NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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Via E-mail

Mr. Dennis Maguire
770 Rock Beach Road
Rochester, NY 14617

September 25, 2020

Re: IRM Work Plan – Soil Cover
Former Alliance Metal Stamping and Fabrication Site #c828101
Gates, Monroe County

The New York State Department of Environmental Conservation (NYSDEC), in consultation with New York State Department of Health, has completed its review of the document entitled "IRM Work Plan- Soil Cover" for Former Alliance Metal Stamping & Fabrication Facility Site #828101, dated July 2020, last revised 9 September 2020 and approve as modified below:

1) Section 3.1.2 Supplemental Soil Sampling and Analysis
   a) Alternative 1 is not accepted

Notice to proceed is granted contingent upon receipt of an updated calendar schedule through completion. **Please note that an approvable IRM Construction Completion Report must be received by 15 October to have the opportunity for a 2020 BCP Certificate of Completion.** If you have questions regarding this letter please contact me at (585) 226-5480 or via email at timothy.schneider@dec.ny.gov.

Sincerely,

Timothy Schneider, P.E.
Professional Engineer 1

D. Pratt
M. Cruden
D. Loew
J. Kenny / J. Deming
P. Sylvestri
T. Wells

IRM Work Plan - Cover System

Former Alliance Metal Stamping & Fabrication Facility
Town of Gates, Monroe County, New York
BCP Site # C828101

Revised September 2020

Prepared for:

NYS Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414

Prepared on Behalf of:

Maguire Family Properties, Inc.
770 Rock Beach Road
Rochester, NY 14617

Prepared by:

Stantec Consulting Services Inc.
61 Commercial Street, Suite 100
Rochester NY 14614-1009

Certification

I, Dwight A. Harrienger, certify that I am currently a NYS registered professional engineer and that this IRM Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

_____ 9/9/2020_____

Signature Date

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Abbreviations

AA and AAR	Alternatives Analysis, AA Report
AMSF	Alliance Metal Stamping & Fabrication
BCP	Brownfield Cleanup Program
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
CU	Commercial Use
CVOC	Chlorinated Volatile Organic Compound
DER-10	Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation, May 2010
DOT	Department of Transportation
ELAP	Environmental Laboratory Approval Program
ft bgs	feet below ground surface
HASP	Health and Safety Plan
IRM	Interim Remedial Measure
ITT	ITT Corporation (ITT Inc.)
IU	Industrial Use
MFP	Maguire Family Properties, Inc.
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OM&M	Operation, Maintenance & Monitoring
OU	Operable Unit
PCE or PERC	Perchloroethylene, also tetrachloroethene, tetrachloroethylene
PID	Photoionization Detector
POGW	Protection of Groundwater
RFM	Rochester Form Machine

(list continues on next page)

RI and RI/FS	Remedial Investigation, Remedial Investigation/Feasibility Study
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SGVs	Standards and Guidance Values
SSDS	Sub-Slab Depressurization System
SVI	Soil Vapor Intrusion
TAL	USEPA's Target Analyte List
TCA	Trichloroethane
TCE	Trichloroethene, also trichloroethylene
TCL	USEPA's Target Compound List
TOGS	Technical and Operational Guidance Series
USEPA	United States Environmental Protection Agency
UU	Unrestricted Use
VOC	Volatile Organic Compound

1.0 INTRODUCTION

This document presents a Work Plan for an Interim Remedial Measure (IRM) to be implemented at the Former Alliance Metal Stamping & Fabrication (AMSF) Facility Site located at 12 Pixley Industrial Parkway in the Town of Gates, Monroe County, New York. The Former AMSF Site (hereinafter the 'Site') is identified as site number C828101 under the Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC). A Site Location Map is presented on Figure 1.

Stantec Consulting Services, Inc. (Stantec) has prepared this Work Plan at the request of Maguire Family Properties, Inc. (MFP), the current owner of the Site.

1.1 PURPOSE

The IRM will be implemented to address cover system conditions in lawn areas on the east and south sides of the Site. The poly-nuclear aromatic hydrocarbon (PAH) compound benzo(a)pyrene (abbreviated B(a)P) was detected in cover system pre-design investigation surface soil samples in those areas at concentrations above the NYSDEC soil cleanup objective (SCO) for protection of human health at commercial-use BCP sites.

The Restricted Use SCOs for Protection of Public Health at BCP sites where the current, intended and reasonably anticipated future use is for commercial purposes are set forth in 6NYCRR Part 375 Table 375-6.8(b). The Restricted Use Commercial SCO is 1 part per million (ppm) for B(a)P. Because the B(a)P concentrations detected in the pre-design samples collected in lawn areas on the east and south sides of the Site exceed the Commercial Use SCO, the existing conditions in these areas are not appropriate for a BCP Track 4 cover system at the Site. The IRM specified in this Work Plan will address the existing conditions in these areas and will result in a final cover system that meets NYSDEC's Track 4 cover system requirements.

1.2 SITE DESCRIPTION

The Site occupies an approximately 7-acre property identified as Monroe County Tax Parcel No. 119.17-1-2. The Site property is improved with a 120,000-square-foot slab-on-grade building surrounded by paved driveways, loading ramps and parking lots and unpaved lawn areas. Land uses in the surrounding area include a mix of vacant land and industrial facilities on the properties to the east, south and west of the Site and a multi-screen movie theater and its parking lot on the adjacent property to the north. A Site Plan is presented on Figure 2.

The town zoning code for the Site and the other properties located along Pixley Industrial Parkway is General Industrial. MFP has owned the Site since 1995 and has leased individual spaces in the facility to a variety of light manufacturing and commercial tenants. Current and reasonably anticipated future uses of the Site include commercial and light-manufacturing industrial uses.

1.3 SITE HISTORY, PREVIOUS INVESTIGATIONS, AND ENVIRONMENTAL CONDITIONS

1.3.1 Site History

The original building at the Site was reportedly constructed in 1967, before which the property was undeveloped agricultural land. Historical records indicate the original Site building may have been operated as a warehouse by the Alcoa Aluminum Corporation. The facility was purchased by the Alliance Tool Corporation, a subsidiary of the Gleason Corporation, in 1973. Alliance operated the Alliance Metal Stamping & Fabrication facility at the Site until July 1994. The manufacturing operations included stamping, forming, grinding, cleaning, painting, phosphating, and deburring of metal piecework. Alliance decommissioned the manufacturing operation and sold the vacant facility to MFP in 1995.

Since 1995, MFP has been leasing subdivided spaces in the building to companies operating a variety of light manufacturing operations and commercial activities.

1.3.2 Previous Investigations and Environmental Conditions

MFP applied as a Volunteer under New York State's BCP and the Site was admitted into the BCP by NYSDEC in July 2011. A BCP Remedial Investigation (RI) was initiated at the Site in March 2012.

Section 1.3.2.1 describes the Cover System Pre-Design Investigation, which is the component of the BCP RI program which has the most relevance for the development of the Cover System IRM Work Plan. Other previous investigation and remedial activities completed at the Site prior to and during the BCP RI program are described in **Appendix A**.

1.3.2.1 Cover System Pre-Design Investigation

A surface soil sampling program was performed in September 2019 to assess whether existing surface soil conditions in the lawn areas of the Site are appropriate for the Site cover system. The cover system pre-design investigation was completed in accordance with Section 3.3 of the June 2019 IRM Work Plan[1]. and the Department's requirements for verification of soil quality for a cover system.

NYSDEC guidance indicates that where an existing soil cover is proposed as a remedial cover system for a BCP Site, verification of soil quality consistent with site use is required. The guidance indicates that samples should be evenly distributed geographically in soil cover areas. The soil cover areas at the Site, which are shown on Figure 2, comprise 1.45 acres in total. The NYSDEC guidance indicates that for an area of that size, a minimum of six grab samples should be collected for volatile organic compound (VOC) analysis, and three or more representative composite samples should be collected for a full suite of non-VOC parameters including Target Analyte List (TAL) inorganic compounds and Target Compound List (TCL) semi-volatile organic compounds (SVOCs). For sites where the current and anticipated future uses are commercial or industrial, the guidance calls for collection of composite samples from 0"-2" and 2"-12"

[1] IRM Work Plan, Former Alliance Metal Stamping & Fabrication Facility, Town of Gates, Monroe County, New York, BCP Site # C828101. Stantec, June 28, 2019.

below ground surface (bgs) for analysis of non-VOC parameters and grab samples from 2”- 6”bgs for analysis of TCL VOCs.

Cover System Pre-Design Investigation sampling locations are shown on Figure 2. The sampling included the following:

- Composite soil samples for analysis of TAL metals and TCL SVOCs, Pesticides and PCBs were collected for each of the four soil cover areas located along the western, northern, eastern, and southern sides of the Site. For each area (west, north east and south), one composite sample from the 0”-2” depth interval and a second composite sample of from 2”-12” bgs were collected, with each sample composited from five locations evenly distributed among and along the lawn areas on the respective side of the Site building. West side sample locations, for example, were designated WS-SS-1 through WS-SS-5 for west-side surface-soil locations 1 through 5.

- Grab samples for analysis of TCL VOCs: For each of the four soil cover areas, grab samples from the 2”- 6” bgs interval were collected from two of the five locations at which the material for the composite samples for non-VOC parameters was collected.

Sample analysis results for the Cover System Pre-Design Investigation surface soil samples are summarized on Table 1. A copy of the summary version of the laboratory analysis report and a copy the data usability summary report for the samples are both provided in **Appendix B**.

In accordance with the NYSDEC cover system verification guidance, the sample analysis results were compared to CU SCOs. As indicated on Table 1, of all the full suite of chemical compounds analyzed only one was detected at concentrations which exceeded its CU SCO. The single exception was the PAH benzo(a)pyrene, which was detected in the east side and south side composite samples for both the 0”-2” and 2”-12” bgs intervals at concentrations that ranged from 1.2 to 3.5 milligrams per kilogram (mg/kg, equivalent to parts per million, ppm). Those concentrations exceeded the CU SCO for B(a)P of 1.0 ppm. Exceedances of the B(a)P CU SCO were not detected in the north and west side composite samples. Summaries of the B(a)P results for the Pre-Design Investigation samples are presented on Figure 2.

The presence of B(a)P in surface soil in these areas of the Site is not considered to be a condition resulting from a Site-specific chemical release. The B(a)P concentrations detected in the samples from the east and south side lawn areas are within the range of background concentrations of PAHs in urban soil and represent a condition that is common for a commercial or industrial setting. PAH compounds including B(a)P are components of asphalt, tar, and driveway pavement sealing products and are common in residues of vehicle emissions. The occurrence of B(a)P at the concentrations detected in the surface soil along the east and south sides of the Site is most likely the result of deposition of PAH residues from decades of parking lot and driveway runoff and snow plowing and vehicle emissions.

1.4 SUMMARY OF THE COVER SYSTEM IRM

The Cover System IRM will consist of the following elements:

- A new asphalt pavement will be constructed to serve as the final cover over a 40-foot by 80-foot (approximately) portion of the north section of the current east-side lawn area. The new pavement will be used as an expansion of the vehicle parking area at the northeast corner of the Site building. The technical approach for the construction of the new pavement and related components of the project plan are described in Section 3.1.1.

- Supplemental soil sampling will be conducted in the remainder of the lawn areas on the east and south sides of the Site. The purpose of the sampling will be to complete a delineation of areas of exceedance of the CU SCO for B(a)P. The technical approach for the sampling is described in Section 3.1.2.

- Practical considerations related to project schedule or facility operations may dictate that foregoing the supplemental sampling described herein is warranted. East- and south-side lawn areas for which supplemental sampling is not conducted will be addressed by the provisions for soil removal and replacement or installation of an overlying cover as specified herein for the entire lawn area.

- The results of the sampling will be used to delineate which portions of the east- and south-side lawn areas meet the requirements for a Track 4 cover system and which lawn areas do not meet the requirements.

    - For those sample points which are confirmed to meet CU SCOs for PAHs, no further remedial action will be performed.

    - For those points which are confirmed by the supplemental sampling to have CU SCO exceedances for PAHs, surface soil removal and replacement will be performed in the surrounding lawn area represented by that point.

    - Grass cover will be re-established in the soil removal areas. Where feasible from a landscaping perspective, installation of an overlying soil cover may be performed as an alternative to soil removal and replacement. Where an overlying soil cover is to be used as an alternative to soil removal, it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Where grade elevation conditions dictate, the existing surface soil at edges of cover areas will be removed as needed to achieve the required one-foot cover thickness and key the edge of the remediated area to the surrounding grade.

    - Replacement or overlying cover material will be pre-characterized in accordance with applicable NYSDEC Part 375 regulations and DER-10 policy requirements to confirm that it is eligible for use as soil cover.

- The technical approach for remedial decision making is described in Section 3.1.3, and the approach for soil removal and replacement activities is described in Section 3.1.4.
- Soil removed from lawn areas will be transported off Site for disposal in a permitted solid waste landfill. The technical approach for the transport and disposal is described in Section 3.1.5.

2.0 GOALS AND OBJECTIVES

The Cover System IRM activities are being implemented to make surface soil conditions in lawn areas at the Site consistent with Department objectives for cover systems at a BCP site with current and reasonably anticipated future uses that are commercial and industrial. Towards those ends, the goals and objectives of the IRM include the following:

- Goal: Determine whether existing surface soil in individual sections of the lawn areas on the south and east sides of the facility can remain in place to serve as part of the cover system for the final remedy for the Site.

  Objective: Complete supplemental surface soil sampling in each east-side and south-side lawn area to delineate where exceedances of the CU SCO for B(a)P occur.

- Goal: Once the supplemental delineation sampling has defined the specific sections of the east-side and south-side lawn areas where exceedances of the CU SCO for B(a)P occur, perform remedial actions to cover or remove and replace the soils that currently exceed the CU SCO.

  Objectives:

  - Construct a new permanent asphalt-paved parking area to serve as the cover system for a portion of the north end of the existing east-side lawn area.

  - Construct a new soil cover system in remaining areas of exceedance of the CU SCO for B(a)P by removing existing surface soil to the depth of exceedance (either to 2 inches bgs or 12 inches, depending on the sampling results) and replacing the removed soil with soil that meets requirements for cover material of Section 5.4(e) of NYSDEC's DER-10 Technical Guidance. Where feasible from a landscaping perspective, installation of 12 inches of overlying soil cover that meets DER-10 requirements may be performed as an alternative to soil removal and replacement.

- Goal: Manage soil removed during the IRM in accordance with applicable NYSDEC regulations.

  Objectives: Transport removed soil off Site for disposal at a permitted solid waste facility in accordance with applicable 6 NYCRR Part 360 regulations.

2.1 STANDARDS, CRITERIA AND GUIDANCE

This IRM Work Plan was developed in general accordance with the applicable standards, criteria, and guidance (SCGs) contained or referenced in the following:

- 6 NYCRR Part 375 Environmental Remediation Programs regulations.
- NYSDEC's "DER-10 Technical Guidance for Site Investigation and Remediation".
- Other applicable NYSDEC guidance on surface soil sampling for BCP remedial cover systems.

Goals and Objectives

- 6 NYCRR Part 360 Solid Waste Management Facilities regulations.

3.0 IRM WORK PLAN

3.1 TECHNICAL APPROACH AND PROJECT PLAN

3.1.1 Parking Lot Expansion

MFP plans to construct an expansion of the paved parking lot in the area adjacent to the east side of the northeast corner of the Site building. The new parking lot section will serve as a replacement of the existing soil cover in this area. The area where the new pavement is to be constructed is shown on Figure 3.

The new parking area will be constructed using 8 to 12 inches of compacted coarse crushed stone aggregate sub-base and 3 to 3.5 inches of asphalt pavement. Construction will be completed by a professional pavement contractor in accordance with specifications acceptable to MFP. Materials, thickness, construction methods and performance of the new pavement will be consistent with those for existing parking lot pavements at the Site.

Should pre-construction grading of the construction area for the new pavement require removal of surface soil to achieve the appropriate grade for the new pavement, the soil to be removed will be managed by one of the following two methods:

- The soil may be direct loaded into dump trucks at the time of removal and transported off Site for disposal at a NYSDEC-permitted solid waste landfill. Requirements for off-Site transport and disposal of excavated soil are described below in Section 3.1.5.

- Alternatively, the soil to be removed may be sampled in place prior to removal and tested to confirm its eligibility for reuse as cover material elsewhere on Site in accordance with the requirements of 6NYCRR 375-6.7(d) and DER-10 Sections 5.4(e)4 and 5.4(e)10.

  Based on the anticipated size of the new parking area (approximately 3,200 square feet) and the assumption that a soil removal depth of 16 inches or less will be required to achieve the necessary pre-construction grade for the new pavement sub-base, it is estimated that up to approximately 160 cubic yards of material may need to be removed prior to placement of the sub-base. As specified in DER-10 Table 5.4(e)10 for that volume of soil, the planned sampling and analysis of the soil that may need to be removed will therefore include the collection of 3 grab samples for analysis of Part 375-6.8(b)-listed VOCs and one composite sample for analysis of Part 375-6.8(b)-listed SVOCs, metals, total cyanide, PCBs and pesticides. The grab samples will be collected from the three locations shown on Figure 3, and the composite sample will be prepared from material collected in roughly equal amounts from the same three locations. Sample depth intervals will be from 0 to 16 inches.

If testing results indicate the soil to be removed for construction of the new parking area pavement does not meet CU and POGW SCOs, it will be direct loaded for off-Site transport at the time of removal and transported off Site for disposal at a NYSDEC-permitted solid waste landfill.

If testing results indicate that the soil to be removed for the parking area meets both CU SCOs and POGW SCOs, it will be eligible for reuse on Site as cover material for the soil cover system. The eligible material will either be placed where needed for cover in a Cover System IRM soil removal area or reused elsewhere on Site as appropriate for landscaping and cover system maintenance purposes. The approach for reuse as replacement material is described in Section 3.1.4.

Cover-system-eligible soil to be removed from the new parking area prior to construction of the pavement may be stockpiled on Site in anticipation of on-Site reuse. Stockpiling will only be conducted if it is necessary to do so to accommodate the construction schedule for the new parking area. Stockpiling prior to reuse on Site will be conducted in accordance with the soil staging methods specified below in Section 3.1.1.1.

Stockpiled soil that has not been placed as soil cover by the end of the construction field activities specified in this IRM Work Plan will be transported off Site for disposal at a NYSDEC-permitted solid waste landfill.

Similarly, any soil removed for construction of the new pavement from a depth greater than the pre-testing sample depth of 16 inches will be transported off Site for disposal at a NYSDEC-permitted solid waste landfill.

3.1.1.1 Soil Staging Methods

The soil staging methods described in this section are in accordance with those specified in Section D3 (Soil Staging Methods) of the Excavation Work Plan (EWP) presented in Appendix D of the draft Site Management Plan (SMP, draft dated August 7, 2019).

Should excavated soil that is eligible for reuse in the soil cover system be stockpiled on Site, the stockpile will be placed on a liner of plastic sheeting and covered with an anchored plastic tarp until such time as it can be reused. Specific procedures are as follows:

- Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.
- Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected, and damaged tarp covers will be promptly replaced.
- Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by the NYSDEC.

3.1.2 Supplemental Soil Sampling and Analysis

In the remainder of the soil cover lawn areas on the east and south sides of the Site, supplemental surface soil sampling will be conducted to more precisely define the areas where and intervals in which (0-2 inches bgs and/or 2-12 inches bgs) exceedances of the Department's CU SCOs for benzo(a)pyrene occur in surface soil in the east- and south-side lawn areas at the Site. Samples will be submitted to the project laboratory for analysis of PAHs by EPA Method 8270. In addition to benzo(a)pyrene, the individual PAHs to be analyzed include:

- benzo(a)anthracene,
- benzo(b)fluoranthene,
- benzo(g,h,i)perylene,
- benzo(k)fluoranthene,
- chrysene,
- dibenz(a,h)anthracene, and
- indeno(1,2,3-cd)pyrene.

The planned sampling is designed to accomplish the following:

- Provide representative coverage of each individual lawn area on the east and south sides of the Site using samples collected at two to four widely spaced discrete sample points within each individual lawn area.
- Allow for differentiation between those individual lawn areas with exceedances of the CU SCO for B(a)P and those without exceedances of the CU SCO for B(a)P.
- Within each individual lawn area found to exhibit a CU SCO exceedance, define the limits and depths of the area in which an exceedance was detected.

Towards those ends, discrete samples will be collected at approximately 23 locations ([2]) on the east and south sides of the site. The proposed sample locations are shown on Figure 3. At each location, a pair of discrete samples will be collected: one from the 0"-2" bgs interval and one from the 2"-12" bgs interval.

Three alternative approaches for sample analysis are proposed:

Alternative 1

Using portions of each of the discrete samples, composite sample pairs (one composite for the 0"-2" bgs interval and one for the 2"-12" bgs interval) will be prepared for each of the eight (8) individual east- and south-side lawn areas. The discrete sample locations to be included in each of the eight composite groups are indicated on Figure 3. Both the composite samples and the discrete samples will be submitted to the project laboratory. Analysis will be performed first on the composite samples, and

[2] The proposed locations shown on Figure 3 are intended to provide representative coverage of each individual lawn area on the east and south sides of the Site. The proposed locations were randomly selected; the actual number and location of the sample points may be adjusted in the field.

discrete samples will be placed on hold pending receipt of results for the composite samples. If an exceedance of a CU SCO is identified in one or both of the composite samples (0 to 2 inches or 2 to 12 inches) representing an individual lawn area, the discrete samples that were used to prepare the composites for that lawn area will each be analyzed. Discrete samples from lawn areas represented by composite samples that do not show an exceedance of a CU SCO will not be analyzed. Alternative 1 is the preferred approach because it represents a potential for reduction in project costs related to laboratory analysis and data evaluation.

Alternative 2

Under Alternative 2, the step of collecting and analyzing composite samples will be skipped, and all 23 discrete sample pairs will be analyzed (a total of 46 samples). Alternative 2 will be the selected approach if it is necessary to expedite IRM activities in order to meet the project milestone schedule for obtaining a certificate of completion in 2020.

Alternative 3

Under Alternative 3, supplemental soil sampling will be skipped altogether in some or all of the east-side and south-side lawn areas, and soil removal or cover placement will be performed in those areas as specified herein. Alternative 3 will be selected at the discretion of MFP.

3.1.3 Remedial Decision Making

Under Alternative 1, if a lawn area composite sample pair is found to not exhibit any exceedances of CU SCOs for any of the PAHs, such a result will confirm the suitability of the surface soil in that lawn area for a Track 4 cover system, and no further remedial action will be necessary for that specific lawn area. If one or both of the lawn area composite samples exhibit an exceedance, results of the follow-up analyses of discrete samples will be used for delineating the portions of the lawn area to be remediated. Discrete sample results will also be used for decision making under Alternative 2.

Under both Alternatives 1 and 2, results of discrete sample analyses will be used to determine which portions of a lawn area will require remediation. Where a discrete sample pair is found to not exhibit any exceedances of CU SCOs for any of the PAHs, such a result will confirm the suitability of the surface soil in the area represented by that sample pair for a Track 4 cover system, and no further remedial action will be necessary for that specific area. Should a discrete sample indicate the presence of a PAH at a concentration exceeding its CU SCO, the surface soil from the area represented by that sample will be removed to the depth of exceedance (either 2 inches or 12 inches) and replaced with soil that is documented through sampling in accordance with DER-10 Sections 5.4(e)4 and 5.4(e)10 to meet the cover system standards for a commercial use site. Where feasible from a landscaping perspective, installation of an overlying soil cover may be performed as an alternative to soil removal and replacement. Where an overlying soil cover is to be used as an alternative to soil removal, it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer.

Under both Alternatives 1 and 2, the limits of the areas requiring remediation will extend outward from each discrete sample point exhibiting a CU SCO exceedance to the edge of adjacent sidewalks, pavements, retaining walls, the facility building or a line drawn midway between the exceeding point and an adjacent sample point that did not exhibit an exceedance.

Under Alternative 3, the remediation area will include all of the individual lawn area and extend to the edge of adjacent sidewalks, pavements, retaining walls, or the facility building.

3.1.4 Soil Removal and Replacement

A qualified environmental professional (QEP) or person under their supervision will oversee soil removal excavation activities, load-out of excavated material, and installation of replacement cover material. Similarly, if placement of an overlying soil cover is performed as an alternative to soil removal and replacement that activity will be conducted by or under the supervision of a QEP. Prior to placement of cover material, a demarcation layer consisting of orange snow fence, or equivalent geotextile, will be secured in place.

The soil removed will be direct loaded into dump trucks at the time of removal and transported off Site for disposal at a NYSDEC-permitted solid waste landfill. Requirements for off-Site transport and disposal of excavated soil are described below in Section 3.1.5.

Replacement soil and overlying soil cover material will either be eligible material, if any, to be removed from the new pavement pre-construction excavation described in Section 3.1.1 or imported soil that has been pre-characterized prior to import as specified in DER-10 Table 5.4(e)10. For imported soil, the required analysis will include Part 375-6.8(b)-listed VOCs, SVOCs, metals, total cyanide, PCBs, and pesticides. The number of grab samples (for VOC analysis) and composite samples (for other parameters) will be determined in accordance with Table 5.4(e)10 and will depend on the volume of material to be imported.

The remediated area will be seeded and protected to establish new lawn or other landscaping cover.

Where soil removal excavations are not backfilled with new cover material on the day of the excavation, the excavation area will be barricaded during off-work hours to prevent inadvertent entry by visitors or facility tenants.

Where a soil removal is to be performed directly adjacent to the off-Site drainage ditch located between the south Site boundary and Pixley Industrial Parkway or directly adjacent to the off-Site drainage ditch located east of the east Site boundary, a silt fence will be installed between the excavation area and the drainage ditch for the purposes of stormwater pollution prevention, and a fabric cover will be placed on any recharge well stormwater drain inlet in the immediately surrounding area. The silt fence and stormwater drain cover, if any, will be maintained until a grass cover is established on the newly installed soil cover in that area.

Where feasible from a landscaping perspective, installation of an overlying soil cover may be performed as an alternative to soil removal and replacement. Where an overlying soil cover is to be used as an

alternative to soil removal, it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Where grade elevation conditions dictate, the existing surface soil at edges of cover areas will be removed as needed to achieve the required one-foot cover thickness and key the edge of the remediated area to the surrounding grade.

To protect the near surface root systems and viability of existing mature trees and shrubs, soil removal or placement of 12 inches of overlying soil cover may need to be minimized in existing well-established landscaping berms and areas within the driplines of mature trees and shrubs. Where it is necessary to minimize soil removal or cover placement in those areas to protect trees and shrubs from damage, measures such as placement of landscaping fabric over the roots and interstitial soil, wrapping the fabric over the edge of the adjacent soil removal excavation, and placement and annual maintenance of landscaping stone or 6 inches of mulch cover on top of the fabric will serve as the cover system where soil removal and soil cover placement cannot be achieved as specified above.

3.1.5 Documentation Sampling for Soil Removal Excavations

Documentation sampling will be performed along those sections of soil-removal excavation sidewalls that do not abut the Site building, retaining walls, sidewalks or parking lot / driveway pavements. Samples will be collected at a frequency of 1 sample per 30 linear feet of sidewall. The sample interval will extend from the top to the bottom of the sidewall to be representative of the full depth interval of the excavation. Excavation bottom samples will not be collected since the presence in the excavation area of one foot of cover material that meets the requirements for a Track 4 cover system will have been confirmed by the other activities described in this work plan.

3.1.6 Excavated Soil Management

Where soil removal is performed, removed soil will be transported off site for disposal at a NYSDEC-permitted solid waste landfill. Waste transport will be performed by appropriately licensed haulers in accordance with 6 NYCRR Part 364. Disposal will be performed in accordance with 6 NYCRR Part 360 regulations.

3.1.7 Interim Reporting and Construction Completion Report

Following receipt of laboratory analysis results for soil reuse eligibility samples from the new parking area and the supplemental surface soil composite (if any) and discrete samples, an interim report will be submitted to NYSDEC with a summary of the lab results and a map showing sample locations and proposed limits of excavations.

An IRM Construction Completion Report (CCR) will be prepared to document the Cover System IRM activities. The CCR will include tables and figures summarizing sampling activities and laboratory analysis results, copies of laboratory analytical and data usability summary reports, record drawings of the new pavement and soil cover components of the Site cover system, and documentation of waste disposal.

3.2 PERMITTING

The pavement and excavation contractors will be responsible for obtaining any necessary permits for construction activities associated with the cover system IRM.

3.3 HEALTH & SAFETY PLAN

Health and safety procedures will be performed in accordance with the Health and Safety Plan (HASP) for the Site that was attached to the RI Work Plan. Contractors working on the site will be required to prepare and follow their own HASPs for the site.

3.4 COMMUNITY AIR MONITORING PROGRAM

The Community Air Monitoring Plan (CAMP) that was attached to the RI Work plan will be implemented during construction activities. Upwind and downwind monitoring requirements of the generic NYSDOH CAMP will be applied during surface-soil removal activities as appropriate for work on a small-scale outdoor excavation and landscaping project that is not anticipated to involve exposure of the Site contamination. VOC monitoring will be performed manually using a Photoionization detector (PID) with a 10.6 electronVolt (eV) lamp to periodically check and document ambient conditions within, upwind and downwind of the work area. Particulate monitoring will be performed by visual inspection. Real time measuring of particulates is not anticipated. Should airborne dust be generated, mitigation will be performed using a garden hose to spray water for dust suppression in the work area.

3.5 QUALITY ASSURANCE AND QUALITY CONTROL

Quality assurance and quality control methods and procedures will be as specified in the RI Work Plan for the Site. Field monitoring instrument calibration will be performed in accordance with DER-10 guidance. A NYSDOH ELAP certified analytical laboratory will be used for the analytical services of the project. A summary of sample types and analysis parameters and methods is presented in Table 2. With the exception of waste characterization samples which may be required for waste profiling by a disposal facility (if any are required), laboratory deliverables will be prepared in general accordance with NYSDOH ASP Category B guidelines and will be evaluated in a data usability summary report.

3.6 SITE-SPECIFIC COVID-19 RESPONSE PLAN

Social distancing and use of face coverings in general accordance with guidelines established by the Centers for Disease Control and Prevention and New York State Department of Health will be observed by Stantec, MFP and contractor personnel conducting or observing Cover System IRM field activities and by other visitors observing IRM activities at the Site. Stantec and contractor personnel performing the sampling and soil removal and replacement activities will be required to confirm their fitness for duty on a daily basis using the form presented in **Appendix C** as will visitors seeking to observe the IRM activities. Personnel and visitors who are unable to confirm their 'fitness for duty' will not be permitted access to the work areas. Personnel or visitors working at or visiting the Site will be asked during the daily briefing to

notify the Stantec Site contact if they become aware that they may be exhibiting symptoms of Covid-19 illness after being at the Site during the IRM activities.

4.0 SCHEDULE

Implementation of the Cover System IRM will begin immediately following approval of this IRM Work Plan by the NYSDOH and NYSDEC. A proposed timeline is as follows:

- Comments and conditional approval received from NYSDEC and NYSDOH by September 25, 2020.
- Supplemental soil sampling and analysis by October 16, 2020.
- Installation of new pavement, soil removal and installation of new soil cover by November 16, 2020.
- Draft CCR to be submitted to NYSDOH and NYSDEC by November 23, 2020.

The NYSDEC project manager will be notified at least 7 days in advance of all IRM-related field activities.

5.0 REFERENCES

NYSDOH, 2006a. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006.

NYSDEC, 2006b. 6 NYCRR Part 375 Environmental Remediation Programs. December 14, 2006.

NYSDEC, 2010a. NYSDEC's DER-10, Technical Guidance for Site Investigation and Remediation. May 3, 2010.

NYSDEC, 2010b. NYSDEC's Commissioner Policy CP-51 Soil Cleanup Guidance. October 21, 2010.

NYSDOH, October 2006. Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

NYSDOH, 2017. Soil Vapor Intrusion Updates, May 2017: Updates to Soil Vapor/Indoor Air Decision Matrices. Website: https://health.ny.gov/environmental/indoors/vapor_intrusion/update.htm, accessed 7/26/2017.

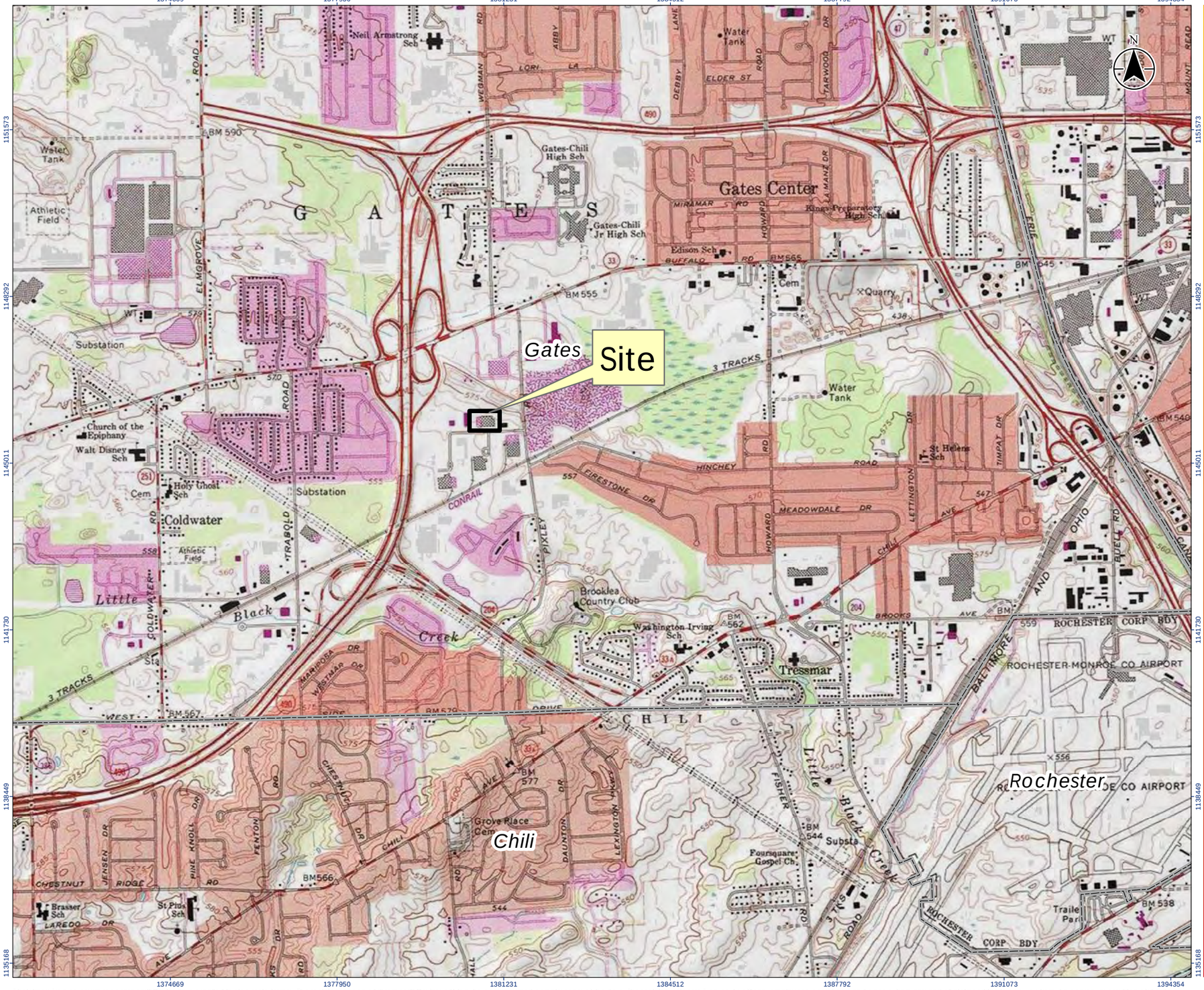
O'Brien & Gere Engineers, Inc., April 11, 2014. Remedial Investigation Report, Former ITT Rochester Form Machine Facility, Site # 8-28-112, Town of Gates, New York.

Stantec Consulting Services Inc., December 2015. Remedial Investigation Report, Brownfield Cleanup Program Site #C828101, Former Alliance Metal Stamping & Fabrication Facility, 12 Pixley Industrial Parkway, Town of Gates, Monroe County, New York.

Stantec Consulting Services Inc., Revised June 2016. Interim Remedial Measure Site Management Plan, Brownfield Cleanup Program Site #C828101, Former Alliance Metal Stamping & Fabrication Facility, 12 Pixley Industrial Parkway, Town of Gates, Monroe County, New York.

Stantec Consulting Services Inc., June 2018. Alternatives Analysis Report, Brownfield Cleanup Program Site #C828101, Former Alliance Metal Stamping & Fabrication Facility, 12 Pixley Industrial Parkway, Town of Gates, Monroe County, New York.

FIGURES



Stantec

Legend

- Property Boundary
- City/Town Boundary

0 2,000 4,000 Feet

Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Basemap: ArcGIS Basemap, USA Topo Maps (Main Frame). For more information on this map, including terms of use, visit online at http://goto.arcgisonline.com/maps/USA_Topo_Maps

Project Location:
12 Pixley Industrial Parkway
Town of Gates, NY

Prepared by AL on 2014-09-23
Technical Review by TW on 2014-09-23

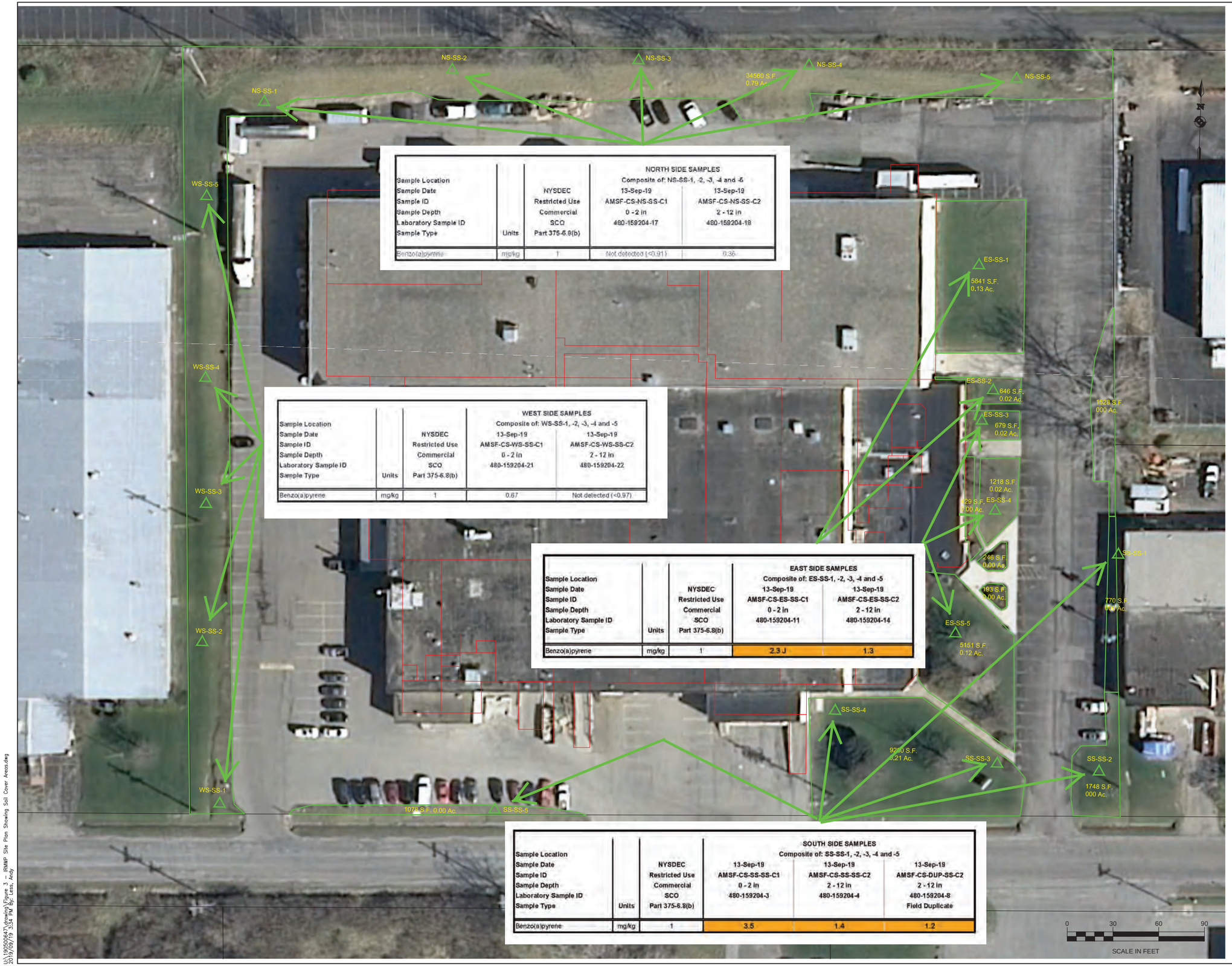
190500647

Client/Project
Former Alliance Metal Stamping and Fabrication Facility
Brownfield Cleanup Program #C828101
IRM Work Plan

Figure No.
1

Title
Site Location Map

L:\190500647\drawing\IRM-SMP Report_mxd\Figure1_Site Location Map_2017-2018.prj.mxd Revised: 2018-01-16 By: rbest



Sample Location			NORTH SIDE SAMPLES Composite of: NS-SS-1, -2, -3, -4 and -5	
Sample Date		NYSDEC	13-Sep-19	13-Sep-19
Sample ID		Restricted Use	AMSF-CS-NS-SS-C1	AMSF-CS-NS-SS-C2
Sample Depth		Commercial	0 - 2 in	2 - 12 in
Laboratory Sample ID		SCO	480-159204-17	480-159204-18
Sample Type	Units	Part 375-6.8(b)		
Benzo(a)pyrene	mg/kg	1	Not detected (<0.91)	0.36

Sample Location			WEST SIDE SAMPLES Composite of: WS-SS-1, -2, -3, -4 and -5		
Sample Date		NYSDEC	13-Sep-19	13-Sep-19	
Sample ID		Restricted Use	AMSF-CS-WS-SS-C1	AMSF-CS-WS-SS-C2	
Sample Depth		Commercial	0 - 2 in	2 - 12 in	
Laboratory Sample ID		SCO	480-159204-21	480-159204-22	
Sample Type	Units	Part 375-6.8(b)			
Benzo(a)pyrene	mg/kg	1	0.67	Not detected (<0.97)	

Sample Location			EAST SIDE SAMPLES Composite of: ES-SS-1, -2, -3, -4 and -5	
Sample Date		NYSDEC	13-Sep-19	13-Sep-19
Sample ID		Restricted Use	AMSF-CS-ES-SS-C1	AMSF-CS-ES-SS-C2
Sample Depth		Commercial	0 - 2 in	2 - 12 in
Laboratory Sample ID		SCO	480-159204-11	480-159204-14
Sample Type	Units	Part 375-6.8(b)		
Benzo(a)pyrene	mg/kg	1	2.3 J	1.3

Sample Location			SOUTH SIDE SAMPLES Composite of: SS-SS-1, -2, -3, -4 and -5		
Sample Date		NYSDEC	13-Sep-19	13-Sep-19	13-Sep-19
Sample ID		Restricted Use	AMSF-CS-SS-SS-C1	AMSF-CS-SS-SS-C2	AMSF-CS-DUP-SS-C2
Sample Depth		Commercial	0 - 2 in	2 - 12 in	2 - 12 in
Laboratory Sample ID		SCO	480-159204-3	480-159204-4	480-159204-8
Sample Type	Units	Part 375-6.8(b)			Field Duplicate
Benzo(a)pyrene	mg/kg	1	3.5	1.4	1.2

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Consultants

Legend

AREAS OF SOIL COVER
SF – SQUARE FEET
AC. – ACRES

ES-SS-1 COVER SYSTEM SURFACE SOIL SAMPLING LOCATIONS

Notes

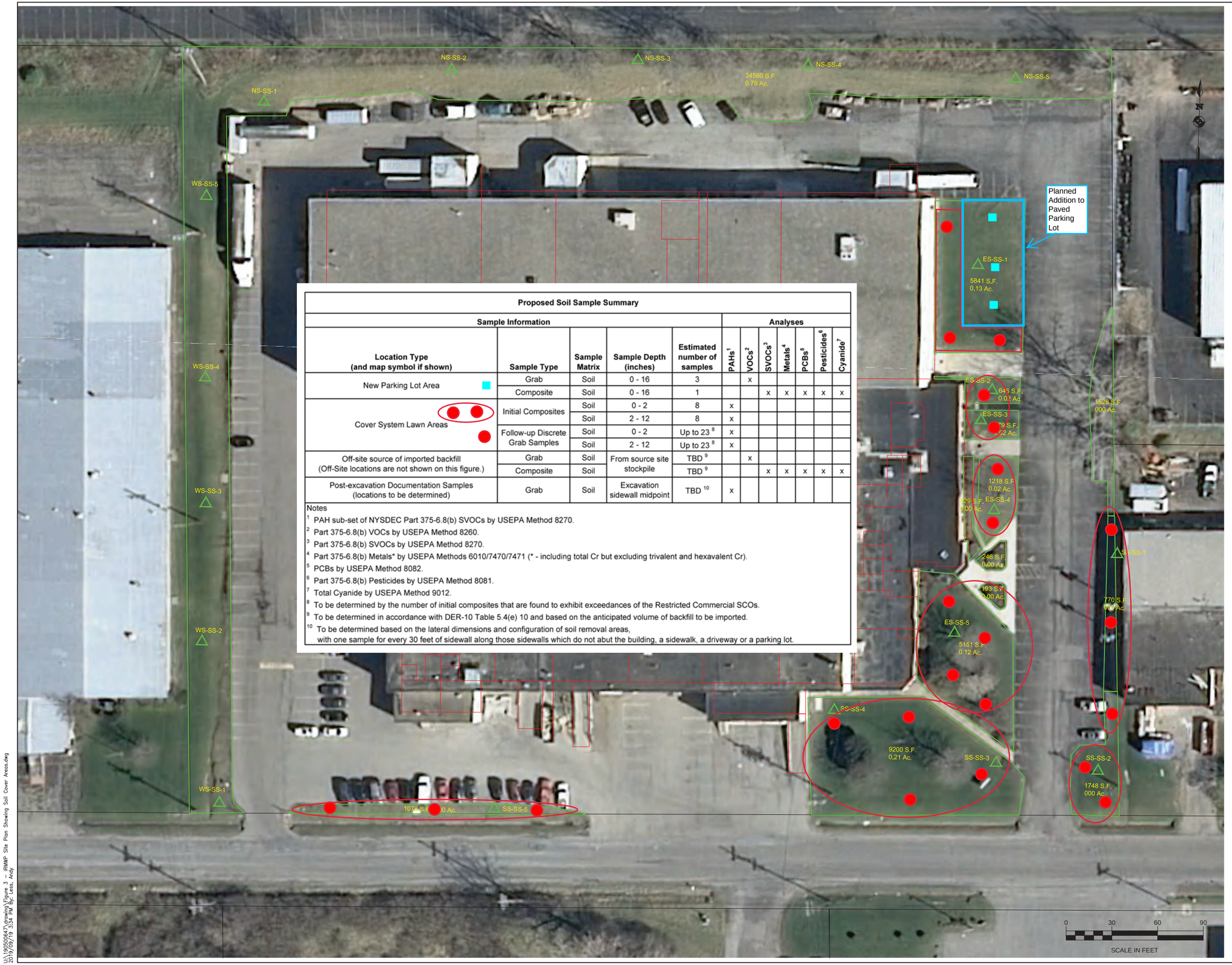
Revision	By	Appd.	YY.MM.DD
COVER SYSTEM IRM WORK PLAN	TW	MPS	2020.08
Issued	By	Appd.	YY.MM.DD
File Name:	APL Dwn.	TW Chkd.	TW Dsgn.	2014.10 YY.MM.DD

Permit-Seal

Client/Project
FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101
12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY

Title
SAMPLE LOCATION PLAN - COVER SYSTEM
PRE-DESIGN INVESTIGATION

Project No. 190500647
Scale AS SHOWN
Drawing No. FIG. 2
Sheet
Revision
of



Proposed Soil Sample Summary

Location Type (and map symbol if shown)	Sample Type	Sample Matrix	Sample Depth (inches)	Estimated number of samples	PAHs[1]	VOCs[2]	SVOCs[3]	Metals[4]	PCBs[5]	Pesticides[6]	Cyanide[7]
New Parking Lot Area	Grab	Soil	0 - 16	3		x					
	Composite	Soil	0 - 16	1			x	x	x	x	x
Cover System Lawn Areas	Initial Composites	Soil	0 - 2	8	x						
		Soil	2 - 12	8	x						
	Follow-up Discrete Grab Samples	Soil	0 - 2	Up to 23 [8]	x						
		Soil	2 - 12	Up to 23 [8]	x						
Off-site source of imported backfill (Off-Site locations are not shown on this figure.)	Grab	Soil	From source site stockpile	TBD [9]		x					
	Composite	Soil		TBD [9]			x	x	x	x	x
Post-excavation Documentation Samples (locations to be determined)	Grab	Soil	Excavation sidewall midpoint	TBD [10]	x						

Notes
1. PAH sub-set of NYSDEC Part 375-6.8(b) SVOCs by USEPA Method 8270.
2. Part 375-6.8(b) VOCs by USEPA Method 8260.
3. Part 375-6.8(b) SVOCs by USEPA Method 8270.
4. Part 375-6.8(b) Metals* by USEPA Methods 6010/7470/7471 (* - including total Cr but excluding trivalent and hexavalent Cr).
5. PCBs by USEPA Method 8082.
6. Part 375-6.8(b) Pesticides by USEPA Method 8081.
7. Total Cyanide by USEPA Method 9012.
8. To be determined by the number of initial composites that are found to exhibit exceedances of the Restricted Commercial SCOs.
9. To be determined in accordance with DER-10 Table 5.4(e) 10 and based on the anticipated volume of backfill to be imported.
10. To be determined based on the lateral dimensions and configuration of soil removal areas, with one sample for every 30 feet of sidewall along those sidewalls which do not abut the building, a sidewalk, a driveway or a parking lot.

