000 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Benzo(a)pyrene	µg/kg	1000 ^A 1100 ^B 22000 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Benzo(b)fluoranthene	µg/kg	5600 ^A 11000 ^B 1700 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Benzo(g,h,i)perylene	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Benzo(k)fluoranthene	µg/kg	56000 ^A 110000 ^B 1700 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Biphenyl, 1,1'- (Biphenyl)	µg/kg	n/v	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Bis(2-Chloroethoxy)methane	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Bis(2-Chloroethyl)ether	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	290 U	300 U	170 U	170 U
Bromophenyl Phenyl Ether, 4-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	290 U	290 U	170 U	170 U
Butyl Benzyl Phthalate	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	240 U	250 U	170 U	170 U
Caprolactam	µg/kg	n/v	3900 U	170 U	1900 U	390 U	400 U	170 U	170 U
Carbazole	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Chloro-3-methyl phenol, 4-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Chloroaniline, 4-	µg/kg	500000 ^c 1000000 ^d BC	3900 UJ	170 U	1900 UJ	260 U	270 U	170 U	170 U
Chloronaphthalene, 2-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Chrysene	µg/kg	56000 ^A 110000 ^B 1000 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Cresol, o- (Methylphenol, 2-)	µg/kg	500000 ^c 1000000 ^d 330 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Cresol, p- (Methylphenol, 4-)	µg/kg	500000 ^c 1000000 ^d 330 ^C	7500 U	330 U	3700 U	330 U	330 U	330 U	330 U
Dibenzo(a,h)anthracene	µg/kg	560 ^A 1100 ^B 1000000 ^d C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Dibenzofuran	µg/kg	350000 ^A 1000000 ^d 210000 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Dibutyl Phthalate (DBP)	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	310 U	320 U	170 U	170 U
Dichlorobenzidine, 3,3'-	µg/kg	500000 ^c 1000000 ^d BC	3900 UJ	200 U	1900 UJ	790 U	800 U	170 U	200 U
Dichlorophenol, 2,4-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Diethyl Phthalate	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Dimethyl Phthalate	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Dimethylphenol, 2,4-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	240 U	250 U	170 U	170 U
Dinitro-o-cresol, 4,6-	µg/kg	500000 ^c 1000000 ^d BC	7500 U	330 U	3700 U	330 U	330 U	330 U	330 U
Dinitrophenol, 2,4-	µg/kg	500000 ^c 1000000 ^d BC	7500 U	330 U	3700 U	330 U	330 U	330 U	330 U
Dinitrotoluene, 2,4-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Dinitrotoluene, 2,6-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	220 U	220 U	170 U	170 U
Di-n-Octyl phthalate	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Fluoranthene	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Fluorene	µg/kg	500000 ^c 1000000 ^d 386000 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Hexachlorobenzene	µg/kg	6000 ^A 12000 ^B 3200 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Hexachlorobutadiene	µg/kg	500000 ^c 1000000 ^d BC	3900 UJ	170 U	1900 UJ	170 U	170 U	170 U	170 U
Hexachlorocyclopentadiene	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	270 U	280 U	170 U	170 U
Hexachloroethane	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Indeno(1,2,3-cd)pyrene	µg/kg	5600 ^A 11000 ^B 8200 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Isophorone	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Methylnaphthalene, 2-	µg/kg	500000 ^c 1000000 ^d BC	9300	170 U	1900 U	170 U	170 U	170 U	170 U
Naphthalene	µg/kg	500000 ^c 1000000 ^d 12000 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Nitroaniline, 2-	µg/kg	500000 ^c 1000000 ^d BC	7500 U	330 U	3700 U	330 U	330 U	330 U	330 U
Nitroaniline, 3-	µg/kg	500000 ^c 1000000 ^d BC	7500 UJ	330 U	3700 UJ	330 U	330 U	330 U	330 U
Nitroaniline, 4-	µg/kg	500000 ^c 1000000 ^d BC	7500 U	330 U	3700 U	330 U	330 U	330 U	330 U
Nitrobenzene	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Nitrophenol, 2-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Nitrophenol, 4-	µg/kg	500000 ^c 1000000 ^d BC	7500 U	330 U	3700 U	330 U	330 U	330 U	330 U
N-Nitrosodi-n-Propylamine	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
n-Nitrosodiphenylamine	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U *	1900 U	170 U *	170 U *	170 U *	170 U *
Pentachlorophenol	µg/kg	6700 ^A 55000 ^B 800 ^C	7500 U	330 U	3700 U	330 U	330 U	330 U	330 U
Phenanthrene	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Phenol	µg/kg	500000 ^c 1000000 ^d 330 ^C	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Pyrene	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
Trichlorophenol, 2,4,5-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	200 U	200 U	170 U	170 U
Trichlorophenol, 2,4,6-	µg/kg	500000 ^c 1000000 ^d BC	3900 U	170 U	1900 U	170 U	170 U	170 U	170 U
SVOC Tentatively Identified Compounds									
Total SVOC TICs	µg/kg	500000 ^c 1000000 ^d BC	242400	670	ND	1720	2060	2100	4740

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 Human Health - Industrial
- ^C 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.
- * Indicates analysis is not within the quality control limits.
- UJ The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
- ^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.
- ^B The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 mg/kg. 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.
- ^{AC} 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.