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Legend

AREAS OF SOIL COVER
SF – SQUARE FEET
AC. – ACRES

ES-SS-1 COVER SYSTEM SURFACE SOIL SAMPLING LOCATIONS. PRE-DESIGN INVESTIGATION, SEPT. 2019

PROPOSED SURFACE SOIL SAMPLING LOCATIONS AND COMPOSITE SAMPLE GROUP OUTLINE, COVER SYSTEM IRM

PROPOSED SOIL REUSE EVALUATION SAMPLING LOCATIONS, NEW PARKING AREA

Notes

Client/Project
FORMER ALLIANCE METAL STAMPING & FABRICATION FACILTY
BROWNFIELD CLEANUP PROGRAM SITE # C828101
12 PIXLEY INDUSTRIAL PARKWAY, GATES, NY
COVER SYSTEM IRM WORK PLAN

Title
SITE PLAN SHOWING PROPOSED COVER SYSTEM SAMPLE LOCATIONS

Project No. 190500647
Scale AS SHOWN
Drawing No. FIG. 3
Sheet
Revision
of

U:\190500647\drawing\Figure 3 - IRMWP Site Plan Showing Soil Cover Areas.dwg
2019/09/19 3:34 PM By: Lees, Andy

ORIGINAL SHEET – ANSI D

TABLES

Table 1
Summary of Soil Sample Analysis Results, Cover System Pre-Design Investigation
Former AMSF Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

			EAST SIDE SAMPLES				NORTH SIDE SAMPLES			
Sample Location			**ES-SS-1**	**ES-SS-2**	**Composite of: ES-SS-1, -2, -3, -4 and -5**		**NS-SS-1**	**NS-SS-4**	**Composite of: NS-SS-1, -2, -3, -4 and -5**	
Sample Date			**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**
Sample ID			**AMSF-CS-ES-SS-G1**	**AMSF-CS-ES-SS-G2**	**AMSF-CS-ES-SS-C1**	**AMSF-CS-ES-SS-C2**	**AMSF-CS-NS-SS-G1**	**AMSF-CS-NS-SS-G2**	**AMSF-CS-NS-SS-C1**	**AMSF-CS-NS-SS-C2**
Sample Depth			**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**	**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**
Laboratory Sample ID			**480-159204-9**	**480-159204-10**	**480-159204-11**	**480-159204-14**	**480-159204-15**	**480-159204-16**	**480-159204-17**	**480-159204-18**
Sample Type	**Units**	**NYSDEC-Part 375**								
General Chemistry										
Cyanide	mg/kg	27[I,A]	-	-	1.2 U F1*	1.1 U F1*	-	-	1.0 U *	1.1 U
Metals										
Aluminum	mg/kg	n/v	-	-	13,500	14,800	-	-	9,170	9,310
Antimony	mg/kg	n/v	-	-	18.2 UJ	16.2 UJ	-	-	16.6 U	15.8 U
Arsenic	mg/kg	16[A]	-	-	3.0	3.0	-	-	2.8	2.6
Barium	mg/kg	400[A]	-	-	61.9 J	65.1 J	-	-	43.7	46.0
Beryllium	mg/kg	590[A]	-	-	0.51	0.53	-	-	0.37	0.39
Cadmium	mg/kg	9.3[A]	-	-	0.24 U	0.22 U	-	-	0.22 U	0.21 U
Calcium	mg/kg	n/v	-	-	9,210 F2F1	10,000	-	-	35,700	56,100
Chromium	mg/kg	1,500[I,A]	-	-	16.5	17.6	-	-	12.3	12.8
Cobalt	mg/kg	n/v	-	-	6.5	6.9	-	-	5.4	5.4
Copper	mg/kg	270[A]	-	-	11.2	8.6	-	-	9.5	9.3
Iron	mg/kg	n/v	-	-	15,800	16,700	-	-	13,200	12,700
Lead	mg/kg	1,000[A]	-	-	13.5	14.9	-	-	10.9	7.7
Magnesium	mg/kg	n/v	-	-	4,830 J	7,250 J	-	-	13,100	19,800[A]
Manganese	mg/kg	n/v	-	-	404 B	434 BF2	-	-	332 B	340 B
Mercury	mg/kg	2.8[K,A]	-	-	0.041	0.041	-	-	0.023 U	0.021 U
Nickel	mg/kg	310[A]	-	-	13.7	13.8	-	-	11.8	11.9
Potassium	mg/kg	n/v	-	-	2,460 J	2,310 J	-	-	2,530	2,620
Selenium	mg/kg	1,500[A]	-	-	4.8 U	4.3 U	-	-	4.4 U	4.2 U
Silver	mg/kg	1,500[A]	-	-	0.73 U	0.65 U	-	-	0.66 U	0.63 U
Sodium	mg/kg	n/v	-	-	170 U	151 U	-	-	155 U	183
Thallium	mg/kg	n/v	-	-	7.3 U	6.5 U	-	-	6.6 U	6.3 U
Vanadium	mg/kg	n/v	-	-	25.9	28.0	-	-	20.2	21.2
Zinc	mg/kg	n/v	-	-	52.4	52.2	-	-	34.9	29.4
Pesticides										
Aldrin	mg/kg	0.68[A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
BHC, alpha-	mg/kg	3.4[A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
BHC, beta-	mg/kg	3[A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
BHC, delta-	mg/kg	500[C,A]	-	-	0.020 U F2	0.019 U	-	-	0.036 U	0.018 U
Camphechlor (Toxaphene)	mg/kg	500[C,A]	-	-	0.20 U	0.19 U	-	-	0.36 U	0.18 U
Chlordane, alpha-	mg/kg	24[A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
Chlordane, trans- (gamma-Chlordane)	mg/kg	n/v	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
DDD (p,p'-DDD)	mg/kg	92[A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
DDE (p,p'-DDE)	mg/kg	62[A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
DDT (p,p'-DDT)	mg/kg	47[A]	-	-	0.020 U F2F1	0.019 U	-	-	0.036 U	0.018 U
Dieldrin	mg/kg	1.4[A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
Endosulfan I	mg/kg	200[I,A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
Endosulfan II	mg/kg	200[I,A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
Endosulfan Sulfate	mg/kg	200[I,A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
Endrin	mg/kg	89[A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
Endrin Aldehyde	mg/kg	500[C,A]	-	-	0.020 U F1	0.019 U	-	-	0.036 U	0.018 U
Endrin Ketone	mg/kg	500[C,A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
Heptachlor	mg/kg	15[A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
Heptachlor Epoxide	mg/kg	500[C,A]	-	-	0.020 U	0.019 U	-	-	0.036 U	0.018 U
Lindane (Hexachlorocyclohexane, gamma)	mg/kg	9.2[A]	-	-	0.020 U F2	0.019 U	-	-	0.036 U	0.018 U
Methoxychlor (4,4'-Methoxychlor)	mg/kg	500[C,A]	-	-	0.020 U F2	0.019 U	-	-	0.036 U	0.018 U
Polychlorinated Biphenyls										
Aroclor 1016	mg/kg	[O,A]	-	-	0.23 U	0.21 U	-	-	0.24 U	0.24 U
Aroclor 1221	mg/kg	[O,A]	-	-	0.23 U	0.21 U	-	-	0.24 U	0.24 U
Aroclor 1232	mg/kg	[O,A]	-	-	0.23 U	0.21 U	-	-	0.24 U	0.24 U
Aroclor 1242	mg/kg	[O,A]	-	-	0.23 U	0.21 U	-	-	0.24 U	0.24 U
Aroclor 1248	mg/kg	[O,A]	-	-	0.23 U	0.21 U	-	-	0.24 U	0.24 U
Aroclor 1254	mg/kg	[O,A]	-	-	0.23 U	0.21 U	-	-	0.24 U	0.24 U
Aroclor 1260	mg/kg	[O,A]	-	-	0.23 U	0.21 U	-	-	0.24 U	0.24 U
Aroclor 1262	mg/kg	[O,A]	-	-	0.23 U	0.21 U	-	-	0.24 U	0.24 U
Aroclor 1268	mg/kg	[O,A]	-	-	0.23 U	0.21 U	-	-	0.24 U	0.24 U
Polychlorinated Biphenyls (PCBs)	mg/kg	1[A]	-	-	ND	ND	-	-	ND	ND

Table 1
Summary of Soil Sample Analysis Results, Cover System Pre-Design Investigation
Former AMSF Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

			EAST SIDE SAMPLES				NORTH SIDE SAMPLES			
Sample Location			**ES-SS-1**	**ES-SS-2**	**Composite of: ES-SS-1, -2, -3, -4 and -5**		**NS-SS-1**	**NS-SS-4**	**Composite of: NS-SS-1, -2, -3, -4 and -5**	
Sample Date			**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**
Sample ID			**AMSF-CS-ES-SS-G1**	**AMSF-CS-ES-SS-G2**	**AMSF-CS-ES-SS-C1**	**AMSF-CS-ES-SS-C2**	**AMSF-CS-NS-SS-G1**	**AMSF-CS-NS-SS-G2**	**AMSF-CS-NS-SS-C1**	**AMSF-CS-NS-SS-C2**
Sample Depth			**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**	**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**
Laboratory Sample ID			**480-159204-9**	**480-159204-10**	**480-159204-11**	**480-159204-14**	**480-159204-15**	**480-159204-16**	**480-159204-17**	**480-159204-18**
Sample Type	**Units**	**NYSDEC-Part 375**								
Semi-Volatile Organic Compounds										
Acenaphthene	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Acenaphthylene	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Acetophenone	mg/kg	n/v	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Anthracene	mg/kg	500$_c$[A]	-	-	0.97 U F2F1	0.95 U	-	-	0.91 U	0.18 U
Atrazine	mg/kg	n/v	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Benzaldehyde	mg/kg	n/v	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Benzo(a)anthracene	mg/kg	5.6[A]	-	-	2.3 J	1.2	-	-	0.91 U	0.29
Benzo(a)pyrene	mg/kg	1[A]	-	-	**2.3 J[A]**	**1.3[A]**	-	-	0.91 U	0.36
Benzo(b)fluoranthene	mg/kg	5.6[A]	-	-	3.3 F2	1.6	-	-	1.2	0.51
Benzo(g,h,i)perylene	mg/kg	500$_c$[A]	-	-	1.7 F2	0.95 U	-	-	0.91 U	0.32
Benzo(k)fluoranthene	mg/kg	56[A]	-	-	1.2 F2	0.95 U	-	-	0.91 U	0.27
Biphenyl	mg/kg	n/v	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Bis(2-Chloroethoxy)methane	mg/kg	500$_c$[A]	-	-	0.97 U F2	0.95 U	-	-	0.91 U	0.18 U
Bis(2-Chloroethyl)ether	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Bromophenyl Phenyl Ether, 4-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Butyl Benzyl Phthalate	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Caprolactam	mg/kg	n/v	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Carbazole	mg/kg	500$_c$[A]	-	-	0.97 U F1	0.95 U	-	-	0.91 U	0.18 U
Chloro-3-methyl phenol, 4-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Chloroaniline, 4-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Chloronaphthalene, 2-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Chlorophenol, 2- (ortho-Chlorophenol)	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Chlorophenyl Phenyl Ether, 4-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Chrysene	mg/kg	56[A]	-	-	2.6 J	1.6	-	-	0.95	0.44
Cresol, o- (Methylphenol, 2-)	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Cresol, p- (Methylphenol, 4-)	mg/kg	500$_c$[A]	-	-	1.9 U	1.9 U	-	-	1.8 U	0.36 U
Dibenzo(a,h)anthracene	mg/kg	0.56[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Dibenzofuran	mg/kg	350[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Dibutyl Phthalate (DBP)	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Dichlorobenzidine, 3,3'-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Dichlorophenol, 2,4-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Diethyl Phthalate	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Dimethyl Phthalate	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Dimethylphenol, 2,4-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Dinitro-o-cresol, 4,6-	mg/kg	500$_c$[A]	-	-	1.9 U	1.9 U	-	-	1.8 U	0.36 U
Dinitrophenol, 2,4-	mg/kg	500$_c$[A]	-	-	1.9 U	1.9 U	-	-	1.8 U	0.36 U
Dinitrotoluene, 2,4-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Dinitrotoluene, 2,6-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Di-n-Octyl phthalate	mg/kg	500$_c$[A]	-	-	0.97 U F1	0.95 U	-	-	0.91 U	0.18 U
Fluoranthene	mg/kg	500$_c$[A]	-	-	5.5 J	3.1	-	-	1.8	0.79
Fluorene	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Hexachlorobenzene	mg/kg	6[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Hexachlorocyclopentadiene	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Hexachloroethane	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Indeno(1,2,3-cd)pyrene	mg/kg	5.6[A]	-	-	1.3 J	0.95 U	-	-	0.91 U	0.28
Isophorone	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Methylnaphthalene, 2-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Naphthalene	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Nitroaniline, 2-	mg/kg	500$_c$[A]	-	-	1.9 U	1.9 U	-	-	1.8 U	0.36 U
Nitroaniline, 3-	mg/kg	500$_c$[A]	-	-	1.9 U	1.9 U	-	-	1.8 U	0.36 U
Nitroaniline, 4-	mg/kg	500$_c$[A]	-	-	1.9 U	1.9 U	-	-	1.8 U	0.36 U
Nitrobenzene	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Nitrophenol, 2-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Nitrophenol, 4-	mg/kg	500$_c$[A]	-	-	1.9 U	1.9 U	-	-	1.8 U	0.36 U
N-Nitrosodi-n-Propylamine	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
n-Nitrosodiphenylamine	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Pentachlorophenol	mg/kg	6.7[A]	-	-	1.9 U	1.9 U	-	-	1.8 U	0.36 U
Phenanthrene	mg/kg	500$_c$[A]	-	-	3.1 J	1.8	-	-	0.91 U	0.27
Phenol	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Pyrene	mg/kg	500$_c$[A]	-	-	4.3 F1	2.4	-	-	1.4	0.60
Trichlorophenol, 2,4,5-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U
Trichlorophenol, 2,4,6-	mg/kg	500$_c$[A]	-	-	0.97 U	0.95 U	-	-	0.91 U	0.18 U

Table 1
Summary of Soil Sample Analysis Results, Cover System Pre-Design Investigation
Former AMSF Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

			EAST SIDE SAMPLES				NORTH SIDE SAMPLES			
Sample Location			**ES-SS-1**	**ES-SS-2**	**Composite of: ES-SS-1, -2, -3, -4 and -5**		**NS-SS-1**	**NS-SS-4**	**Composite of: NS-SS-1, -2, -3, -4 and -5**	
Sample Date			**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**
Sample ID			**AMSF-CS-ES-SS-G1**	**AMSF-CS-ES-SS-G2**	**AMSF-CS-ES-SS-C1**	**AMSF-CS-ES-SS-C2**	**AMSF-CS-NS-SS-G1**	**AMSF-CS-NS-SS-G2**	**AMSF-CS-NS-SS-C1**	**AMSF-CS-NS-SS-C2**
Sample Depth			**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**	**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**
Laboratory Sample ID			**480-159204-9**	**480-159204-10**	**480-159204-11**	**480-159204-14**	**480-159204-15**	**480-159204-16**	**480-159204-17**	**480-159204-18**
Sample Type	**Units**	**NYSDEC-Part 375**								
Volatile Organic Compounds										
Acetone	mg/kg	500$_c$[A]	0.029 UJ	0.027 U	-	-	0.026 U	0.026 U	-	-
Benzene	mg/kg	44[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Bromodichloromethane	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Bromoform (Tribromomethane)	mg/kg	500$_c$[A]	0.0059 U *	0.0054 U *	-	-	0.0053 U *	0.0052 U *	-	-
Bromomethane (Methyl bromide)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Carbon Disulfide	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Carbon Tetrachloride (Tetrachloromethane)	mg/kg	22[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Chlorobenzene (Monochlorobenzene)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Chloroethane (Ethyl Chloride)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Chloroform (Trichloromethane)	mg/kg	350[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Chloromethane	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Cyclohexane	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dibromochloromethane	mg/kg	500$_c$[A]	0.0059 U *	0.0054 U *	-	-	0.0053 U *	0.0052 U *	-	-
Dichlorobenzene, 1,2-	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichlorobenzene, 1,3-	mg/kg	280[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichlorobenzene, 1,4-	mg/kg	130[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichlorodifluoromethane (Freon 12)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichloroethane, 1,1-	mg/kg	240[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichloroethane, 1,2-	mg/kg	30[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichloroethene, 1,1-	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichloroethene, cis-1,2-	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichloroethene, trans-1,2-	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichloropropane, 1,2-	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichloropropene, cis-1,3-	mg/kg	500$_c$[A]	0.0059 U F1	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Dichloropropene, trans-1,3-	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Ethyl Acetate	mg/kg	n/v	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Ethylbenzene	mg/kg	390[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Hexanone, 2- (Methyl Butyl Ketone)	mg/kg	500$_c$[A]	0.029 UJ	0.027 U	-	-	0.026 U	0.026 U	-	-
Isopropylbenzene	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Methyl Acetate	mg/kg	500$_c$[A]	0.029 UJ	0.027 U	-	-	0.026 U	0.026 U	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	mg/kg	500$_c$[A]	0.029 UJ	0.027 U	-	-	0.026 U	0.026 U	-	-
Methyl Isobutyl Ketone (MIBK)	mg/kg	500$_c$[A]	0.029 U F1	0.027 U	-	-	0.026 U	0.026 U	-	-
Methyl tert-butyl ether (MTBE)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Methylcyclohexane	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Methylene Chloride (Dichloromethane)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Styrene	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Tetrachloroethane, 1,1,2,2-	mg/kg	500$_c$[A]	0.0059 U F1	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Tetrachloroethene (PCE)	mg/kg	150[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Toluene	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Trichlorobenzene, 1,2,4-	mg/kg	500$_c$[A]	0.0059 UJ	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Trichloroethane, 1,1,1-	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Trichloroethane, 1,1,2-	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Trichloroethene (TCE)	mg/kg	200[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Trichlorofluoromethane (Freon 11)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Trichlorotrifluoroethane (Freon 113)	mg/kg	500$_c$[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Vinyl Chloride	mg/kg	13[A]	0.0059 U	0.0054 U	-	-	0.0053 U	0.0052 U	-	-
Xylenes, Total	mg/kg	500$_c$[A]	0.012 U	0.011 U	-	-	0.011 U	0.010 U	-	-

Table 1
Summary of Soil Sample Analysis Results, Cover System Pre-Design Investigation
Former AMSF Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

			SOUTH SIDE SAMPLES						WEST SIDE SAMPLES			
Sample Location			**SS-SS-2**	**SS-SS-5**		**Composite of: SS-SS-1, -2, -3, -4 and -5**			**WS-SS-2**	**WS-SS-5**	**Composite of: WS-SS-1, -2, -3, -4 and -5**	
Sample Date			**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**
Sample ID			**AMSF-CS-SS-SS-G2**	**AMSF-CS-SS-SS-G1**	**AMSF-CS-DUP-SS-G1**	**AMSF-CS-SS-SS-C1**	**AMSF-CS-SS-SS-C2**	**AMSF-CS-DUP-SS-C2**	**AMSF-CS-WS-SS-G1**	**AMSF-CS-WS-SS-G2**	**AMSF-CS-WS-SS-C1**	**AMSF-CS-WS-SS-C2**
Sample Depth			**2 - 6 in**	**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**	**2 - 12 in**	**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**
Laboratory Sample ID			**480-159204-2**	**480-159204-1**	**480-159204-5**	**480-159204-3**	**480-159204-4**	**480-159204-8**	**480-159204-19**	**480-159204-20**	**480-159204-21**	**480-159204-22**
Sample Type	**Units**	**NYSDEC-Part 375**			**Field Duplicate**			**Field Duplicate**				
General Chemistry												
Cyanide	mg/kg	27[I,A]	-	-	-	1.1 U *	1.1 U *	1.1 U *	-	-	1.2 U	1.1 U
Metals												
Aluminum	mg/kg	n/v	-	-	-	14,500	16,100	14,600	-	-	14,000	16,100
Antimony	mg/kg	n/v	-	-	-	17.7 U	16.8 U	17.2 U	-	-	18.2 U	17.7 U
Arsenic	mg/kg	16[A]	-	-	-	3.7	3.3	3.3	-	-	3.5	3.3
Barium	mg/kg	400[A]	-	-	-	67.4	73.8	65.9	-	-	62.1	79.9
Beryllium	mg/kg	590[A]	-	-	-	0.58	0.63	0.54	-	-	0.57	0.70
Cadmium	mg/kg	9.3[A]	-	-	-	0.24 U	0.22 U	0.23 U	-	-	0.24 U	0.24 U
Calcium	mg/kg	n/v	-	-	-	6,880	12,200	15,300	-	-	31,200	4,330
Chromium	mg/kg	1,500[I,A]	-	-	-	43.3	20.1	17.7	-	-	16.8	21.1
Cobalt	mg/kg	n/v	-	-	-	7.2	7.5	6.9	-	-	6.8	9.9
Copper	mg/kg	270[A]	-	-	-	17.0	17.2	14.1	-	-	12.0	11.5
Iron	mg/kg	n/v	-	-	-	18,400	18,400	16,500	-	-	17,100	19,800
Lead	mg/kg	1,000[A]	-	-	-	24.5	30.5	24.3	-	-	13.6	10.7
Magnesium	mg/kg	n/v	-	-	-	4,830	7,540	9,710	-	-	19,000	3,780
Manganese	mg/kg	n/v	-	-	-	451 B	367 B	412 B	-	-	375 B	440 B
Mercury	mg/kg	2.8[K,A]	-	-	-	0.049	0.050	0.054	-	-	0.036	0.039
Nickel	mg/kg	310[A]	-	-	-	16.0	17.4	14.8	-	-	16.0	19.4
Potassium	mg/kg	n/v	-	-	-	2,490	2,760	2,390	-	-	3,030	3,120
Selenium	mg/kg	1,500[A]	-	-	-	4.7 U	4.5 U	4.6 U	-	-	4.9 U	4.7 U
Silver	mg/kg	1,500[A]	-	-	-	0.71 U	0.67 U	0.69 U	-	-	0.73 U	0.71 U
Sodium	mg/kg	n/v	-	-	-	191	601	373	-	-	170 U	165 U
Thallium	mg/kg	n/v	-	-	-	7.1 U	6.7 U	6.9 U	-	-	7.3 U	7.1 U
Vanadium	mg/kg	n/v	-	-	-	29.1	31.0	27.7	-	-	25.8	31.0
Zinc	mg/kg	n/v	-	-	-	101	88.9	70.1	-	-	54.3	52.6
Pesticides												
Aldrin	mg/kg	0.68[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
BHC, alpha-	mg/kg	3.4[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0037 J+	0.0019 U
BHC, beta-	mg/kg	3[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
BHC, delta-	mg/kg	500[C,A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Camphechlor (Toxaphene)	mg/kg	500[C,A]	-	-	-	0.19 U	0.18 U	0.18 U	-	-	0.020 U	0.019 U
Chlordane, alpha-	mg/kg	24[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Chlordane, trans- (gamma-Chlordane)	mg/kg	n/v	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
DDD (p,p'-DDD)	mg/kg	92[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
DDE (p,p'-DDE)	mg/kg	62[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
DDT (p,p'-DDT)	mg/kg	47[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Dieldrin	mg/kg	1.4[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Endosulfan I	mg/kg	200[I,A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Endosulfan II	mg/kg	200[I,A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Endosulfan Sulfate	mg/kg	200[I,A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Endrin	mg/kg	89[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Endrin Aldehyde	mg/kg	500[C,A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Endrin Ketone	mg/kg	500[C,A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Heptachlor	mg/kg	15[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Heptachlor Epoxide	mg/kg	500[C,A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Lindane (Hexachlorocyclohexane, gamma)	mg/kg	9.2[A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Methoxychlor (4,4'-Methoxychlor)	mg/kg	500[C,A]	-	-	-	0.019 U	0.018 U	0.018 U	-	-	0.0020 U	0.0019 U
Polychlorinated Biphenyls												
Aroclor 1016	mg/kg	[O,A]	-	-	-	0.27 U	0.25 U	0.28 U	-	-	0.28 U	0.28 U
Aroclor 1221	mg/kg	[O,A]	-	-	-	0.27 U	0.25 U	0.28 U	-	-	0.28 U	0.28 U
Aroclor 1232	mg/kg	[O,A]	-	-	-	0.27 U	0.25 U	0.28 U	-	-	0.28 U	0.28 U
Aroclor 1242	mg/kg	[O,A]	-	-	-	0.27 U	0.25 U	0.28 U	-	-	0.28 U	0.28 U
Aroclor 1248	mg/kg	[O,A]	-	-	-	0.27 U	0.25 U	0.28 U	-	-	0.28 U	0.28 U
Aroclor 1254	mg/kg	[O,A]	-	-	-	0.27 U	0.25 U	0.28 U	-	-	0.28 U	0.28 U
Aroclor 1260	mg/kg	[O,A]	-	-	-	0.27 U	0.25 U	0.28 U	-	-	0.28 U	0.28 U
Aroclor 1262	mg/kg	[O,A]	-	-	-	0.27 U	0.25 U	0.28 U	-	-	0.28 U	0.28 U
Aroclor 1268	mg/kg	[O,A]	-	-	-	0.27 U	0.25 U	0.28 U	-	-	0.28 U	0.28 U
Polychlorinated Biphenyls (PCBs)	mg/kg	1[A]	-	-	-	ND	ND	ND	-	-	ND	ND

Table 1
Summary of Soil Sample Analysis Results, Cover System Pre-Design Investigation
Former AMSF Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

			SOUTH SIDE SAMPLES						WEST SIDE SAMPLES			
Sample Location			**SS-SS-2**	**SS-SS-5**		**Composite of: SS-SS-1, -2, -3, -4 and -5**			**WS-SS-2**	**WS-SS-5**	**Composite of: WS-SS-1, -2, -3, -4 and -5**	
Sample Date			**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**
Sample ID			**AMSF-CS-SS-SS-G2**	**AMSF-CS-SS-SS-G1**	**AMSF-CS-DUP-SS-G1**	**AMSF-CS-SS-SS-C1**	**AMSF-CS-SS-SS-C2**	**AMSF-CS-DUP-SS-C2**	**AMSF-CS-WS-SS-G1**	**AMSF-CS-WS-SS-G2**	**AMSF-CS-WS-SS-C1**	**AMSF-CS-WS-SS-C2**
Sample Depth			**2 - 6 in**	**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**	**2 - 12 in**	**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**
Laboratory Sample ID			**480-159204-2**	**480-159204-1**	**480-159204-5**	**480-159204-3**	**480-159204-4**	**480-159204-8**	**480-159204-19**	**480-159204-20**	**480-159204-21**	**480-159204-22**
Sample Type	**Units**	**NYSDEC-Part 375**			**Field Duplicate**			**Field Duplicate**				
Semi-Volatile Organic Compounds												
Acenaphthene	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Acenaphthylene	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Acetophenone	mg/kg	n/v	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Anthracene	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Atrazine	mg/kg	n/v	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Benzaldehyde	mg/kg	n/v	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Benzo(a)anthracene	mg/kg	5.6[A]	-	-	-	3.1	1.3	1.0	-	-	0.49	0.97 U
Benzo(a)pyrene	mg/kg	1[A]	-	-	-	**3.5[A]**	**1.4[A]**	**1.2[A]**	-	-	0.67	0.97 U
Benzo(b)fluoranthene	mg/kg	5.6[A]	-	-	-	4.8	2.1	1.6	-	-	0.93	1.1
Benzo(g,h,i)perylene	mg/kg	500$_c$[A]	-	-	-	2.4	1.1	0.94 U	-	-	0.57	0.97 U
Benzo(k)fluoranthene	mg/kg	56[A]	-	-	-	2.0	0.95 U	0.94 U	-	-	0.47	0.97 U
Biphenyl	mg/kg	n/v	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Bis(2-Chloroethoxy)methane	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Bis(2-Chloroethyl)ether	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Bromophenyl Phenyl Ether, 4-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Butyl Benzyl Phthalate	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Caprolactam	mg/kg	n/v	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Carbazole	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Chloro-3-methyl phenol, 4-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Chloroaniline, 4-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Chloronaphthalene, 2-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Chlorophenol, 2- (ortho-Chlorophenol)	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Chlorophenyl Phenyl Ether, 4-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Chrysene	mg/kg	56[A]	-	-	-	4.0	1.5	1.3	-	-	0.75	0.97 U
Cresol, o- (Methylphenol, 2-)	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Cresol, p- (Methylphenol, 4-)	mg/kg	500$_c$[A]	-	-	-	3.8 U	1.8 U	1.8 U	-	-	0.40 U	1.9 U
Dibenzo(a,h)anthracene	mg/kg	0.56[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Dibenzofuran	mg/kg	350[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Dibutyl Phthalate (DBP)	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Dichlorobenzidine, 3,3'-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Dichlorophenol, 2,4-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Diethyl Phthalate	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Dimethyl Phthalate	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Dimethylphenol, 2,4-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Dinitro-o-cresol, 4,6-	mg/kg	500$_c$[A]	-	-	-	3.8 U	1.8 U	1.8 U	-	-	0.40 U	1.9 U
Dinitrophenol, 2,4-	mg/kg	500$_c$[A]	-	-	-	3.8 U	1.8 U	1.8 U	-	-	0.40 U	1.9 U
Dinitrotoluene, 2,4-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Dinitrotoluene, 2,6-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Di-n-Octyl phthalate	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Fluoranthene	mg/kg	500$_c$[A]	-	-	-	8.5	3.1	2.6	-	-	1.4	2.1
Fluorene	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Hexachlorobenzene	mg/kg	6[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Hexachlorocyclopentadiene	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Hexachloroethane	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Indeno(1,2,3-cd)pyrene	mg/kg	5.6[A]	-	-	-	2.1	0.95 U	0.94 U	-	-	0.45	0.97 U
Isophorone	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Methylnaphthalene, 2-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Naphthalene	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Nitroaniline, 2-	mg/kg	500$_c$[A]	-	-	-	3.8 U	1.8 U	1.8 U	-	-	0.40 U	1.9 U
Nitroaniline, 3-	mg/kg	500$_c$[A]	-	-	-	3.8 U	1.8 U	1.8 U	-	-	0.40 U	1.9 U
Nitroaniline, 4-	mg/kg	500$_c$[A]	-	-	-	3.8 U	1.8 U	1.8 U	-	-	0.40 U	1.9 U
Nitrobenzene	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Nitrophenol, 2-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Nitrophenol, 4-	mg/kg	500$_c$[A]	-	-	-	3.8 U	1.8 U	1.8 U	-	-	0.40 U	1.9 U
N-Nitrosodi-n-Propylamine	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
n-Nitrosodiphenylamine	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Pentachlorophenol	mg/kg	6.7[A]	-	-	-	3.8 U	1.8 U	1.8 U	-	-	0.40 U	1.9 U
Phenanthrene	mg/kg	500$_c$[A]	-	-	-	4.6	1.3	1.2	-	-	0.45	1.5
Phenol	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Pyrene	mg/kg	500$_c$[A]	-	-	-	6.2	2.3	2.0	-	-	1.1	1.6
Trichlorophenol, 2,4,5-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U
Trichlorophenol, 2,4,6-	mg/kg	500$_c$[A]	-	-	-	2.0 U	0.95 U	0.94 U	-	-	0.21 U	0.97 U

Table 1
Summary of Soil Sample Analysis Results, Cover System Pre-Design Investigation
Former AMSF Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

			SOUTH SIDE SAMPLES						WEST SIDE SAMPLES			
Sample Location			**SS-SS-2**	**SS-SS-5**		**Composite of: SS-SS-1, -2, -3, -4 and -5**			**WS-SS-2**	**WS-SS-5**	**Composite of: WS-SS-1, -2, -3, -4 and -5**	
Sample Date			**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**	**13-Sep-19**
Sample ID			**AMSF-CS-SS-SS-G2**	**AMSF-CS-SS-SS-G1**	**AMSF-CS-DUP-SS-G1**	**AMSF-CS-SS-SS-C1**	**AMSF-CS-SS-SS-C2**	**AMSF-CS-DUP-SS-C2**	**AMSF-CS-WS-SS-G1**	**AMSF-CS-WS-SS-G2**	**AMSF-CS-WS-SS-C1**	**AMSF-CS-WS-SS-C2**
Sample Depth			**2 - 6 in**	**2 - 6 in**	**2 - 6 in**	**0 - 2 in**	**2 - 12 in**	**2 - 12 in**	**2 - 6 in**	**2 - 12 in**	**0 - 2 in**	**2 - 12 in**
Sampling Company			**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**	**STANTEC**
Laboratory			**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**	**TALBU**
Laboratory Work Order			**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**	**480-159204-1**
Laboratory Sample ID			**480-159204-2**	**480-159204-1**	**480-159204-5**	**480-159204-3**	**480-159204-4**	**480-159204-8**	**480-159204-19**	**480-159204-20**	**480-159204-21**	**480-159204-22**
Sample Type	**Units**	**NYSDEC-Part 375**			**Field Duplicate**			**Field Duplicate**				
Volatile Organic Compounds												
Acetone	mg/kg	500$_c$[A]	0.027 U	0.027 U	0.027 U	-	-	-	0.028 U	0.028 U	-	-
Benzene	mg/kg	44[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Bromodichloromethane	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Bromoform (Tribromomethane)	mg/kg	500$_c$[A]	0.0053 U *	0.0054 U *	0.0054 U *	-	-	-	0.0055 U *	0.0055 U *	-	-
Bromomethane (Methyl bromide)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Carbon Disulfide	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Carbon Tetrachloride (Tetrachloromethane)	mg/kg	22[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Chlorobenzene (Monochlorobenzene)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Chloroethane (Ethyl Chloride)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Chloroform (Trichloromethane)	mg/kg	350[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Chloromethane	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Cyclohexane	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dibromochloromethane	mg/kg	500$_c$[A]	0.0053 U *	0.0054 U *	0.0054 U *	-	-	-	0.0055 U *	0.0055 U *	-	-
Dichlorobenzene, 1,2-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichlorobenzene, 1,3-	mg/kg	280[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichlorobenzene, 1,4-	mg/kg	130[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichlorodifluoromethane (Freon 12)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichloroethane, 1,1-	mg/kg	240[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichloroethane, 1,2-	mg/kg	30[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichloroethene, 1,1-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichloroethene, cis-1,2-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichloroethene, trans-1,2-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichloropropane, 1,2-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichloropropene, cis-1,3-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Dichloropropene, trans-1,3-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Ethyl Acetate	mg/kg	n/v	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Ethylbenzene	mg/kg	390[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Hexanone, 2- (Methyl Butyl Ketone)	mg/kg	500$_c$[A]	0.027 U	0.027 U	0.027 U	-	-	-	0.028 U	0.028 U	-	-
Isopropylbenzene	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Methyl Acetate	mg/kg	500$_c$[A]	0.027 U	0.027 U	0.027 U	-	-	-	0.028 U	0.028 U	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	mg/kg	500$_c$[A]	0.027 U	0.027 U	0.027 U	-	-	-	0.028 U	0.028 U	-	-
Methyl Isobutyl Ketone (MIBK)	mg/kg	500$_c$[A]	0.027 U	0.027 U	0.027 U	-	-	-	0.028 U	0.028 U	-	-
Methyl tert-butyl ether (MTBE)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Methylcyclohexane	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Methylene Chloride (Dichloromethane)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Styrene	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Tetrachloroethane, 1,1,2,2-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Tetrachloroethene (PCE)	mg/kg	150[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Toluene	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Trichlorobenzene, 1,2,4-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Trichloroethane, 1,1,1-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Trichloroethane, 1,1,2-	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Trichloroethene (TCE)	mg/kg	200[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Trichlorofluoromethane (Freon 11)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Trichlorotrifluoroethane (Freon 113)	mg/kg	500$_c$[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Vinyl Chloride	mg/kg	13[A]	0.0053 U	0.0054 U	0.0054 U	-	-	-	0.0055 U	0.0055 U	-	-
Xylenes, Total	mg/kg	500$_c$[A]	0.011 U	0.011 U	0.011 U	-	-	-	0.011 U	0.011 U	-	-

Notes:

NYSDEC-Part 375	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)	[k]	This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts).
[A]	Protection of Human Health - Commercial SCO	[o]	Standard is applicable to total PCBs, and the individual Aroclors should be added for comparison.
6.5[A]	Concentration exceeds the indicated standard.	*	Indicates analysis is not within the quality control limits.
15.2	Measured concentration did not exceed the indicated standard.	B	Indicates analyte was found in associated blank as well as in the sample.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.	F1	MS and/or MSD Recovery is outside acceptance limits.
n/v	No standard/guideline value.	F2	MS/MSD RPD exceeds control limits.
-	Parameter not analyzed.	J	The reported result is an estimated value.
[c]	The SCOs for commercial use were capped at a maximum value of 500 mg/kg.	J+	The analyte was positively identified; the result is an estimated quantity that may be biased high.
[e]	The SCOS for metals were capped at a maximum value of 10,000 mg/kg.	ND	Not detected.
[i]	The SCO is considered to be met if the total for all species of this contaminant is below the SCO.	UJ	Indicates estimated non-detect.
[j]	This SCO is the sum of endosulfan I, endosulfan II, and endosulfan sulfate.		

Table 2
Proposed Soil Samplling Summary
Cover System IRM Work Plan
Former AMSF Facility BCP Site (C828101)
12 Pixley Industrial Parkway, Gates, New York

Sample Information					Analyses						
Location type	Sample Type	Sample Matrix	Sample Depth (inches)	Estimated number of samples	PAHs[1]	VOCs[2]	SVOCs[3]	Metals[4]	PCBs[5]	Pesticides[6]	Cyanide[7]
New Parking Lot Area	Grab	Soil	0 - 16	3		x					
	Composite	Soil	0 - 16	1			x	x	x	x	x
Cover System Lawn Areas	Initial Composites	Soil	0 - 2	8	x						
		Soil	2 - 12	8	x						
	Follow-up Discrete Grab Samples	Soil	0 - 2	Up to 23 [8]	x						
		Soil	2 - 12	Up to 23 [8]	x						
Off-site source of imported backfill	Grab	Soil	From source site stockpile	TBD [9]		x					
	Composite	Soil		TBD [9]			x	x	x	x	x
Post-excavation Documentation Samples	Grab	Soil	Excavation sidewall midpoint	TBD [10]	x						

Notes

[1] PAH sub-set of NYSDEC Part 375-6.8(b) SVOCs by USEPA Method 8270.

[2] Part 375-6.8(b) VOCs by USEPA Method 8260.

[3] Part 375-6.8(b) SVOCs by USEPA Method 8270.

[4] Part 375-6.8(b) Metals* by USEPA Methods 6010/7470/7471 (* - including total Cr but excluding trivalent and hexavalent Cr).

[5] PCBs by USEPA Method 8082.

[6] Part 375-6.8(b) Pesticides by USEPA Method 8081.

[7] Total Cyanide by USEPA Method 9012.

[8] To be determined by the number of initial composites that are found to exhibit exceedances of the Restricted Commercial SCOs.

[9] To be determined in accordance with DER-10 Table 5.4(e) 10 and based on the anticipated volume of backfill to be imported.

[10] To be determined based on the lateral dimensions and configuration of soil removal areas, with one sample for every 30 feet of sidewall along those sidewalls which do not abut the building, a sidewalk, a driveway or a parking lot.

APPENDIX A

Summary of Previous Investigations and Environmental Conditions

PREVIOUS INVESTIGATIONS AND ENVIRONMENTAL CONDITIONS

Previous investigation and remedial activities completed at the Site prior to and during the BCP RI program are described below in chronological order. The Cover System Pre-Design Investigation, which is the component of the BCP RI program which has the most relevance for the development of this Cover System IRM Work Plan, is described in Section 1.3.2.1 of the work plan.

Due-Diligence Investigations - 1990s

An initial assessment of the environmental history of the Site was performed in 1991 on behalf of Gleason Corporation. Related investigation of environmental conditions in exterior areas outside the facility building were conducted through 1994. The results of these investigations identified the presence of contamination of Site groundwater by 1,1,1-trichloroethane (1,1,1-TCA), a chlorinated VOC commonly used as a solvent in industrial degreasing operations. The highest levels of contamination were found at a well located at the northwest corner of the Site, and this occurrence was investigated further on behalf of ITT Corporation, the owner of the adjacent property to the west, as described below.

The 1990s-era investigations conducted for Gleason also identified contamination of groundwater by much lower concentrations of tetrachloroethylene, a chlorinated VOC commonly used as a degreasing or dry-cleaning solvent (also known as tetrachloroethene or perchloroethylene, and commonly abbreviated as PERC or PCE), was identified in groundwater along the southern boundary of the Site. Four occurrences of soil contamination identified at the Site were addressed in 1994 with remedial actions to remove the contaminated soil.

ITT Site RI/FS

The west boundary of the Site adjoins the site of the ITT Corporation Former Rochester Form Machine Facility located at 30 Pixley Industrial Parkway (the ITT or RFM site), an inactive hazardous waste site (NYSDEC Site # 828112). The ITT site, an adjacent portion of the movie theater parcel to the north, and the west/northwest portion of the Site (that portion of the Site property which is adjacent to the northeast corner of the ITT site) have been the subject of a Remedial Investigation (RI) and Feasibility Study (FS) program implemented by ITT under the oversight of NYSDEC. The focus of the ITT site RI/FS was contamination by 1,1,1-TCA and related VOCs related to past releases from degreasing operations at the ITT site. Data from the ITT site RI indicate that bedrock, groundwater and soil vapor in areas of the Site which are downgradient of the ITT site[3] have been impacted by chlorinated solvent contamination, with 1,1,1-TCA being the principal contaminant. In Operable Unit 1 (OU-1), the northwest portion of the Site, contamination of the bedrock matrix by chlorinated VOCs appears to act as a source for VOC contamination in Site groundwater. The contamination of the bedrock matrix was found to extend

[3] At most times, the direction of shallow groundwater flow along the western Site boundary is generally eastward from the ITT site towards the AMSF Site. However, during periods immediately following significant rain events, a temporary pattern of flow develops in the area immediately surrounding the stormwater recharge well (RW-2) located in the northwest corner of the AMSF Site. The groundwater flow direction during and immediately following significant rain events is radially outward from the recharge well.

vertically from the shallow to the deeper bedrock horizons intersected by the 149-foot deep stormwater recharge well (RW-2) located in the northwest corner of the Site.

In April 2009, ITT detected elevated concentrations of PCE in sub-slab vapor beneath the northeastern portion of the AMSF building when it performed an assessment of the potential for soil-vapor intrusion (SVI) in the AMSF building performed as part of the ITT RI. Historical records for the Site identified a degreaser that had been located in that portion of the AMSF facility during AMSF operations. The 2009 SVI data indicated a need for further investigation of the former degreaser area.

Remedial Investigation of the Site (the Former AMSF Site RI)

The need for further investigation of the subsurface conditions in the area of the former AMSF degreaser was the impetus for MFP to undertake an RI at the Site under the BCP. MFP applied as a Volunteer under New York State's BCP and the Site was admitted into the BCP by NYSDEC in July 2011.

The BCP RI was initiated in March 2012 and completed in December 2015. The findings of the RI concerning the nature and extent of contamination at the Site were as follows:

Soil

Occurrences of soil contamination exceeding NYSDEC's Soil Cleanup Objectives (SCOs) for protection of public health at commercial or industrial use sites were not identified at the Site.

VOC contamination exceeding NYSDEC's SCOs for protection of unrestricted site use (UU SCOs) and protection of groundwater (POGW SCOs) were detected in three areas of the Site:

- Former Degreaser Area - Area of Concern AOC 1
- Former Waste Storage Area B – AOC 5B
- Former Paint Shop Area - AOC 6

All three areas are within the footprint of the Site building, and the contaminated soil is therefore covered by and contained beneath the building floor slab. In each area, the water table occurs below the top of bedrock. The cap provided by the floor slab, the unsaturated condition of the soil profile and the contaminant concentrations in both soil and groundwater together indicate that the soil contamination in these areas is unlikely to pose health risks to site workers or others from direct contact or ingestion or to be contributing to groundwater contamination at the Site.

The occurrence of benzo(a)pyrene in surface soil in the lawn areas located adjacent to facility parking areas and roadways on the east and south sides of the Site was identified after completion of the RI during the cover system pre-design investigation. The activities and findings of the cover system pre-design investigation are described in Section 1.3.2.1 of the work plan.

Groundwater

Chlorinated VOCs are present in Site groundwater at concentrations that exceed NYSDEC's groundwater quality standards in the shallow-bedrock zone across the entire Site and are also present in the intermediate- and deep-bedrock zones.

Concentrations of 1,1,1-TCA and the chlorinated VOCs which are the daughter products of the degradation of 1,1,1-TCA in the environment (including principally 1,1-dichloroethane and 1,1-dichloroethene) are highest in OU-1, located in the upgradient northwest corner of the Site. 1,1,1-TCA-related contamination above standards extends from OU-1 beneath the building to the eastern, downgradient Site boundary. Contamination by PCE and its degradation daughter products (including principally trichloroethene and cis-1,2-dichloroethene) is present at lower concentrations, with the highest levels found in the area of the former degreaser in AOC 1 and with exceedances of standards extending to the eastern Site boundary. As a BCP Volunteer, MFP was not responsible for delineation of the extent of off-Site groundwater contamination, and therefore groundwater sampling was not performed on the adjacent properties located east of the Site during the Site RI.

Soil Vapor

The results of the RI indicated the potential for chlorinated VOCs present in the subsurface at the Site to migrate by soil vapor intrusion (SVI) from below the floor of the facility building into the air inside the building. Concentrations of TCA, PCE and/or one or more related chlorinated VOC daughter products were detected in sub-slab vapor and indoor air sample pairs collected at locations throughout the building. Concentrations in sub-slab vapor at most of the locations sampled, including those locations throughout the high-ceiling sections of the building originally occupied by AMSF manufacturing operations, have exceeded 'No further action' SVI evaluation guidance values established by the New York State Department of Health (NYSDOH)[4]. The locations where the data met the NYSDOH guidance levels for 'No further action' recommended included:

- an office space in the Storage Shed Addition located on the west side of the building,
- an office area in the former Paint Storage Room addition located on the south side of the southwest corner of the building, and
- two locations in the office areas of the Original Administration Building section located at the southeast side of the facility.

Interim Remedial Measure Site Management Plan (IRM SMP)

An IRM Site Management Plan (IRM SMP, Stantec 2016) was instituted in 2016 which specified a monitoring program to be performed annually to assess whether the chlorinated VOCs (CVOCs) that are

[4] The guidance values are those specified in the May 2017 matrices for assessing whether indoor air and sub-slab vapor sample analysis results would lead to a recommendation by NYSDOH for further action to address the potential for SVI at a site. The matrices are an updated element of the NYSDOH "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH, October 2006).

present in the subsurface at the Site are intruding from below the floor into the air inside the building. The monitoring is performed during each heating season. The annual monitoring program specified in the IRM SMP involves:

- an inspection of the building to review conditions of the floor slab,
- a review of activities and operations conducted by the various occupants,
- an inventory of chemical products in use at the site, and
- collection of indoor air samples at more than 20 locations distributed throughout the entire building and covering the range of activity and occupancy conditions for each tenant's operation.

Initial IRM SMP monitoring activities were conducted in February 2016. The most recent monitoring was conducted in December 2019. Each year, results of the annual monitoring have been evaluated to determine whether other actions (actions in addition to the annual monitoring) are warranted to address potential exposure of building occupants to VOCs which may be detected in the samples.

March 2017 Sub-slab Vacuum Communication Testing

Comparison of AMSF RI sub-slab soil vapor sampling results to NYSDOH's SVI evaluation guidance criteria indicated that mitigation of the potential for SVI would be recommended for most areas of the AMSF building. Anticipating that mitigation of the potential for SVI using a sub-slab depressurization system (SSDS) was a possible option for the Site remedy, sub-slab vacuum communication testing was performed in 2017 to assess the feasibility of an SSDS approach.

This work was performed in accordance with the Revised Work Plan for Supplemental Activities dated March 2, 2017. The testing was performed with the intent of understanding the ability of the sub-slab substrate in three major sections of the building to propagate vacuum. Results of the testing were documented in AMSF RI Progress Report No. 61 (April 10, 2017).

Installation of Sub-Slab Depressurization System Components for the Excelsus Tenant Space

In late 2017 an approximately 35,000-square-foot portion of the building became vacant. The vacancy of the space, which included the former AMSF degreaser location, afforded MFP an opportunity to install SSDS suction points and risers in the space prior to occupancy by Excelsus, the current tenant in that space. A plan for installation of these SSDS components was submitted to NYSDEC in a Notification of IRM-SMP Activity letter dated January 31, 2018. The work involved construction of nine SSDS suction points and installation of related SSDS riser pipes up to a height of approximately 6 feet above floor grade. Riser pipes were capped with air-tight seals. The installation of these SSDS components was completed in February 2018 and documented in RI Progress Report No. 72 (Stantec, March 19, 2018).

Alternatives Analysis

Following completion of the RI and the implementation of the IRM SMP activities described above, an Alternatives Analysis (AA) was performed to evaluate remedial options for addressing the conditions indicated by the findings of the RI and the IRM SMP monitoring program. Among other criteria, remedial alternatives were screened under the assumption that an institutional control will be implemented that will restrict Site uses to commercial and industrial uses, the types of uses that have characterized the Site and surrounding area for the past 50 years. The AA also considered alternatives which could theoretically achieve conditions that would allow for unrestricted use of the Site relative to soil contamination.

A draft Alternatives Analysis Report (AAR) was submitted to NYSDEC for review in June 2018. The draft AAR recommended the following combination of remedial elements as the remedy for the contamination identified at the Site by the RI:

- Construction and operation of an SSDS for SVI mitigation throughout the entire building.
- Containment of VOC-contaminated soil exceeding UU and POGW SCOs by maintaining the existing building as cover in affected areas.
- Modification of an existing stormwater recharge well located in the northwest corner of the Site (recharge well RW-2) to eliminate direct recharge of stormwater into the deep bedrock horizons of the contaminated bedrock aquifer and thereby reduce the potential for mobilization and migration of VOC contaminants in these horizons.
- Development and implementation of a Site Management Plan (SMP) specifying, among other standard elements, the following:
    - an operation, maintenance & monitoring (OM&M) plan for the SSDS,
    - programs of periodic groundwater and indoor air monitoring for the Site,
    - periodic Site inspection to assess the integrity and continued effectiveness of the various components of the remedy (including the cover system), and
    - procedures for environmental monitoring during future excavations at the Site.
- Institutional Controls which will grant an environmental easement to NYSDEC, restrict future use of the Site to industrial and commercial uses, and prohibit use of Site groundwater.

The remedy recommended in the AAR also includes performance of initial SVI assessments at the buildings located on the two off-site properties (4 and 10 Pixley Industrial Parkway) adjacent to the downgradient eastern Site boundary, followed if and as necessary by additional actions such as SVI mitigation or monitoring at the off-site properties. Because MFP, as the BCP Volunteer, would not bear responsibility under BCP regulations for quantitative assessment of the potential for SVI exposures at adjacent off-Site downgradient properties, it is anticipated that this component of the recommended remedy would be undertaken by others.

2019 IRM - SSDS Installation and Modification of RW-2

An IRM was implemented in the fall of 2019 to construct the tangible components of the recommended remedy which were not already in place at the site. The IRM consisted of the following elements.

- An SSDS was installed to cover the entire building. Installation, commissioning and start-up of the SSDS were completed in October 2019, and verification of negative sub-slab pressure differential extension across the building footprint was completed in November 2019. Full-time operation of the system has continued to the present and will continue in the future.
- Plugging of the deep bedrock interval of recharge well RW-2 was completed in October 2019.

The IRM activities were completed in accordance with the IRM Work Plan dated June 28, 2019 and a Work Plan Amendment dated September 5, 2019. A Construction Completion Report (CCR) for the 2019 IRM is currently in preparation.

APPENDIX B

Laboratory Analysis Report and Data Usability Summary Report

Cover System Pre-Design Investigation Samples

Data Validation Services

120 Cobble Creek Road P. O. Box 208
North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

October 20, 2019

Thomas Wells
Stantec
61 Commercial St.
Rochester, NY 14614

RE: Validation of the Alliance, Gates, NY Site Analytical Laboratory Data
Data Usability Summary Report (DUSR)
Eurofins TestAmerica SDG No. 480-159204-1

Dear Mr. Wells:

Review has been completed for the data package generated by Eurofins pertains to samples collected 09/13/19 at the Alliance, Gates, NY site. Eight soil samples and a field duplicate were processed for TCL semivolatiles, TCL pesticides, Aroclor PCBs, TAL metals, and total cyanide. Eight soil samples and a field duplicate were processed for TCL volatiles. A rinse blank and a trip blank were also processed. The analytical methodologies are those of the USEPA SW846.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Method/Preparation Blanks
* Matrix Spike Recoveries/Duplicate Correlations
* Blind Field Duplicate Correlations
* Laboratory Control Sample (LCS)
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Serial Dilution Evaluation
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data package.

In summary, results for the samples are usable either as reported or with minor qualification.

Data completeness, accuracy, precision, representativeness, reproducibility, sensitivity, and comparability are acceptable.

Client sample identifications are attached to this text. Also included in this report are the client EDDs with recommended qualifiers/edits applied in red.

Blind Field Duplicates

The blind field duplicate evaluations were performed on AMSF-SS-SS-C2 and AMSF-SS-SS-G1. All correlations are within validation guidelines.

TCL Volatile Analyses by EPA 8260C

The matrix spikes of AMSF-CS-ES-SS-G1 show recoveries and duplicate correlations that are within validation guidelines, with the exception of the following that show low recoveries, results for which are qualified as estimated in the parent sample: 1,2,4-trichlorobenzene, 2-butanone, 2-hexanone, acetone, and methyl acetate.

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

Holding times were met. Surrogate and internal standard recoveries are compliant. Blanks show no contamination.

TCL Semivolatile Analyses by EPA8270D

The matrix spikes of AMSF-CS-ES-SS-C1 show recoveries and duplicate correlations that are within validation guidelines, with the exception of the following, results for which are qualified as estimated in the parent sample: benzo(a)anthracene, benzo(a)pyrene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, and phenanthrene.

Surrogate and internal standard recoveries are within validation guidelines. Blanks show no contamination.

Calibration standards show responses within validation action levels, with the exception of that for benzaldehyde (61%D) in the standard associated with AMSF-CS-RB-W-1. The result for that compound in that rinse blank has been qualified as estimated.

Some of the samples were diluted due to color and/or appearance. Reporting limits in those samples are elevated proportional to the dilution factor.

TCL Pesticide and Aroclor PCBs by EPA 8081 and 8082

The Aroclor 1016/1260 matrix spikes of AMSF-CS-ES-SS-C1 show recoveries and correlations within validation guidelines. The pesticide matrix spikes of that sample were diluted beyond the ability to have an applicable evaluation.

The result for a-BHC in AMSF-CS-WS-SS-C1 is qualified as estimated, with a high bias, due to elevated surrogate recoveries.

Holding times were met, and internal standard recoveries are compliant. Calibration standard responses are within validation guidelines.

Some samples were processed at dilution. This resulted in proportionally elevated reporting limits for those samples.

TAL Metals/CN Analyses by EPA 6010B, 7470A, and 9012

Matrix spikes/duplicate evaluations were performed on AMSF-CS-ES-SS-C1 and AMSF-CS-ES-SS-C2. They show recoveries and correlations within validation guidelines, with the following exceptions, which show outliers in both parent samples, and results for which are qualified as estimated in those parent samples: antimony, barium, magnesium, and potassium.

Total cyanide matrix spikes of AMSF-CS-ES-SS-C1, AMSF-CS-ES-SS-C2, and AMSF-CS-WS-SS-C1, and the laboratory duplicate of AMSF-CS-NS-SS-C2 show acceptable accuracy and precision.

The ICP serial dilution evaluation of AMSF-CS-ES-SS-C1 shows acceptable correlations.

Instrument performance was compliant.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Attachments: Validation Qualifier Definitions
Sample Identifications
Qualified Laboratory EQuIS EDDs

VALIDATION DATA QUALIFIER DEFINITIONS

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

Sample Summaries

Sample Summary

Client: Stantec Consulting Corp.
Job ID: 480-159204-1
Project/Site: Alliance BCP Site (AMSF)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-159204-1	AMSF-CS-SS-SS-G1	Solid	09/13/19 15:30	09/14/19 09:00	
480-159204-2	AMSF-CS-SS-SS-G2	Solid	09/13/19 15:30	09/14/19 09:00	
480-159204-3	AMSF-CS-SS-SS-C1	Solid	09/13/19 15:30	09/14/19 09:00	
480-159204-4	AMSF-CS-SS-SS-C2	Solid	09/13/19 15:30	09/14/19 09:00	
480-159204-5	AMSF-CS-DUP-SS-G1	Solid	09/13/19 15:40	09/14/19 09:00	
480-159204-8	AMSF-CS-DUP-SS-C2	Solid	09/13/19 15:40	09/14/19 09:00	
480-159204-9	AMSF-CS-ES-SS-G1	Solid	09/13/19 14:00	09/14/19 09:00	
480-159204-10	AMSF-CS-ES-SS-G2	Solid	09/13/19 14:00	09/14/19 09:00	
480-159204-11	AMSF-CS-ES-SS-C1	Solid	09/13/19 14:00	09/14/19 09:00	
480-159204-12	AMSF-CS-RB-W-1	Water	09/13/19 09:10	09/14/19 09:00	
480-159204-13	TRIP BLANK	Water	09/13/19 09:00	09/14/19 09:00	
480-159204-14	AMSF-CS-ES-SS-C2	Solid	09/13/19 14:00	09/14/19 09:00	
480-159204-15	AMSF-CS-NS-SS-G1	Solid	09/13/19 11:30	09/14/19 09:00	
480-159204-16	AMSF-CS-NS-SS-G2	Solid	09/13/19 11:30	09/14/19 09:00	
480-159204-17	AMSF-CS-NS-SS-C1	Solid	09/13/19 11:30	09/14/19 09:00	
480-159204-18	AMSF-CS-NS-SS-C2	Solid	09/13/19 11:30	09/14/19 09:00	
480-159204-19	AMSF-CS-WS-SS-G1	Solid	09/13/19 10:00	09/14/19 09:00	
480-159204-20	AMSF-CS-WS-SS-G2	Solid	09/13/19 10:00	09/14/19 09:00	
480-159204-21	AMSF-CS-WS-SS-C1	Solid	09/13/19 10:00	09/14/19 09:00	
480-159204-22	AMSF-CS-WS-SS-C2	Solid	09/13/19 10:00	09/14/19 09:00	

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ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-159204-1
Client Project/Site: Alliance BCP Site (AMSF)

For:
Stantec Consulting Corp.
61 Commercial Street
Rochester, New York 14614

Attn: Mrs. Katherine Nelson

Authorized for release by:
10/4/2019 3:16:56 PM

Ryan VanDette, Project Manager II
(716)504-9830
ryan.vandette@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
vs	Reported analyte concentrations are below 200 ug/kg and may be biased low due to the sample not being collected according to 5035A-L low-level specifications.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-159204-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-159204-1

Comments
No additional comments.

Receipt
The samples were received on 9/14/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-492443 recovered above the upper control limit for Chlorodibromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: AMSF-CS-SS-SS-G1 (480-159204-1), AMSF-CS-SS-SS-G2 (480-159204-2), AMSF-CS-DUP-SS-G1 (480-159204-5), AMSF-CS-ES-SS-G1 (480-159204-9), AMSF-CS-ES-SS-G2 (480-159204-10), AMSF-CS-NS-SS-G1 (480-159204-15), AMSF-CS-NS-SS-G2 (480-159204-16), AMSF-CS-WS-SS-G1 (480-159204-19) and AMSF-CS-WS-SS-G2 (480-159204-20).

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-492516 and analytical batch 480-492443 recovered outside control limits for the following analytes: Bromoform and Chlorodibromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: AMSF-CS-SS-SS-G1 (480-159204-1), AMSF-CS-SS-SS-G2 (480-159204-2), AMSF-CS-DUP-SS-G1 (480-159204-5), AMSF-CS-ES-SS-G1 (480-159204-9), AMSF-CS-ES-SS-G2 (480-159204-10), AMSF-CS-NS-SS-G1 (480-159204-15), AMSF-CS-NS-SS-G2 (480-159204-16), AMSF-CS-WS-SS-G1 (480-159204-19) and AMSF-CS-WS-SS-G2 (480-159204-20).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-492746 recovered above the upper control limit for 4-Nitrophenol and Atrazine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: AMSF-CS-RB-W-1 (480-159204-12).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-492746 recovered outside acceptance criteria, low biased, for Carbazole, Benzaldehyde, Pentachlorophenol and bis (2-chloroisopropyl) ether. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted:AMSF-CS-RB-W-1 (480-159204-12).

Method(s) 8270D: 2,4,6-Tribromophenol surrogate recovered above the upper control limit in the LCS (laboratory control sample) for preparation batch 480-492549. However, the associated samples are ND for acid extractable analytes. Therefore, re-extraction and re-analysis were not performed. The data has been reported and qualified. (LCS 480-492549/2-A)

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 480-492549 and analytical batch 480-492746 recovered outside control limits for the following analytes: Atrazine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following sample is impacted:AMSF-CS-RB-W-1 (480-159204-12).

Method(s) 8270D: The following samples were diluted due to color and appearance: AMSF-CS-SS-SS-C1 (480-159204-3), AMSF-CS-SS-SS-C2 (480-159204-4), AMSF-CS-DUP-SS-C2 (480-159204-8), AMSF-CS-ES-SS-C1 (480-159204-11), AMSF-CS-ES-SS-C1 (480-159204-11[MS]), AMSF-CS-ES-SS-C1 (480-159204-11[MSD]), AMSF-CS-ES-SS-C2 (480-159204-14), AMSF-CS-NS-SS-C1 (480-159204-17) and AMSF-CS-WS-SS-C2 (480-159204-22). Elevated reporting limits (RL) are provided.

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: AMSF-CS-SS-SS-C1 (480-159204-3), AMSF-CS-ES-SS-C1 (480-159204-11[MS]) and AMSF-CS-ES-SS-C1 (480-159204-11[MSD]). These results have been reported and qualified.

Job ID: 480-159204-1 (Continued)

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 480-493581 and analytical batch 480-493753 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-493753 recovered above the upper control limit for 2,4-Dinitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: AMSF-CS-SS-SS-C1 (480-159204-3), AMSF-CS-SS-SS-C2 (480-159204-4), AMSF-CS-DUP-SS-C2 (480-159204-8), AMSF-CS-ES-SS-C1 (480-159204-11), AMSF-CS-ES-SS-C2 (480-159204-14), AMSF-CS-NS-SS-C1 (480-159204-17), AMSF-CS-NS-SS-C2 (480-159204-18), AMSF-CS-WS-SS-C1 (480-159204-21) and AMSF-CS-WS-SS-C2 (480-159204-22).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-493753 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted:AMSF-CS-SS-SS-C1 (480-159204-3), AMSF-CS-SS-SS-C2 (480-159204-4), AMSF-CS-DUP-SS-C2 (480-159204-8), AMSF-CS-ES-SS-C1 (480-159204-11), AMSF-CS-ES-SS-C2 (480-159204-14), AMSF-CS-NS-SS-C1 (480-159204-17), AMSF-CS-NS-SS-C2 (480-159204-18), AMSF-CS-WS-SS-C1 (480-159204-21) and AMSF-CS-WS-SS-C2 (480-159204-22).

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-493581 and analytical batch 480-493753 were diluted below the method detection limit (MDL) for 2,4-Dinitrophenol and therefore percent recovery and RPD were not calculated. The associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D: The initial calibration curve analyzed in analytical batch 480-491423 and associated with analytical batch 480-493753 was outside method criteria for the analyte 2,4-Dinitrophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for this analyte is considered an estimated concentration.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: AMSF-CS-SS-SS-C1 (480-159204-3), AMSF-CS-SS-SS-C2 (480-159204-4), AMSF-CS-DUP-SS-C2 (480-159204-8), AMSF-CS-ES-SS-C1 (480-159204-11), AMSF-CS-ES-SS-C2 (480-159204-14), AMSF-CS-NS-SS-C1 (480-159204-17) and AMSF-CS-NS-SS-C2 (480-159204-18). As such, surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: AMSF-CS-ES-SS-C1 (480-159204-11[MS]) and AMSF-CS-ES-SS-C1 (480-159204-11[MSD]). As such, spike and surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method(s) 8081B: For method 8081, the recovery of the one surrogate in samples AMSF-CS-WS-SS-C1 (480-159204-21) exceeds quality control limits due to the sample matrix. The recovery of the secondary surrogate is within quality control criteria; no corrective action is required.

Method(s) 8081B: Surrogate recovery for the following sample was outside the upper control limit: AMSF-CS-WS-SS-C2 (480-159204-22). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8081B: All primary data for analytical batch 492824 is reported from the RTX-CLPI column, while all primary data for analytical batches 493205 and 493333 is reported from the RTX-CLPII column.

Method(s) 8082A: The continuing calibration verification (CCV) associated with batch 480-494083 recovered above the upper control limit for PCB-1232 and PCB-1248. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: AMSF-CS-RB-W-1 (480-159204-12).

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Job ID: 480-159204-1 (Continued)

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

Method(s) 8082A: All primary data for analytical batches 493822 and 494083 is reported from the ZB-5 column.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010C: The low level continuing calibration verification (CCVL 480-492839/29) recovered above the upper control limit for Total Zinc. The samples associated with this CCVL were either less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples AMSF-CS-RB-W-1 (480-159204-12), (LCS 480-492544/2-A), (MB 480-492544/1-A), (480-159204-E-12-B MS), (480-159204-E-12-C MSD), (480-159204-E-12-A PDS) and (480-159204-E-12-A SD ^5) was not performed.

Method(s) 6010C: The method blank for preparation batch 480-492504 and analytical batch 480-493083 contained Total Manganese above the reporting limit (RL). Associated samples AMSF-CS-SS-SS-C1 (480-159204-3), AMSF-CS-SS-SS-C2 (480-159204-4), AMSF-CS-DUP-SS-C2 (480-159204-8), AMSF-CS-ES-SS-C1 (480-159204-11), AMSF-CS-ES-SS-C2 (480-159204-14), AMSF-CS-NS-SS-C1 (480-159204-17), AMSF-CS-NS-SS-C2 (480-159204-18), AMSF-CS-WS-SS-C1 (480-159204-21) and AMSF-CS-WS-SS-C2 (480-159204-22) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 6010C: The serial dilution and post spike (480-159204-A-11-A PDS) and (480-159204-A-11-A SD ^5), associated with batch 480-492504, exceeded the quality control limits for Total Calcium and Manganese. Sample matrix is suspected, therefore, no corrective action was necessary.

Method(s) 6010C: The serial dilution (480-159204-A-11-A SD ^5) associated with batch 480-493083, exhibited results outside the quality control limits for Total Barium, Magnesium, and Zinc. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Method(s) 6010C: The serial dilution and post spike (480-159204-A-11-A PDS) and (480-159204-A-11-A SD ^5), associated with batch 4840-492504, exceeded the quality control limits for Total Iron. Sample matrix is suspected, therefore, no corrective action was necessary.

Method(s) 6010C: The recovery of post spike, (480-159204-A-11-A PDS), associated with batch 480-493465, exhibited a result outside quality control limits for Total Aluminum. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) 9012B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-494182 and analytical batch 480-494364 recovered outside control limits for the following analytes: Cyanide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. AMSF-CS-SS-SS-C1 (480-159204-3), AMSF-CS-SS-SS-C2 (480-159204-4), AMSF-CS-DUP-SS-C2 (480-159204-8), AMSF-CS-ES-SS-C1 (480-159204-11), AMSF-CS-ES-SS-C2 (480-159204-14) and AMSF-CS-NS-SS-C1 (480-159204-17)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method(s) 3550C: For method 8081, organic prep batch 492848, the following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: AMSF-CS-SS-SS-C1 (480-159204-3), AMSF-CS-SS-SS-C2 (480-159204-4), AMSF-CS-DUP-SS-C2 (480-159204-8), AMSF-CS-ES-SS-C1 (480-159204-11), AMSF-CS-ES-SS-C1 (480-159204-11[MS]), AMSF-CS-ES-SS-C1 (480-159204-11[MSD]), AMSF-CS-ES-SS-C2 (480-159204-14), AMSF-CS-NS-SS-C1 (480-159204-17), AMSF-CS-NS-SS-C2 (480-159204-18), AMSF-CS-WS-SS-C1 (480-159204-21) and AMSF-CS-WS-SS-C2 (480-159204-22).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-G1 — Lab Sample ID: 480-159204-1

No Detections.

Client Sample ID: AMSF-CS-SS-SS-G2 — Lab Sample ID: 480-159204-2

No Detections.

Client Sample ID: AMSF-CS-SS-SS-C1 — Lab Sample ID: 480-159204-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	3.1		2.0		mg/Kg	10	☼	8270D	Total/NA
Benzo(a)pyrene	3.5		2.0		mg/Kg	10	☼	8270D	Total/NA
Benzo(b)fluoranthene	4.8		2.0		mg/Kg	10	☼	8270D	Total/NA
Benzo(g,h,i)perylene	2.4		2.0		mg/Kg	10	☼	8270D	Total/NA
Benzo(k)fluoranthene	2.0		2.0		mg/Kg	10	☼	8270D	Total/NA
Chrysene	4.0		2.0		mg/Kg	10	☼	8270D	Total/NA
Fluoranthene	8.5		2.0		mg/Kg	10	☼	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	2.1		2.0		mg/Kg	10	☼	8270D	Total/NA
Phenanthrene	4.6		2.0		mg/Kg	10	☼	8270D	Total/NA
Pyrene	6.2		2.0		mg/Kg	10	☼	8270D	Total/NA
Aluminum	14500		11.8		mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.7		2.4		mg/Kg	1	☼	6010C	Total/NA
Barium	67.4		0.59		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.58		0.24		mg/Kg	1	☼	6010C	Total/NA
Calcium	6880		59.0		mg/Kg	1	☼	6010C	Total/NA
Chromium	43.3		0.59		mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.2		0.59		mg/Kg	1	☼	6010C	Total/NA
Copper	17.0		1.2		mg/Kg	1	☼	6010C	Total/NA
Iron	18400		11.8		mg/Kg	1	☼	6010C	Total/NA
Lead	24.5		1.2		mg/Kg	1	☼	6010C	Total/NA
Magnesium	4830		23.6		mg/Kg	1	☼	6010C	Total/NA
Manganese	451	B	0.24		mg/Kg	1	☼	6010C	Total/NA
Nickel	16.0		5.9		mg/Kg	1	☼	6010C	Total/NA
Potassium	2490		35.4		mg/Kg	1	☼	6010C	Total/NA
Sodium	191		165		mg/Kg	1	☼	6010C	Total/NA
Vanadium	29.1		0.59		mg/Kg	1	☼	6010C	Total/NA
Zinc	101		2.4		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.049		0.024		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: AMSF-CS-SS-SS-C2 — Lab Sample ID: 480-159204-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	1.3		0.95		mg/Kg	5	☼	8270D	Total/NA
Benzo(a)pyrene	1.4		0.95		mg/Kg	5	☼	8270D	Total/NA
Benzo(b)fluoranthene	2.1		0.95		mg/Kg	5	☼	8270D	Total/NA
Benzo(g,h,i)perylene	1.1		0.95		mg/Kg	5	☼	8270D	Total/NA
Chrysene	1.5		0.95		mg/Kg	5	☼	8270D	Total/NA
Fluoranthene	3.1		0.95		mg/Kg	5	☼	8270D	Total/NA
Phenanthrene	1.3		0.95		mg/Kg	5	☼	8270D	Total/NA
Pyrene	2.3		0.95		mg/Kg	5	☼	8270D	Total/NA
Aluminum	16100		11.2		mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.3		2.2		mg/Kg	1	☼	6010C	Total/NA
Barium	73.8		0.56		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.63		0.22		mg/Kg	1	☼	6010C	Total/NA
Calcium	12200		55.9		mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-C2 (Continued) — Lab Sample ID: 480-159204-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	20.1		0.56		mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.5		0.56		mg/Kg	1	☼	6010C	Total/NA
Copper	17.2		1.1		mg/Kg	1	☼	6010C	Total/NA
Iron	18400		11.2		mg/Kg	1	☼	6010C	Total/NA
Lead	30.5		1.1		mg/Kg	1	☼	6010C	Total/NA
Magnesium	7540		22.4		mg/Kg	1	☼	6010C	Total/NA
Manganese	367	B	0.22		mg/Kg	1	☼	6010C	Total/NA
Nickel	17.4		5.6		mg/Kg	1	☼	6010C	Total/NA
Potassium	2760		33.6		mg/Kg	1	☼	6010C	Total/NA
Sodium	601		157		mg/Kg	1	☼	6010C	Total/NA
Vanadium	31.0		0.56		mg/Kg	1	☼	6010C	Total/NA
Zinc	88.9		2.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.050		0.022		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: AMSF-CS-DUP-SS-G1 — Lab Sample ID: 480-159204-5

No Detections.

Client Sample ID: AMSF-CS-DUP-SS-C2 — Lab Sample ID: 480-159204-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	1.0		0.94		mg/Kg	5	☼	8270D	Total/NA
Benzo(a)pyrene	1.2		0.94		mg/Kg	5	☼	8270D	Total/NA
Benzo(b)fluoranthene	1.6		0.94		mg/Kg	5	☼	8270D	Total/NA
Chrysene	1.3		0.94		mg/Kg	5	☼	8270D	Total/NA
Fluoranthene	2.6		0.94		mg/Kg	5	☼	8270D	Total/NA
Phenanthrene	1.2		0.94		mg/Kg	5	☼	8270D	Total/NA
Pyrene	2.0		0.94		mg/Kg	5	☼	8270D	Total/NA
Aluminum	14600		11.4		mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.3		2.3		mg/Kg	1	☼	6010C	Total/NA
Barium	65.9		0.57		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.54		0.23		mg/Kg	1	☼	6010C	Total/NA
Calcium	15300		57.2		mg/Kg	1	☼	6010C	Total/NA
Chromium	17.7		0.57		mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.9		0.57		mg/Kg	1	☼	6010C	Total/NA
Copper	14.1		1.1		mg/Kg	1	☼	6010C	Total/NA
Iron	16500		11.4		mg/Kg	1	☼	6010C	Total/NA
Lead	24.3		1.1		mg/Kg	1	☼	6010C	Total/NA
Magnesium	9710		22.9		mg/Kg	1	☼	6010C	Total/NA
Manganese	412	B	0.23		mg/Kg	1	☼	6010C	Total/NA
Nickel	14.8		5.7		mg/Kg	1	☼	6010C	Total/NA
Potassium	2390		34.3		mg/Kg	1	☼	6010C	Total/NA
Sodium	373		160		mg/Kg	1	☼	6010C	Total/NA
Vanadium	27.7		0.57		mg/Kg	1	☼	6010C	Total/NA
Zinc	70.1		2.3		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.054		0.023		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: AMSF-CS-ES-SS-G1 — Lab Sample ID: 480-159204-9

No Detections.

Client Sample ID: AMSF-CS-ES-SS-G2 — Lab Sample ID: 480-159204-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-C1 — Lab Sample ID: 480-159204-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	2.3	F2 F1	0.97		mg/Kg	5	☼	8270D	Total/NA
Benzo(a)pyrene	2.3	F2 F1	0.97		mg/Kg	5	☼	8270D	Total/NA
Benzo(b)fluoranthene	3.3	F2	0.97		mg/Kg	5	☼	8270D	Total/NA
Benzo(g,h,i)perylene	1.7	F2	0.97		mg/Kg	5	☼	8270D	Total/NA
Benzo(k)fluoranthene	1.2	F2	0.97		mg/Kg	5	☼	8270D	Total/NA
Chrysene	2.6	F2 F1	0.97		mg/Kg	5	☼	8270D	Total/NA
Fluoranthene	5.5	F2 F1	0.97		mg/Kg	5	☼	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	1.3	F2 F1	0.97		mg/Kg	5	☼	8270D	Total/NA
Phenanthrene	3.1	F2 F1	0.97		mg/Kg	5	☼	8270D	Total/NA
Pyrene	4.3	F1	0.97		mg/Kg	5	☼	8270D	Total/NA
Aluminum	13500		12.1		mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.0		2.4		mg/Kg	1	☼	6010C	Total/NA
Barium	61.9	F1	0.61		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.51		0.24		mg/Kg	1	☼	6010C	Total/NA
Calcium	9210	F2 F1	60.6		mg/Kg	1	☼	6010C	Total/NA
Chromium	16.5		0.61		mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.5		0.61		mg/Kg	1	☼	6010C	Total/NA
Copper	11.2		1.2		mg/Kg	1	☼	6010C	Total/NA
Iron	15800		12.1		mg/Kg	1	☼	6010C	Total/NA
Lead	13.5		1.2		mg/Kg	1	☼	6010C	Total/NA
Magnesium	4830	F1 F2	24.2		mg/Kg	1	☼	6010C	Total/NA
Manganese	404	B	0.24		mg/Kg	1	☼	6010C	Total/NA
Nickel	13.7		6.1		mg/Kg	1	☼	6010C	Total/NA
Potassium	2460	F1	36.3		mg/Kg	1	☼	6010C	Total/NA
Vanadium	25.9		0.61		mg/Kg	1	☼	6010C	Total/NA
Zinc	52.4		2.4		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.041		0.024		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: AMSF-CS-RB-W-1 — Lab Sample ID: 480-159204-12

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-159204-13

No Detections.

Client Sample ID: AMSF-CS-ES-SS-C2 — Lab Sample ID: 480-159204-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	1.2		0.95		mg/Kg	5	☼	8270D	Total/NA
Benzo(a)pyrene	1.3		0.95		mg/Kg	5	☼	8270D	Total/NA
Benzo(b)fluoranthene	1.6		0.95		mg/Kg	5	☼	8270D	Total/NA
Chrysene	1.6		0.95		mg/Kg	5	☼	8270D	Total/NA
Fluoranthene	3.1		0.95		mg/Kg	5	☼	8270D	Total/NA
Phenanthrene	1.8		0.95		mg/Kg	5	☼	8270D	Total/NA
Pyrene	2.4		0.95		mg/Kg	5	☼	8270D	Total/NA
Aluminum	14800		10.8		mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.0		2.2		mg/Kg	1	☼	6010C	Total/NA
Barium	65.1	F1	0.54		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.53		0.22		mg/Kg	1	☼	6010C	Total/NA
Calcium	10000		54.1		mg/Kg	1	☼	6010C	Total/NA
Chromium	17.6		0.54		mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.9		0.54		mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AMSF-CS-ES-SS-C2 (Continued) — Lab Sample ID: 480-159204-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	8.6		1.1		mg/Kg	1	☼	6010C	Total/NA
Iron	16700		10.8		mg/Kg	1	☼	6010C	Total/NA
Lead	14.9		1.1		mg/Kg	1	☼	6010C	Total/NA
Magnesium	7250	F1 F2	21.6		mg/Kg	1	☼	6010C	Total/NA
Manganese	434	B F2	0.22		mg/Kg	1	☼	6010C	Total/NA
Nickel	13.8		5.4		mg/Kg	1	☼	6010C	Total/NA
Potassium	2310	F1	32.4		mg/Kg	1	☼	6010C	Total/NA
Vanadium	28.0		0.54		mg/Kg	1	☼	6010C	Total/NA
Zinc	52.2		2.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.041		0.022		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: AMSF-CS-NS-SS-G1 — Lab Sample ID: 480-159204-15

No Detections.

Client Sample ID: AMSF-CS-NS-SS-G2 — Lab Sample ID: 480-159204-16

No Detections.

Client Sample ID: AMSF-CS-NS-SS-C1 — Lab Sample ID: 480-159204-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(b)fluoranthene	1.2		0.91		mg/Kg	5	☼	8270D	Total/NA
Chrysene	0.95		0.91		mg/Kg	5	☼	8270D	Total/NA
Fluoranthene	1.8		0.91		mg/Kg	5	☼	8270D	Total/NA
Pyrene	1.4		0.91		mg/Kg	5	☼	8270D	Total/NA
Aluminum	9170		11.1		mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.8		2.2		mg/Kg	1	☼	6010C	Total/NA
Barium	43.7		0.55		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.37		0.22		mg/Kg	1	☼	6010C	Total/NA
Calcium	35700		55.4		mg/Kg	1	☼	6010C	Total/NA
Chromium	12.3		0.55		mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.4		0.55		mg/Kg	1	☼	6010C	Total/NA
Copper	9.5		1.1		mg/Kg	1	☼	6010C	Total/NA
Iron	13200		11.1		mg/Kg	1	☼	6010C	Total/NA
Lead	10.9		1.1		mg/Kg	1	☼	6010C	Total/NA
Magnesium	13100		22.1		mg/Kg	1	☼	6010C	Total/NA
Manganese	332	B	0.22		mg/Kg	1	☼	6010C	Total/NA
Nickel	11.8		5.5		mg/Kg	1	☼	6010C	Total/NA
Potassium	2530		33.2		mg/Kg	1	☼	6010C	Total/NA
Vanadium	20.2		0.55		mg/Kg	1	☼	6010C	Total/NA
Zinc	34.9		2.2		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: AMSF-CS-NS-SS-C2 — Lab Sample ID: 480-159204-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	0.29		0.18		mg/Kg	1	☼	8270D	Total/NA
Benzo(a)pyrene	0.36		0.18		mg/Kg	1	☼	8270D	Total/NA
Benzo(b)fluoranthene	0.51		0.18		mg/Kg	1	☼	8270D	Total/NA
Benzo(g,h,i)perylene	0.32		0.18		mg/Kg	1	☼	8270D	Total/NA
Benzo(k)fluoranthene	0.27		0.18		mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.44		0.18		mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	0.79		0.18		mg/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AMSF-CS-NS-SS-C2 (Continued) — Lab Sample ID: 480-159204-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno(1,2,3-cd)pyrene	0.28		0.18		mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.27		0.18		mg/Kg	1	☼	8270D	Total/NA
Pyrene	0.60		0.18		mg/Kg	1	☼	8270D	Total/NA
Aluminum	9310		10.6		mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.6		2.1		mg/Kg	1	☼	6010C	Total/NA
Barium	46.0		0.53		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.39		0.21		mg/Kg	1	☼	6010C	Total/NA
Calcium	56100		52.8		mg/Kg	1	☼	6010C	Total/NA
Chromium	12.8		0.53		mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.4		0.53		mg/Kg	1	☼	6010C	Total/NA
Copper	9.3		1.1		mg/Kg	1	☼	6010C	Total/NA
Iron	12700		10.6		mg/Kg	1	☼	6010C	Total/NA
Lead	7.7		1.1		mg/Kg	1	☼	6010C	Total/NA
Magnesium	19800		21.1		mg/Kg	1	☼	6010C	Total/NA
Manganese	340	B	0.21		mg/Kg	1	☼	6010C	Total/NA
Nickel	11.9		5.3		mg/Kg	1	☼	6010C	Total/NA
Potassium	2620		31.7		mg/Kg	1	☼	6010C	Total/NA
Sodium	183		148		mg/Kg	1	☼	6010C	Total/NA
Vanadium	21.2		0.53		mg/Kg	1	☼	6010C	Total/NA
Zinc	29.4		2.1		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: AMSF-CS-WS-SS-G1 — Lab Sample ID: 480-159204-19

No Detections.

Client Sample ID: AMSF-CS-WS-SS-G2 — Lab Sample ID: 480-159204-20

No Detections.

Client Sample ID: AMSF-CS-WS-SS-C1 — Lab Sample ID: 480-159204-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	0.49		0.21		mg/Kg	1	☼	8270D	Total/NA
Benzo(a)pyrene	0.67		0.21		mg/Kg	1	☼	8270D	Total/NA
Benzo(b)fluoranthene	0.93		0.21		mg/Kg	1	☼	8270D	Total/NA
Benzo(g,h,i)perylene	0.57		0.21		mg/Kg	1	☼	8270D	Total/NA
Benzo(k)fluoranthene	0.47		0.21		mg/Kg	1	☼	8270D	Total/NA
Chrysene	0.75		0.21		mg/Kg	1	☼	8270D	Total/NA
Fluoranthene	1.4		0.21		mg/Kg	1	☼	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	0.45		0.21		mg/Kg	1	☼	8270D	Total/NA
Phenanthrene	0.45		0.21		mg/Kg	1	☼	8270D	Total/NA
Pyrene	1.1		0.21		mg/Kg	1	☼	8270D	Total/NA
alpha-BHC	0.0037		0.0020		mg/Kg	1	☼	8081B	Total/NA
Aluminum	14000		12.1		mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.5		2.4		mg/Kg	1	☼	6010C	Total/NA
Barium	62.1		0.61		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.57		0.24		mg/Kg	1	☼	6010C	Total/NA
Calcium	31200		60.7		mg/Kg	1	☼	6010C	Total/NA
Chromium	16.8		0.61		mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.8		0.61		mg/Kg	1	☼	6010C	Total/NA
Copper	12.0		1.2		mg/Kg	1	☼	6010C	Total/NA
Iron	17100		12.1		mg/Kg	1	☼	6010C	Total/NA
Lead	13.6		1.2		mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AMSF-CS-WS-SS-C1 (Continued) — Lab Sample ID: 480-159204-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	19000		24.3		mg/Kg	1	☼	6010C	Total/NA
Manganese	375	B	0.24		mg/Kg	1	☼	6010C	Total/NA
Nickel	16.0		6.1		mg/Kg	1	☼	6010C	Total/NA
Potassium	3030		36.4		mg/Kg	1	☼	6010C	Total/NA
Vanadium	25.8		0.61		mg/Kg	1	☼	6010C	Total/NA
Zinc	54.3		2.4		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.036		0.024		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: AMSF-CS-WS-SS-C2 — Lab Sample ID: 480-159204-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(b)fluoranthene	1.1		0.97		mg/Kg	5	☼	8270D	Total/NA
Fluoranthene	2.1		0.97		mg/Kg	5	☼	8270D	Total/NA
Phenanthrene	1.5		0.97		mg/Kg	5	☼	8270D	Total/NA
Pyrene	1.6		0.97		mg/Kg	5	☼	8270D	Total/NA
Aluminum	16100		11.8		mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.3		2.4		mg/Kg	1	☼	6010C	Total/NA
Barium	79.9		0.59		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.70		0.24		mg/Kg	1	☼	6010C	Total/NA
Calcium	4330		59.1		mg/Kg	1	☼	6010C	Total/NA
Chromium	21.1		0.59		mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.9		0.59		mg/Kg	1	☼	6010C	Total/NA
Copper	11.5		1.2		mg/Kg	1	☼	6010C	Total/NA
Iron	19800		11.8		mg/Kg	1	☼	6010C	Total/NA
Lead	10.7		1.2		mg/Kg	1	☼	6010C	Total/NA
Magnesium	3780		23.6		mg/Kg	1	☼	6010C	Total/NA
Manganese	440	B	0.24		mg/Kg	1	☼	6010C	Total/NA
Nickel	19.4		5.9		mg/Kg	1	☼	6010C	Total/NA
Potassium	3120		35.5		mg/Kg	1	☼	6010C	Total/NA
Vanadium	31.0		0.59		mg/Kg	1	☼	6010C	Total/NA
Zinc	52.6		2.4		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.039		0.023		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AMSF-CS-SS-SS-G1
Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-1
Matrix: Solid
Percent Solids: 89.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,1,2,2-Tetrachloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,1,2-Trichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,1-Dichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,1-Dichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,2,4-Trichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,2-Dibromo-3-Chloropropane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,2-Dichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,2-Dichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,2-Dichloropropane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,3-Dichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,4-Dichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
2-Butanone (MEK)	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
2-Hexanone	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
4-Methyl-2-pentanone (MIBK)	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Acetone	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Benzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Bromoform	ND	* vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Bromomethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Carbon disulfide	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Carbon tetrachloride	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Chlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Dibromochloromethane	ND	* vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Chloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Chloroform	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Chloromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
cis-1,2-Dichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Cyclohexane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Bromodichloromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Dichlorodifluoromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Ethylbenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
1,2-Dibromoethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Isopropylbenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Methyl acetate	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Methyl tert-butyl ether	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Methylcyclohexane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Methylene Chloride	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Tetrachloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Toluene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
trans-1,2-Dichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
trans-1,3-Dichloropropene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Trichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Trichlorofluoromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Vinyl chloride	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Xylenes, Total	ND	vs	0.011		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
cis-1,3-Dichloropropene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Styrene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1
Ethyl acetate	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:00	1

Client Sample ID: AMSF-CS-SS-SS-G1
Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-1
Matrix: Solid
Percent Solids: 89.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		64 - 126	09/17/19 12:21	09/17/19 16:00	1
4-Bromofluorobenzene (Surr)	99		72 - 126	09/17/19 12:21	09/17/19 16:00	1
Toluene-d8 (Surr)	99		71 - 125	09/17/19 12:21	09/17/19 16:00	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-G2
Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-2
Matrix: Solid
Percent Solids: 91.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,1,2,2-Tetrachloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,1,2-Trichloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,1-Dichloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,1-Dichloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,2,4-Trichlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,2-Dibromo-3-Chloropropane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,2-Dichlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,2-Dichloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,2-Dichloropropane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,3-Dichlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,4-Dichlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
2-Butanone (MEK)	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
2-Hexanone	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
4-Methyl-2-pentanone (MIBK)	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Acetone	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Benzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Bromoform	ND	* vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Bromomethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Carbon disulfide	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Carbon tetrachloride	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Chlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Dibromochloromethane	ND	* vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Chloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Chloroform	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Chloromethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
cis-1,2-Dichloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Cyclohexane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Bromodichloromethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Dichlorodifluoromethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Ethylbenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
1,2-Dibromoethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Isopropylbenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Methyl acetate	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Methyl tert-butyl ether	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Methylcyclohexane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Methylene Chloride	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Tetrachloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Toluene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
trans-1,2-Dichloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
trans-1,3-Dichloropropene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Trichloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Trichlorofluoromethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Vinyl chloride	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Xylenes, Total	ND	vs	0.011		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
cis-1,3-Dichloropropene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Styrene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1
Ethyl acetate	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 16:26	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-G2
Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-2
Matrix: Solid
Percent Solids: 91.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 126	09/17/19 12:21	09/17/19 16:26	1
4-Bromofluorobenzene (Surr)	95		72 - 126	09/17/19 12:21	09/17/19 16:26	1
Toluene-d8 (Surr)	99		71 - 125	09/17/19 12:21	09/17/19 16:26	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-C1
Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-3
Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2,4,6-Trichlorophenol	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2,4-Dichlorophenol	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2,4-Dimethylphenol	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2,4-Dinitrophenol	ND		3.8		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2,4-Dinitrotoluene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2,6-Dinitrotoluene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2-Chloronaphthalene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2-Chlorophenol	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2-Methylnaphthalene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2-Methylphenol	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2-Nitroaniline	ND		3.8		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
2-Nitrophenol	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
3,3'-Dichlorobenzidine	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
3-Nitroaniline	ND		3.8		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
4,6-Dinitro-2-methylphenol	ND		3.8		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
4-Bromophenyl phenyl ether	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
4-Chloro-3-methylphenol	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
4-Chloroaniline	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
4-Chlorophenyl phenyl ether	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
4-Methylphenol	ND		3.8		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
4-Nitroaniline	ND		3.8		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
4-Nitrophenol	ND		3.8		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Acenaphthene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Acenaphthylene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Acetophenone	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Anthracene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Atrazine	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Benzaldehyde	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Benzo(a)anthracene	**3.1**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Benzo(a)pyrene	**3.5**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Benzo(b)fluoranthene	**4.8**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Benzo(g,h,i)perylene	**2.4**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Benzo(k)fluoranthene	**2.0**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Biphenyl	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
bis (2-chloroisopropyl) ether	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Bis(2-chloroethoxy)methane	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Bis(2-chloroethyl)ether	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Bis(2-ethylhexyl) phthalate	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Butyl benzyl phthalate	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Caprolactam	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Carbazole	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Chrysene	**4.0**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Dibenz(a,h)anthracene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Dibenzofuran	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Diethyl phthalate	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Dimethyl phthalate	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Di-n-butyl phthalate	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Di-n-octyl phthalate	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10

Client Sample ID: AMSF-CS-SS-SS-C1

Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-3

Matrix: Solid
Percent Solids: 85.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**8.5**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Fluorene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Hexachlorobenzene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Hexachlorobutadiene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Hexachlorocyclopentadiene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Hexachloroethane	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Indeno(1,2,3-cd)pyrene	**2.1**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Isophorone	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Naphthalene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Nitrobenzene	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
N-Nitrosodi-n-propylamine	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
N-Nitrosodiphenylamine	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Pentachlorophenol	ND		3.8		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Phenanthrene	**4.6**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Phenol	ND		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10
Pyrene	**6.2**		2.0		mg/Kg	☼	09/23/19 14:27	09/24/19 19:48	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*127*	*X*	*54 - 120*	*09/23/19 14:27*	*09/24/19 19:48*	*10*
2-Fluorobiphenyl	*98*		*60 - 120*	*09/23/19 14:27*	*09/24/19 19:48*	*10*
2-Fluorophenol	*85*		*52 - 120*	*09/23/19 14:27*	*09/24/19 19:48*	*10*
Nitrobenzene-d5	*84*		*53 - 120*	*09/23/19 14:27*	*09/24/19 19:48*	*10*
Phenol-d5	*86*		*54 - 120*	*09/23/19 14:27*	*09/24/19 19:48*	*10*
p-Terphenyl-d14	*115*		*79 - 130*	*09/23/19 14:27*	*09/24/19 19:48*	*10*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
4,4'-DDE	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
4,4'-DDT	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Aldrin	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
alpha-BHC	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
cis-Chlordane	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
beta-BHC	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
delta-BHC	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Dieldrin	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Endosulfan I	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Endosulfan II	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Endosulfan sulfate	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Endrin	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Endrin aldehyde	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Endrin ketone	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
gamma-BHC (Lindane)	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
trans-Chlordane	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Heptachlor	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Heptachlor epoxide	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Methoxychlor	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10
Toxaphene	ND		0.19		mg/Kg	☼	09/19/19 07:28	09/20/19 19:59	10

Client Sample ID: AMSF-CS-SS-SS-C1

Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-3

Matrix: Solid
Percent Solids: 85.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*178*	*X*	*45 - 120*	*09/19/19 07:28*	*09/20/19 19:59*	*10*
DCB Decachlorobiphenyl	*211*	*X*	*45 - 120*	*09/19/19 07:28*	*09/20/19 19:59*	*10*
Tetrachloro-m-xylene	*104*		*30 - 124*	*09/19/19 07:28*	*09/20/19 19:59*	*10*
Tetrachloro-m-xylene	*108*		*30 - 124*	*09/19/19 07:28*	*09/20/19 19:59*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.27		mg/Kg	☼	09/21/19 11:23	09/24/19 23:32	1
PCB-1221	ND		0.27		mg/Kg	☼	09/21/19 11:23	09/24/19 23:32	1
PCB-1232	ND		0.27		mg/Kg	☼	09/21/19 11:23	09/24/19 23:32	1
PCB-1242	ND		0.27		mg/Kg	☼	09/21/19 11:23	09/24/19 23:32	1
PCB-1248	ND		0.27		mg/Kg	☼	09/21/19 11:23	09/24/19 23:32	1
PCB-1254	ND		0.27		mg/Kg	☼	09/21/19 11:23	09/24/19 23:32	1
PCB-1260	ND		0.27		mg/Kg	☼	09/21/19 11:23	09/24/19 23:32	1
PCB-1262	ND		0.27		mg/Kg	☼	09/21/19 11:23	09/24/19 23:32	1
PCB-1268	ND		0.27		mg/Kg	☼	09/21/19 11:23	09/24/19 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*115*		*65 - 174*	*09/21/19 11:23*	*09/24/19 23:32*	*1*
DCB Decachlorobiphenyl	*81*		*65 - 174*	*09/21/19 11:23*	*09/24/19 23:32*	*1*
Tetrachloro-m-xylene	*112*		*60 - 154*	*09/21/19 11:23*	*09/24/19 23:32*	*1*
Tetrachloro-m-xylene	*102*		*60 - 154*	*09/21/19 11:23*	*09/24/19 23:32*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14500**		11.8		mg/Kg	☼	09/18/19 05:20	09/20/19 21:41	1
Antimony	ND		17.7		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Arsenic	**3.7**		2.4		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Barium	**67.4**		0.59		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Beryllium	**0.58**		0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Cadmium	ND		0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Calcium	**6880**		59.0		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Chromium	**43.3**		0.59		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Cobalt	**7.2**		0.59		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Copper	**17.0**		1.2		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Iron	**18400**		11.8		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Lead	**24.5**		1.2		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Magnesium	**4830**		23.6		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Manganese	**451**	**B**	0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Nickel	**16.0**		5.9		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Potassium	**2490**		35.4		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Selenium	ND		4.7		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Silver	ND		0.71		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Sodium	**191**		165		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Thallium	ND		7.1		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Vanadium	**29.1**		0.59		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1
Zinc	**101**		2.4		mg/Kg	☼	09/18/19 05:20	09/19/19 22:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.049**		0.024		mg/Kg	☼	09/26/19 11:26	09/26/19 13:26	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-C1
Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-3
Matrix: Solid
Percent Solids: 85.6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND	*	1.1		mg/Kg	☼	09/25/19 22:25	09/26/19 15:22	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-C2
Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-4
Matrix: Solid
Percent Solids: 89.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2,4,6-Trichlorophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2,4-Dichlorophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2,4-Dimethylphenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2,4-Dinitrophenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2,4-Dinitrotoluene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2,6-Dinitrotoluene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2-Chloronaphthalene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2-Chlorophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2-Methylnaphthalene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2-Methylphenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2-Nitroaniline	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
2-Nitrophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
3,3'-Dichlorobenzidine	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
3-Nitroaniline	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
4,6-Dinitro-2-methylphenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
4-Bromophenyl phenyl ether	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
4-Chloro-3-methylphenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
4-Chloroaniline	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
4-Chlorophenyl phenyl ether	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
4-Methylphenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
4-Nitroaniline	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
4-Nitrophenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Acenaphthene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Acenaphthylene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Acetophenone	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Anthracene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Atrazine	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Benzaldehyde	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Benzo(a)anthracene	**1.3**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Benzo(a)pyrene	**1.4**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Benzo(b)fluoranthene	**2.1**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Benzo(g,h,i)perylene	**1.1**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Benzo(k)fluoranthene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Biphenyl	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
bis (2-chloroisopropyl) ether	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Bis(2-chloroethoxy)methane	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Bis(2-chloroethyl)ether	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Bis(2-ethylhexyl) phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Butyl benzyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Caprolactam	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Carbazole	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Chrysene	**1.5**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Dibenz(a,h)anthracene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Dibenzofuran	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Diethyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Dimethyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Di-n-butyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Di-n-octyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5

Client Sample ID: AMSF-CS-SS-SS-C2

Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-4

Matrix: Solid
Percent Solids: 89.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**3.1**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Fluorene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Hexachlorobenzene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Hexachlorobutadiene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Hexachlorocyclopentadiene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Hexachloroethane	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Indeno(1,2,3-cd)pyrene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Isophorone	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Naphthalene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Nitrobenzene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
N-Nitrosodi-n-propylamine	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
N-Nitrosodiphenylamine	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Pentachlorophenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Phenanthrene	**1.3**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Phenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5
Pyrene	**2.3**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 20:13	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*106*		*54 - 120*	*09/23/19 14:27*	*09/24/19 20:13*	*5*
2-Fluorobiphenyl	*97*		*60 - 120*	*09/23/19 14:27*	*09/24/19 20:13*	*5*
2-Fluorophenol	*84*		*52 - 120*	*09/23/19 14:27*	*09/24/19 20:13*	*5*
Nitrobenzene-d5	*81*		*53 - 120*	*09/23/19 14:27*	*09/24/19 20:13*	*5*
Phenol-d5	*81*		*54 - 120*	*09/23/19 14:27*	*09/24/19 20:13*	*5*
p-Terphenyl-d14	*112*		*79 - 130*	*09/23/19 14:27*	*09/24/19 20:13*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
4,4'-DDE	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
4,4'-DDT	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Aldrin	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
alpha-BHC	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
cis-Chlordane	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
beta-BHC	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
delta-BHC	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Dieldrin	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Endosulfan I	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Endosulfan II	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Endosulfan sulfate	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Endrin	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Endrin aldehyde	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Endrin ketone	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
gamma-BHC (Lindane)	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
trans-Chlordane	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Heptachlor	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Heptachlor epoxide	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Methoxychlor	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10
Toxaphene	ND		0.18		mg/Kg	☼	09/19/19 07:28	09/20/19 20:18	10

Client Sample ID: AMSF-CS-SS-SS-C2
Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-4
Matrix: Solid
Percent Solids: 89.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*187*	*X*	*45 - 120*	*09/19/19 07:28*	*09/20/19 20:18*	*10*
DCB Decachlorobiphenyl	*230*	*X*	*45 - 120*	*09/19/19 07:28*	*09/20/19 20:18*	*10*
Tetrachloro-m-xylene	*138*	*X*	*30 - 124*	*09/19/19 07:28*	*09/20/19 20:18*	*10*
Tetrachloro-m-xylene	*120*		*30 - 124*	*09/19/19 07:28*	*09/20/19 20:18*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25		mg/Kg	☼	09/21/19 11:23	09/24/19 23:44	1
PCB-1221	ND		0.25		mg/Kg	☼	09/21/19 11:23	09/24/19 23:44	1
PCB-1232	ND		0.25		mg/Kg	☼	09/21/19 11:23	09/24/19 23:44	1
PCB-1242	ND		0.25		mg/Kg	☼	09/21/19 11:23	09/24/19 23:44	1
PCB-1248	ND		0.25		mg/Kg	☼	09/21/19 11:23	09/24/19 23:44	1
PCB-1254	ND		0.25		mg/Kg	☼	09/21/19 11:23	09/24/19 23:44	1
PCB-1260	ND		0.25		mg/Kg	☼	09/21/19 11:23	09/24/19 23:44	1
PCB-1262	ND		0.25		mg/Kg	☼	09/21/19 11:23	09/24/19 23:44	1
PCB-1268	ND		0.25		mg/Kg	☼	09/21/19 11:23	09/24/19 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*109*		*65 - 174*	*09/21/19 11:23*	*09/24/19 23:44*	*1*
DCB Decachlorobiphenyl	*67*		*65 - 174*	*09/21/19 11:23*	*09/24/19 23:44*	*1*
Tetrachloro-m-xylene	*106*		*60 - 154*	*09/21/19 11:23*	*09/24/19 23:44*	*1*
Tetrachloro-m-xylene	*93*		*60 - 154*	*09/21/19 11:23*	*09/24/19 23:44*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16100**		11.2		mg/Kg	☼	09/18/19 05:20	09/20/19 21:56	1
Antimony	ND		16.8		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Arsenic	**3.3**		2.2		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Barium	**73.8**		0.56		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Beryllium	**0.63**		0.22		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Cadmium	ND		0.22		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Calcium	**12200**		55.9		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Chromium	**20.1**		0.56		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Cobalt	**7.5**		0.56		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Copper	**17.2**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Iron	**18400**		11.2		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Lead	**30.5**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Magnesium	**7540**		22.4		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Manganese	**367**	**B**	0.22		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Nickel	**17.4**		5.6		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Potassium	**2760**		33.6		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Selenium	ND		4.5		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Silver	ND		0.67		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Sodium	**601**		157		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Thallium	ND		6.7		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Vanadium	**31.0**		0.56		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1
Zinc	**88.9**		2.2		mg/Kg	☼	09/18/19 05:20	09/19/19 22:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.050**		0.022		mg/Kg	☼	09/26/19 11:26	09/26/19 13:27	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-C2
Date Collected: 09/13/19 15:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-4
Matrix: Solid
Percent Solids: 89.5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND	*	1.1		mg/Kg	☼	09/25/19 22:25	09/26/19 15:23	1

Client Sample ID: AMSF-CS-DUP-SS-G1

Date Collected: 09/13/19 15:40
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-5

Matrix: Solid
Percent Solids: 90.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,1,2,2-Tetrachloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,1,2-Trichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,1-Dichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,1-Dichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,2,4-Trichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,2-Dibromo-3-Chloropropane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,2-Dichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,2-Dichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,2-Dichloropropane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,3-Dichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,4-Dichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
2-Butanone (MEK)	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
2-Hexanone	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
4-Methyl-2-pentanone (MIBK)	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Acetone	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Benzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Bromoform	ND	* vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Bromomethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Carbon disulfide	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Carbon tetrachloride	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Chlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Dibromochloromethane	ND	* vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Chloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Chloroform	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Chloromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
cis-1,2-Dichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Cyclohexane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Bromodichloromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Dichlorodifluoromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Ethylbenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
1,2-Dibromoethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Isopropylbenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Methyl acetate	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Methyl tert-butyl ether	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Methylcyclohexane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Methylene Chloride	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Tetrachloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Toluene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
trans-1,2-Dichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
trans-1,3-Dichloropropene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Trichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Trichlorofluoromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Vinyl chloride	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Xylenes, Total	ND	vs	0.011		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
cis-1,3-Dichloropropene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Styrene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1
Ethyl acetate	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 16:51	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-DUP-SS-G1
Date Collected: 09/13/19 15:40
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-5
Matrix: Solid
Percent Solids: 90.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		64 - 126	09/17/19 12:21	09/17/19 16:51	1
4-Bromofluorobenzene (Surr)	96		72 - 126	09/17/19 12:21	09/17/19 16:51	1
Toluene-d8 (Surr)	100		71 - 125	09/17/19 12:21	09/17/19 16:51	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-DUP-SS-C2

Date Collected: 09/13/19 15:40
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-8

Matrix: Solid
Percent Solids: 89.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2,4,6-Trichlorophenol	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2,4-Dichlorophenol	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2,4-Dimethylphenol	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2,4-Dinitrophenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2,4-Dinitrotoluene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2,6-Dinitrotoluene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2-Chloronaphthalene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2-Chlorophenol	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2-Methylnaphthalene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2-Methylphenol	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2-Nitroaniline	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
2-Nitrophenol	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
3,3'-Dichlorobenzidine	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
3-Nitroaniline	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
4,6-Dinitro-2-methylphenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
4-Bromophenyl phenyl ether	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
4-Chloro-3-methylphenol	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
4-Chloroaniline	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
4-Chlorophenyl phenyl ether	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
4-Methylphenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
4-Nitroaniline	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
4-Nitrophenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Acenaphthene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Acenaphthylene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Acetophenone	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Anthracene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Atrazine	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Benzaldehyde	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Benzo(a)anthracene	**1.0**		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Benzo(a)pyrene	**1.2**		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Benzo(b)fluoranthene	**1.6**		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Benzo(g,h,i)perylene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Benzo(k)fluoranthene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Biphenyl	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
bis (2-chloroisopropyl) ether	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Bis(2-chloroethoxy)methane	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Bis(2-chloroethyl)ether	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Bis(2-ethylhexyl) phthalate	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Butyl benzyl phthalate	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Caprolactam	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Carbazole	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Chrysene	**1.3**		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Dibenz(a,h)anthracene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Dibenzofuran	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Diethyl phthalate	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Dimethyl phthalate	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Di-n-butyl phthalate	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Di-n-octyl phthalate	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5

Client Sample ID: AMSF-CS-DUP-SS-C2

Date Collected: 09/13/19 15:40
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-8

Matrix: Solid
Percent Solids: 89.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**2.6**		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Fluorene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Hexachlorobenzene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Hexachlorobutadiene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Hexachlorocyclopentadiene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Hexachloroethane	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Indeno(1,2,3-cd)pyrene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Isophorone	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Naphthalene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Nitrobenzene	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
N-Nitrosodi-n-propylamine	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
N-Nitrosodiphenylamine	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Pentachlorophenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Phenanthrene	**1.2**		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Phenol	ND		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5
Pyrene	**2.0**		0.94		mg/Kg	☼	09/23/19 14:27	09/24/19 20:37	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*100*		*54 - 120*	*09/23/19 14:27*	*09/24/19 20:37*	*5*
2-Fluorobiphenyl	*85*		*60 - 120*	*09/23/19 14:27*	*09/24/19 20:37*	*5*
2-Fluorophenol	*75*		*52 - 120*	*09/23/19 14:27*	*09/24/19 20:37*	*5*
Nitrobenzene-d5	*74*		*53 - 120*	*09/23/19 14:27*	*09/24/19 20:37*	*5*
Phenol-d5	*74*		*54 - 120*	*09/23/19 14:27*	*09/24/19 20:37*	*5*
p-Terphenyl-d14	*106*		*79 - 130*	*09/23/19 14:27*	*09/24/19 20:37*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
4,4'-DDE	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
4,4'-DDT	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Aldrin	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
alpha-BHC	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
cis-Chlordane	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
beta-BHC	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
delta-BHC	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Dieldrin	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Endosulfan I	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Endosulfan II	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Endosulfan sulfate	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Endrin	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Endrin aldehyde	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Endrin ketone	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
gamma-BHC (Lindane)	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
trans-Chlordane	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Heptachlor	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Heptachlor epoxide	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Methoxychlor	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10
Toxaphene	ND		0.18		mg/Kg	☼	09/19/19 07:28	09/20/19 20:38	10

Client Sample ID: AMSF-CS-DUP-SS-C2

Date Collected: 09/13/19 15:40
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-8

Matrix: Solid
Percent Solids: 89.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	185	X	45 - 120	09/19/19 07:28	09/20/19 20:38	10
DCB Decachlorobiphenyl	248	X	45 - 120	09/19/19 07:28	09/20/19 20:38	10
Tetrachloro-m-xylene	113		30 - 124	09/19/19 07:28	09/20/19 20:38	10
Tetrachloro-m-xylene	115		30 - 124	09/19/19 07:28	09/20/19 20:38	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/24/19 23:57	1
PCB-1221	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/24/19 23:57	1
PCB-1232	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/24/19 23:57	1
PCB-1242	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/24/19 23:57	1
PCB-1248	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/24/19 23:57	1
PCB-1254	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/24/19 23:57	1
PCB-1260	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/24/19 23:57	1
PCB-1262	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/24/19 23:57	1
PCB-1268	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/24/19 23:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	117		65 - 174	09/21/19 11:23	09/24/19 23:57	1
DCB Decachlorobiphenyl	80		65 - 174	09/21/19 11:23	09/24/19 23:57	1
Tetrachloro-m-xylene	107		60 - 154	09/21/19 11:23	09/24/19 23:57	1
Tetrachloro-m-xylene	103		60 - 154	09/21/19 11:23	09/24/19 23:57	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14600**		11.4		mg/Kg	☼	09/18/19 05:20	09/20/19 22:00	1
Antimony	ND		17.2		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Arsenic	**3.3**		2.3		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Barium	**65.9**		0.57		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Beryllium	**0.54**		0.23		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Cadmium	ND		0.23		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Calcium	**15300**		57.2		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Chromium	**17.7**		0.57		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Cobalt	**6.9**		0.57		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Copper	**14.1**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Iron	**16500**		11.4		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Lead	**24.3**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Magnesium	**9710**		22.9		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Manganese	**412**	**B**	0.23		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Nickel	**14.8**		5.7		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Potassium	**2390**		34.3		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Selenium	ND		4.6		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Silver	ND		0.69		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Sodium	**373**		160		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Thallium	ND		6.9		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Vanadium	**27.7**		0.57		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1
Zinc	**70.1**		2.3		mg/Kg	☼	09/18/19 05:20	09/19/19 22:58	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.054**		0.023		mg/Kg	☼	09/26/19 11:26	09/26/19 13:28	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-DUP-SS-C2
Date Collected: 09/13/19 15:40
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-8
Matrix: Solid
Percent Solids: 89.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND	*	1.1		mg/Kg	☼	09/25/19 22:25	09/26/19 15:25	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-G1
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-9
Matrix: Solid
Percent Solids: 83.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,1,2,2-Tetrachloroethane	ND	F1 vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,1,2-Trichloroethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,1-Dichloroethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,1-Dichloroethene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,2,4-Trichlorobenzene	ND	F1 vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,2-Dibromo-3-Chloropropane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,2-Dichlorobenzene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,2-Dichloroethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,2-Dichloropropane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,3-Dichlorobenzene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,4-Dichlorobenzene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
2-Butanone (MEK)	ND	F1 vs	0.029		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
2-Hexanone	ND	F1 vs	0.029		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
4-Methyl-2-pentanone (MIBK)	ND	F1 vs	0.029		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Acetone	ND	F1 vs	0.029		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Benzene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Bromoform	ND	* vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Bromomethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Carbon disulfide	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Carbon tetrachloride	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Chlorobenzene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Dibromochloromethane	ND	* vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Chloroethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Chloroform	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Chloromethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
cis-1,2-Dichloroethene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Cyclohexane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Bromodichloromethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Dichlorodifluoromethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Ethylbenzene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
1,2-Dibromoethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Isopropylbenzene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Methyl acetate	ND	F1 vs	0.029		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Methyl tert-butyl ether	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Methylcyclohexane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Methylene Chloride	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Tetrachloroethene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Toluene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
trans-1,2-Dichloroethene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
trans-1,3-Dichloropropene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Trichloroethene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Trichlorofluoromethane	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Vinyl chloride	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Xylenes, Total	ND	vs	0.012		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
cis-1,3-Dichloropropene	ND	F1 vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Styrene	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1
Ethyl acetate	ND	vs	0.0059		mg/Kg	☼	09/17/19 12:21	09/17/19 17:16	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-G1
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-9
Matrix: Solid
Percent Solids: 83.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 126	09/17/19 12:21	09/17/19 17:16	1
4-Bromofluorobenzene (Surr)	97		72 - 126	09/17/19 12:21	09/17/19 17:16	1
Toluene-d8 (Surr)	99		71 - 125	09/17/19 12:21	09/17/19 17:16	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-G2
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-10
Matrix: Solid
Percent Solids: 92.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,1,2,2-Tetrachloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,1,2-Trichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,1-Dichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,1-Dichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,2,4-Trichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,2-Dibromo-3-Chloropropane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,2-Dichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,2-Dichloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,2-Dichloropropane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,3-Dichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,4-Dichlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
2-Butanone (MEK)	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
2-Hexanone	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
4-Methyl-2-pentanone (MIBK)	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Acetone	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Benzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Bromoform	ND	* vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Bromomethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Carbon disulfide	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Carbon tetrachloride	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Chlorobenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Dibromochloromethane	ND	* vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Chloroethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Chloroform	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Chloromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
cis-1,2-Dichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Cyclohexane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Bromodichloromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Dichlorodifluoromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Ethylbenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
1,2-Dibromoethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Isopropylbenzene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Methyl acetate	ND	vs	0.027		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Methyl tert-butyl ether	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Methylcyclohexane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Methylene Chloride	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Tetrachloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Toluene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
trans-1,2-Dichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
trans-1,3-Dichloropropene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Trichloroethene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Trichlorofluoromethane	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Vinyl chloride	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Xylenes, Total	ND	vs	0.011		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
cis-1,3-Dichloropropene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Styrene	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1
Ethyl acetate	ND	vs	0.0054		mg/Kg	☼	09/17/19 12:21	09/17/19 17:42	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-G2
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-10
Matrix: Solid
Percent Solids: 92.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	09/17/19 12:21	09/17/19 17:42	1
4-Bromofluorobenzene (Surr)	97		72 - 126	09/17/19 12:21	09/17/19 17:42	1
Toluene-d8 (Surr)	98		71 - 125	09/17/19 12:21	09/17/19 17:42	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-C1
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-11
Matrix: Solid
Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2,4,6-Trichlorophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2,4-Dichlorophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2,4-Dimethylphenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2,4-Dinitrophenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2,4-Dinitrotoluene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2,6-Dinitrotoluene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2-Chloronaphthalene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2-Chlorophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2-Methylnaphthalene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2-Methylphenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2-Nitroaniline	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
2-Nitrophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
3,3'-Dichlorobenzidine	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
3-Nitroaniline	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
4,6-Dinitro-2-methylphenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
4-Bromophenyl phenyl ether	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
4-Chloro-3-methylphenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
4-Chloroaniline	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
4-Chlorophenyl phenyl ether	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
4-Methylphenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
4-Nitroaniline	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
4-Nitrophenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Acenaphthene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Acenaphthylene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Acetophenone	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Anthracene	ND	F2 F1	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Atrazine	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Benzaldehyde	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Benzo(a)anthracene	**2.3**	**F2 F1**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Benzo(a)pyrene	**2.3**	**F2 F1**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Benzo(b)fluoranthene	**3.3**	**F2**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Benzo(g,h,i)perylene	**1.7**	**F2**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Benzo(k)fluoranthene	**1.2**	**F2**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Biphenyl	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
bis (2-chloroisopropyl) ether	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Bis(2-chloroethoxy)methane	ND	F2	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Bis(2-chloroethyl)ether	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Bis(2-ethylhexyl) phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Butyl benzyl phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Caprolactam	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Carbazole	ND	F1	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Chrysene	**2.6**	**F2 F1**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Dibenz(a,h)anthracene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Dibenzofuran	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Diethyl phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Dimethyl phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Di-n-butyl phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Di-n-octyl phthalate	ND	F1	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5

Client Sample ID: AMSF-CS-ES-SS-C1

Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-11

Matrix: Solid
Percent Solids: 84.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**5.5**	**F2 F1**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Fluorene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Hexachlorobenzene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Hexachlorobutadiene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Hexachlorocyclopentadiene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Hexachloroethane	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Indeno(1,2,3-cd)pyrene	**1.3**	**F2 F1**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Isophorone	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Naphthalene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Nitrobenzene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
N-Nitrosodi-n-propylamine	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
N-Nitrosodiphenylamine	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Pentachlorophenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Phenanthrene	**3.1**	**F2 F1**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Phenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5
Pyrene	**4.3**	**F1**	0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 14:57	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*101*		*54 - 120*	*09/23/19 14:27*	*09/24/19 14:57*	*5*
2-Fluorobiphenyl	*87*		*60 - 120*	*09/23/19 14:27*	*09/24/19 14:57*	*5*
2-Fluorophenol	*73*		*52 - 120*	*09/23/19 14:27*	*09/24/19 14:57*	*5*
Nitrobenzene-d5	*72*		*53 - 120*	*09/23/19 14:27*	*09/24/19 14:57*	*5*
Phenol-d5	*73*		*54 - 120*	*09/23/19 14:27*	*09/24/19 14:57*	*5*
p-Terphenyl-d14	*112*		*79 - 130*	*09/23/19 14:27*	*09/24/19 14:57*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
4,4'-DDE	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
4,4'-DDT	ND	F2 F1	0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Aldrin	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
alpha-BHC	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
cis-Chlordane	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
beta-BHC	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
delta-BHC	ND	F2	0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Dieldrin	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Endosulfan I	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Endosulfan II	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Endosulfan sulfate	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Endrin	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Endrin aldehyde	ND	F1	0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Endrin ketone	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
gamma-BHC (Lindane)	ND	F2	0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
trans-Chlordane	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Heptachlor	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Heptachlor epoxide	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Methoxychlor	ND	F2	0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10
Toxaphene	ND		0.20		mg/Kg	☼	09/19/19 07:28	09/20/19 18:21	10

Client Sample ID: AMSF-CS-ES-SS-C1

Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-11

Matrix: Solid
Percent Solids: 84.8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*209*	*X*	*45 - 120*	*09/19/19 07:28*	*09/20/19 18:21*	*10*
DCB Decachlorobiphenyl	*213*	*X*	*45 - 120*	*09/19/19 07:28*	*09/20/19 18:21*	*10*
Tetrachloro-m-xylene	*144*	*X*	*30 - 124*	*09/19/19 07:28*	*09/20/19 18:21*	*10*
Tetrachloro-m-xylene	*117*		*30 - 124*	*09/19/19 07:28*	*09/20/19 18:21*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23		mg/Kg	☼	09/21/19 11:23	09/24/19 23:19	1
PCB-1221	ND		0.23		mg/Kg	☼	09/21/19 11:23	09/24/19 23:19	1
PCB-1232	ND		0.23		mg/Kg	☼	09/21/19 11:23	09/24/19 23:19	1
PCB-1242	ND		0.23		mg/Kg	☼	09/21/19 11:23	09/24/19 23:19	1
PCB-1248	ND		0.23		mg/Kg	☼	09/21/19 11:23	09/24/19 23:19	1
PCB-1254	ND		0.23		mg/Kg	☼	09/21/19 11:23	09/24/19 23:19	1
PCB-1260	ND		0.23		mg/Kg	☼	09/21/19 11:23	09/24/19 23:19	1
PCB-1262	ND		0.23		mg/Kg	☼	09/21/19 11:23	09/24/19 23:19	1
PCB-1268	ND		0.23		mg/Kg	☼	09/21/19 11:23	09/24/19 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*117*		*65 - 174*	*09/21/19 11:23*	*09/24/19 23:19*	*1*
DCB Decachlorobiphenyl	*81*		*65 - 174*	*09/21/19 11:23*	*09/24/19 23:19*	*1*
Tetrachloro-m-xylene	*119*		*60 - 154*	*09/21/19 11:23*	*09/24/19 23:19*	*1*
Tetrachloro-m-xylene	*104*		*60 - 154*	*09/21/19 11:23*	*09/24/19 23:19*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13500**		12.1		mg/Kg	☼	09/18/19 05:20	09/20/19 22:04	1
Antimony	ND	F1	18.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Arsenic	**3.0**		2.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Barium	**61.9**	**F1**	0.61		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Beryllium	**0.51**		0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Cadmium	ND		0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Calcium	**9210**	**F2 F1**	60.6		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Chromium	**16.5**		0.61		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Cobalt	**6.5**		0.61		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Copper	**11.2**		1.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Iron	**15800**		12.1		mg/Kg	☼	09/18/19 05:20	09/20/19 22:04	1
Lead	**13.5**		1.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Magnesium	**4830**	**F1 F2**	24.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Manganese	**404**	**B**	0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Nickel	**13.7**		6.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Potassium	**2460**	**F1**	36.3		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Selenium	ND		4.8		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Silver	ND		0.73		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Sodium	ND		170		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Thallium	ND		7.3		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Vanadium	**25.9**		0.61		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1
Zinc	**52.4**		2.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.041**		0.024		mg/Kg	☼	09/26/19 11:26	09/26/19 13:30	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-C1
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-11
Matrix: Solid
Percent Solids: 84.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND	F1 *	1.2		mg/Kg	☼	09/25/19 22:25	09/26/19 15:00	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-RB-W-1
Date Collected: 09/13/19 09:10
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/24/19 16:45	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/24/19 16:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/24/19 16:45	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/24/19 16:45	1
1,1-Dichloroethane	ND		1.0		ug/L			09/24/19 16:45	1
1,1-Dichloroethene	ND		1.0		ug/L			09/24/19 16:45	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			09/24/19 16:45	1
1,2,3-Trichloropropane	ND		1.0		ug/L			09/24/19 16:45	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/24/19 16:45	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/24/19 16:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/24/19 16:45	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/24/19 16:45	1
1,2-Dichloroethane	ND		1.0		ug/L			09/24/19 16:45	1
1,2-Dichloropropane	ND		1.0		ug/L			09/24/19 16:45	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/24/19 16:45	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/24/19 16:45	1
1,3-Dichloropropane	ND		1.0		ug/L			09/24/19 16:45	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/24/19 16:45	1
2-Butanone (MEK)	ND		10		ug/L			09/24/19 16:45	1
2-Hexanone	ND		5.0		ug/L			09/24/19 16:45	1
4-Isopropyltoluene	ND		1.0		ug/L			09/24/19 16:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/24/19 16:45	1
Acetone	ND		10		ug/L			09/24/19 16:45	1
Benzene	ND		1.0		ug/L			09/24/19 16:45	1
Bromoform	ND		1.0		ug/L			09/24/19 16:45	1
Bromomethane	ND		1.0		ug/L			09/24/19 16:45	1
Carbon disulfide	ND		1.0		ug/L			09/24/19 16:45	1
Carbon tetrachloride	ND		1.0		ug/L			09/24/19 16:45	1
Chlorobenzene	ND		1.0		ug/L			09/24/19 16:45	1
Dibromochloromethane	ND		1.0		ug/L			09/24/19 16:45	1
Chloroethane	ND		1.0		ug/L			09/24/19 16:45	1
Chloroform	ND		1.0		ug/L			09/24/19 16:45	1
Chloromethane	ND		1.0		ug/L			09/24/19 16:45	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/24/19 16:45	1
Cyclohexane	ND		1.0		ug/L			09/24/19 16:45	1
Bromodichloromethane	ND		1.0		ug/L			09/24/19 16:45	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/24/19 16:45	1
Ethyl acetate	ND		1.0		ug/L			09/24/19 16:45	1
Ethylbenzene	ND		1.0		ug/L			09/24/19 16:45	1
1,2-Dibromoethane	ND		1.0		ug/L			09/24/19 16:45	1
Isopropylbenzene	ND		1.0		ug/L			09/24/19 16:45	1
Methyl acetate	ND		2.5		ug/L			09/24/19 16:45	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/24/19 16:45	1
Methylcyclohexane	ND		1.0		ug/L			09/24/19 16:45	1
Methylene Chloride	ND		1.0		ug/L			09/24/19 16:45	1
Naphthalene	ND		1.0		ug/L			09/24/19 16:45	1
n-Butylbenzene	ND		1.0		ug/L			09/24/19 16:45	1
N-Propylbenzene	ND		1.0		ug/L			09/24/19 16:45	1
sec-Butylbenzene	ND		1.0		ug/L			09/24/19 16:45	1

Client Sample ID: AMSF-CS-RB-W-1
Date Collected: 09/13/19 09:10
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			09/24/19 16:45	1
Toluene	ND		1.0		ug/L			09/24/19 16:45	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/24/19 16:45	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/24/19 16:45	1
Trichloroethene	ND		1.0		ug/L			09/24/19 16:45	1
Trichlorofluoromethane	ND		1.0		ug/L			09/24/19 16:45	1
Vinyl chloride	ND		1.0		ug/L			09/24/19 16:45	1
Xylenes, Total	ND		2.0		ug/L			09/24/19 16:45	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/24/19 16:45	1
Styrene	ND		1.0		ug/L			09/24/19 16:45	1
tert-Butylbenzene	ND		1.0		ug/L			09/24/19 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*09/24/19 16:45*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*09/24/19 16:45*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/24/19 16:45*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*09/24/19 16:45*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2,4,6-Trichlorophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2,4-Dichlorophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2,4-Dimethylphenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2,4-Dinitrophenol	ND		10		ug/L		09/17/19 15:14	09/18/19 20:16	1
2,4-Dinitrotoluene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2,6-Dinitrotoluene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2-Chloronaphthalene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2-Chlorophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2-Methylnaphthalene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2-Methylphenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
2-Nitroaniline	ND		10		ug/L		09/17/19 15:14	09/18/19 20:16	1
2-Nitrophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
3,3'-Dichlorobenzidine	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
3-Nitroaniline	ND		10		ug/L		09/17/19 15:14	09/18/19 20:16	1
4,6-Dinitro-2-methylphenol	ND		10		ug/L		09/17/19 15:14	09/18/19 20:16	1
4-Bromophenyl phenyl ether	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
4-Chloro-3-methylphenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
4-Chloroaniline	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
4-Chlorophenyl phenyl ether	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
4-Methylphenol	ND		10		ug/L		09/17/19 15:14	09/18/19 20:16	1
4-Nitroaniline	ND		10		ug/L		09/17/19 15:14	09/18/19 20:16	1
4-Nitrophenol	ND		10		ug/L		09/17/19 15:14	09/18/19 20:16	1
Acenaphthene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Acenaphthylene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Acetophenone	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Anthracene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Atrazine	ND	*	5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Benzaldehyde	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Benzo[a]anthracene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1

Client Sample ID: AMSF-CS-RB-W-1
Date Collected: 09/13/19 09:10
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-12
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Benzo[b]fluoranthene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Benzo[g,h,i]perylene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Benzo[k]fluoranthene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Biphenyl	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
bis (2-chloroisopropyl) ether	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Bis(2-chloroethoxy)methane	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Bis(2-chloroethyl)ether	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Bis(2-ethylhexyl) phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Butyl benzyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Caprolactam	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Carbazole	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Chrysene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Dibenz(a,h)anthracene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Dibenzofuran	ND		10		ug/L		09/17/19 15:14	09/18/19 20:16	1
Diethyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Dimethyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Di-n-butyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Di-n-octyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Fluoranthene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Fluorene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Hexachlorobenzene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Hexachlorobutadiene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Hexachlorocyclopentadiene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Hexachloroethane	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Isophorone	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Naphthalene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Nitrobenzene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
N-Nitrosodi-n-propylamine	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
N-Nitrosodiphenylamine	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Pentachlorophenol	ND		10		ug/L		09/17/19 15:14	09/18/19 20:16	1
Phenanthrene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Phenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1
Pyrene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*41 - 120*	*09/17/19 15:14*	*09/18/19 20:16*	*1*
2-Fluorobiphenyl	*88*		*48 - 120*	*09/17/19 15:14*	*09/18/19 20:16*	*1*
2-Fluorophenol	*55*		*35 - 120*	*09/17/19 15:14*	*09/18/19 20:16*	*1*
Nitrobenzene-d5	*82*		*46 - 120*	*09/17/19 15:14*	*09/18/19 20:16*	*1*
Phenol-d5	*40*		*22 - 120*	*09/17/19 15:14*	*09/18/19 20:16*	*1*
p-Terphenyl-d14	*93*		*60 - 148*	*09/17/19 15:14*	*09/18/19 20:16*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
4,4'-DDE	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
4,4'-DDT	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Aldrin	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1

Client Sample ID: AMSF-CS-RB-W-1
Date Collected: 09/13/19 09:10
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-12
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
cis-Chlordane	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
beta-BHC	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
delta-BHC	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Dieldrin	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Endosulfan I	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Endosulfan II	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Endosulfan sulfate	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Endrin	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Endrin aldehyde	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Endrin ketone	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
gamma-BHC (Lindane)	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
trans-Chlordane	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Heptachlor	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Heptachlor epoxide	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Methoxychlor	ND		0.050		ug/L		09/17/19 15:04	09/19/19 15:12	1
Toxaphene	ND		0.50		ug/L		09/17/19 15:04	09/19/19 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*20 - 120*	*09/17/19 15:04*	*09/19/19 15:12*	*1*
DCB Decachlorobiphenyl	*59*		*20 - 120*	*09/17/19 15:04*	*09/19/19 15:12*	*1*
Tetrachloro-m-xylene	*79*		*44 - 120*	*09/17/19 15:04*	*09/19/19 15:12*	*1*
Tetrachloro-m-xylene	*76*		*44 - 120*	*09/17/19 15:04*	*09/19/19 15:12*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:19	1
PCB-1221	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:19	1
PCB-1232	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:19	1
PCB-1242	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:19	1
PCB-1248	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:19	1
PCB-1254	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:19	1
PCB-1260	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:19	1
PCB-1262	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:19	1
PCB-1268	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*19 - 120*	*09/23/19 15:10*	*09/25/19 17:19*	*1*
DCB Decachlorobiphenyl	*39*		*19 - 120*	*09/23/19 15:10*	*09/25/19 17:19*	*1*
Tetrachloro-m-xylene	*92*		*39 - 121*	*09/23/19 15:10*	*09/25/19 17:19*	*1*
Tetrachloro-m-xylene	*78*		*39 - 121*	*09/23/19 15:10*	*09/25/19 17:19*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200		ug/L		09/18/19 08:54	09/18/19 23:16	1
Antimony	ND		20.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Arsenic	ND		15.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Barium	ND		2.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Beryllium	ND		2.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Cadmium	ND		2.0		ug/L		09/18/19 08:54	09/18/19 23:16	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-RB-W-1

Date Collected: 09/13/19 09:10
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-12

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		09/18/19 08:54	09/18/19 23:16	1
Chromium	ND		4.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Cobalt	ND		4.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Copper	ND		10.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Iron	ND		50.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Lead	ND		10.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Magnesium	ND		200		ug/L		09/18/19 08:54	09/18/19 23:16	1
Manganese	ND		3.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Nickel	ND		10.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Potassium	ND		500		ug/L		09/18/19 08:54	09/18/19 23:16	1
Selenium	ND		25.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Silver	ND		6.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Sodium	ND		1000		ug/L		09/18/19 08:54	09/18/19 23:16	1
Thallium	ND		20.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Vanadium	ND		5.0		ug/L		09/18/19 08:54	09/18/19 23:16	1
Zinc	ND	^	10.0		ug/L		09/18/19 08:54	09/18/19 23:16	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		09/23/19 11:57	09/23/19 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		09/25/19 20:35	09/26/19 13:00	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: TRIP BLANK

Date Collected: 09/13/19 09:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/24/19 17:10	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/24/19 17:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/24/19 17:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/24/19 17:10	1
1,1-Dichloroethane	ND		1.0		ug/L			09/24/19 17:10	1
1,1-Dichloroethene	ND		1.0		ug/L			09/24/19 17:10	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			09/24/19 17:10	1
1,2,3-Trichloropropane	ND		1.0		ug/L			09/24/19 17:10	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/24/19 17:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/24/19 17:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/24/19 17:10	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/24/19 17:10	1
1,2-Dichloroethane	ND		1.0		ug/L			09/24/19 17:10	1
1,2-Dichloropropane	ND		1.0		ug/L			09/24/19 17:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/24/19 17:10	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/24/19 17:10	1
1,3-Dichloropropane	ND		1.0		ug/L			09/24/19 17:10	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/24/19 17:10	1
2-Butanone (MEK)	ND		10		ug/L			09/24/19 17:10	1
2-Hexanone	ND		5.0		ug/L			09/24/19 17:10	1
4-Isopropyltoluene	ND		1.0		ug/L			09/24/19 17:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/24/19 17:10	1
Acetone	ND		10		ug/L			09/24/19 17:10	1
Benzene	ND		1.0		ug/L			09/24/19 17:10	1
Bromoform	ND		1.0		ug/L			09/24/19 17:10	1
Bromomethane	ND		1.0		ug/L			09/24/19 17:10	1
Carbon disulfide	ND		1.0		ug/L			09/24/19 17:10	1
Carbon tetrachloride	ND		1.0		ug/L			09/24/19 17:10	1
Chlorobenzene	ND		1.0		ug/L			09/24/19 17:10	1
Dibromochloromethane	ND		1.0		ug/L			09/24/19 17:10	1
Chloroethane	ND		1.0		ug/L			09/24/19 17:10	1
Chloroform	ND		1.0		ug/L			09/24/19 17:10	1
Chloromethane	ND		1.0		ug/L			09/24/19 17:10	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/24/19 17:10	1
Cyclohexane	ND		1.0		ug/L			09/24/19 17:10	1
Bromodichloromethane	ND		1.0		ug/L			09/24/19 17:10	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/24/19 17:10	1
Ethyl acetate	ND		1.0		ug/L			09/24/19 17:10	1
Ethylbenzene	ND		1.0		ug/L			09/24/19 17:10	1
1,2-Dibromoethane	ND		1.0		ug/L			09/24/19 17:10	1
Isopropylbenzene	ND		1.0		ug/L			09/24/19 17:10	1
Methyl acetate	ND		2.5		ug/L			09/24/19 17:10	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/24/19 17:10	1
Methylcyclohexane	ND		1.0		ug/L			09/24/19 17:10	1
Methylene Chloride	ND		1.0		ug/L			09/24/19 17:10	1
Naphthalene	ND		1.0		ug/L			09/24/19 17:10	1
n-Butylbenzene	ND		1.0		ug/L			09/24/19 17:10	1
N-Propylbenzene	ND		1.0		ug/L			09/24/19 17:10	1
sec-Butylbenzene	ND		1.0		ug/L			09/24/19 17:10	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: TRIP BLANK
Date Collected: 09/13/19 09:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-13
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			09/24/19 17:10	1
Toluene	ND		1.0		ug/L			09/24/19 17:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/24/19 17:10	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/24/19 17:10	1
Trichloroethene	ND		1.0		ug/L			09/24/19 17:10	1
Trichlorofluoromethane	ND		1.0		ug/L			09/24/19 17:10	1
Vinyl chloride	ND		1.0		ug/L			09/24/19 17:10	1
Xylenes, Total	ND		2.0		ug/L			09/24/19 17:10	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/24/19 17:10	1
Styrene	ND		1.0		ug/L			09/24/19 17:10	1
tert-Butylbenzene	ND		1.0		ug/L			09/24/19 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*09/24/19 17:10*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*09/24/19 17:10*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/24/19 17:10*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*09/24/19 17:10*	*1*

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-C2
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-14
Matrix: Solid
Percent Solids: 88.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2,4,6-Trichlorophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2,4-Dichlorophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2,4-Dimethylphenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2,4-Dinitrophenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2,4-Dinitrotoluene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2,6-Dinitrotoluene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2-Chloronaphthalene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2-Chlorophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2-Methylnaphthalene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2-Methylphenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2-Nitroaniline	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
2-Nitrophenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
3,3'-Dichlorobenzidine	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
3-Nitroaniline	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
4,6-Dinitro-2-methylphenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
4-Bromophenyl phenyl ether	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
4-Chloro-3-methylphenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
4-Chloroaniline	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
4-Chlorophenyl phenyl ether	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
4-Methylphenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
4-Nitroaniline	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
4-Nitrophenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Acenaphthene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Acenaphthylene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Acetophenone	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Anthracene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Atrazine	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Benzaldehyde	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Benzo(a)anthracene	**1.2**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Benzo(a)pyrene	**1.3**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Benzo(b)fluoranthene	**1.6**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Benzo(g,h,i)perylene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Benzo(k)fluoranthene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Biphenyl	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
bis (2-chloroisopropyl) ether	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Bis(2-chloroethoxy)methane	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Bis(2-chloroethyl)ether	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Bis(2-ethylhexyl) phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Butyl benzyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Caprolactam	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Carbazole	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Chrysene	**1.6**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Dibenz(a,h)anthracene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Dibenzofuran	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Diethyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Dimethyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Di-n-butyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Di-n-octyl phthalate	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-C2
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-14
Matrix: Solid
Percent Solids: 88.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**3.1**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Fluorene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Hexachlorobenzene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Hexachlorobutadiene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Hexachlorocyclopentadiene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Hexachloroethane	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Indeno(1,2,3-cd)pyrene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Isophorone	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Naphthalene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Nitrobenzene	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
N-Nitrosodi-n-propylamine	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
N-Nitrosodiphenylamine	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Pentachlorophenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Phenanthrene	**1.8**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Phenol	ND		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5
Pyrene	**2.4**		0.95		mg/Kg	☼	09/23/19 14:27	09/24/19 15:22	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*54 - 120*	*09/23/19 14:27*	*09/24/19 15:22*	*5*
2-Fluorobiphenyl	*91*		*60 - 120*	*09/23/19 14:27*	*09/24/19 15:22*	*5*
2-Fluorophenol	*78*		*52 - 120*	*09/23/19 14:27*	*09/24/19 15:22*	*5*
Nitrobenzene-d5	*76*		*53 - 120*	*09/23/19 14:27*	*09/24/19 15:22*	*5*
Phenol-d5	*79*		*54 - 120*	*09/23/19 14:27*	*09/24/19 15:22*	*5*
p-Terphenyl-d14	*108*		*79 - 130*	*09/23/19 14:27*	*09/24/19 15:22*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
4,4'-DDE	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
4,4'-DDT	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Aldrin	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
alpha-BHC	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
cis-Chlordane	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
beta-BHC	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
delta-BHC	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Dieldrin	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Endosulfan I	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Endosulfan II	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Endosulfan sulfate	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Endrin	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Endrin aldehyde	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Endrin ketone	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
gamma-BHC (Lindane)	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
trans-Chlordane	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Heptachlor	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Heptachlor epoxide	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Methoxychlor	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10
Toxaphene	ND		0.19		mg/Kg	☼	09/19/19 07:28	09/20/19 20:57	10

Client Sample ID: AMSF-CS-ES-SS-C2
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-14
Matrix: Solid
Percent Solids: 88.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*160*	*X*	*45 - 120*	*09/19/19 07:28*	*09/20/19 20:57*	*10*
DCB Decachlorobiphenyl	*139*	*X*	*45 - 120*	*09/19/19 07:28*	*09/20/19 20:57*	*10*
Tetrachloro-m-xylene	*91*		*30 - 124*	*09/19/19 07:28*	*09/20/19 20:57*	*10*
Tetrachloro-m-xylene	*102*		*30 - 124*	*09/19/19 07:28*	*09/20/19 20:57*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21		mg/Kg	☼	09/21/19 11:23	09/25/19 00:10	1
PCB-1221	ND		0.21		mg/Kg	☼	09/21/19 11:23	09/25/19 00:10	1
PCB-1232	ND		0.21		mg/Kg	☼	09/21/19 11:23	09/25/19 00:10	1
PCB-1242	ND		0.21		mg/Kg	☼	09/21/19 11:23	09/25/19 00:10	1
PCB-1248	ND		0.21		mg/Kg	☼	09/21/19 11:23	09/25/19 00:10	1
PCB-1254	ND		0.21		mg/Kg	☼	09/21/19 11:23	09/25/19 00:10	1
PCB-1260	ND		0.21		mg/Kg	☼	09/21/19 11:23	09/25/19 00:10	1
PCB-1262	ND		0.21		mg/Kg	☼	09/21/19 11:23	09/25/19 00:10	1
PCB-1268	ND		0.21		mg/Kg	☼	09/21/19 11:23	09/25/19 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*111*		*65 - 174*	*09/21/19 11:23*	*09/25/19 00:10*	*1*
DCB Decachlorobiphenyl	*74*		*65 - 174*	*09/21/19 11:23*	*09/25/19 00:10*	*1*
Tetrachloro-m-xylene	*115*		*60 - 154*	*09/21/19 11:23*	*09/25/19 00:10*	*1*
Tetrachloro-m-xylene	*103*		*60 - 154*	*09/21/19 11:23*	*09/25/19 00:10*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14800**		10.8		mg/Kg	☼	09/18/19 05:20	09/20/19 22:23	1
Antimony	ND	F1	16.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Arsenic	**3.0**		2.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Barium	**65.1**	**F1**	0.54		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Beryllium	**0.53**		0.22		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Cadmium	ND		0.22		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Calcium	**10000**		54.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Chromium	**17.6**		0.54		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Cobalt	**6.9**		0.54		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Copper	**8.6**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Iron	**16700**		10.8		mg/Kg	☼	09/18/19 05:20	09/20/19 22:23	1
Lead	**14.9**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Magnesium	**7250**	**F1 F2**	21.6		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Manganese	**434**	**B F2**	0.22		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Nickel	**13.8**		5.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Potassium	**2310**	**F1**	32.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Selenium	ND		4.3		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Silver	ND		0.65		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Sodium	ND		151		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Thallium	ND		6.5		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Vanadium	**28.0**		0.54		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1
Zinc	**52.2**		2.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.041**		0.022		mg/Kg	☼	09/26/19 11:26	09/26/19 13:35	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-C2
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-14
Matrix: Solid
Percent Solids: 88.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND	F1 *	1.1		mg/Kg	☼	09/25/19 22:25	09/26/19 15:29	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-G1
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-15
Matrix: Solid
Percent Solids: 92.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,1,2,2-Tetrachloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,1,2-Trichloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,1-Dichloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,1-Dichloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,2,4-Trichlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,2-Dibromo-3-Chloropropane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,2-Dichlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,2-Dichloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,2-Dichloropropane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,3-Dichlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,4-Dichlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
2-Butanone (MEK)	ND	vs	0.026		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
2-Hexanone	ND	vs	0.026		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
4-Methyl-2-pentanone (MIBK)	ND	vs	0.026		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Acetone	ND	vs	0.026		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Benzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Bromoform	ND	* vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Bromomethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Carbon disulfide	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Carbon tetrachloride	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Chlorobenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Dibromochloromethane	ND	* vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Chloroethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Chloroform	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Chloromethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
cis-1,2-Dichloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Cyclohexane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Bromodichloromethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Dichlorodifluoromethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Ethylbenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
1,2-Dibromoethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Isopropylbenzene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Methyl acetate	ND	vs	0.026		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Methyl tert-butyl ether	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Methylcyclohexane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Methylene Chloride	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Tetrachloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Toluene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
trans-1,2-Dichloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
trans-1,3-Dichloropropene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Trichloroethene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Trichlorofluoromethane	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Vinyl chloride	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Xylenes, Total	ND	vs	0.011		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
cis-1,3-Dichloropropene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Styrene	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1
Ethyl acetate	ND	vs	0.0053		mg/Kg	☼	09/17/19 12:21	09/17/19 18:07	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-G1
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-15
Matrix: Solid
Percent Solids: 92.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	09/17/19 12:21	09/17/19 18:07	1
4-Bromofluorobenzene (Surr)	93		72 - 126	09/17/19 12:21	09/17/19 18:07	1
Toluene-d8 (Surr)	102		71 - 125	09/17/19 12:21	09/17/19 18:07	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-G2
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-16
Matrix: Solid
Percent Solids: 95.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,1,2,2-Tetrachloroethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,1,2-Trichloroethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,1-Dichloroethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,1-Dichloroethene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,2,4-Trichlorobenzene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,2-Dibromo-3-Chloropropane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,2-Dichlorobenzene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,2-Dichloroethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,2-Dichloropropane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,3-Dichlorobenzene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,4-Dichlorobenzene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
2-Butanone (MEK)	ND	vs	0.026		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
2-Hexanone	ND	vs	0.026		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
4-Methyl-2-pentanone (MIBK)	ND	vs	0.026		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Acetone	ND	vs	0.026		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Benzene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Bromoform	ND	* vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Bromomethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Carbon disulfide	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Carbon tetrachloride	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Chlorobenzene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Dibromochloromethane	ND	* vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Chloroethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Chloroform	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Chloromethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
cis-1,2-Dichloroethene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Cyclohexane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Bromodichloromethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Dichlorodifluoromethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Ethylbenzene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
1,2-Dibromoethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Isopropylbenzene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Methyl acetate	ND	vs	0.026		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Methyl tert-butyl ether	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Methylcyclohexane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Methylene Chloride	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Tetrachloroethene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Toluene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
trans-1,2-Dichloroethene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
trans-1,3-Dichloropropene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Trichloroethene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Trichlorofluoromethane	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Vinyl chloride	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Xylenes, Total	ND	vs	0.010		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
cis-1,3-Dichloropropene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Styrene	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1
Ethyl acetate	ND	vs	0.0052		mg/Kg	☼	09/17/19 13:21	09/17/19 18:32	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-G2
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-16
Matrix: Solid
Percent Solids: 95.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	09/17/19 13:21	09/17/19 18:32	1
4-Bromofluorobenzene (Surr)	94		72 - 126	09/17/19 13:21	09/17/19 18:32	1
Toluene-d8 (Surr)	101		71 - 125	09/17/19 13:21	09/17/19 18:32	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-C1
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-17
Matrix: Solid
Percent Solids: 91.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2,4,6-Trichlorophenol	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2,4-Dichlorophenol	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2,4-Dimethylphenol	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2,4-Dinitrophenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2,4-Dinitrotoluene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2,6-Dinitrotoluene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2-Chloronaphthalene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2-Chlorophenol	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2-Methylnaphthalene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2-Methylphenol	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2-Nitroaniline	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
2-Nitrophenol	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
3,3'-Dichlorobenzidine	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
3-Nitroaniline	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
4,6-Dinitro-2-methylphenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
4-Bromophenyl phenyl ether	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
4-Chloro-3-methylphenol	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
4-Chloroaniline	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
4-Chlorophenyl phenyl ether	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
4-Methylphenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
4-Nitroaniline	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
4-Nitrophenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Acenaphthene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Acenaphthylene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Acetophenone	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Anthracene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Atrazine	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Benzaldehyde	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Benzo(a)anthracene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Benzo(a)pyrene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Benzo(b)fluoranthene	**1.2**		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Benzo(g,h,i)perylene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Benzo(k)fluoranthene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Biphenyl	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
bis (2-chloroisopropyl) ether	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Bis(2-chloroethoxy)methane	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Bis(2-chloroethyl)ether	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Bis(2-ethylhexyl) phthalate	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Butyl benzyl phthalate	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Caprolactam	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Carbazole	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Chrysene	**0.95**		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Dibenz(a,h)anthracene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Dibenzofuran	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Diethyl phthalate	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Dimethyl phthalate	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Di-n-butyl phthalate	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Di-n-octyl phthalate	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-C1
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-17
Matrix: Solid
Percent Solids: 91.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**1.8**		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Fluorene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Hexachlorobenzene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Hexachlorobutadiene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Hexachlorocyclopentadiene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Hexachloroethane	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Indeno(1,2,3-cd)pyrene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Isophorone	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Naphthalene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Nitrobenzene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
N-Nitrosodi-n-propylamine	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
N-Nitrosodiphenylamine	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Pentachlorophenol	ND		1.8		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Phenanthrene	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Phenol	ND		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5
Pyrene	**1.4**		0.91		mg/Kg	☼	09/23/19 14:27	09/24/19 15:46	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*93*		*54 - 120*	*09/23/19 14:27*	*09/24/19 15:46*	*5*
2-Fluorobiphenyl	*94*		*60 - 120*	*09/23/19 14:27*	*09/24/19 15:46*	*5*
2-Fluorophenol	*82*		*52 - 120*	*09/23/19 14:27*	*09/24/19 15:46*	*5*
Nitrobenzene-d5	*77*		*53 - 120*	*09/23/19 14:27*	*09/24/19 15:46*	*5*
Phenol-d5	*81*		*54 - 120*	*09/23/19 14:27*	*09/24/19 15:46*	*5*
p-Terphenyl-d14	*110*		*79 - 130*	*09/23/19 14:27*	*09/24/19 15:46*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
4,4'-DDE	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
4,4'-DDT	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Aldrin	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
alpha-BHC	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
cis-Chlordane	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
beta-BHC	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
delta-BHC	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Dieldrin	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Endosulfan I	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Endosulfan II	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Endosulfan sulfate	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Endrin	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Endrin aldehyde	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Endrin ketone	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
gamma-BHC (Lindane)	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
trans-Chlordane	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Heptachlor	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Heptachlor epoxide	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Methoxychlor	ND		0.036		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20
Toxaphene	ND		0.36		mg/Kg	☼	09/19/19 07:28	09/20/19 21:17	20

Client Sample ID: AMSF-CS-NS-SS-C1

Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-17

Matrix: Solid
Percent Solids: 91.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	275	X	45 - 120	09/19/19 07:28	09/20/19 21:17	20
DCB Decachlorobiphenyl	208	X	45 - 120	09/19/19 07:28	09/20/19 21:17	20
Tetrachloro-m-xylene	110		30 - 124	09/19/19 07:28	09/20/19 21:17	20
Tetrachloro-m-xylene	146	X	30 - 124	09/19/19 07:28	09/20/19 21:17	20

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:23	1
PCB-1221	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:23	1
PCB-1232	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:23	1
PCB-1242	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:23	1
PCB-1248	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:23	1
PCB-1254	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:23	1
PCB-1260	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:23	1
PCB-1262	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:23	1
PCB-1268	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	118		65 - 174	09/21/19 11:23	09/25/19 00:23	1
DCB Decachlorobiphenyl	73		65 - 174	09/21/19 11:23	09/25/19 00:23	1
Tetrachloro-m-xylene	115		60 - 154	09/21/19 11:23	09/25/19 00:23	1
Tetrachloro-m-xylene	102		60 - 154	09/21/19 11:23	09/25/19 00:23	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9170**		11.1		mg/Kg	☼	09/18/19 05:20	09/20/19 22:46	1
Antimony	ND		16.6		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Arsenic	**2.8**		2.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Barium	**43.7**		0.55		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Beryllium	**0.37**		0.22		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Cadmium	ND		0.22		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Calcium	**35700**		55.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Chromium	**12.3**		0.55		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Cobalt	**5.4**		0.55		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Copper	**9.5**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Iron	**13200**		11.1		mg/Kg	☼	09/18/19 05:20	09/20/19 22:46	1
Lead	**10.9**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Magnesium	**13100**		22.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Manganese	**332**	**B**	0.22		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Nickel	**11.8**		5.5		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Potassium	**2530**		33.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Selenium	ND		4.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Silver	ND		0.66		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Sodium	ND		155		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Thallium	ND		6.6		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Vanadium	**20.2**		0.55		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1
Zinc	**34.9**		2.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023		mg/Kg	☼	09/26/19 11:26	09/26/19 13:36	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-C1
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-17
Matrix: Solid
Percent Solids: 91.6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND	*	1.0		mg/Kg	☼	09/25/19 22:25	09/26/19 15:35	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-C2
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-18
Matrix: Solid
Percent Solids: 91.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2,4,6-Trichlorophenol	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2,4-Dichlorophenol	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2,4-Dimethylphenol	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2,4-Dinitrophenol	ND		0.36		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2,4-Dinitrotoluene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2,6-Dinitrotoluene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2-Chloronaphthalene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2-Chlorophenol	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2-Methylnaphthalene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2-Methylphenol	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2-Nitroaniline	ND		0.36		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
2-Nitrophenol	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
3,3'-Dichlorobenzidine	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
3-Nitroaniline	ND		0.36		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
4,6-Dinitro-2-methylphenol	ND		0.36		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
4-Bromophenyl phenyl ether	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
4-Chloro-3-methylphenol	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
4-Chloroaniline	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
4-Chlorophenyl phenyl ether	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
4-Methylphenol	ND		0.36		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
4-Nitroaniline	ND		0.36		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
4-Nitrophenol	ND		0.36		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Acenaphthene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Acenaphthylene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Acetophenone	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Anthracene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Atrazine	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Benzaldehyde	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Benzo(a)anthracene	**0.29**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Benzo(a)pyrene	**0.36**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Benzo(b)fluoranthene	**0.51**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Benzo(g,h,i)perylene	**0.32**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Benzo(k)fluoranthene	**0.27**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Biphenyl	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
bis (2-chloroisopropyl) ether	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Bis(2-chloroethoxy)methane	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Bis(2-chloroethyl)ether	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Bis(2-ethylhexyl) phthalate	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Butyl benzyl phthalate	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Caprolactam	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Carbazole	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Chrysene	**0.44**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Dibenz(a,h)anthracene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Dibenzofuran	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Diethyl phthalate	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Dimethyl phthalate	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Di-n-butyl phthalate	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Di-n-octyl phthalate	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-C2
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-18
Matrix: Solid
Percent Solids: 91.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**0.79**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Fluorene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Hexachlorobenzene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Hexachlorobutadiene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Hexachlorocyclopentadiene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Hexachloroethane	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Indeno(1,2,3-cd)pyrene	**0.28**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Isophorone	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Naphthalene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Nitrobenzene	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
N-Nitrosodi-n-propylamine	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
N-Nitrosodiphenylamine	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Pentachlorophenol	ND		0.36		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Phenanthrene	**0.27**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Phenol	ND		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1
Pyrene	**0.60**		0.18		mg/Kg	☼	09/23/19 14:27	09/24/19 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*93*		*54 - 120*	*09/23/19 14:27*	*09/24/19 16:10*	*1*
2-Fluorobiphenyl	*87*		*60 - 120*	*09/23/19 14:27*	*09/24/19 16:10*	*1*
2-Fluorophenol	*77*		*52 - 120*	*09/23/19 14:27*	*09/24/19 16:10*	*1*
Nitrobenzene-d5	*75*		*53 - 120*	*09/23/19 14:27*	*09/24/19 16:10*	*1*
Phenol-d5	*73*		*54 - 120*	*09/23/19 14:27*	*09/24/19 16:10*	*1*
p-Terphenyl-d14	*103*		*79 - 130*	*09/23/19 14:27*	*09/24/19 16:10*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
4,4'-DDE	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
4,4'-DDT	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Aldrin	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
alpha-BHC	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
cis-Chlordane	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
beta-BHC	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
delta-BHC	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Dieldrin	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Endosulfan I	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Endosulfan II	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Endosulfan sulfate	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Endrin	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Endrin aldehyde	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Endrin ketone	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
gamma-BHC (Lindane)	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
trans-Chlordane	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Heptachlor	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Heptachlor epoxide	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Methoxychlor	ND		0.018		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10
Toxaphene	ND		0.18		mg/Kg	☼	09/19/19 07:28	09/20/19 21:36	10

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-C2

Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-18

Matrix: Solid
Percent Solids: 91.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	182	X	45 - 120	09/19/19 07:28	09/20/19 21:36	10
DCB Decachlorobiphenyl	145	X	45 - 120	09/19/19 07:28	09/20/19 21:36	10
Tetrachloro-m-xylene	93		30 - 124	09/19/19 07:28	09/20/19 21:36	10
Tetrachloro-m-xylene	110		30 - 124	09/19/19 07:28	09/20/19 21:36	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:36	1
PCB-1221	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:36	1
PCB-1232	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:36	1
PCB-1242	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:36	1
PCB-1248	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:36	1
PCB-1254	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:36	1
PCB-1260	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:36	1
PCB-1262	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:36	1
PCB-1268	ND		0.24		mg/Kg	☼	09/21/19 11:23	09/25/19 00:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	125		65 - 174	09/21/19 11:23	09/25/19 00:36	1
DCB Decachlorobiphenyl	81		65 - 174	09/21/19 11:23	09/25/19 00:36	1
Tetrachloro-m-xylene	121		60 - 154	09/21/19 11:23	09/25/19 00:36	1
Tetrachloro-m-xylene	105		60 - 154	09/21/19 11:23	09/25/19 00:36	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9310**		10.6		mg/Kg	☼	09/18/19 05:20	09/20/19 22:50	1
Antimony	ND		15.8		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Arsenic	**2.6**		2.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Barium	**46.0**		0.53		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Beryllium	**0.39**		0.21		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Cadmium	ND		0.21		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Calcium	**56100**		52.8		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Chromium	**12.8**		0.53		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Cobalt	**5.4**		0.53		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Copper	**9.3**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Iron	**12700**		10.6		mg/Kg	☼	09/18/19 05:20	09/20/19 22:50	1
Lead	**7.7**		1.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Magnesium	**19800**		21.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Manganese	**340**	**B**	0.21		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Nickel	**11.9**		5.3		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Potassium	**2620**		31.7		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Selenium	ND		4.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Silver	ND		0.63		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Sodium	**183**		148		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Thallium	ND		6.3		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Vanadium	**21.2**		0.53		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1
Zinc	**29.4**		2.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021		mg/Kg	☼	09/26/19 11:26	09/26/19 13:40	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-C2
Date Collected: 09/13/19 11:30
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-18
Matrix: Solid
Percent Solids: 91.5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.1		mg/Kg	☼	09/26/19 20:30	09/27/19 11:17	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-G1
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-19
Matrix: Solid
Percent Solids: 87.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,1,2,2-Tetrachloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,1,2-Trichloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,1-Dichloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,1-Dichloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,2,4-Trichlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,2-Dibromo-3-Chloropropane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,2-Dichlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,2-Dichloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,2-Dichloropropane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,3-Dichlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,4-Dichlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
2-Butanone (MEK)	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
2-Hexanone	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
4-Methyl-2-pentanone (MIBK)	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Acetone	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Benzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Bromoform	ND	* vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Bromomethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Carbon disulfide	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Carbon tetrachloride	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Chlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Dibromochloromethane	ND	* vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Chloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Chloroform	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Chloromethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
cis-1,2-Dichloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Cyclohexane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Bromodichloromethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Dichlorodifluoromethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Ethylbenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
1,2-Dibromoethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Isopropylbenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Methyl acetate	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Methyl tert-butyl ether	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Methylcyclohexane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Methylene Chloride	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Tetrachloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Toluene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
trans-1,2-Dichloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
trans-1,3-Dichloropropene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Trichloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Trichlorofluoromethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Vinyl chloride	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Xylenes, Total	ND	vs	0.011		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
cis-1,3-Dichloropropene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Styrene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1
Ethyl acetate	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 18:58	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-G1
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-19
Matrix: Solid
Percent Solids: 87.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	09/17/19 13:21	09/17/19 18:58	1
4-Bromofluorobenzene (Surr)	94		72 - 126	09/17/19 13:21	09/17/19 18:58	1
Toluene-d8 (Surr)	100		71 - 125	09/17/19 13:21	09/17/19 18:58	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-G2
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-20
Matrix: Solid
Percent Solids: 87.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,1,2,2-Tetrachloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,1,2-Trichloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,1-Dichloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,1-Dichloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,2,4-Trichlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,2-Dibromo-3-Chloropropane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,2-Dichlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,2-Dichloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,2-Dichloropropane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,3-Dichlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,4-Dichlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
2-Butanone (MEK)	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
2-Hexanone	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
4-Methyl-2-pentanone (MIBK)	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Acetone	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Benzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Bromoform	ND	* vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Bromomethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Carbon disulfide	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Carbon tetrachloride	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Chlorobenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Dibromochloromethane	ND	* vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Chloroethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Chloroform	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Chloromethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
cis-1,2-Dichloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Cyclohexane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Bromodichloromethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Dichlorodifluoromethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Ethylbenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
1,2-Dibromoethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Isopropylbenzene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Methyl acetate	ND	vs	0.028		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Methyl tert-butyl ether	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Methylcyclohexane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Methylene Chloride	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Tetrachloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Toluene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
trans-1,2-Dichloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
trans-1,3-Dichloropropene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Trichloroethene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Trichlorofluoromethane	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Vinyl chloride	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Xylenes, Total	ND	vs	0.011		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
cis-1,3-Dichloropropene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Styrene	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1
Ethyl acetate	ND	vs	0.0055		mg/Kg	☼	09/17/19 13:21	09/17/19 19:23	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-G2
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-20
Matrix: Solid
Percent Solids: 87.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		64 - 126	09/17/19 13:21	09/17/19 19:23	1
4-Bromofluorobenzene (Surr)	99		72 - 126	09/17/19 13:21	09/17/19 19:23	1
Toluene-d8 (Surr)	100		71 - 125	09/17/19 13:21	09/17/19 19:23	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-C1
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-21
Matrix: Solid
Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2,4,6-Trichlorophenol	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2,4-Dichlorophenol	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2,4-Dimethylphenol	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2,4-Dinitrophenol	ND		0.40		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2,4-Dinitrotoluene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2,6-Dinitrotoluene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2-Chloronaphthalene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2-Chlorophenol	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2-Methylnaphthalene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2-Methylphenol	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2-Nitroaniline	ND		0.40		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
2-Nitrophenol	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
3,3'-Dichlorobenzidine	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
3-Nitroaniline	ND		0.40		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
4,6-Dinitro-2-methylphenol	ND		0.40		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
4-Bromophenyl phenyl ether	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
4-Chloro-3-methylphenol	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
4-Chloroaniline	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
4-Chlorophenyl phenyl ether	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
4-Methylphenol	ND		0.40		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
4-Nitroaniline	ND		0.40		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
4-Nitrophenol	ND		0.40		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Acenaphthene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Acenaphthylene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Acetophenone	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Anthracene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Atrazine	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Benzaldehyde	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Benzo(a)anthracene	**0.49**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Benzo(a)pyrene	**0.67**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Benzo(b)fluoranthene	**0.93**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Benzo(g,h,i)perylene	**0.57**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Benzo(k)fluoranthene	**0.47**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Biphenyl	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
bis (2-chloroisopropyl) ether	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Bis(2-chloroethoxy)methane	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Bis(2-chloroethyl)ether	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Bis(2-ethylhexyl) phthalate	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Butyl benzyl phthalate	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Caprolactam	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Carbazole	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Chrysene	**0.75**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Dibenz(a,h)anthracene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Dibenzofuran	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Diethyl phthalate	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Dimethyl phthalate	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Di-n-butyl phthalate	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Di-n-octyl phthalate	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-C1
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-21
Matrix: Solid
Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**1.4**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Fluorene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Hexachlorobenzene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Hexachlorobutadiene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Hexachlorocyclopentadiene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Hexachloroethane	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Indeno(1,2,3-cd)pyrene	**0.45**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Isophorone	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Naphthalene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Nitrobenzene	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
N-Nitrosodi-n-propylamine	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
N-Nitrosodiphenylamine	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Pentachlorophenol	ND		0.40		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Phenanthrene	**0.45**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Phenol	ND		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1
Pyrene	**1.1**		0.21		mg/Kg	☼	09/23/19 14:27	09/24/19 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*103*		*54 - 120*	*09/23/19 14:27*	*09/24/19 16:34*	*1*
2-Fluorobiphenyl	*90*		*60 - 120*	*09/23/19 14:27*	*09/24/19 16:34*	*1*
2-Fluorophenol	*83*		*52 - 120*	*09/23/19 14:27*	*09/24/19 16:34*	*1*
Nitrobenzene-d5	*79*		*53 - 120*	*09/23/19 14:27*	*09/24/19 16:34*	*1*
Phenol-d5	*79*		*54 - 120*	*09/23/19 14:27*	*09/24/19 16:34*	*1*
p-Terphenyl-d14	*107*		*79 - 130*	*09/23/19 14:27*	*09/24/19 16:34*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
4,4'-DDE	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
4,4'-DDT	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Aldrin	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
alpha-BHC	**0.0037**		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
cis-Chlordane	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
beta-BHC	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
delta-BHC	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Dieldrin	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Endosulfan I	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Endosulfan II	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Endosulfan sulfate	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Endrin	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Endrin aldehyde	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Endrin ketone	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
gamma-BHC (Lindane)	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
trans-Chlordane	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Heptachlor	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Heptachlor epoxide	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Methoxychlor	ND		0.0020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1
Toxaphene	ND		0.020		mg/Kg	☼	09/19/19 07:28	09/20/19 21:56	1

Client Sample ID: AMSF-CS-WS-SS-C1

Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-21

Matrix: Solid
Percent Solids: 81.7

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*45 - 120*	*09/19/19 07:28*	*09/20/19 21:56*	*1*
DCB Decachlorobiphenyl	*142*	*X*	*45 - 120*	*09/19/19 07:28*	*09/20/19 21:56*	*1*
Tetrachloro-m-xylene	*84*		*30 - 124*	*09/19/19 07:28*	*09/20/19 21:56*	*1*
Tetrachloro-m-xylene	*67*		*30 - 124*	*09/19/19 07:28*	*09/20/19 21:56*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 00:49	1
PCB-1221	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 00:49	1
PCB-1232	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 00:49	1
PCB-1242	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 00:49	1
PCB-1248	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 00:49	1
PCB-1254	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 00:49	1
PCB-1260	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 00:49	1
PCB-1262	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 00:49	1
PCB-1268	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*120*		*65 - 174*	*09/21/19 11:23*	*09/25/19 00:49*	*1*
DCB Decachlorobiphenyl	*75*		*65 - 174*	*09/21/19 11:23*	*09/25/19 00:49*	*1*
Tetrachloro-m-xylene	*119*		*60 - 154*	*09/21/19 11:23*	*09/25/19 00:49*	*1*
Tetrachloro-m-xylene	*100*		*60 - 154*	*09/21/19 11:23*	*09/25/19 00:49*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14000**		12.1		mg/Kg	☼	09/18/19 05:20	09/20/19 22:54	1
Antimony	ND		18.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Arsenic	**3.5**		2.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Barium	**62.1**		0.61		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Beryllium	**0.57**		0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Cadmium	ND		0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Calcium	**31200**		60.7		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Chromium	**16.8**		0.61		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Cobalt	**6.8**		0.61		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Copper	**12.0**		1.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Iron	**17100**		12.1		mg/Kg	☼	09/18/19 05:20	09/20/19 22:54	1
Lead	**13.6**		1.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Magnesium	**19000**		24.3		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Manganese	**375**	**B**	0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Nickel	**16.0**		6.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Potassium	**3030**		36.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Selenium	ND		4.9		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Silver	ND		0.73		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Sodium	ND		170		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Thallium	ND		7.3		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Vanadium	**25.8**		0.61		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1
Zinc	**54.3**		2.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.036**		0.024		mg/Kg	☼	09/26/19 11:26	09/26/19 13:41	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-C1
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-21
Matrix: Solid
Percent Solids: 81.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.2		mg/Kg	☼	09/26/19 20:30	09/27/19 11:19	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-C2
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-22
Matrix: Solid
Percent Solids: 87.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2,4,6-Trichlorophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2,4-Dichlorophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2,4-Dimethylphenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2,4-Dinitrophenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2,4-Dinitrotoluene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2,6-Dinitrotoluene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2-Chloronaphthalene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2-Chlorophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2-Methylnaphthalene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2-Methylphenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2-Nitroaniline	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
2-Nitrophenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
3,3'-Dichlorobenzidine	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
3-Nitroaniline	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
4,6-Dinitro-2-methylphenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
4-Bromophenyl phenyl ether	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
4-Chloro-3-methylphenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
4-Chloroaniline	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
4-Chlorophenyl phenyl ether	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
4-Methylphenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
4-Nitroaniline	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
4-Nitrophenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Acenaphthene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Acenaphthylene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Acetophenone	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Anthracene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Atrazine	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Benzaldehyde	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Benzo(a)anthracene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Benzo(a)pyrene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Benzo(b)fluoranthene	**1.1**		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Benzo(g,h,i)perylene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Benzo(k)fluoranthene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Biphenyl	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
bis (2-chloroisopropyl) ether	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Bis(2-chloroethoxy)methane	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Bis(2-chloroethyl)ether	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Bis(2-ethylhexyl) phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Butyl benzyl phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Caprolactam	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Carbazole	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Chrysene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Dibenz(a,h)anthracene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Dibenzofuran	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Diethyl phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Dimethyl phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Di-n-butyl phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Di-n-octyl phthalate	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-C2
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-22
Matrix: Solid
Percent Solids: 87.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**2.1**		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Fluorene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Hexachlorobenzene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Hexachlorobutadiene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Hexachlorocyclopentadiene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Hexachloroethane	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Indeno(1,2,3-cd)pyrene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Isophorone	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Naphthalene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Nitrobenzene	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
N-Nitrosodi-n-propylamine	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
N-Nitrosodiphenylamine	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Pentachlorophenol	ND		1.9		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Phenanthrene	**1.5**		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Phenol	ND		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5
Pyrene	**1.6**		0.97		mg/Kg	☼	09/23/19 14:27	09/24/19 16:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*109*		*54 - 120*	*09/23/19 14:27*	*09/24/19 16:58*	*5*
2-Fluorobiphenyl	*100*		*60 - 120*	*09/23/19 14:27*	*09/24/19 16:58*	*5*
2-Fluorophenol	*84*		*52 - 120*	*09/23/19 14:27*	*09/24/19 16:58*	*5*
Nitrobenzene-d5	*81*		*53 - 120*	*09/23/19 14:27*	*09/24/19 16:58*	*5*
Phenol-d5	*82*		*54 - 120*	*09/23/19 14:27*	*09/24/19 16:58*	*5*
p-Terphenyl-d14	*110*		*79 - 130*	*09/23/19 14:27*	*09/24/19 16:58*	*5*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
4,4'-DDE	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
4,4'-DDT	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Aldrin	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
alpha-BHC	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
cis-Chlordane	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
beta-BHC	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
delta-BHC	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Dieldrin	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Endosulfan I	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Endosulfan II	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Endosulfan sulfate	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Endrin	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Endrin aldehyde	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Endrin ketone	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
gamma-BHC (Lindane)	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
trans-Chlordane	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Heptachlor	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Heptachlor epoxide	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Methoxychlor	ND		0.0019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1
Toxaphene	ND		0.019		mg/Kg	☼	09/19/19 07:28	09/21/19 15:49	1

Client Sample ID: AMSF-CS-WS-SS-C2

Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-22

Matrix: Solid
Percent Solids: 87.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	94		45 - 120	09/19/19 07:28	09/21/19 15:49	1
DCB Decachlorobiphenyl	123	X	45 - 120	09/19/19 07:28	09/21/19 15:49	1
Tetrachloro-m-xylene	82		30 - 124	09/19/19 07:28	09/21/19 15:49	1
Tetrachloro-m-xylene	73		30 - 124	09/19/19 07:28	09/21/19 15:49	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 01:01	1
PCB-1221	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 01:01	1
PCB-1232	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 01:01	1
PCB-1242	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 01:01	1
PCB-1248	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 01:01	1
PCB-1254	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 01:01	1
PCB-1260	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 01:01	1
PCB-1262	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 01:01	1
PCB-1268	ND		0.28		mg/Kg	☼	09/21/19 11:23	09/25/19 01:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	136		65 - 174	09/21/19 11:23	09/25/19 01:01	1
DCB Decachlorobiphenyl	91		65 - 174	09/21/19 11:23	09/25/19 01:01	1
Tetrachloro-m-xylene	133		60 - 154	09/21/19 11:23	09/25/19 01:01	1
Tetrachloro-m-xylene	108		60 - 154	09/21/19 11:23	09/25/19 01:01	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16100**		11.8		mg/Kg	☼	09/18/19 05:20	09/20/19 22:58	1
Antimony	ND		17.7		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Arsenic	**3.3**		2.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Barium	**79.9**		0.59		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Beryllium	**0.70**		0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Cadmium	ND		0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Calcium	**4330**		59.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Chromium	**21.1**		0.59		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Cobalt	**9.9**		0.59		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Copper	**11.5**		1.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Iron	**19800**		11.8		mg/Kg	☼	09/18/19 05:20	09/20/19 22:58	1
Lead	**10.7**		1.2		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Magnesium	**3780**		23.6		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Manganese	**440**	**B**	0.24		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Nickel	**19.4**		5.9		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Potassium	**3120**		35.5		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Selenium	ND		4.7		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Silver	ND		0.71		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Sodium	ND		165		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Thallium	ND		7.1		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Vanadium	**31.0**		0.59		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1
Zinc	**52.6**		2.4		mg/Kg	☼	09/18/19 05:20	09/19/19 23:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.039**		0.023		mg/Kg	☼	09/26/19 11:26	09/26/19 13:43	1

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-C2
Date Collected: 09/13/19 10:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-22
Matrix: Solid
Percent Solids: 87.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.1		mg/Kg	☼	09/26/19 20:30	09/27/19 11:22	1

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		DCA	BFB	TOL						
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(71-125)						
480-159204-1	AMSF-CS-SS-SS-G1	106	99	99						
480-159204-2	AMSF-CS-SS-SS-G2	98	95	99						
480-159204-5	AMSF-CS-DUP-SS-G1	97	96	100						
480-159204-9	AMSF-CS-ES-SS-G1	105	97	99						
480-159204-9 MSD	AMSF-CS-ES-SS-G1	92	95	102						
480-159204-9MS	AMSF-CS-ES-SS-G1	88	93	101						
480-159204-10	AMSF-CS-ES-SS-G2	101	97	98						
480-159204-15	AMSF-CS-NS-SS-G1	101	93	102						
480-159204-16	AMSF-CS-NS-SS-G2	101	94	101						
480-159204-19	AMSF-CS-WS-SS-G1	101	94	100						
480-159204-20	AMSF-CS-WS-SS-G2	106	99	100						
LCS 480-492516/1-A	Lab Control Sample	93	100	101						
MB 480-492516/2-A	Method Blank	83	96	100						

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		DCA	BFB	TOL	DBFM					
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)	(75-123)					
480-159204-12	AMSF-CS-RB-W-1	97	107	103	97					
480-159204-13	TRIP BLANK	108	104	101	103					
LCS 480-493643/5	Lab Control Sample	104	105	103	106					
MB 480-493643/8	Method Blank	99	107	104	100					

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		TBP	FBP	2FP	NBZ	PHL	TPHd14			
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)			
480-159204-3	AMSF-CS-SS-SS-C1	127 X	98	85	84	86	115			
480-159204-4	AMSF-CS-SS-SS-C2	106	97	84	81	81	112			
480-159204-8	AMSF-CS-DUP-SS-C2	100	85	75	74	74	106			
480-159204-11	AMSF-CS-ES-SS-C1	101	87	73	72	73	112			
480-159204-11 MS	AMSF-CS-ES-SS-C1	129 X	87	67	68	70	126			
480-159204-11 MSD	AMSF-CS-ES-SS-C1	122 X	99	78	81	82	118			
480-159204-14	AMSF-CS-ES-SS-C2	97	91	78	76	79	108			
480-159204-17	AMSF-CS-NS-SS-C1	93	94	82	77	81	110			
480-159204-18	AMSF-CS-NS-SS-C2	93	87	77	75	73	103			

Surrogate Summary

Client: Stantec Consulting Corp.
Job ID: 480-159204-1
Project/Site: Alliance BCP Site (AMSF)

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-159204-21	AMSF-CS-WS-SS-C1	103	90	83	79	79	107
480-159204-22	AMSF-CS-WS-SS-C2	109	100	84	81	82	110
LCS 480-493581/2-A	Lab Control Sample	113	104	89	90	85	122
MB 480-493581/1-A	Method Blank	90	95	89	86	82	108

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)
480-159204-12	AMSF-CS-RB-W-1	95	88	55	82	40	93
LCS 480-492549/2-A	Lab Control Sample	128 X	97	67	85	53	101
MB 480-492549/1-A	Method Blank	89	90	57	80	43	98

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(45-120)	(45-120)	(30-124)	(30-124)
480-159204-3	AMSF-CS-SS-SS-C1	178 X	211 X	104	108
480-159204-4	AMSF-CS-SS-SS-C2	187 X	230 X	138 X	120
480-159204-8	AMSF-CS-DUP-SS-C2	185 X	248 X	113	115
480-159204-11	AMSF-CS-ES-SS-C1	209 X	213 X	144 X	117
480-159204-11 MS	AMSF-CS-ES-SS-C1	198 X	263 X	119	114
480-159204-11 MSD	AMSF-CS-ES-SS-C1	217 X	161 X	124	117
480-159204-14	AMSF-CS-ES-SS-C2	160 X	139 X	91	102
480-159204-17	AMSF-CS-NS-SS-C1	275 X	208 X	110	146 X
480-159204-18	AMSF-CS-NS-SS-C2	182 X	145 X	93	110
480-159204-21	AMSF-CS-WS-SS-C1	79	142 X	84	67
480-159204-22	AMSF-CS-WS-SS-C2	94	123 X	82	73
LCS 480-492848/2-A	Lab Control Sample	95	88	80	62
MB 480-492848/1-A	Method Blank	85	89	75	61

Surrogate Legend

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(20-120)	(20-120)	(44-120)	(44-120)
480-159204-12	AMSF-CS-RB-W-1	56	59	79	76
LCS 480-492545/2-A	Lab Control Sample	65	68	81	78
LCSD 480-492545/3-A	Lab Control Sample Dup	56	57	82	71
MB 480-492545/1-A	Method Blank	68	72	95	85

Surrogate Legend
DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(65-174)	(65-174)	(60-154)	(60-154)
480-159204-3	AMSF-CS-SS-SS-C1	115	81	112	102
480-159204-4	AMSF-CS-SS-SS-C2	109	67	106	93
480-159204-8	AMSF-CS-DUP-SS-C2	117	80	107	103
480-159204-11	AMSF-CS-ES-SS-C1	117	81	119	104
480-159204-11 MS	AMSF-CS-ES-SS-C1	135	87	115	101
480-159204-11 MSD	AMSF-CS-ES-SS-C1	110	69	106	93
480-159204-14	AMSF-CS-ES-SS-C2	111	74	115	103
480-159204-17	AMSF-CS-NS-SS-C1	118	73	115	102
480-159204-18	AMSF-CS-NS-SS-C2	125	81	121	105
480-159204-21	AMSF-CS-WS-SS-C1	120	75	119	100
480-159204-22	AMSF-CS-WS-SS-C2	136	91	133	108
LCS 480-493350/2-A	Lab Control Sample	145	96	130	117
MB 480-493350/1-A	Method Blank	120	79	116	100

Surrogate Legend
DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCBP1	DCBP2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(19-120)	(19-120)	(39-121)	(39-121)
480-159204-12	AMSF-CS-RB-W-1	62	39	92	78
LCS 480-493603/2-A	Lab Control Sample	53	35	99	76
MB 480-493603/1-A	Method Blank	55	34	73	66

Surrogate Legend
DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-492516/2-A
Matrix: Solid
Analysis Batch: 492443

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,1,2,2-Tetrachloroethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,1,2-Trichloroethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,1-Dichloroethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,1-Dichloroethene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,2,4-Trichlorobenzene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,2-Dibromo-3-Chloropropane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,2-Dichlorobenzene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,2-Dichloroethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,2-Dichloropropane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,3-Dichlorobenzene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,4-Dichlorobenzene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
2-Butanone (MEK)	ND		0.025		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
2-Hexanone	ND		0.025		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
4-Methyl-2-pentanone (MIBK)	ND		0.025		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Acetone	ND		0.025		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Benzene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Bromoform	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Bromomethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Carbon disulfide	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Carbon tetrachloride	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Chlorobenzene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Dibromochloromethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Chloroethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Chloroform	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Chloromethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
cis-1,2-Dichloroethene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Cyclohexane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Bromodichloromethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Dichlorodifluoromethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Ethylbenzene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
1,2-Dibromoethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Isopropylbenzene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Methyl acetate	ND		0.025		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Methyl tert-butyl ether	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Methylcyclohexane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Methylene Chloride	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Tetrachloroethene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Toluene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
trans-1,2-Dichloroethene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
trans-1,3-Dichloropropene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Trichloroethene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Trichlorofluoromethane	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Vinyl chloride	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Xylenes, Total	ND		0.010		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
cis-1,3-Dichloropropene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1
Styrene	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-492516/2-A
Matrix: Solid
Analysis Batch: 492443

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl acetate	ND		0.0050		mg/Kg		09/17/19 12:21	09/17/19 14:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*64 - 126*	*09/17/19 12:21*	*09/17/19 14:44*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*09/17/19 12:21*	*09/17/19 14:44*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*09/17/19 12:21*	*09/17/19 14:44*	*1*

Lab Sample ID: LCS 480-492516/1-A
Matrix: Solid
Analysis Batch: 492443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0520		mg/Kg		104	77 - 121
1,1,2,2-Tetrachloroethane	0.0500	0.0515		mg/Kg		103	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0506		mg/Kg		101	60 - 140
1,1,2-Trichloroethane	0.0500	0.0532		mg/Kg		106	78 - 122
1,1-Dichloroethane	0.0500	0.0503		mg/Kg		101	73 - 126
1,1-Dichloroethene	0.0500	0.0517		mg/Kg		103	59 - 125
1,2,4-Trichlorobenzene	0.0500	0.0485		mg/Kg		97	64 - 120
1,2-Dibromo-3-Chloropropane	0.0500	0.0524		mg/Kg		105	63 - 124
1,2-Dichlorobenzene	0.0500	0.0511		mg/Kg		102	75 - 120
1,2-Dichloroethane	0.0500	0.0487		mg/Kg		97	77 - 122
1,2-Dichloropropane	0.0500	0.0500		mg/Kg		100	75 - 124
1,3-Dichlorobenzene	0.0500	0.0520		mg/Kg		104	74 - 120
1,4-Dichlorobenzene	0.0500	0.0518		mg/Kg		104	73 - 120
2-Butanone (MEK)	0.250	0.246		mg/Kg		99	70 - 134
2-Hexanone	0.250	0.263		mg/Kg		105	59 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.253		mg/Kg		101	65 - 133
Acetone	0.250	0.228		mg/Kg		91	61 - 137
Benzene	0.0500	0.0510		mg/Kg		102	79 - 127
Bromoform	0.0500	0.0650	*	mg/Kg		130	68 - 126
Bromomethane	0.0500	0.0538		mg/Kg		108	37 - 149
Carbon disulfide	0.0500	0.0508		mg/Kg		102	64 - 131
Carbon tetrachloride	0.0500	0.0549		mg/Kg		110	75 - 135
Chlorobenzene	0.0500	0.0527		mg/Kg		105	76 - 124
Dibromochloromethane	0.0500	0.0636	*	mg/Kg		127	76 - 125
Chloroethane	0.0500	0.0532		mg/Kg		106	69 - 135
Chloroform	0.0500	0.0511		mg/Kg		102	80 - 120
Chloromethane	0.0500	0.0477		mg/Kg		95	63 - 127
cis-1,2-Dichloroethene	0.0500	0.0525		mg/Kg		105	81 - 120
Cyclohexane	0.0500	0.0487		mg/Kg		97	65 - 120
Bromodichloromethane	0.0500	0.0559		mg/Kg		112	80 - 122
Dichlorodifluoromethane	0.0500	0.0406		mg/Kg		81	57 - 142
Ethylbenzene	0.0500	0.0529		mg/Kg		106	80 - 120
1,2-Dibromoethane	0.0500	0.0544		mg/Kg		109	78 - 120
Isopropylbenzene	0.0500	0.0525		mg/Kg		105	72 - 120
Methyl acetate	0.100	0.0967		mg/Kg		97	55 - 136
Methyl tert-butyl ether	0.0500	0.0522		mg/Kg		104	63 - 125

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-492516/1-A
Matrix: Solid
Analysis Batch: 492443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492516

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methylcyclohexane			0.0500	0.0510		mg/Kg		102	60 - 140		
Methylene Chloride			0.0500	0.0484		mg/Kg		97	61 - 127		
Tetrachloroethene			0.0500	0.0538		mg/Kg		108	74 - 122		
Toluene			0.0500	0.0528		mg/Kg		106	74 - 128		
trans-1,2-Dichloroethene			0.0500	0.0523		mg/Kg		105	78 - 126		
trans-1,3-Dichloropropene			0.0500	0.0569		mg/Kg		114	73 - 123		
Trichloroethene			0.0500	0.0512		mg/Kg		102	77 - 129		
Trichlorofluoromethane			0.0500	0.0453		mg/Kg		91	65 - 146		
Vinyl chloride			0.0500	0.0522		mg/Kg		104	61 - 133		
cis-1,3-Dichloropropene			0.0500	0.0543		mg/Kg		109	80 - 120		
Styrene			0.0500	0.0535		mg/Kg		107	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*64 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*
Toluene-d8 (Surr)	*101*		*71 - 125*

Lab Sample ID: 480-159204-9 MSD
Matrix: Solid
Analysis Batch: 492443

Client Sample ID: AMSF-CS-ES-SS-G1
Prep Type: Total/NA
Prep Batch: 492516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND	vs	0.0592	0.0646	vs	mg/Kg	☼	109	77 - 121	3	30
1,1,2,2-Tetrachloroethane	ND	F1 vs	0.0592	0.0477	vs	mg/Kg	☼	81	80 - 120	6	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0592	0.0638	vs	mg/Kg	☼	108	60 - 140	3	30
1,1,2-Trichloroethane	ND	vs	0.0592	0.0518	vs	mg/Kg	☼	88	78 - 122	8	30
1,1-Dichloroethane	ND	vs	0.0592	0.0599	vs	mg/Kg	☼	101	73 - 126	2	30
1,1-Dichloroethene	ND	vs	0.0592	0.0624	vs	mg/Kg	☼	105	59 - 125	4	30
1,2,4-Trichlorobenzene	ND	F1 vs	0.0592	0.0325	F1 vs	mg/Kg	☼	55	64 - 120	2	30
1,2-Dibromo-3-Chloropropane	ND	vs	0.0592	0.0415	vs	mg/Kg	☼	70	63 - 124	13	30
1,2-Dichlorobenzene	ND	vs	0.0592	0.0475	vs	mg/Kg	☼	80	75 - 120	1	30
1,2-Dichloroethane	ND	vs	0.0592	0.0538	vs	mg/Kg	☼	91	77 - 122	6	30
1,2-Dichloropropane	ND	vs	0.0592	0.0565	vs	mg/Kg	☼	95	75 - 124	2	30
1,3-Dichlorobenzene	ND	vs	0.0592	0.0501	vs	mg/Kg	☼	85	74 - 120	2	30
1,4-Dichlorobenzene	ND	vs	0.0592	0.0493	vs	mg/Kg	☼	83	73 - 120	2	30
2-Butanone (MEK)	ND	F1 vs	0.296	0.178	F1 vs	mg/Kg	☼	60	70 - 134	11	30
2-Hexanone	ND	F1 vs	0.296	0.173	F1 vs	mg/Kg	☼	58	59 - 130	9	30
4-Methyl-2-pentanone (MIBK)	ND	F1 vs	0.296	0.198	vs	mg/Kg	☼	67	65 - 133	11	30
Acetone	ND	F1 vs	0.296	0.167	F1 vs	mg/Kg	☼	56	61 - 137	8	30
Benzene	ND	vs	0.0592	0.0581	vs	mg/Kg	☼	98	79 - 127	2	30
Bromoform	ND	* vs	0.0592	0.0522	vs	mg/Kg	☼	88	68 - 126	3	30
Bromomethane	ND	vs	0.0592	0.0457	vs	mg/Kg	☼	77	37 - 149	5	30
Carbon disulfide	ND	vs	0.0592	0.0548	vs	mg/Kg	☼	93	64 - 131	1	30
Carbon tetrachloride	ND	vs	0.0592	0.0673	vs	mg/Kg	☼	114	75 - 135	1	30
Chlorobenzene	ND	vs	0.0592	0.0541	vs	mg/Kg	☼	91	76 - 124	0	30
Dibromochloromethane	ND	* vs	0.0592	0.0613	vs	mg/Kg	☼	104	76 - 125	1	30
Chloroethane	ND	vs	0.0592	0.0654	vs	mg/Kg	☼	110	69 - 135	6	30
Chloroform	ND	vs	0.0592	0.0617	vs	mg/Kg	☼	104	80 - 120	4	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-159204-9 MSD
Matrix: Solid
Analysis Batch: 492443

Client Sample ID: AMSF-CS-ES-SS-G1
Prep Type: Total/NA
Prep Batch: 492516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	ND	vs	0.0592	0.0484	vs	mg/Kg	☼	82	63 - 127	10	30
cis-1,2-Dichloroethene	ND	vs	0.0592	0.0588	vs	mg/Kg	☼	99	80 - 120	2	30
Cyclohexane	ND	vs	0.0592	0.0553	vs	mg/Kg	☼	93	65 - 120	3	30
Bromodichloromethane	ND	vs	0.0592	0.0618	vs	mg/Kg	☼	104	80 - 122	1	30
Dichlorodifluoromethane	ND	vs	0.0592	0.0561	vs	mg/Kg	☼	95	57 - 142	1	30
Ethylbenzene	ND	vs	0.0592	0.0564	vs	mg/Kg	☼	95	80 - 120	1	30
1,2-Dibromoethane	ND	vs	0.0592	0.0479	vs	mg/Kg	☼	81	78 - 120	4	30
Isopropylbenzene	ND	vs	0.0592	0.0598	vs	mg/Kg	☼	101	72 - 120	1	30
Methyl acetate	ND	F1 vs	0.118	0.0576	F1 vs	mg/Kg	☼	49	55 - 136	1	30
Methyl tert-butyl ether	ND	vs	0.0592	0.0526	vs	mg/Kg	☼	89	63 - 125	8	30
Methylcyclohexane	ND	vs	0.0592	0.0533	vs	mg/Kg	☼	90	60 - 140	1	30
Methylene Chloride	ND	vs	0.0592	0.0577	vs	mg/Kg	☼	97	61 - 127	5	30
Tetrachloroethene	ND	vs	0.0592	0.0589	vs	mg/Kg	☼	100	74 - 122	2	30
Toluene	ND	vs	0.0592	0.0576	vs	mg/Kg	☼	97	74 - 128	1	30
trans-1,2-Dichloroethene	ND	vs	0.0592	0.0619	vs	mg/Kg	☼	105	78 - 126	3	30
trans-1,3-Dichloropropene	ND	vs	0.0592	0.0488	vs	mg/Kg	☼	82	73 - 123	0	30
Trichloroethene	ND	vs	0.0592	0.0583	vs	mg/Kg	☼	99	77 - 129	2	30
Trichlorofluoromethane	ND	vs	0.0592	0.0658	vs	mg/Kg	☼	111	65 - 146	4	30
Vinyl chloride	ND	vs	0.0592	0.0601	vs	mg/Kg	☼	102	61 - 133	11	30
cis-1,3-Dichloropropene	ND	F1 vs	0.0592	0.0466	F1 vs	mg/Kg	☼	79	80 - 120	5	30
Styrene	ND	vs	0.0592	0.0509	vs	mg/Kg	☼	86	80 - 120	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*64 - 126*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*
Toluene-d8 (Surr)	*102*		*71 - 125*

Lab Sample ID: 480-159204-9MS
Matrix: Solid
Analysis Batch: 492443

Client Sample ID: AMSF-CS-ES-SS-G1
Prep Type: Total/NA
Prep Batch: 492516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND	vs	0.0573	0.0630	vs	mg/Kg	☼	110	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1 vs	0.0573	0.0449	F1 vs	mg/Kg	☼	78	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	0.0573	0.0618	vs	mg/Kg	☼	108	60 - 140
1,1,2-Trichloroethane	ND	vs	0.0573	0.0480	vs	mg/Kg	☼	84	78 - 122
1,1-Dichloroethane	ND	vs	0.0573	0.0586	vs	mg/Kg	☼	102	73 - 126
1,1-Dichloroethene	ND	vs	0.0573	0.0600	vs	mg/Kg	☼	105	59 - 125
1,2,4-Trichlorobenzene	ND	F1 vs	0.0573	0.0330	F1 vs	mg/Kg	☼	58	64 - 120
1,2-Dibromo-3-Chloropropane	ND	vs	0.0573	0.0366	vs	mg/Kg	☼	64	63 - 124
1,2-Dichlorobenzene	ND	vs	0.0573	0.0479	vs	mg/Kg	☼	84	75 - 120
1,2-Dichloroethane	ND	vs	0.0573	0.0506	vs	mg/Kg	☼	88	77 - 122
1,2-Dichloropropane	ND	vs	0.0573	0.0551	vs	mg/Kg	☼	96	75 - 124
1,3-Dichlorobenzene	ND	vs	0.0573	0.0510	vs	mg/Kg	☼	89	74 - 120
1,4-Dichlorobenzene	ND	vs	0.0573	0.0501	vs	mg/Kg	☼	87	73 - 120
2-Butanone (MEK)	ND	F1 vs	0.286	0.159	F1 vs	mg/Kg	☼	56	70 - 134
2-Hexanone	ND	F1 vs	0.286	0.157	F1 vs	mg/Kg	☼	55	59 - 130
4-Methyl-2-pentanone (MIBK)	ND	F1 vs	0.286	0.177	F1 vs	mg/Kg	☼	62	65 - 133

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-159204-9MS
Matrix: Solid
Analysis Batch: 492443

Client Sample ID: AMSF-CS-ES-SS-G1
Prep Type: Total/NA
Prep Batch: 492516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	F1 vs	0.286	0.153	F1 vs	mg/Kg	☼	54	61 - 137
Benzene	ND	vs	0.0573	0.0571	vs	mg/Kg	☼	100	79 - 127
Bromoform	ND	* vs	0.0573	0.0504	vs	mg/Kg	☼	88	68 - 126
Bromomethane	ND	vs	0.0573	0.0481	vs	mg/Kg	☼	84	37 - 149
Carbon disulfide	ND	vs	0.0573	0.0553	vs	mg/Kg	☼	97	64 - 131
Carbon tetrachloride	ND	vs	0.0573	0.0667	vs	mg/Kg	☼	116	75 - 135
Chlorobenzene	ND	vs	0.0573	0.0539	vs	mg/Kg	☼	94	76 - 124
Dibromochloromethane	ND	* vs	0.0573	0.0605	vs	mg/Kg	☼	106	76 - 125
Chloroethane	ND	vs	0.0573	0.0613	vs	mg/Kg	☼	107	69 - 135
Chloroform	ND	vs	0.0573	0.0592	vs	mg/Kg	☼	103	80 - 120
Chloromethane	ND	vs	0.0573	0.0440	vs	mg/Kg	☼	77	63 - 127
cis-1,2-Dichloroethene	ND	vs	0.0573	0.0576	vs	mg/Kg	☼	101	80 - 120
Cyclohexane	ND	vs	0.0573	0.0539	vs	mg/Kg	☼	94	65 - 120
Bromodichloromethane	ND	vs	0.0573	0.0611	vs	mg/Kg	☼	107	80 - 122
Dichlorodifluoromethane	ND	vs	0.0573	0.0557	vs	mg/Kg	☼	97	57 - 142
Ethylbenzene	ND	vs	0.0573	0.0559	vs	mg/Kg	☼	98	80 - 120
1,2-Dibromoethane	ND	vs	0.0573	0.0460	vs	mg/Kg	☼	80	78 - 120
Isopropylbenzene	ND	vs	0.0573	0.0606	vs	mg/Kg	☼	106	72 - 120
Methyl acetate	ND	F1 vs	0.115	0.0581	F1 vs	mg/Kg	☼	51	55 - 136
Methyl tert-butyl ether	ND	vs	0.0573	0.0485	vs	mg/Kg	☼	85	63 - 125
Methylcyclohexane	ND	vs	0.0573	0.0530	vs	mg/Kg	☼	92	60 - 140
Methylene Chloride	ND	vs	0.0573	0.0549	vs	mg/Kg	☼	96	61 - 127
Tetrachloroethene	ND	vs	0.0573	0.0580	vs	mg/Kg	☼	101	74 - 122
Toluene	ND	vs	0.0573	0.0573	vs	mg/Kg	☼	100	74 - 128
trans-1,2-Dichloroethene	ND	vs	0.0573	0.0603	vs	mg/Kg	☼	105	78 - 126
trans-1,3-Dichloropropene	ND	vs	0.0573	0.0490	vs	mg/Kg	☼	85	73 - 123
Trichloroethene	ND	vs	0.0573	0.0573	vs	mg/Kg	☼	100	77 - 129
Trichlorofluoromethane	ND	vs	0.0573	0.0631	vs	mg/Kg	☼	110	65 - 146
Vinyl chloride	ND	vs	0.0573	0.0541	vs	mg/Kg	☼	94	61 - 133
cis-1,3-Dichloropropene	ND	F1 vs	0.0573	0.0490	vs	mg/Kg	☼	86	80 - 120
Styrene	ND	vs	0.0573	0.0512	vs	mg/Kg	☼	89	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*64 - 126*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*
Toluene-d8 (Surr)	*101*		*71 - 125*

Lab Sample ID: MB 480-493643/8
Matrix: Water
Analysis Batch: 493643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/24/19 12:24	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/24/19 12:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/24/19 12:24	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/24/19 12:24	1
1,1-Dichloroethane	ND		1.0		ug/L			09/24/19 12:24	1
1,1-Dichloroethene	ND		1.0		ug/L			09/24/19 12:24	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-493643/8
Matrix: Water
Analysis Batch: 493643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0		ug/L			09/24/19 12:24	1
1,2,3-Trichloropropane	ND		1.0		ug/L			09/24/19 12:24	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/24/19 12:24	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/24/19 12:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/24/19 12:24	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/24/19 12:24	1
1,2-Dichloroethane	ND		1.0		ug/L			09/24/19 12:24	1
1,2-Dichloropropane	ND		1.0		ug/L			09/24/19 12:24	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/24/19 12:24	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/24/19 12:24	1
1,3-Dichloropropane	ND		1.0		ug/L			09/24/19 12:24	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/24/19 12:24	1
2-Butanone (MEK)	ND		10		ug/L			09/24/19 12:24	1
2-Hexanone	ND		5.0		ug/L			09/24/19 12:24	1
4-Isopropyltoluene	ND		1.0		ug/L			09/24/19 12:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/24/19 12:24	1
Acetone	ND		10		ug/L			09/24/19 12:24	1
Benzene	ND		1.0		ug/L			09/24/19 12:24	1
Bromoform	ND		1.0		ug/L			09/24/19 12:24	1
Bromomethane	ND		1.0		ug/L			09/24/19 12:24	1
Carbon disulfide	ND		1.0		ug/L			09/24/19 12:24	1
Carbon tetrachloride	ND		1.0		ug/L			09/24/19 12:24	1
Chlorobenzene	ND		1.0		ug/L			09/24/19 12:24	1
Dibromochloromethane	ND		1.0		ug/L			09/24/19 12:24	1
Chloroethane	ND		1.0		ug/L			09/24/19 12:24	1
Chloroform	ND		1.0		ug/L			09/24/19 12:24	1
Chloromethane	ND		1.0		ug/L			09/24/19 12:24	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/24/19 12:24	1
Cyclohexane	ND		1.0		ug/L			09/24/19 12:24	1
Bromodichloromethane	ND		1.0		ug/L			09/24/19 12:24	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/24/19 12:24	1
Ethylbenzene	ND		1.0		ug/L			09/24/19 12:24	1
1,2-Dibromoethane	ND		1.0		ug/L			09/24/19 12:24	1
Isopropylbenzene	ND		1.0		ug/L			09/24/19 12:24	1
Methyl acetate	ND		2.5		ug/L			09/24/19 12:24	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/24/19 12:24	1
Methylcyclohexane	ND		1.0		ug/L			09/24/19 12:24	1
Methylene Chloride	ND		1.0		ug/L			09/24/19 12:24	1
Naphthalene	ND		1.0		ug/L			09/24/19 12:24	1
n-Butylbenzene	ND		1.0		ug/L			09/24/19 12:24	1
N-Propylbenzene	ND		1.0		ug/L			09/24/19 12:24	1
sec-Butylbenzene	ND		1.0		ug/L			09/24/19 12:24	1
Tetrachloroethene	ND		1.0		ug/L			09/24/19 12:24	1
Toluene	ND		1.0		ug/L			09/24/19 12:24	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/24/19 12:24	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/24/19 12:24	1
Trichloroethene	ND		1.0		ug/L			09/24/19 12:24	1
Trichlorofluoromethane	ND		1.0		ug/L			09/24/19 12:24	1
Vinyl chloride	ND		1.0		ug/L			09/24/19 12:24	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-493643/8
Matrix: Water
Analysis Batch: 493643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0		ug/L			09/24/19 12:24	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/24/19 12:24	1
Styrene	ND		1.0		ug/L			09/24/19 12:24	1
tert-Butylbenzene	ND		1.0		ug/L			09/24/19 12:24	1
Ethyl acetate	ND		1.0		ug/L			09/24/19 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*09/24/19 12:24*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*09/24/19 12:24*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*09/24/19 12:24*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*09/24/19 12:24*	*1*

Lab Sample ID: LCS 480-493643/5
Matrix: Water
Analysis Batch: 493643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	24.4		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.6		ug/L		91	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.7		ug/L		87	61 - 148
1,1,2-Trichloroethane	25.0	24.0		ug/L		96	76 - 122
1,1-Dichloroethane	25.0	23.6		ug/L		94	77 - 120
1,1-Dichloroethene	25.0	22.8		ug/L		91	66 - 127
1,2,3-Trichlorobenzene	25.0	24.5		ug/L		98	75 - 123
1,2,3-Trichloropropane	25.0	23.0		ug/L		92	68 - 122
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		98	79 - 122
1,2,4-Trimethylbenzene	25.0	24.1		ug/L		96	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	20.6		ug/L		83	56 - 134
1,2-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	24.7		ug/L		99	75 - 120
1,2-Dichloropropane	25.0	25.3		ug/L		101	76 - 120
1,3,5-Trimethylbenzene	25.0	24.0		ug/L		96	77 - 121
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	77 - 120
1,3-Dichloropropane	25.0	24.5		ug/L		98	75 - 120
1,4-Dichlorobenzene	25.0	24.2		ug/L		97	80 - 120
2-Butanone (MEK)	125	137		ug/L		109	57 - 140
2-Hexanone	125	117		ug/L		94	65 - 127
4-Isopropyltoluene	25.0	24.4		ug/L		98	73 - 120
4-Methyl-2-pentanone (MIBK)	125	116		ug/L		93	71 - 125
Acetone	125	162		ug/L		129	56 - 142
Benzene	25.0	25.1		ug/L		100	71 - 124
Bromoform	25.0	22.9		ug/L		92	61 - 132
Bromomethane	25.0	22.8		ug/L		91	55 - 144
Carbon disulfide	25.0	21.9		ug/L		87	59 - 134
Carbon tetrachloride	25.0	22.8		ug/L		91	72 - 134
Chlorobenzene	25.0	24.9		ug/L		100	80 - 120
Dibromochloromethane	25.0	25.2		ug/L		101	75 - 125
Chloroethane	25.0	21.9		ug/L		88	69 - 136

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-493643/5
Matrix: Water
Analysis Batch: 493643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	25.0	22.9		ug/L		92	73 - 127
Chloromethane	25.0	22.0		ug/L		88	68 - 124
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	74 - 124
Cyclohexane	25.0	23.0		ug/L		92	59 - 135
Bromodichloromethane	25.0	24.9		ug/L		100	80 - 122
Dichlorodifluoromethane	25.0	17.1		ug/L		68	59 - 135
Ethylbenzene	25.0	24.7		ug/L		99	77 - 123
1,2-Dibromoethane	25.0	24.3		ug/L		97	77 - 120
Isopropylbenzene	25.0	23.9		ug/L		96	77 - 122
Methyl acetate	50.0	45.1		ug/L		90	74 - 133
Methyl tert-butyl ether	25.0	24.2		ug/L		97	77 - 120
Methylcyclohexane	25.0	23.1		ug/L		92	68 - 134
Methylene Chloride	25.0	25.7		ug/L		103	75 - 124
Naphthalene	25.0	22.5		ug/L		90	66 - 125
n-Butylbenzene	25.0	23.0		ug/L		92	71 - 128
N-Propylbenzene	25.0	23.6		ug/L		94	75 - 127
sec-Butylbenzene	25.0	23.7		ug/L		95	74 - 127
Tetrachloroethene	25.0	25.1		ug/L		100	74 - 122
Toluene	25.0	23.3		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	23.4		ug/L		94	73 - 127
trans-1,3-Dichloropropene	25.0	24.4		ug/L		98	80 - 120
Trichloroethene	25.0	24.4		ug/L		97	74 - 123
Trichlorofluoromethane	25.0	23.9		ug/L		96	62 - 150
Vinyl chloride	25.0	22.3		ug/L		89	65 - 133
cis-1,3-Dichloropropene	25.0	26.2		ug/L		105	74 - 124
Styrene	25.0	25.2		ug/L		101	80 - 120
tert-Butylbenzene	25.0	23.8		ug/L		95	75 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*75 - 123*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-492549/1-A
Matrix: Water
Analysis Batch: 492746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492549

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
2,4,6-Trichlorophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
2,4-Dichlorophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
2,4-Dimethylphenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
2,4-Dinitrophenol	ND		10		ug/L		09/17/19 15:14	09/18/19 17:54	1
2,4-Dinitrotoluene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
2,6-Dinitrotoluene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
2-Chloronaphthalene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-492549/1-A
Matrix: Water
Analysis Batch: 492746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492549

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
2-Methylnaphthalene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
2-Methylphenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
2-Nitroaniline	ND		10		ug/L		09/17/19 15:14	09/18/19 17:54	1
2-Nitrophenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
3,3'-Dichlorobenzidine	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
3-Nitroaniline	ND		10		ug/L		09/17/19 15:14	09/18/19 17:54	1
4,6-Dinitro-2-methylphenol	ND		10		ug/L		09/17/19 15:14	09/18/19 17:54	1
4-Bromophenyl phenyl ether	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
4-Chloro-3-methylphenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
4-Chloroaniline	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
4-Chlorophenyl phenyl ether	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
4-Methylphenol	ND		10		ug/L		09/17/19 15:14	09/18/19 17:54	1
4-Nitroaniline	ND		10		ug/L		09/17/19 15:14	09/18/19 17:54	1
4-Nitrophenol	ND		10		ug/L		09/17/19 15:14	09/18/19 17:54	1
Acenaphthene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Acenaphthylene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Acetophenone	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Anthracene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Atrazine	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Benzaldehyde	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Benzo[a]anthracene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Benzo[a]pyrene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Benzo[b]fluoranthene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Benzo[g,h,i]perylene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Benzo[k]fluoranthene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Biphenyl	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
bis (2-chloroisopropyl) ether	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Bis(2-chloroethoxy)methane	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Bis(2-chloroethyl)ether	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Bis(2-ethylhexyl) phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Butyl benzyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Caprolactam	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Carbazole	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Chrysene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Dibenz(a,h)anthracene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Dibenzofuran	ND		10		ug/L		09/17/19 15:14	09/18/19 17:54	1
Diethyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Dimethyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Di-n-butyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Di-n-octyl phthalate	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Fluoranthene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Fluorene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Hexachlorobenzene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Hexachlorobutadiene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Hexachlorocyclopentadiene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Hexachloroethane	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Isophorone	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-492549/1-A
Matrix: Water
Analysis Batch: 492746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492549

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Nitrobenzene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
N-Nitrosodi-n-propylamine	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
N-Nitrosodiphenylamine	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Pentachlorophenol	ND		10		ug/L		09/17/19 15:14	09/18/19 17:54	1
Phenanthrene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Phenol	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1
Pyrene	ND		5.0		ug/L		09/17/19 15:14	09/18/19 17:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*41 - 120*	*09/17/19 15:14*	*09/18/19 17:54*	*1*
2-Fluorobiphenyl	*90*		*48 - 120*	*09/17/19 15:14*	*09/18/19 17:54*	*1*
2-Fluorophenol	*57*		*35 - 120*	*09/17/19 15:14*	*09/18/19 17:54*	*1*
Nitrobenzene-d5	*80*		*46 - 120*	*09/17/19 15:14*	*09/18/19 17:54*	*1*
Phenol-d5	*43*		*22 - 120*	*09/17/19 15:14*	*09/18/19 17:54*	*1*
p-Terphenyl-d14	*98*		*60 - 148*	*09/17/19 15:14*	*09/18/19 17:54*	*1*

Lab Sample ID: LCS 480-492549/2-A
Matrix: Water
Analysis Batch: 492746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	32.0	35.0		ug/L		109	65 - 126
2,4,6-Trichlorophenol	32.0	38.2		ug/L		119	64 - 120
2,4-Dichlorophenol	32.0	33.7		ug/L		105	63 - 120
2,4-Dimethylphenol	32.0	31.4		ug/L		98	47 - 120
2,4-Dinitrophenol	64.0	73.2		ug/L		114	31 - 137
2,4-Dinitrotoluene	32.0	36.2		ug/L		113	69 - 120
2,6-Dinitrotoluene	32.0	34.0		ug/L		106	68 - 120
2-Chloronaphthalene	32.0	30.9		ug/L		97	58 - 120
2-Chlorophenol	32.0	28.1		ug/L		88	48 - 120
2-Methylnaphthalene	32.0	29.5		ug/L		92	59 - 120
2-Methylphenol	32.0	27.4		ug/L		86	39 - 120
2-Nitroaniline	32.0	34.2		ug/L		107	54 - 127
2-Nitrophenol	32.0	31.3		ug/L		98	52 - 125
3,3'-Dichlorobenzidine	64.0	71.7		ug/L		112	49 - 135
3-Nitroaniline	32.0	28.0		ug/L		87	51 - 120
4,6-Dinitro-2-methylphenol	64.0	80.0		ug/L		125	46 - 136
4-Bromophenyl phenyl ether	32.0	35.0		ug/L		109	65 - 120
4-Chloro-3-methylphenol	32.0	32.8		ug/L		102	61 - 123
4-Chloroaniline	32.0	25.7		ug/L		80	30 - 120
4-Chlorophenyl phenyl ether	32.0	34.4		ug/L		108	62 - 120
4-Methylphenol	32.0	27.6		ug/L		86	29 - 131
4-Nitroaniline	32.0	38.1		ug/L		119	65 - 120
4-Nitrophenol	64.0	75.9		ug/L		119	45 - 120
Acenaphthene	32.0	31.6		ug/L		99	60 - 120
Acenaphthylene	32.0	31.7		ug/L		99	63 - 120
Acetophenone	32.0	30.6		ug/L		95	45 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-492549/2-A
Matrix: Water
Analysis Batch: 492746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Anthracene	32.0	33.4		ug/L		104	67 - 120
Atrazine	64.0	89.7	*	ug/L		140	71 - 130
Benzaldehyde	64.0	56.1		ug/L		88	10 - 140
Benzo[a]anthracene	32.0	32.4		ug/L		101	70 - 121
Benzo[a]pyrene	32.0	30.2		ug/L		94	60 - 123
Benzo[b]fluoranthene	32.0	33.7		ug/L		105	66 - 126
Benzo[g,h,i]perylene	32.0	35.9		ug/L		112	66 - 150
Benzo[k]fluoranthene	32.0	34.0		ug/L		106	65 - 124
Biphenyl	32.0	31.4		ug/L		98	59 - 120
bis (2-chloroisopropyl) ether	32.0	20.0		ug/L		63	21 - 136
Bis(2-chloroethoxy)methane	32.0	28.0		ug/L		88	50 - 128
Bis(2-chloroethyl)ether	32.0	25.2		ug/L		79	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	33.5		ug/L		105	63 - 139
Butyl benzyl phthalate	32.0	32.9		ug/L		103	70 - 129
Caprolactam	64.0	23.1		ug/L		36	22 - 120
Carbazole	32.0	33.4		ug/L		104	66 - 123
Chrysene	32.0	32.4		ug/L		101	69 - 120
Dibenz(a,h)anthracene	32.0	36.5		ug/L		114	65 - 135
Dibenzofuran	32.0	33.0		ug/L		103	66 - 120
Diethyl phthalate	32.0	37.0		ug/L		116	59 - 127
Dimethyl phthalate	32.0	35.1		ug/L		110	68 - 120
Di-n-butyl phthalate	32.0	35.3		ug/L		110	69 - 131
Di-n-octyl phthalate	32.0	34.2		ug/L		107	63 - 140
Fluoranthene	32.0	34.5		ug/L		108	69 - 126
Fluorene	32.0	33.9		ug/L		106	66 - 120
Hexachlorobenzene	32.0	37.7		ug/L		118	61 - 120
Hexachlorobutadiene	32.0	31.3		ug/L		98	35 - 120
Hexachlorocyclopentadiene	32.0	24.5		ug/L		76	31 - 120
Hexachloroethane	32.0	26.7		ug/L		83	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	35.5		ug/L		111	69 - 146
Isophorone	32.0	28.8		ug/L		90	55 - 120
Naphthalene	32.0	29.4		ug/L		92	57 - 120
Nitrobenzene	32.0	29.3		ug/L		91	53 - 123
N-Nitrosodi-n-propylamine	32.0	29.5		ug/L		92	32 - 140
N-Nitrosodiphenylamine	32.0	32.7		ug/L		102	61 - 120
Pentachlorophenol	64.0	64.6		ug/L		101	29 - 136
Phenanthrene	32.0	34.7		ug/L		109	68 - 120
Phenol	32.0	17.8		ug/L		56	17 - 120
Pyrene	32.0	33.1		ug/L		104	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*128*	*X*	*41 - 120*
2-Fluorobiphenyl	*97*		*48 - 120*
2-Fluorophenol	*67*		*35 - 120*
Nitrobenzene-d5	*85*		*46 - 120*
Phenol-d5	*53*		*22 - 120*
p-Terphenyl-d14	*101*		*60 - 148*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-493581/1-A
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 493581

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2,4,6-Trichlorophenol	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2,4-Dichlorophenol	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2,4-Dimethylphenol	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2,4-Dinitrophenol	ND		0.33		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2,4-Dinitrotoluene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2,6-Dinitrotoluene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2-Chloronaphthalene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2-Chlorophenol	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2-Methylnaphthalene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2-Methylphenol	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2-Nitroaniline	ND		0.33		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
2-Nitrophenol	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
3,3'-Dichlorobenzidine	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
3-Nitroaniline	ND		0.33		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
4,6-Dinitro-2-methylphenol	ND		0.33		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
4-Bromophenyl phenyl ether	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
4-Chloro-3-methylphenol	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
4-Chloroaniline	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
4-Chlorophenyl phenyl ether	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
4-Methylphenol	ND		0.33		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
4-Nitroaniline	ND		0.33		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
4-Nitrophenol	ND		0.33		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Acenaphthene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Acenaphthylene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Acetophenone	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Anthracene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Atrazine	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Benzaldehyde	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Benzo(a)anthracene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Benzo(a)pyrene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Benzo(b)fluoranthene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Benzo(g,h,i)perylene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Benzo(k)fluoranthene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Biphenyl	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
bis (2-chloroisopropyl) ether	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Bis(2-chloroethoxy)methane	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Bis(2-chloroethyl)ether	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Bis(2-ethylhexyl) phthalate	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Butyl benzyl phthalate	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Caprolactam	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Carbazole	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Chrysene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Dibenz(a,h)anthracene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Dibenzofuran	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Diethyl phthalate	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Dimethyl phthalate	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Di-n-butyl phthalate	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-493581/1-A
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 493581

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Fluoranthene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Fluorene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Hexachlorobenzene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Hexachlorobutadiene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Hexachlorocyclopentadiene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Hexachloroethane	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Indeno(1,2,3-cd)pyrene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Isophorone	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Naphthalene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Nitrobenzene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
N-Nitrosodi-n-propylamine	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
N-Nitrosodiphenylamine	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Pentachlorophenol	ND		0.33		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Phenanthrene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Phenol	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1
Pyrene	ND		0.17		mg/Kg		09/23/19 14:27	09/24/19 13:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*54 - 120*	*09/23/19 14:27*	*09/24/19 13:20*	*1*
2-Fluorobiphenyl	*95*		*60 - 120*	*09/23/19 14:27*	*09/24/19 13:20*	*1*
2-Fluorophenol	*89*		*52 - 120*	*09/23/19 14:27*	*09/24/19 13:20*	*1*
Nitrobenzene-d5	*86*		*53 - 120*	*09/23/19 14:27*	*09/24/19 13:20*	*1*
Phenol-d5	*82*		*54 - 120*	*09/23/19 14:27*	*09/24/19 13:20*	*1*
p-Terphenyl-d14	*108*		*79 - 130*	*09/23/19 14:27*	*09/24/19 13:20*	*1*

Lab Sample ID: LCS 480-493581/2-A
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 493581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	1.65	1.68		mg/Kg		102	59 - 126
2,4,6-Trichlorophenol	1.65	1.71		mg/Kg		104	59 - 123
2,4-Dichlorophenol	1.65	1.52		mg/Kg		92	61 - 120
2,4-Dimethylphenol	1.65	1.48		mg/Kg		90	59 - 120
2,4-Dinitrophenol	3.30	2.96		mg/Kg		90	41 - 146
2,4-Dinitrotoluene	1.65	1.68		mg/Kg		102	63 - 120
2,6-Dinitrotoluene	1.65	1.73		mg/Kg		105	66 - 120
2-Chloronaphthalene	1.65	1.60		mg/Kg		97	57 - 120
2-Chlorophenol	1.65	1.45		mg/Kg		88	53 - 120
2-Methylnaphthalene	1.65	1.47		mg/Kg		89	59 - 120
2-Methylphenol	1.65	1.33		mg/Kg		81	54 - 120
2-Nitroaniline	1.65	1.57		mg/Kg		95	61 - 120
2-Nitrophenol	1.65	1.61		mg/Kg		98	56 - 120
3,3'-Dichlorobenzidine	3.30	3.65		mg/Kg		110	54 - 120
3-Nitroaniline	1.65	1.49		mg/Kg		91	48 - 120
4,6-Dinitro-2-methylphenol	3.30	3.89		mg/Kg		118	49 - 122
4-Bromophenyl phenyl ether	1.65	1.73		mg/Kg		105	58 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-493581/2-A
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 493581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	1.65	1.49		mg/Kg		90	61 - 120
4-Chloroaniline	1.65	1.38		mg/Kg		84	38 - 120
4-Chlorophenyl phenyl ether	1.65	1.58		mg/Kg		96	63 - 124
4-Methylphenol	1.65	1.40		mg/Kg		85	55 - 120
4-Nitroaniline	1.65	1.57		mg/Kg		95	56 - 120
4-Nitrophenol	3.30	2.78		mg/Kg		84	43 - 147
Acenaphthene	1.65	1.57		mg/Kg		95	62 - 120
Acenaphthylene	1.65	1.67		mg/Kg		101	58 - 121
Acetophenone	1.65	1.38		mg/Kg		84	54 - 120
Anthracene	1.65	1.78		mg/Kg		108	62 - 120
Atrazine	3.30	3.21		mg/Kg		97	60 - 127
Benzaldehyde	3.30	2.58		mg/Kg		78	10 - 150
Benzo(a)anthracene	1.65	1.73		mg/Kg		105	65 - 120
Benzo(a)pyrene	1.65	1.78		mg/Kg		108	64 - 120
Benzo(b)fluoranthene	1.65	1.76		mg/Kg		107	64 - 120
Benzo(g,h,i)perylene	1.65	1.88		mg/Kg		114	45 - 145
Benzo(k)fluoranthene	1.65	1.88		mg/Kg		114	65 - 120
Biphenyl	1.65	1.64		mg/Kg		100	59 - 120
bis (2-chloroisopropyl) ether	1.65	1.22		mg/Kg		74	44 - 120
Bis(2-chloroethoxy)methane	1.65	1.48		mg/Kg		90	55 - 120
Bis(2-chloroethyl)ether	1.65	1.39		mg/Kg		84	45 - 120
Bis(2-ethylhexyl) phthalate	1.65	1.87		mg/Kg		113	61 - 133
Butyl benzyl phthalate	1.65	1.88		mg/Kg		114	61 - 129
Caprolactam	3.30	3.19		mg/Kg		97	47 - 120
Carbazole	1.65	1.73		mg/Kg		105	65 - 120
Chrysene	1.65	1.85		mg/Kg		112	64 - 120
Dibenz(a,h)anthracene	1.65	1.84		mg/Kg		111	54 - 132
Dibenzofuran	1.65	1.63		mg/Kg		98	63 - 120
Diethyl phthalate	1.65	1.66		mg/Kg		101	66 - 120
Dimethyl phthalate	1.65	1.70		mg/Kg		103	65 - 124
Di-n-butyl phthalate	1.65	1.82		mg/Kg		110	58 - 130
Di-n-octyl phthalate	1.65	2.10		mg/Kg		127	57 - 133
Fluoranthene	1.65	1.75		mg/Kg		106	62 - 120
Fluorene	1.65	1.64		mg/Kg		99	63 - 120
Hexachlorobenzene	1.65	1.78		mg/Kg		108	60 - 120
Hexachlorobutadiene	1.65	1.43		mg/Kg		87	45 - 120
Hexachlorocyclopentadiene	1.65	1.35		mg/Kg		82	47 - 120
Hexachloroethane	1.65	1.17		mg/Kg		71	41 - 120
Indeno(1,2,3-cd)pyrene	1.65	1.80		mg/Kg		109	56 - 134
Isophorone	1.65	1.51		mg/Kg		91	56 - 120
Naphthalene	1.65	1.49		mg/Kg		90	55 - 120
Nitrobenzene	1.65	1.43		mg/Kg		87	54 - 120
N-Nitrosodi-n-propylamine	1.65	1.31		mg/Kg		80	52 - 120
N-Nitrosodiphenylamine	1.65	1.76		mg/Kg		106	51 - 128
Pentachlorophenol	3.30	3.01		mg/Kg		91	51 - 120
Phenanthrene	1.65	1.72		mg/Kg		104	60 - 120
Phenol	1.65	1.28		mg/Kg		78	53 - 120
Pyrene	1.65	1.95		mg/Kg		118	61 - 133

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-493581/2-A
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 493581

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	113		54 - 120
2-Fluorobiphenyl	104		60 - 120
2-Fluorophenol	89		52 - 120
Nitrobenzene-d5	90		53 - 120
Phenol-d5	85		54 - 120
p-Terphenyl-d14	122		79 - 130

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 493581

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		1.97	2.23		mg/Kg	☼	113	46 - 120
2,4,6-Trichlorophenol	ND		1.97	2.10		mg/Kg	☼	107	41 - 123
2,4-Dichlorophenol	ND		1.97	1.63		mg/Kg	☼	83	45 - 120
2,4-Dimethylphenol	ND		1.97	1.44		mg/Kg	☼	73	52 - 120
2,4-Dinitrophenol	ND		3.93	3.88		mg/Kg	☼	NC	41 - 146
2,4-Dinitrotoluene	ND		1.97	2.36		mg/Kg	☼	120	63 - 125
2,6-Dinitrotoluene	ND		1.97	2.16		mg/Kg	☼	110	66 - 120
2-Chloronaphthalene	ND		1.97	1.65		mg/Kg	☼	84	57 - 120
2-Chlorophenol	ND		1.97	1.29		mg/Kg	☼	65	43 - 120
2-Methylnaphthalene	ND		1.97	1.49		mg/Kg	☼	76	55 - 120
2-Methylphenol	ND		1.97	1.32		mg/Kg	☼	67	48 - 120
2-Nitroaniline	ND		1.97	1.98		mg/Kg	☼	101	61 - 120
2-Nitrophenol	ND		1.97	1.55		mg/Kg	☼	79	37 - 120
3,3'-Dichlorobenzidine	ND		3.93	4.83		mg/Kg	☼	123	37 - 126
3-Nitroaniline	ND		1.97	2.14		mg/Kg	☼	109	48 - 120
4,6-Dinitro-2-methylphenol	ND		3.93	4.78		mg/Kg	☼	122	23 - 149
4-Bromophenyl phenyl ether	ND		1.97	2.06		mg/Kg	☼	105	58 - 120
4-Chloro-3-methylphenol	ND		1.97	1.99		mg/Kg	☼	101	49 - 125
4-Chloroaniline	ND		1.97	1.45		mg/Kg	☼	74	38 - 120
4-Chlorophenyl phenyl ether	ND		1.97	2.03		mg/Kg	☼	103	63 - 124
4-Methylphenol	ND		1.97	ND		mg/Kg	☼	73	50 - 120
4-Nitroaniline	ND		1.97	2.23		mg/Kg	☼	113	47 - 120
4-Nitrophenol	ND		3.93	4.03		mg/Kg	☼	103	31 - 147
Acenaphthene	ND		1.97	2.09		mg/Kg	☼	94	60 - 120
Acenaphthylene	ND		1.97	1.98		mg/Kg	☼	101	58 - 121
Acetophenone	ND		1.97	1.26		mg/Kg	☼	64	47 - 120
Anthracene	ND	F2 F1	1.97	3.33	F1	mg/Kg	☼	137	62 - 120
Atrazine	ND		3.93	4.66		mg/Kg	☼	119	60 - 150
Benzaldehyde	ND		3.93	2.36		mg/Kg	☼	60	10 - 150
Benzo(a)anthracene	2.3	F2 F1	1.97	4.91	F1	mg/Kg	☼	134	65 - 120
Benzo(a)pyrene	2.3	F2 F1	1.97	4.93	F1	mg/Kg	☼	132	64 - 120
Benzo(b)fluoranthene	3.3	F2	1.97	5.78		mg/Kg	☼	129	10 - 150
Benzo(g,h,i)perylene	1.7	F2	1.97	4.33		mg/Kg	☼	134	45 - 145
Benzo(k)fluoranthene	1.2	F2	1.97	4.13		mg/Kg	☼	148	23 - 150
Biphenyl	ND		1.97	1.70		mg/Kg	☼	86	58 - 120
bis (2-chloroisopropyl) ether	ND		1.97	1.09		mg/Kg	☼	55	31 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 493581

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	ND	F2	1.97	1.29		mg/Kg	☼	65	52 - 120
Bis(2-chloroethyl)ether	ND		1.97	1.23		mg/Kg	☼	63	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1.97	2.45		mg/Kg	☼	125	61 - 133
Butyl benzyl phthalate	ND		1.97	2.37		mg/Kg	☼	120	61 - 120
Caprolactam	ND		3.93	4.49		mg/Kg	☼	114	37 - 133
Carbazole	ND	F1	1.97	3.09	F1	mg/Kg	☼	134	59 - 120
Chrysene	2.6	F2 F1	1.97	5.17	F1	mg/Kg	☼	132	64 - 120
Dibenz(a,h)anthracene	ND		1.97	2.89		mg/Kg	☼	122	54 - 132
Dibenzofuran	ND		1.97	2.19		mg/Kg	☼	105	62 - 120
Diethyl phthalate	ND		1.97	2.21		mg/Kg	☼	112	66 - 120
Dimethyl phthalate	ND		1.97	2.10		mg/Kg	☼	107	65 - 124
Di-n-butyl phthalate	ND		1.97	2.55		mg/Kg	☼	130	58 - 130
Di-n-octyl phthalate	ND	F1	1.97	2.84	F1	mg/Kg	☼	145	57 - 133
Fluoranthene	5.5	F2 F1	1.97	8.80	F1	mg/Kg	☼	169	62 - 120
Fluorene	ND		1.97	2.43		mg/Kg	☼	111	63 - 120
Hexachlorobenzene	ND		1.97	2.25		mg/Kg	☼	115	60 - 120
Hexachlorobutadiene	ND		1.97	1.26		mg/Kg	☼	64	45 - 120
Hexachlorocyclopentadiene	ND		1.97	ND		mg/Kg	☼	48	31 - 120
Hexachloroethane	ND		1.97	ND		mg/Kg	☼	50	21 - 120
Indeno(1,2,3-cd)pyrene	1.3	F2 F1	1.97	4.00	F1	mg/Kg	☼	137	56 - 134
Isophorone	ND		1.97	1.42		mg/Kg	☼	72	56 - 120
Naphthalene	ND		1.97	1.49		mg/Kg	☼	76	46 - 120
Nitrobenzene	ND		1.97	1.28		mg/Kg	☼	65	49 - 120
N-Nitrosodi-n-propylamine	ND		1.97	1.26		mg/Kg	☼	64	46 - 120
N-Nitrosodiphenylamine	ND		1.97	2.19		mg/Kg	☼	111	20 - 128
Pentachlorophenol	ND		3.93	3.71		mg/Kg	☼	94	25 - 136
Phenanthrene	3.1	F2 F1	1.97	6.43	F1	mg/Kg	☼	168	60 - 122
Phenol	ND		1.97	1.25		mg/Kg	☼	64	50 - 120
Pyrene	4.3	F1	1.97	7.27	F1	mg/Kg	☼	152	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol	*129*	*X*	*54 - 120*
2-Fluorobiphenyl	*87*		*60 - 120*
2-Fluorophenol	*67*		*52 - 120*
Nitrobenzene-d5	*68*		*53 - 120*
Phenol-d5	*70*		*54 - 120*
p-Terphenyl-d14	*126*		*79 - 130*

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 493581

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND		1.95	2.02		mg/Kg	☼	104	46 - 120	10	18
2,4,6-Trichlorophenol	ND		1.95	2.07		mg/Kg	☼	106	41 - 123	2	19
2,4-Dichlorophenol	ND		1.95	1.88		mg/Kg	☼	96	45 - 120	14	19
2,4-Dimethylphenol	ND		1.95	1.58		mg/Kg	☼	81	52 - 120	9	42
2,4-Dinitrophenol	ND		3.89	3.94		mg/Kg	☼	NC	41 - 146	NC	22

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 493581

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	ND		1.95	2.24		mg/Kg	☼	115	63 - 125	5	20
2,6-Dinitrotoluene	ND		1.95	2.18		mg/Kg	☼	112	66 - 120	1	15
2-Chloronaphthalene	ND		1.95	1.83		mg/Kg	☼	94	57 - 120	10	21
2-Chlorophenol	ND		1.95	1.53		mg/Kg	☼	79	43 - 120	18	25
2-Methylnaphthalene	ND		1.95	1.70		mg/Kg	☼	87	55 - 120	13	21
2-Methylphenol	ND		1.95	1.56		mg/Kg	☼	80	48 - 120	17	27
2-Nitroaniline	ND		1.95	1.95		mg/Kg	☼	100	61 - 120	2	15
2-Nitrophenol	ND		1.95	1.72		mg/Kg	☼	89	37 - 120	10	18
3,3'-Dichlorobenzidine	ND		3.89	4.48		mg/Kg	☼	115	37 - 126	8	25
3-Nitroaniline	ND		1.95	1.96		mg/Kg	☼	101	48 - 120	9	19
4,6-Dinitro-2-methylphenol	ND		3.89	4.75		mg/Kg	☼	122	23 - 149	1	15
4-Bromophenyl phenyl ether	ND		1.95	2.02		mg/Kg	☼	104	58 - 120	2	15
4-Chloro-3-methylphenol	ND		1.95	1.94		mg/Kg	☼	100	49 - 125	3	27
4-Chloroaniline	ND		1.95	1.58		mg/Kg	☼	81	38 - 120	9	22
4-Chlorophenyl phenyl ether	ND		1.95	1.99		mg/Kg	☼	102	63 - 124	2	16
4-Methylphenol	ND		1.95	ND		mg/Kg	☼	84	50 - 120	13	24
4-Nitroaniline	ND		1.95	2.11		mg/Kg	☼	109	47 - 120	5	24
4-Nitrophenol	ND		3.89	3.61		mg/Kg	☼	93	31 - 147	11	25
Acenaphthene	ND		1.95	2.07		mg/Kg	☼	94	60 - 120	1	35
Acenaphthylene	ND		1.95	2.04		mg/Kg	☼	105	58 - 121	3	18
Acetophenone	ND		1.95	1.42		mg/Kg	☼	73	47 - 120	12	20
Anthracene	ND	F2 F1	1.95	2.85	F2	mg/Kg	☼	114	62 - 120	16	15
Atrazine	ND		3.89	4.46		mg/Kg	☼	115	60 - 150	4	20
Benzaldehyde	ND		3.89	2.87		mg/Kg	☼	74	10 - 150	19	20
Benzo(a)anthracene	2.3	F2 F1	1.95	3.87	F2	mg/Kg	☼	82	65 - 120	24	15
Benzo(a)pyrene	2.3	F2 F1	1.95	4.01	F2	mg/Kg	☼	86	64 - 120	20	15
Benzo(b)fluoranthene	3.3	F2	1.95	4.91	F2	mg/Kg	☼	85	10 - 150	16	15
Benzo(g,h,i)perylene	1.7	F2	1.95	3.64	F2	mg/Kg	☼	100	45 - 145	17	15
Benzo(k)fluoranthene	1.2	F2	1.95	3.14	F2	mg/Kg	☼	99	23 - 150	27	22
Biphenyl	ND		1.95	1.86		mg/Kg	☼	95	58 - 120	9	20
bis (2-chloroisopropyl) ether	ND		1.95	1.31		mg/Kg	☼	67	31 - 120	19	24
Bis(2-chloroethoxy)methane	ND	F2	1.95	1.55	F2	mg/Kg	☼	80	52 - 120	19	17
Bis(2-chloroethyl)ether	ND		1.95	1.48		mg/Kg	☼	76	45 - 120	18	21
Bis(2-ethylhexyl) phthalate	ND		1.95	2.23		mg/Kg	☼	114	61 - 133	10	15
Butyl benzyl phthalate	ND		1.95	2.20		mg/Kg	☼	113	61 - 120	7	16
Caprolactam	ND		3.89	4.05		mg/Kg	☼	104	37 - 133	10	20
Carbazole	ND	F1	1.95	2.78		mg/Kg	☼	120	59 - 120	10	20
Chrysene	2.6	F2 F1	1.95	4.33	F2	mg/Kg	☼	89	64 - 120	18	15
Dibenz(a,h)anthracene	ND		1.95	2.60		mg/Kg	☼	108	54 - 132	11	15
Dibenzofuran	ND		1.95	2.18		mg/Kg	☼	105	62 - 120	0	15
Diethyl phthalate	ND		1.95	2.09		mg/Kg	☼	107	66 - 120	6	15
Dimethyl phthalate	ND		1.95	2.09		mg/Kg	☼	107	65 - 124	1	15
Di-n-butyl phthalate	ND		1.95	2.40		mg/Kg	☼	123	58 - 130	6	15
Di-n-octyl phthalate	ND	F1	1.95	2.61	F1	mg/Kg	☼	134	57 - 133	8	16
Fluoranthene	5.5	F2 F1	1.95	6.73	F2	mg/Kg	☼	65	62 - 120	27	15
Fluorene	ND		1.95	2.30		mg/Kg	☼	105	63 - 120	6	15
Hexachlorobenzene	ND		1.95	2.11		mg/Kg	☼	109	60 - 120	6	15
Hexachlorobutadiene	ND		1.95	1.47		mg/Kg	☼	75	45 - 120	15	44
Hexachlorocyclopentadiene	ND		1.95	1.12		mg/Kg	☼	58	31 - 120	18	49

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 493753

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 493581

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane	ND		1.95	1.18		mg/Kg	☼	61	21 - 120	18	46
Indeno(1,2,3-cd)pyrene	1.3	F2 F1	1.95	3.29	F2	mg/Kg	☼	102	56 - 134	20	15
Isophorone	ND		1.95	1.65		mg/Kg	☼	85	56 - 120	15	17
Naphthalene	ND		1.95	1.70		mg/Kg	☼	87	46 - 120	13	29
Nitrobenzene	ND		1.95	1.51		mg/Kg	☼	77	49 - 120	16	24
N-Nitrosodi-n-propylamine	ND		1.95	1.43		mg/Kg	☼	73	46 - 120	12	31
N-Nitrosodiphenylamine	ND		1.95	2.10		mg/Kg	☼	108	20 - 128	4	15
Pentachlorophenol	ND		3.89	3.40		mg/Kg	☼	87	25 - 136	9	35
Phenanthrene	3.1	F2 F1	1.95	4.81	F2	mg/Kg	☼	87	60 - 122	29	15
Phenol	ND		1.95	1.49		mg/Kg	☼	77	50 - 120	18	35
Pyrene	4.3	F1	1.95	5.59		mg/Kg	☼	67	61 - 133	26	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*122*	*X*	*54 - 120*
2-Fluorobiphenyl	*99*		*60 - 120*
2-Fluorophenol	*78*		*52 - 120*
Nitrobenzene-d5	*81*		*53 - 120*
Phenol-d5	*82*		*54 - 120*
p-Terphenyl-d14	*118*		*79 - 130*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-492545/1-A
Matrix: Water
Analysis Batch: 492824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492545

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
4,4'-DDE	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
4,4'-DDT	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Aldrin	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
alpha-BHC	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
cis-Chlordane	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
beta-BHC	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
delta-BHC	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Dieldrin	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Endosulfan I	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Endosulfan II	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Endosulfan sulfate	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Endrin	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Endrin aldehyde	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Endrin ketone	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
gamma-BHC (Lindane)	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
trans-Chlordane	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Heptachlor	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Heptachlor epoxide	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Methoxychlor	ND		0.050		ug/L		09/17/19 15:04	09/19/19 09:18	1
Toxaphene	ND		0.50		ug/L		09/17/19 15:04	09/19/19 09:18	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-492545/1-A
Matrix: Water
Analysis Batch: 492824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492545

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	68		20 - 120	09/17/19 15:04	09/19/19 09:18	1
DCB Decachlorobiphenyl	72		20 - 120	09/17/19 15:04	09/19/19 09:18	1
Tetrachloro-m-xylene	95		44 - 120	09/17/19 15:04	09/19/19 09:18	1
Tetrachloro-m-xylene	85		44 - 120	09/17/19 15:04	09/19/19 09:18	1

Lab Sample ID: LCS 480-492545/2-A
Matrix: Water
Analysis Batch: 492824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492545

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.400	0.378		ug/L		95	64 - 129
4,4'-DDE	0.400	0.324		ug/L		81	50 - 120
4,4'-DDT	0.400	0.356		ug/L		89	59 - 120
Aldrin	0.400	0.328		ug/L		82	40 - 125
alpha-BHC	0.400	0.315		ug/L		79	52 - 125
cis-Chlordane	0.400	0.344		ug/L		86	52 - 120
beta-BHC	0.400	0.361		ug/L		90	51 - 120
delta-BHC	0.400	0.383		ug/L		96	51 - 120
Dieldrin	0.400	0.366		ug/L		91	66 - 128
Endosulfan I	0.400	0.381		ug/L		95	57 - 120
Endosulfan II	0.400	0.424		ug/L		106	66 - 131
Endosulfan sulfate	0.400	0.420		ug/L		105	66 - 136
Endrin	0.400	0.385		ug/L		96	65 - 135
Endrin aldehyde	0.400	0.341		ug/L		85	61 - 134
Endrin ketone	0.400	0.427		ug/L		107	71 - 133
gamma-BHC (Lindane)	0.400	0.352		ug/L		88	56 - 120
trans-Chlordane	0.400	0.377		ug/L		94	54 - 120
Heptachlor	0.400	0.377		ug/L		94	58 - 120
Heptachlor epoxide	0.400	0.430		ug/L		107	65 - 125
Methoxychlor	0.400	0.407		ug/L		102	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	65		20 - 120
DCB Decachlorobiphenyl	68		20 - 120
Tetrachloro-m-xylene	81		44 - 120
Tetrachloro-m-xylene	78		44 - 120

Lab Sample ID: LCSD 480-492545/3-A
Matrix: Water
Analysis Batch: 492824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 492545

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.400	0.342		ug/L		85	64 - 129	10	23
4,4'-DDE	0.400	0.300		ug/L		75	50 - 120	8	22
4,4'-DDT	0.400	0.328		ug/L		82	59 - 120	8	24
Aldrin	0.400	0.303		ug/L		76	40 - 125	8	25
alpha-BHC	0.400	0.287		ug/L		72	52 - 125	9	24
cis-Chlordane	0.400	0.323		ug/L		81	52 - 120	6	23

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 480-492545/3-A
Matrix: Water
Analysis Batch: 492824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 492545

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
beta-BHC			0.400	0.331		ug/L		83	51 - 120	9	24
delta-BHC			0.400	0.355		ug/L		89	51 - 120	8	24
Dieldrin			0.400	0.351		ug/L		88	66 - 128	4	24
Endosulfan I			0.400	0.358		ug/L		89	57 - 120	6	30
Endosulfan II			0.400	0.387		ug/L		97	66 - 131	9	40
Endosulfan sulfate			0.400	0.385		ug/L		96	66 - 136	9	24
Endrin			0.400	0.353		ug/L		88	65 - 135	9	24
Endrin aldehyde			0.400	0.284		ug/L		71	61 - 134	18	28
Endrin ketone			0.400	0.386		ug/L		97	71 - 133	10	26
gamma-BHC (Lindane)			0.400	0.327		ug/L		82	56 - 120	8	24
trans-Chlordane			0.400	0.347		ug/L		87	54 - 120	8	24
Heptachlor			0.400	0.346		ug/L		86	58 - 120	9	25
Heptachlor epoxide			0.400	0.387		ug/L		97	65 - 125	11	23
Methoxychlor			0.400	0.374		ug/L		94	50 - 150	8	26

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*56*		*20 - 120*
DCB Decachlorobiphenyl	*57*		*20 - 120*
Tetrachloro-m-xylene	*82*		*44 - 120*
Tetrachloro-m-xylene	*71*		*44 - 120*

Lab Sample ID: MB 480-492848/1-A
Matrix: Solid
Analysis Batch: 493205

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
4,4'-DDE	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
4,4'-DDT	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Aldrin	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
alpha-BHC	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
cis-Chlordane	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
beta-BHC	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
delta-BHC	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Dieldrin	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Endosulfan I	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Endosulfan II	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Endosulfan sulfate	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Endrin	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Endrin aldehyde	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Endrin ketone	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
gamma-BHC (Lindane)	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
trans-Chlordane	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Heptachlor	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Heptachlor epoxide	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Methoxychlor	ND		0.0017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1
Toxaphene	ND		0.017		mg/Kg		09/19/19 07:28	09/20/19 15:45	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-492848/1-A
Matrix: Solid
Analysis Batch: 493205

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492848

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		45 - 120	09/19/19 07:28	09/20/19 15:45	1
DCB Decachlorobiphenyl	89		45 - 120	09/19/19 07:28	09/20/19 15:45	1
Tetrachloro-m-xylene	75		30 - 124	09/19/19 07:28	09/20/19 15:45	1
Tetrachloro-m-xylene	61		30 - 124	09/19/19 07:28	09/20/19 15:45	1

Lab Sample ID: LCS 480-492848/2-A
Matrix: Solid
Analysis Batch: 493205

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.0162	0.0141		mg/Kg		87	56 - 120
4,4'-DDE	0.0162	0.0130		mg/Kg		81	44 - 120
4,4'-DDT	0.0162	0.0134		mg/Kg		83	38 - 120
Aldrin	0.0162	0.0113		mg/Kg		70	38 - 120
alpha-BHC	0.0162	0.00686		mg/Kg		42	39 - 120
cis-Chlordane	0.0162	0.0129		mg/Kg		80	47 - 120
beta-BHC	0.0162	0.0117		mg/Kg		72	40 - 120
delta-BHC	0.0162	0.0119		mg/Kg		74	45 - 120
Dieldrin	0.0162	0.0137		mg/Kg		84	58 - 120
Endosulfan I	0.0162	0.0128		mg/Kg		79	49 - 120
Endosulfan II	0.0162	0.0138		mg/Kg		85	55 - 120
Endosulfan sulfate	0.0162	0.0135		mg/Kg		83	49 - 124
Endrin	0.0162	0.0133		mg/Kg		82	58 - 120
Endrin aldehyde	0.0162	0.0132		mg/Kg		82	37 - 121
Endrin ketone	0.0162	0.0136		mg/Kg		84	46 - 123
gamma-BHC (Lindane)	0.0162	0.0117		mg/Kg		72	50 - 120
trans-Chlordane	0.0162	0.0127		mg/Kg		78	48 - 120
Heptachlor	0.0162	0.0128		mg/Kg		79	50 - 120
Heptachlor epoxide	0.0162	0.0133		mg/Kg		82	50 - 120
Methoxychlor	0.0162	0.0134		mg/Kg		83	58 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	95		45 - 120
DCB Decachlorobiphenyl	88		45 - 120
Tetrachloro-m-xylene	80		30 - 124
Tetrachloro-m-xylene	62		30 - 124

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 493205

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 492848

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		0.0193	0.0196		mg/Kg	☼	102	37 - 126
4,4'-DDE	ND		0.0193	ND		mg/Kg	☼	96	34 - 120
4,4'-DDT	ND	F2 F1	0.0193	0.0215		mg/Kg	☼	65	43 - 123
Aldrin	ND		0.0193	ND		mg/Kg	☼	81	37 - 125
alpha-BHC	ND		0.0193	ND		mg/Kg	☼	83	39 - 120
cis-Chlordane	ND		0.0193	0.0192		mg/Kg	☼	99	35 - 120

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 493205

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 492848

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
beta-BHC	ND		0.0193	ND		mg/Kg	☼	70	36 - 120
delta-BHC	ND	F2	0.0193	ND		mg/Kg	☼	71	34 - 120
Dieldrin	ND		0.0193	ND		mg/Kg	☼	89	45 - 120
Endosulfan I	ND		0.0193	ND		mg/Kg	☼	86	39 - 120
Endosulfan II	ND		0.0193	ND		mg/Kg	☼	98	34 - 126
Endosulfan sulfate	ND		0.0193	0.0190		mg/Kg	☼	98	27 - 130
Endrin	ND		0.0193	ND		mg/Kg	☼	87	47 - 121
Endrin aldehyde	ND	F1	0.0193	0.0296	F1	mg/Kg	☼	153	33 - 123
Endrin ketone	ND		0.0193	ND		mg/Kg	☼	75	43 - 126
gamma-BHC (Lindane)	ND	F2	0.0193	ND		mg/Kg	☼	73	50 - 120
trans-Chlordane	ND		0.0193	ND		mg/Kg	☼	92	31 - 120
Heptachlor	ND		0.0193	ND		mg/Kg	☼	69	42 - 120
Heptachlor epoxide	ND		0.0193	ND		mg/Kg	☼	86	40 - 120
Methoxychlor	ND	F2	0.0193	0.0210		mg/Kg	☼	109	44 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*198*	*X*	*45 - 120*
DCB Decachlorobiphenyl	*263*	*X*	*45 - 120*
Tetrachloro-m-xylene	*119*		*30 - 124*
Tetrachloro-m-xylene	*114*		*30 - 124*

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 493205

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 492848

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		0.0193	0.0196		mg/Kg	☼	102	37 - 126	0	21
4,4'-DDE	ND		0.0193	ND		mg/Kg	☼	97	34 - 120	0	18
4,4'-DDT	ND	F2 F1	0.0193	ND	F2 F1	mg/Kg	☼	39	43 - 123	27	25
Aldrin	ND		0.0193	ND		mg/Kg	☼	90	37 - 125	11	12
alpha-BHC	ND		0.0193	ND		mg/Kg	☼	91	39 - 120	9	15
cis-Chlordane	ND		0.0193	0.0193		mg/Kg	☼	100	35 - 120	1	23
beta-BHC	ND		0.0193	ND		mg/Kg	☼	77	36 - 120	8	19
delta-BHC	ND	F2	0.0193	ND	F2	mg/Kg	☼	94	34 - 120	28	14
Dieldrin	ND		0.0193	ND		mg/Kg	☼	96	45 - 120	7	12
Endosulfan I	ND		0.0193	ND		mg/Kg	☼	83	39 - 120	4	18
Endosulfan II	ND		0.0193	0.0191		mg/Kg	☼	99	34 - 126	1	26
Endosulfan sulfate	ND		0.0193	ND		mg/Kg	☼	97	27 - 130	2	35
Endrin	ND		0.0193	ND		mg/Kg	☼	85	47 - 121	2	20
Endrin aldehyde	ND	F1	0.0193	0.0202		mg/Kg	☼	105	33 - 123	37	47
Endrin ketone	ND		0.0193	ND		mg/Kg	☼	89	43 - 126	17	37
gamma-BHC (Lindane)	ND	F2	0.0193	ND	F2	mg/Kg	☼	92	50 - 120	22	12
trans-Chlordane	ND		0.0193	ND		mg/Kg	☼	91	31 - 120	1	15
Heptachlor	ND		0.0193	ND		mg/Kg	☼	69	42 - 120	0	22
Heptachlor epoxide	ND		0.0193	ND		mg/Kg	☼	91	40 - 120	5	15
Methoxychlor	ND	F2	0.0193	0.0277	F2	mg/Kg	☼	144	44 - 150	27	24

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 493205

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 492848

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*217*	*X*	*45 - 120*
DCB Decachlorobiphenyl	*161*	*X*	*45 - 120*
Tetrachloro-m-xylene	*124*		*30 - 124*
Tetrachloro-m-xylene	*117*		*30 - 124*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-493350/1-A
Matrix: Solid
Analysis Batch: 493822

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 493350

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23		mg/Kg		09/21/19 11:23	09/24/19 22:02	1
PCB-1221	ND		0.23		mg/Kg		09/21/19 11:23	09/24/19 22:02	1
PCB-1232	ND		0.23		mg/Kg		09/21/19 11:23	09/24/19 22:02	1
PCB-1242	ND		0.23		mg/Kg		09/21/19 11:23	09/24/19 22:02	1
PCB-1248	ND		0.23		mg/Kg		09/21/19 11:23	09/24/19 22:02	1
PCB-1254	ND		0.23		mg/Kg		09/21/19 11:23	09/24/19 22:02	1
PCB-1260	ND		0.23		mg/Kg		09/21/19 11:23	09/24/19 22:02	1
PCB-1262	ND		0.23		mg/Kg		09/21/19 11:23	09/24/19 22:02	1
PCB-1268	ND		0.23		mg/Kg		09/21/19 11:23	09/24/19 22:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*120*		*65 - 174*	*09/21/19 11:23*	*09/24/19 22:02*	*1*
DCB Decachlorobiphenyl	*79*		*65 - 174*	*09/21/19 11:23*	*09/24/19 22:02*	*1*
Tetrachloro-m-xylene	*116*		*60 - 154*	*09/21/19 11:23*	*09/24/19 22:02*	*1*
Tetrachloro-m-xylene	*100*		*60 - 154*	*09/21/19 11:23*	*09/24/19 22:02*	*1*

Lab Sample ID: LCS 480-493350/2-A
Matrix: Solid
Analysis Batch: 493822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 493350

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			2.20	3.65		mg/Kg		166	51 - 185		
PCB-1260			2.20	3.15		mg/Kg		143	61 - 184		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*145*		*65 - 174*
DCB Decachlorobiphenyl	*96*		*65 - 174*
Tetrachloro-m-xylene	*130*		*60 - 154*
Tetrachloro-m-xylene	*117*		*60 - 154*

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 493822

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 493350

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		2.39	3.16		mg/Kg	☼	132	50 - 177		

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 493822

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 493350

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1260	ND		2.39	2.87		mg/Kg	☼	120	33 - 200

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*135*		*65 - 174*
DCB Decachlorobiphenyl	*87*		*65 - 174*
Tetrachloro-m-xylene	*115*		*60 - 154*
Tetrachloro-m-xylene	*101*		*60 - 154*

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 493822

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 493350

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		2.85	2.75		mg/Kg	☼	96	50 - 177	14	50
PCB-1260	ND		2.85	2.31		mg/Kg	☼	81	33 - 200	22	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*110*		*65 - 174*
DCB Decachlorobiphenyl	*69*		*65 - 174*
Tetrachloro-m-xylene	*106*		*60 - 154*
Tetrachloro-m-xylene	*93*		*60 - 154*

Lab Sample ID: MB 480-493603/1-A
Matrix: Water
Analysis Batch: 494083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 493603

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:07	1
PCB-1221	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:07	1
PCB-1232	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:07	1
PCB-1242	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:07	1
PCB-1248	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:07	1
PCB-1254	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:07	1
PCB-1260	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:07	1
PCB-1262	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:07	1
PCB-1268	ND		0.50		ug/L		09/23/19 15:10	09/25/19 17:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*19 - 120*	*09/23/19 15:10*	*09/25/19 17:07*	*1*
DCB Decachlorobiphenyl	*34*		*19 - 120*	*09/23/19 15:10*	*09/25/19 17:07*	*1*
Tetrachloro-m-xylene	*73*		*39 - 121*	*09/23/19 15:10*	*09/25/19 17:07*	*1*
Tetrachloro-m-xylene	*66*		*39 - 121*	*09/23/19 15:10*	*09/25/19 17:07*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 480-493603/2-A
Matrix: Water
Analysis Batch: 493822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 493603

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			4.00	4.91		ug/L		123	62 - 130		
PCB-1260			4.00	3.59		ug/L		90	56 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*53*		*19 - 120*
DCB Decachlorobiphenyl	*35*		*19 - 120*
Tetrachloro-m-xylene	*99*		*39 - 121*
Tetrachloro-m-xylene	*76*		*39 - 121*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-492504/1-A
Matrix: Solid
Analysis Batch: 493083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		14.4		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Arsenic	ND		1.9		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Barium	ND		0.48		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Beryllium	ND		0.19		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Cadmium	ND		0.19		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Calcium	ND		47.9		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Chromium	ND		0.48		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Cobalt	ND		0.48		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Copper	ND		0.96		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Iron	ND		9.6		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Lead	ND		0.96		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Magnesium	ND		19.1		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Manganese	0.224		0.19		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Nickel	ND		4.8		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Potassium	ND		28.7		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Selenium	ND		3.8		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Silver	ND		0.57		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Sodium	ND		134		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Thallium	ND		5.7		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Vanadium	ND		0.48		mg/Kg		09/18/19 05:20	09/19/19 22:44	1
Zinc	ND		1.9		mg/Kg		09/18/19 05:20	09/19/19 22:44	1

Lab Sample ID: MB 480-492504/1-A
Matrix: Solid
Analysis Batch: 493465

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.6		mg/Kg		09/18/19 05:20	09/20/19 21:33	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-492504/2-A
Matrix: Solid
Analysis Batch: 493083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	173	62.05		mg/Kg		35.9	10.0 - 134.1
Arsenic	221	182.1		mg/Kg		82.4	63.8 - 119.0
Barium	288	247.9		mg/Kg		86.1	70.5 - 117.4
Beryllium	102	85.38		mg/Kg		83.7	71.2 - 118.6
Cadmium	153	122.5		mg/Kg		80.1	68.6 - 115.0
Calcium	5190	4226		mg/Kg		81.4	65.7 - 115.6
Chromium	179	154.8		mg/Kg		86.5	65.4 - 121.2
Cobalt	182	180.4		mg/Kg		99.1	71.4 - 119.2
Copper	113	94.15		mg/Kg		83.3	71.4 - 118.6
Iron	15000	14950		mg/Kg		99.7	35.7 - 160.7
Lead	74.5	77.14		mg/Kg		103.5	67.8 - 130.3
Magnesium	2570	2169		mg/Kg		84.4	55.6 - 124.1
Manganese	348	305.2		mg/Kg		87.7	71.3 - 118.4
Nickel	98.0	94.56		mg/Kg		96.5	63.8 - 118.4
Potassium	2630	2290		mg/Kg		87.1	51.7 - 119.0
Selenium	54.4	43.87		mg/Kg		80.7	53.3 - 130.0
Silver	75.5	63.97		mg/Kg		84.7	66.6 - 121.7
Sodium	226	208.9		mg/Kg		92.4	39.2 - 133.2
Thallium	64.7	62.99		mg/Kg		97.4	55.0 - 126.0
Vanadium	62.7	61.13		mg/Kg		97.5	53.3 - 132.4
Zinc	281	239.7		mg/Kg		85.3	65.8 - 122.4

Lab Sample ID: LCSSRM 480-492504/2-A
Matrix: Solid
Analysis Batch: 493465

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10100	9764		mg/Kg		96.7	41.6 - 123.8

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 493083

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	44.9	27.87	F1	mg/Kg	☼	60	75 - 125
Arsenic	3.0		44.9	41.83		mg/Kg	☼	87	75 - 125
Barium	61.9	F1	44.9	128.7	F1	mg/Kg	☼	149	75 - 125
Beryllium	0.51		44.9	39.17		mg/Kg	☼	86	75 - 125
Cadmium	ND		44.9	39.01		mg/Kg	☼	87	75 - 125
Calcium	9210	F2 F1	2240	12010	4	mg/Kg	☼	125	75 - 125
Chromium	16.5		44.9	60.69		mg/Kg	☼	98	75 - 125
Cobalt	6.5		44.9	50.65		mg/Kg	☼	98	75 - 125
Copper	11.2		44.9	48.67		mg/Kg	☼	84	75 - 125
Lead	13.5		44.9	57.56		mg/Kg	☼	98	75 - 125
Magnesium	4830	F1 F2	2240	8393	F1	mg/Kg	☼	159	75 - 125
Manganese	404	B	44.9	503.9	4	mg/Kg	☼	223	75 - 125
Nickel	13.7		44.9	60.32		mg/Kg	☼	104	75 - 125
Potassium	2460	F1	2240	7117	F1	mg/Kg	☼	208	75 - 125
Selenium	ND		44.9	38.03		mg/Kg	☼	84	75 - 125
Silver	ND		11.2	10.46		mg/Kg	☼	93	75 - 125
Sodium	ND		2250	2196		mg/Kg	☼	93	75 - 125
Thallium	ND		44.9	43.56		mg/Kg	☼	97	75 - 125
Vanadium	25.9		44.9	76.92		mg/Kg	☼	114	75 - 125
Zinc	52.4		44.9	93.30		mg/Kg	☼	91	75 - 125

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 493465

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	13500		2240	22600	4	mg/Kg	☼	407	75 - 125
Iron	15800		2240	19750	4	mg/Kg	☼	176	75 - 125

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 493083

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	47.9	29.64	F1	mg/Kg	☼	60	75 - 125	6	20
Arsenic	3.0		47.9	43.88		mg/Kg	☼	85	75 - 125	5	20
Barium	61.9	F1	47.9	132.0	F1	mg/Kg	☼	147	75 - 125	3	20
Beryllium	0.51		47.9	41.73		mg/Kg	☼	86	75 - 125	6	20
Cadmium	ND		47.9	41.38		mg/Kg	☼	86	75 - 125	6	20
Calcium	9210	F2 F1	2390	7027	F1 F2	mg/Kg	☼	-91	75 - 125	52	20
Chromium	16.5		47.9	64.33		mg/Kg	☼	100	75 - 125	6	20
Cobalt	6.5		47.9	52.15		mg/Kg	☼	95	75 - 125	3	20
Copper	11.2		47.9	50.07		mg/Kg	☼	81	75 - 125	3	20
Lead	13.5		47.9	59.53		mg/Kg	☼	96	75 - 125	3	20
Magnesium	4830	F1 F2	2390	6784	F2	mg/Kg	☼	82	75 - 125	21	20
Manganese	404	B	47.9	456.4	4	mg/Kg	☼	110	75 - 125	10	20
Nickel	13.7		47.9	61.87		mg/Kg	☼	101	75 - 125	3	20
Potassium	2460	F1	2390	7075	F1	mg/Kg	☼	193	75 - 125	1	20
Selenium	ND		47.9	40.58		mg/Kg	☼	84	75 - 125	6	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 493083

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		12.0	10.80		mg/Kg	☼	90	75 - 125	3	20
Sodium	ND		2400	2242		mg/Kg	☼	89	75 - 125	2	20
Thallium	ND		47.9	46.00		mg/Kg	☼	96	75 - 125	5	20
Vanadium	25.9		47.9	79.56		mg/Kg	☼	112	75 - 125	3	20
Zinc	52.4		47.9	98.18		mg/Kg	☼	96	75 - 125	5	20

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 493465

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	13500		2390	23650	4	mg/Kg	☼	426	75 - 125	5	20
Iron	15800		2390	20000	4	mg/Kg	☼	176	75 - 125	1	20

Lab Sample ID: 480-159204-14 MS
Matrix: Solid
Analysis Batch: 493083

Client Sample ID: AMSF-CS-ES-SS-C2
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	44.6	27.97	F1	mg/Kg	☼	61	75 - 125
Arsenic	3.0		44.6	42.46		mg/Kg	☼	88	75 - 125
Barium	65.1	F1	44.6	139.7	F1	mg/Kg	☼	167	75 - 125
Beryllium	0.53		44.6	39.14		mg/Kg	☼	87	75 - 125
Cadmium	ND		44.6	39.72		mg/Kg	☼	89	75 - 125
Calcium	10000		2230	21690	4	mg/Kg	☼	524	75 - 125
Chromium	17.6		44.6	59.89		mg/Kg	☼	95	75 - 125
Cobalt	6.9		44.6	51.12		mg/Kg	☼	99	75 - 125
Copper	8.6		44.6	48.57		mg/Kg	☼	90	75 - 125
Lead	14.9		44.6	58.22		mg/Kg	☼	97	75 - 125
Magnesium	7250	F1 F2	2230	13700	F1	mg/Kg	☼	289	75 - 125
Manganese	434	B F2	44.6	927.4	4	mg/Kg	☼	1106	75 - 125
Nickel	13.8		44.6	60.71		mg/Kg	☼	105	75 - 125
Potassium	2310	F1	2230	6842	F1	mg/Kg	☼	203	75 - 125
Selenium	ND		44.6	38.36		mg/Kg	☼	86	75 - 125
Silver	ND		11.2	10.62		mg/Kg	☼	95	75 - 125
Sodium	ND		2230	2205		mg/Kg	☼	94	75 - 125
Thallium	ND		44.6	43.45		mg/Kg	☼	97	75 - 125
Vanadium	28.0		44.6	83.24		mg/Kg	☼	124	75 - 125
Zinc	52.2		44.6	95.67		mg/Kg	☼	97	75 - 125

Lab Sample ID: 480-159204-14 MS
Matrix: Solid
Analysis Batch: 493465

Client Sample ID: AMSF-CS-ES-SS-C2
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	14800		2230	21630	4	mg/Kg	☼	304	75 - 125
Iron	16700		2230	18690	4	mg/Kg	☼	91	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-159204-14 MSD
Matrix: Solid
Analysis Batch: 493083

Client Sample ID: AMSF-CS-ES-SS-C2
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	43.9	25.99	F1	mg/Kg	☼	57	75 - 125	7	20
Arsenic	3.0		43.9	40.33		mg/Kg	☼	85	75 - 125	5	20
Barium	65.1	F1	43.9	123.4	F1	mg/Kg	☼	133	75 - 125	12	20
Beryllium	0.53		43.9	37.81		mg/Kg	☼	85	75 - 125	3	20
Cadmium	ND		43.9	37.90		mg/Kg	☼	86	75 - 125	5	20
Calcium	10000		2200	21520	4	mg/Kg	☼	524	75 - 125	1	20
Chromium	17.6		43.9	58.06		mg/Kg	☼	92	75 - 125	3	20
Cobalt	6.9		43.9	47.67		mg/Kg	☼	93	75 - 125	7	20
Copper	8.6		43.9	45.05		mg/Kg	☼	83	75 - 125	8	20
Lead	14.9		43.9	53.99		mg/Kg	☼	89	75 - 125	8	20
Magnesium	7250	F1 F2	2200	6931	F1 F2	mg/Kg	☼	-15	75 - 125	66	20
Manganese	434	B F2	43.9	441.7	4 F2	mg/Kg	☼	18	75 - 125	71	20
Nickel	13.8		43.9	56.33		mg/Kg	☼	97	75 - 125	7	20
Potassium	2310	F1	2200	6662	F1	mg/Kg	☼	198	75 - 125	3	20
Selenium	ND		43.9	36.97		mg/Kg	☼	84	75 - 125	4	20
Silver	ND		11.0	10.06		mg/Kg	☼	92	75 - 125	5	20
Sodium	ND		2200	2096		mg/Kg	☼	91	75 - 125	5	20
Thallium	ND		43.9	41.57		mg/Kg	☼	95	75 - 125	4	20
Vanadium	28.0		43.9	73.32		mg/Kg	☼	103	75 - 125	13	20
Zinc	52.2		43.9	88.25		mg/Kg	☼	82	75 - 125	8	20

Lab Sample ID: 480-159204-14 MSD
Matrix: Solid
Analysis Batch: 493465

Client Sample ID: AMSF-CS-ES-SS-C2
Prep Type: Total/NA
Prep Batch: 492504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	14800		2200	22130	4	mg/Kg	☼	332	75 - 125	2	20
Iron	16700		2200	18460	4	mg/Kg	☼	82	75 - 125	1	20

Lab Sample ID: MB 480-492544/1-A
Matrix: Water
Analysis Batch: 492839

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492544

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		200		ug/L		09/18/19 08:54	09/18/19 23:08	1
Antimony	ND		20.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Arsenic	ND		15.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Barium	ND		2.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Beryllium	ND		2.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Cadmium	ND		2.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Calcium	ND		500		ug/L		09/18/19 08:54	09/18/19 23:08	1
Chromium	ND		4.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Cobalt	ND		4.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Copper	ND		10.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Iron	ND		50.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Lead	ND		10.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Magnesium	ND		200		ug/L		09/18/19 08:54	09/18/19 23:08	1
Manganese	ND		3.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Nickel	ND		10.0		ug/L		09/18/19 08:54	09/18/19 23:08	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-492544/1-A
Matrix: Water
Analysis Batch: 492839

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 492544

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	ND		500		ug/L		09/18/19 08:54	09/18/19 23:08	1
Selenium	ND		25.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Silver	ND		6.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Sodium	ND		1000		ug/L		09/18/19 08:54	09/18/19 23:08	1
Thallium	ND		20.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Vanadium	ND		5.0		ug/L		09/18/19 08:54	09/18/19 23:08	1
Zinc	ND	^	10.0		ug/L		09/18/19 08:54	09/18/19 23:08	1

Lab Sample ID: LCS 480-492544/2-A
Matrix: Water
Analysis Batch: 492839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 492544

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9708		ug/L		97	80 - 120
Antimony	200	220.3		ug/L		110	80 - 120
Arsenic	200	199.8		ug/L		100	80 - 120
Barium	200	205.7		ug/L		103	80 - 120
Beryllium	200	202.8		ug/L		101	80 - 120
Cadmium	200	204.2		ug/L		102	80 - 120
Calcium	10000	10060		ug/L		101	80 - 120
Chromium	200	204.2		ug/L		102	80 - 120
Cobalt	200	191.7		ug/L		96	80 - 120
Copper	200	196.8		ug/L		98	80 - 120
Iron	10000	10060		ug/L		101	80 - 120
Lead	200	195.1		ug/L		98	80 - 120
Magnesium	10000	10020		ug/L		100	80 - 120
Manganese	200	203.0		ug/L		101	80 - 120
Nickel	200	200.0		ug/L		100	80 - 120
Potassium	10000	9505		ug/L		95	80 - 120
Selenium	200	191.3		ug/L		96	80 - 120
Silver	50.0	51.30		ug/L		103	80 - 120
Sodium	10000	9270		ug/L		93	80 - 120
Thallium	200	203.8		ug/L		102	80 - 120
Vanadium	200	204.4		ug/L		102	80 - 120
Zinc	200	209.2	^	ug/L		105	80 - 120

Lab Sample ID: 480-159204-12 MS
Matrix: Water
Analysis Batch: 492839

Client Sample ID: AMSF-CS-RB-W-1
Prep Type: Total/NA
Prep Batch: 492544

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	ND		10000	9461		ug/L		93	75 - 125
Antimony	ND		200	214.8		ug/L		107	75 - 125
Arsenic	ND		200	194.6		ug/L		97	75 - 125
Barium	ND		200	199.9		ug/L		100	75 - 125
Beryllium	ND		200	198.4		ug/L		99	75 - 125
Cadmium	ND		200	198.8		ug/L		99	75 - 125
Calcium	ND		10000	9845		ug/L		98	75 - 125
Chromium	ND		200	200.5		ug/L		100	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-159204-12 MS
Matrix: Water
Analysis Batch: 492839

Client Sample ID: AMSF-CS-RB-W-1
Prep Type: Total/NA
Prep Batch: 492544

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	ND		200	187.1		ug/L		94	75 - 125
Copper	ND		200	192.1		ug/L		96	75 - 125
Iron	ND		10000	9806		ug/L		98	75 - 125
Lead	ND		200	191.6		ug/L		96	75 - 125
Magnesium	ND		10000	9775		ug/L		98	75 - 125
Manganese	ND		200	197.1		ug/L		98	75 - 125
Nickel	ND		200	194.8		ug/L		97	75 - 125
Potassium	ND		10000	9239		ug/L		92	75 - 125
Selenium	ND		200	185.5		ug/L		93	75 - 125
Silver	ND		50.0	48.91		ug/L		98	75 - 125
Sodium	ND		10000	9199		ug/L		92	75 - 125
Thallium	ND		200	198.0		ug/L		99	75 - 125
Vanadium	ND		200	198.9		ug/L		99	75 - 125
Zinc	ND	^	200	207.9	^	ug/L		102	75 - 125

Lab Sample ID: 480-159204-12 MSD
Matrix: Water
Analysis Batch: 492839

Client Sample ID: AMSF-CS-RB-W-1
Prep Type: Total/NA
Prep Batch: 492544

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	ND		10000	9087		ug/L		89	75 - 125	4	20
Antimony	ND		200	207.6		ug/L		104	75 - 125	3	20
Arsenic	ND		200	190.7		ug/L		95	75 - 125	2	20
Barium	ND		200	195.4		ug/L		98	75 - 125	2	20
Beryllium	ND		200	192.3		ug/L		96	75 - 125	3	20
Cadmium	ND		200	192.9		ug/L		96	75 - 125	3	20
Calcium	ND		10000	9532		ug/L		95	75 - 125	3	20
Chromium	ND		200	198.3		ug/L		99	75 - 125	1	20
Cobalt	ND		200	181.6		ug/L		91	75 - 125	3	20
Copper	ND		200	187.3		ug/L		94	75 - 125	3	20
Iron	ND		10000	9539		ug/L		95	75 - 125	3	20
Lead	ND		200	184.5		ug/L		92	75 - 125	4	20
Magnesium	ND		10000	9492		ug/L		95	75 - 125	3	20
Manganese	ND		200	193.3		ug/L		96	75 - 125	2	20
Nickel	ND		200	189.2		ug/L		95	75 - 125	3	20
Potassium	ND		10000	8895		ug/L		89	75 - 125	4	20
Selenium	ND		200	184.6		ug/L		92	75 - 125	1	20
Silver	ND		50.0	47.53		ug/L		95	75 - 125	3	20
Sodium	ND		10000	8924		ug/L		89	75 - 125	3	20
Thallium	ND		200	193.5		ug/L		97	75 - 125	2	20
Vanadium	ND		200	193.5		ug/L		97	75 - 125	3	20
Zinc	ND	^	200	200.5	^	ug/L		99	75 - 125	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-493531/1-A
Matrix: Water
Analysis Batch: 493626

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 493531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		09/23/19 11:57	09/23/19 15:59	1

Lab Sample ID: LCS 480-493531/2-A
Matrix: Water
Analysis Batch: 493626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 493531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	6.67	6.38		ug/L		96	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-494125/1-A
Matrix: Solid
Analysis Batch: 494349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		09/26/19 11:26	09/26/19 13:09	1

Lab Sample ID: LCSSRM 480-494125/2-A ^5
Matrix: Solid
Analysis Batch: 494349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494125

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	4.85	3.30		mg/Kg		68.0	46.0 - 107.0

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 494349

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 494125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.041		0.368	0.414		mg/Kg	☼	101	80 - 120

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 494349

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 494125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.041		0.380	0.435		mg/Kg	☼	104	80 - 120	5	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 480-494152/1-A
Matrix: Water
Analysis Batch: 494307

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494152

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		09/25/19 20:35	09/26/19 12:30	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 480-494152/2-A
Matrix: Water
Analysis Batch: 494307

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494152

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			0.250	0.276		mg/L		110	90 - 110		

Lab Sample ID: MB 480-494182/1-A
Matrix: Solid
Analysis Batch: 494364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494182

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.94		mg/Kg		09/25/19 22:25	09/26/19 14:55	1

Lab Sample ID: LCS 480-494182/2-A
Matrix: Solid
Analysis Batch: 494364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494182

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			2.91	4.00	*	mg/Kg		138	29 - 122		

Lab Sample ID: LCSD 480-494182/3-A
Matrix: Solid
Analysis Batch: 494364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 494182

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total			2.91	3.91	*	mg/Kg		134	29 - 122	2	15

Lab Sample ID: 480-159204-11 MS
Matrix: Solid
Analysis Batch: 494364

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 494182

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	ND	F1 *	1.38	1.69	F1	mg/Kg	☼	122	85 - 115		

Lab Sample ID: 480-159204-11 MSD
Matrix: Solid
Analysis Batch: 494364

Client Sample ID: AMSF-CS-ES-SS-C1
Prep Type: Total/NA
Prep Batch: 494182

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND	F1 *	1.37	1.88	F1	mg/Kg	☼	137	85 - 115	11	15

Lab Sample ID: 480-159204-14 MS
Matrix: Solid
Analysis Batch: 494364

Client Sample ID: AMSF-CS-ES-SS-C2
Prep Type: Total/NA
Prep Batch: 494182

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	ND	F1 *	1.34	1.83	F1	mg/Kg	☼	137	85 - 115		

Lab Sample ID: MB 480-494412/1-A
Matrix: Solid
Analysis Batch: 494533

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.99		mg/Kg		09/26/19 20:30	09/27/19 11:11	1

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: LCS 480-494412/2-A
Matrix: Solid
Analysis Batch: 494533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494412

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			4.63	4.74		mg/Kg		102	29 - 122		

Lab Sample ID: LCS 480-494412/3-A
Matrix: Solid
Analysis Batch: 494533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494412

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total			2.87	3.09		mg/Kg		108	29 - 122		

Lab Sample ID: 480-159204-21 MS
Matrix: Solid
Analysis Batch: 494533

Client Sample ID: AMSF-CS-WS-SS-C1
Prep Type: Total/NA
Prep Batch: 494412

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	ND		1.43	1.53		mg/Kg	☼	107	85 - 115		

Lab Sample ID: 480-159204-18 DU
Matrix: Solid
Analysis Batch: 494533

Client Sample ID: AMSF-CS-NS-SS-C2
Prep Type: Total/NA
Prep Batch: 494412

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cyanide, Total	ND			ND		mg/Kg	☼			NC	15

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Analysis Batch: 492443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-1	AMSF-CS-SS-SS-G1	Total/NA	Solid	8260C	492516
480-159204-2	AMSF-CS-SS-SS-G2	Total/NA	Solid	8260C	492516
480-159204-5	AMSF-CS-DUP-SS-G1	Total/NA	Solid	8260C	492516
480-159204-9	AMSF-CS-ES-SS-G1	Total/NA	Solid	8260C	492516
480-159204-10	AMSF-CS-ES-SS-G2	Total/NA	Solid	8260C	492516
480-159204-15	AMSF-CS-NS-SS-G1	Total/NA	Solid	8260C	492516
480-159204-16	AMSF-CS-NS-SS-G2	Total/NA	Solid	8260C	492516
480-159204-19	AMSF-CS-WS-SS-G1	Total/NA	Solid	8260C	492516
480-159204-20	AMSF-CS-WS-SS-G2	Total/NA	Solid	8260C	492516
MB 480-492516/2-A	Method Blank	Total/NA	Solid	8260C	492516
LCS 480-492516/1-A	Lab Control Sample	Total/NA	Solid	8260C	492516
480-159204-9 MSD	AMSF-CS-ES-SS-G1	Total/NA	Solid	8260C	492516
480-159204-9MS	AMSF-CS-ES-SS-G1	Total/NA	Solid	8260C	492516

Prep Batch: 492516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-1	AMSF-CS-SS-SS-G1	Total/NA	Solid	5035A_L	
480-159204-2	AMSF-CS-SS-SS-G2	Total/NA	Solid	5035A_L	
480-159204-5	AMSF-CS-DUP-SS-G1	Total/NA	Solid	5035A_L	
480-159204-9	AMSF-CS-ES-SS-G1	Total/NA	Solid	5035A_L	
480-159204-10	AMSF-CS-ES-SS-G2	Total/NA	Solid	5035A_L	
480-159204-15	AMSF-CS-NS-SS-G1	Total/NA	Solid	5035A_L	
480-159204-16	AMSF-CS-NS-SS-G2	Total/NA	Solid	5035A_L	
480-159204-19	AMSF-CS-WS-SS-G1	Total/NA	Solid	5035A_L	
480-159204-20	AMSF-CS-WS-SS-G2	Total/NA	Solid	5035A_L	
MB 480-492516/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-492516/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-159204-9 MSD	AMSF-CS-ES-SS-G1	Total/NA	Solid	5035A_L	
480-159204-9MS	AMSF-CS-ES-SS-G1	Total/NA	Solid	5035A_L	

Analysis Batch: 493643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	8260C	
480-159204-13	TRIP BLANK	Total/NA	Water	8260C	
MB 480-493643/8	Method Blank	Total/NA	Water	8260C	
LCS 480-493643/5	Lab Control Sample	Total/NA	Water	8260C	

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Prep Batch: 492549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	3510C	
MB 480-492549/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-492549/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 492746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	8270D	492549
MB 480-492549/1-A	Method Blank	Total/NA	Water	8270D	492549
LCS 480-492549/2-A	Lab Control Sample	Total/NA	Water	8270D	492549

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Prep Batch: 493581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	3550C	
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	3550C	
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	3550C	
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	3550C	
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	3550C	
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	3550C	
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	3550C	
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	3550C	
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	3550C	
MB 480-493581/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-493581/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	3550C	
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	3550C	

Analysis Batch: 493753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	8270D	493581
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	8270D	493581
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	8270D	493581
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	8270D	493581
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	8270D	493581
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	8270D	493581
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	8270D	493581
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	8270D	493581
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	8270D	493581
MB 480-493581/1-A	Method Blank	Total/NA	Solid	8270D	493581
LCS 480-493581/2-A	Lab Control Sample	Total/NA	Solid	8270D	493581
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	8270D	493581
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	8270D	493581

GC Semi VOA

Prep Batch: 492545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	3510C	
MB 480-492545/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-492545/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-492545/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 492824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	8081B	492545
MB 480-492545/1-A	Method Blank	Total/NA	Water	8081B	492545
LCS 480-492545/2-A	Lab Control Sample	Total/NA	Water	8081B	492545
LCSD 480-492545/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	492545

Prep Batch: 492848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	3550C	
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	3550C	
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	3550C	

GC Semi VOA (Continued)

Prep Batch: 492848 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	3550C	
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	3550C	
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	3550C	
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	3550C	
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	3550C	
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	3550C	
MB 480-492848/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-492848/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	3550C	
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	3550C	

Analysis Batch: 493205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	8081B	492848
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	8081B	492848
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	8081B	492848
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	8081B	492848
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	8081B	492848
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	8081B	492848
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	8081B	492848
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	8081B	492848
MB 480-492848/1-A	Method Blank	Total/NA	Solid	8081B	492848
LCS 480-492848/2-A	Lab Control Sample	Total/NA	Solid	8081B	492848
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	8081B	492848
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	8081B	492848

Analysis Batch: 493333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	8081B	492848

Prep Batch: 493350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	3550C	
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	3550C	
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	3550C	
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	3550C	
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	3550C	
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	3550C	
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	3550C	
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	3550C	
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	3550C	
MB 480-493350/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-493350/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	3550C	
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	3550C	

Prep Batch: 493603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	3510C	
MB 480-493603/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-493603/2-A	Lab Control Sample	Total/NA	Water	3510C	

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Analysis Batch: 493822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	8082A	493350
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	8082A	493350
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	8082A	493350
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	8082A	493350
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	8082A	493350
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	8082A	493350
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	8082A	493350
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	8082A	493350
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	8082A	493350
MB 480-493350/1-A	Method Blank	Total/NA	Solid	8082A	493350
LCS 480-493350/2-A	Lab Control Sample	Total/NA	Solid	8082A	493350
LCS 480-493603/2-A	Lab Control Sample	Total/NA	Water	8082A	493603
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	8082A	493350
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	8082A	493350

Analysis Batch: 494083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	8082A	493603
MB 480-493603/1-A	Method Blank	Total/NA	Water	8082A	493603

Metals

Prep Batch: 492504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	3050B	
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	3050B	
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	3050B	
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	3050B	
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	3050B	
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	3050B	
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	3050B	
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	3050B	
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	3050B	
MB 480-492504/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-492504/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	3050B	
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	3050B	
480-159204-14 MS	AMSF-CS-ES-SS-C2	Total/NA	Solid	3050B	
480-159204-14 MSD	AMSF-CS-ES-SS-C2	Total/NA	Solid	3050B	

Prep Batch: 492544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	3005A	
MB 480-492544/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-492544/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-159204-12 MS	AMSF-CS-RB-W-1	Total/NA	Water	3005A	
480-159204-12 MSD	AMSF-CS-RB-W-1	Total/NA	Water	3005A	

Analysis Batch: 492839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	6010C	492544

Metals (Continued)

Analysis Batch: 492839 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-492544/1-A	Method Blank	Total/NA	Water	6010C	492544
LCS 480-492544/2-A	Lab Control Sample	Total/NA	Water	6010C	492544
480-159204-12 MS	AMSF-CS-RB-W-1	Total/NA	Water	6010C	492544
480-159204-12 MSD	AMSF-CS-RB-W-1	Total/NA	Water	6010C	492544

Analysis Batch: 493083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	6010C	492504
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	6010C	492504
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	6010C	492504
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	6010C	492504
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	6010C	492504
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	6010C	492504
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	6010C	492504
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	6010C	492504
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	6010C	492504
MB 480-492504/1-A	Method Blank	Total/NA	Solid	6010C	492504
LCSSRM 480-492504/2-A	Lab Control Sample	Total/NA	Solid	6010C	492504
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	6010C	492504
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	6010C	492504
480-159204-14 MS	AMSF-CS-ES-SS-C2	Total/NA	Solid	6010C	492504
480-159204-14 MSD	AMSF-CS-ES-SS-C2	Total/NA	Solid	6010C	492504

Analysis Batch: 493465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	6010C	492504
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	6010C	492504
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	6010C	492504
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	6010C	492504
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	6010C	492504
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	6010C	492504
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	6010C	492504
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	6010C	492504
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	6010C	492504
MB 480-492504/1-A	Method Blank	Total/NA	Solid	6010C	492504
LCSSRM 480-492504/2-A	Lab Control Sample	Total/NA	Solid	6010C	492504
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	6010C	492504
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	6010C	492504
480-159204-14 MS	AMSF-CS-ES-SS-C2	Total/NA	Solid	6010C	492504
480-159204-14 MSD	AMSF-CS-ES-SS-C2	Total/NA	Solid	6010C	492504

Prep Batch: 493531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	7470A	
MB 480-493531/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-493531/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 493626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	7470A	493531
MB 480-493531/1-A	Method Blank	Total/NA	Water	7470A	493531

Metals (Continued)

Analysis Batch: 493626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-493531/2-A	Lab Control Sample	Total/NA	Water	7470A	493531

Prep Batch: 494125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	7471B	
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	7471B	
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	7471B	
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	7471B	
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	7471B	
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	7471B	
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	7471B	
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	7471B	
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	7471B	
MB 480-494125/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-494125/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	7471B	
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	7471B	

Analysis Batch: 494349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	7471B	494125
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	7471B	494125
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	7471B	494125
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	7471B	494125
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	7471B	494125
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	7471B	494125
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	7471B	494125
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	7471B	494125
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	7471B	494125
MB 480-494125/1-A	Method Blank	Total/NA	Solid	7471B	494125
LCSSRM 480-494125/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	494125
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	7471B	494125
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	7471B	494125

General Chemistry

Analysis Batch: 492554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	Moisture	
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	Moisture	
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	Moisture	
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	Moisture	
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	Moisture	
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	Moisture	
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	Moisture	
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	Moisture	
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	Moisture	
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	Moisture	
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	Moisture	
480-159204-14 MS	AMSF-CS-ES-SS-C2	Total/NA	Solid	Moisture	
480-159204-14 MSD	AMSF-CS-ES-SS-C2	Total/NA	Solid	Moisture	

General Chemistry

Analysis Batch: 492739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-1	AMSF-CS-SS-SS-G1	Total/NA	Solid	Moisture	
480-159204-2	AMSF-CS-SS-SS-G2	Total/NA	Solid	Moisture	
480-159204-5	AMSF-CS-DUP-SS-G1	Total/NA	Solid	Moisture	
480-159204-9	AMSF-CS-ES-SS-G1	Total/NA	Solid	Moisture	
480-159204-10	AMSF-CS-ES-SS-G2	Total/NA	Solid	Moisture	
480-159204-15	AMSF-CS-NS-SS-G1	Total/NA	Solid	Moisture	
480-159204-16	AMSF-CS-NS-SS-G2	Total/NA	Solid	Moisture	
480-159204-19	AMSF-CS-WS-SS-G1	Total/NA	Solid	Moisture	
480-159204-20	AMSF-CS-WS-SS-G2	Total/NA	Solid	Moisture	
480-159204-9 MSD	AMSF-CS-ES-SS-G1	Total/NA	Solid	Moisture	
480-159204-9MS	AMSF-CS-ES-SS-G1	Total/NA	Solid	Moisture	
480-159204-10 MS	AMSF-CS-ES-SS-G2	Total/NA	Solid	Moisture	
480-159204-10 MSD	AMSF-CS-ES-SS-G2	Total/NA	Solid	Moisture	

Prep Batch: 494152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	9012B	
MB 480-494152/1-A	Method Blank	Total/NA	Water	9012B	
LCS 480-494152/2-A	Lab Control Sample	Total/NA	Water	9012B	

Prep Batch: 494182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	9012B	
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	9012B	
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	9012B	
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	9012B	
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	9012B	
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	9012B	
MB 480-494182/1-A	Method Blank	Total/NA	Solid	9012B	
LCS 480-494182/2-A	Lab Control Sample	Total/NA	Solid	9012B	
LCSD 480-494182/3-A	Lab Control Sample Dup	Total/NA	Solid	9012B	
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	9012B	
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	9012B	
480-159204-14 MS	AMSF-CS-ES-SS-C2	Total/NA	Solid	9012B	

Analysis Batch: 494307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-12	AMSF-CS-RB-W-1	Total/NA	Water	9012B	494152
MB 480-494152/1-A	Method Blank	Total/NA	Water	9012B	494152
LCS 480-494152/2-A	Lab Control Sample	Total/NA	Water	9012B	494152

Analysis Batch: 494364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-3	AMSF-CS-SS-SS-C1	Total/NA	Solid	9012B	494182
480-159204-4	AMSF-CS-SS-SS-C2	Total/NA	Solid	9012B	494182
480-159204-8	AMSF-CS-DUP-SS-C2	Total/NA	Solid	9012B	494182
480-159204-11	AMSF-CS-ES-SS-C1	Total/NA	Solid	9012B	494182
480-159204-14	AMSF-CS-ES-SS-C2	Total/NA	Solid	9012B	494182
480-159204-17	AMSF-CS-NS-SS-C1	Total/NA	Solid	9012B	494182
MB 480-494182/1-A	Method Blank	Total/NA	Solid	9012B	494182
LCS 480-494182/2-A	Lab Control Sample	Total/NA	Solid	9012B	494182

General Chemistry (Continued)

Analysis Batch: 494364 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 480-494182/3-A	Lab Control Sample Dup	Total/NA	Solid	9012B	494182
480-159204-11 MS	AMSF-CS-ES-SS-C1	Total/NA	Solid	9012B	494182
480-159204-11 MSD	AMSF-CS-ES-SS-C1	Total/NA	Solid	9012B	494182
480-159204-14 MS	AMSF-CS-ES-SS-C2	Total/NA	Solid	9012B	494182

Prep Batch: 494412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	9012B	
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	9012B	
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	9012B	
MB 480-494412/1-A	Method Blank	Total/NA	Solid	9012B	
LCS 480-494412/2-A	Lab Control Sample	Total/NA	Solid	9012B	
LCS 480-494412/3-A	Lab Control Sample	Total/NA	Solid	9012B	
480-159204-21 MS	AMSF-CS-WS-SS-C1	Total/NA	Solid	9012B	
480-159204-18 DU	AMSF-CS-NS-SS-C2	Total/NA	Solid	9012B	

Analysis Batch: 494533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159204-18	AMSF-CS-NS-SS-C2	Total/NA	Solid	9012B	494412
480-159204-21	AMSF-CS-WS-SS-C1	Total/NA	Solid	9012B	494412
480-159204-22	AMSF-CS-WS-SS-C2	Total/NA	Solid	9012B	494412
MB 480-494412/1-A	Method Blank	Total/NA	Solid	9012B	494412
LCS 480-494412/2-A	Lab Control Sample	Total/NA	Solid	9012B	494412
LCS 480-494412/3-A	Lab Control Sample	Total/NA	Solid	9012B	494412
480-159204-21 MS	AMSF-CS-WS-SS-C1	Total/NA	Solid	9012B	494412
480-159204-18 DU	AMSF-CS-NS-SS-C2	Total/NA	Solid	9012B	494412

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-G1
Lab Sample ID: 480-159204-1
Date Collected: 09/13/19 15:30
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492739	09/18/19 14:03	S1V	TAL BUF

Client Sample ID: AMSF-CS-SS-SS-G1
Lab Sample ID: 480-159204-1
Date Collected: 09/13/19 15:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			492516	09/17/19 12:21	LCH	TAL BUF
Total/NA	Analysis	8260C		1	492443	09/17/19 16:00	LCH	TAL BUF

Client Sample ID: AMSF-CS-SS-SS-G2
Lab Sample ID: 480-159204-2
Date Collected: 09/13/19 15:30
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492739	09/18/19 14:03	S1V	TAL BUF

Client Sample ID: AMSF-CS-SS-SS-G2
Lab Sample ID: 480-159204-2
Date Collected: 09/13/19 15:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			492516	09/17/19 12:21	LCH	TAL BUF
Total/NA	Analysis	8260C		1	492443	09/17/19 16:26	LCH	TAL BUF

Client Sample ID: AMSF-CS-SS-SS-C1
Lab Sample ID: 480-159204-3
Date Collected: 09/13/19 15:30
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492554	09/17/19 15:36	IMZ	TAL BUF

Client Sample ID: AMSF-CS-SS-SS-C1
Lab Sample ID: 480-159204-3
Date Collected: 09/13/19 15:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			493581	09/23/19 14:27	SGD	TAL BUF
Total/NA	Analysis	8270D		10	493753	09/24/19 19:48	RJS	TAL BUF
Total/NA	Prep	3550C			492848	09/19/19 07:28	SMP	TAL BUF
Total/NA	Analysis	8081B		10	493205	09/20/19 19:59	JLS	TAL BUF
Total/NA	Prep	3550C			493350	09/21/19 11:23	SGD	TAL BUF
Total/NA	Analysis	8082A		1	493822	09/24/19 23:32	W1T	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493465	09/20/19 21:41	LMH	TAL BUF

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-SS-SS-C1

Lab Sample ID: 480-159204-3
Date Collected: 09/13/19 15:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493083	09/19/19 22:51	LMH	TAL BUF
Total/NA	Prep	7471B			494125	09/26/19 11:26	BMB	TAL BUF
Total/NA	Analysis	7471B		1	494349	09/26/19 13:26	BMB	TAL BUF
Total/NA	Prep	9012B			494182	09/25/19 22:25	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494364	09/26/19 15:22	MDL	TAL BUF

Client Sample ID: AMSF-CS-SS-SS-C2

Lab Sample ID: 480-159204-4
Date Collected: 09/13/19 15:30
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492554	09/17/19 15:36	IMZ	TAL BUF

Client Sample ID: AMSF-CS-SS-SS-C2

Lab Sample ID: 480-159204-4
Date Collected: 09/13/19 15:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			493581	09/23/19 14:27	SGD	TAL BUF
Total/NA	Analysis	8270D		5	493753	09/24/19 20:13	RJS	TAL BUF
Total/NA	Prep	3550C			492848	09/19/19 07:28	SMP	TAL BUF
Total/NA	Analysis	8081B		10	493205	09/20/19 20:18	JLS	TAL BUF
Total/NA	Prep	3550C			493350	09/21/19 11:23	SGD	TAL BUF
Total/NA	Analysis	8082A		1	493822	09/24/19 23:44	W1T	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493465	09/20/19 21:56	LMH	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493083	09/19/19 22:55	LMH	TAL BUF
Total/NA	Prep	7471B			494125	09/26/19 11:26	BMB	TAL BUF
Total/NA	Analysis	7471B		1	494349	09/26/19 13:27	BMB	TAL BUF
Total/NA	Prep	9012B			494182	09/25/19 22:25	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494364	09/26/19 15:23	MDL	TAL BUF

Client Sample ID: AMSF-CS-DUP-SS-G1

Lab Sample ID: 480-159204-5
Date Collected: 09/13/19 15:40
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492739	09/18/19 14:03	S1V	TAL BUF

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-DUP-SS-G1

Lab Sample ID: 480-159204-5
Date Collected: 09/13/19 15:40
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			492516	09/17/19 12:21	LCH	TAL BUF
Total/NA	Analysis	8260C		1	492443	09/17/19 16:51	LCH	TAL BUF

Client Sample ID: AMSF-CS-DUP-SS-C2

Lab Sample ID: 480-159204-8
Date Collected: 09/13/19 15:40
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492554	09/17/19 15:36	IMZ	TAL BUF

Client Sample ID: AMSF-CS-DUP-SS-C2

Lab Sample ID: 480-159204-8
Date Collected: 09/13/19 15:40
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			493581	09/23/19 14:27	SGD	TAL BUF
Total/NA	Analysis	8270D		5	493753	09/24/19 20:37	RJS	TAL BUF
Total/NA	Prep	3550C			492848	09/19/19 07:28	SMP	TAL BUF
Total/NA	Analysis	8081B		10	493205	09/20/19 20:38	JLS	TAL BUF
Total/NA	Prep	3550C			493350	09/21/19 11:23	SGD	TAL BUF
Total/NA	Analysis	8082A		1	493822	09/24/19 23:57	W1T	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493465	09/20/19 22:00	LMH	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493083	09/19/19 22:58	LMH	TAL BUF
Total/NA	Prep	7471B			494125	09/26/19 11:26	BMB	TAL BUF
Total/NA	Analysis	7471B		1	494349	09/26/19 13:28	BMB	TAL BUF
Total/NA	Prep	9012B			494182	09/25/19 22:25	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494364	09/26/19 15:25	MDL	TAL BUF

Client Sample ID: AMSF-CS-ES-SS-G1

Lab Sample ID: 480-159204-9
Date Collected: 09/13/19 14:00
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492739	09/18/19 14:03	S1V	TAL BUF

Client Sample ID: AMSF-CS-ES-SS-G1

Lab Sample ID: 480-159204-9
Date Collected: 09/13/19 14:00
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			492516	09/17/19 12:21	LCH	TAL BUF
Total/NA	Analysis	8260C		1	492443	09/17/19 17:16	LCH	TAL BUF

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-ES-SS-G2
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492739	09/18/19 14:03	S1V	TAL BUF

Client Sample ID: AMSF-CS-ES-SS-G2
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-10
Matrix: Solid
Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			492516	09/17/19 12:21	LCH	TAL BUF
Total/NA	Analysis	8260C		1	492443	09/17/19 17:42	LCH	TAL BUF

Client Sample ID: AMSF-CS-ES-SS-C1
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492554	09/17/19 15:36	IMZ	TAL BUF

Client Sample ID: AMSF-CS-ES-SS-C1
Date Collected: 09/13/19 14:00
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-11
Matrix: Solid
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			493581	09/23/19 14:27	SGD	TAL BUF
Total/NA	Analysis	8270D		5	493753	09/24/19 14:57	RJS	TAL BUF
Total/NA	Prep	3550C			492848	09/19/19 07:28	SMP	TAL BUF
Total/NA	Analysis	8081B		10	493205	09/20/19 18:21	JLS	TAL BUF
Total/NA	Prep	3550C			493350	09/21/19 11:23	SGD	TAL BUF
Total/NA	Analysis	8082A		1	493822	09/24/19 23:19	W1T	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493465	09/20/19 22:04	LMH	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493083	09/19/19 23:02	LMH	TAL BUF
Total/NA	Prep	7471B			494125	09/26/19 11:26	BMB	TAL BUF
Total/NA	Analysis	7471B		1	494349	09/26/19 13:30	BMB	TAL BUF
Total/NA	Prep	9012B			494182	09/25/19 22:25	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494364	09/26/19 15:00	MDL	TAL BUF

Client Sample ID: AMSF-CS-RB-W-1
Date Collected: 09/13/19 09:10
Date Received: 09/14/19 09:00

Lab Sample ID: 480-159204-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	493643	09/24/19 16:45	AMM	TAL BUF
Total/NA	Prep	3510C			492549	09/17/19 15:14	AAP	TAL BUF
Total/NA	Analysis	8270D		1	492746	09/18/19 20:16	PJQ	TAL BUF

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-RB-W-1

Lab Sample ID: 480-159204-12

Date Collected: 09/13/19 09:10

Matrix: Water

Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			492545	09/17/19 15:04	AAP	TAL BUF
Total/NA	Analysis	8081B		1	492824	09/19/19 15:12	JLS	TAL BUF
Total/NA	Prep	3510C			493603	09/23/19 15:10	AAP	TAL BUF
Total/NA	Analysis	8082A		1	494083	09/25/19 17:19	DSC	TAL BUF
Total/NA	Prep	3005A			492544	09/18/19 08:54	BMB	TAL BUF
Total/NA	Analysis	6010C		1	492839	09/18/19 23:16	LMH	TAL BUF
Total/NA	Prep	7470A			493531	09/23/19 11:57	BMB	TAL BUF
Total/NA	Analysis	7470A		1	493626	09/23/19 16:32	BMB	TAL BUF
Total/NA	Prep	9012B			494152	09/25/19 20:35	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494307	09/26/19 13:00	MDL	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-159204-13

Date Collected: 09/13/19 09:00

Matrix: Water

Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	493643	09/24/19 17:10	AMM	TAL BUF

Client Sample ID: AMSF-CS-ES-SS-C2

Lab Sample ID: 480-159204-14

Date Collected: 09/13/19 14:00

Matrix: Solid

Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492554	09/17/19 15:36	IMZ	TAL BUF

Client Sample ID: AMSF-CS-ES-SS-C2

Lab Sample ID: 480-159204-14

Date Collected: 09/13/19 14:00

Matrix: Solid

Date Received: 09/14/19 09:00

Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			493581	09/23/19 14:27	SGD	TAL BUF
Total/NA	Analysis	8270D		5	493753	09/24/19 15:22	RJS	TAL BUF
Total/NA	Prep	3550C			492848	09/19/19 07:28	SMP	TAL BUF
Total/NA	Analysis	8081B		10	493205	09/20/19 20:57	JLS	TAL BUF
Total/NA	Prep	3550C			493350	09/21/19 11:23	SGD	TAL BUF
Total/NA	Analysis	8082A		1	493822	09/25/19 00:10	W1T	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493465	09/20/19 22:23	LMH	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493083	09/19/19 23:31	LMH	TAL BUF
Total/NA	Prep	7471B			494125	09/26/19 11:26	BMB	TAL BUF
Total/NA	Analysis	7471B		1	494349	09/26/19 13:35	BMB	TAL BUF
Total/NA	Prep	9012B			494182	09/25/19 22:25	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494364	09/26/19 15:29	MDL	TAL BUF

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-G1
Lab Sample ID: 480-159204-15
Date Collected: 09/13/19 11:30
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492739	09/18/19 14:03	S1V	TAL BUF

Client Sample ID: AMSF-CS-NS-SS-G1
Lab Sample ID: 480-159204-15
Date Collected: 09/13/19 11:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			492516	09/17/19 12:21	LCH	TAL BUF
Total/NA	Analysis	8260C		1	492443	09/17/19 18:07	LCH	TAL BUF

Client Sample ID: AMSF-CS-NS-SS-G2
Lab Sample ID: 480-159204-16
Date Collected: 09/13/19 11:30
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492739	09/18/19 14:03	S1V	TAL BUF

Client Sample ID: AMSF-CS-NS-SS-G2
Lab Sample ID: 480-159204-16
Date Collected: 09/13/19 11:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			492516	09/17/19 13:21	LCH	TAL BUF
Total/NA	Analysis	8260C		1	492443	09/17/19 18:32	LCH	TAL BUF

Client Sample ID: AMSF-CS-NS-SS-C1
Lab Sample ID: 480-159204-17
Date Collected: 09/13/19 11:30
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492554	09/17/19 15:36	IMZ	TAL BUF

Client Sample ID: AMSF-CS-NS-SS-C1
Lab Sample ID: 480-159204-17
Date Collected: 09/13/19 11:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			493581	09/23/19 14:27	SGD	TAL BUF
Total/NA	Analysis	8270D		5	493753	09/24/19 15:46	RJS	TAL BUF
Total/NA	Prep	3550C			492848	09/19/19 07:28	SMP	TAL BUF
Total/NA	Analysis	8081B		20	493205	09/20/19 21:17	JLS	TAL BUF
Total/NA	Prep	3550C			493350	09/21/19 11:23	SGD	TAL BUF
Total/NA	Analysis	8082A		1	493822	09/25/19 00:23	W1T	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493465	09/20/19 22:46	LMH	TAL BUF

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-NS-SS-C1

Lab Sample ID: 480-159204-17
Date Collected: 09/13/19 11:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493083	09/19/19 23:42	LMH	TAL BUF
Total/NA	Prep	7471B			494125	09/26/19 11:26	BMB	TAL BUF
Total/NA	Analysis	7471B		1	494349	09/26/19 13:36	BMB	TAL BUF
Total/NA	Prep	9012B			494182	09/25/19 22:25	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494364	09/26/19 15:35	MDL	TAL BUF

Client Sample ID: AMSF-CS-NS-SS-C2

Lab Sample ID: 480-159204-18
Date Collected: 09/13/19 11:30
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492554	09/17/19 15:36	IMZ	TAL BUF

Client Sample ID: AMSF-CS-NS-SS-C2

Lab Sample ID: 480-159204-18
Date Collected: 09/13/19 11:30
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			493581	09/23/19 14:27	SGD	TAL BUF
Total/NA	Analysis	8270D		1	493753	09/24/19 16:10	RJS	TAL BUF
Total/NA	Prep	3550C			492848	09/19/19 07:28	SMP	TAL BUF
Total/NA	Analysis	8081B		10	493205	09/20/19 21:36	JLS	TAL BUF
Total/NA	Prep	3550C			493350	09/21/19 11:23	SGD	TAL BUF
Total/NA	Analysis	8082A		1	493822	09/25/19 00:36	W1T	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493465	09/20/19 22:50	LMH	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493083	09/19/19 23:46	LMH	TAL BUF
Total/NA	Prep	7471B			494125	09/26/19 11:26	BMB	TAL BUF
Total/NA	Analysis	7471B		1	494349	09/26/19 13:40	BMB	TAL BUF
Total/NA	Prep	9012B			494412	09/26/19 20:30	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494533	09/27/19 11:17	CLT	TAL BUF

Client Sample ID: AMSF-CS-WS-SS-G1

Lab Sample ID: 480-159204-19
Date Collected: 09/13/19 10:00
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492739	09/18/19 14:03	S1V	TAL BUF

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-G1

Lab Sample ID: 480-159204-19
Date Collected: 09/13/19 10:00
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			492516	09/17/19 13:21	LCH	TAL BUF
Total/NA	Analysis	8260C		1	492443	09/17/19 18:58	LCH	TAL BUF

Client Sample ID: AMSF-CS-WS-SS-G2

Lab Sample ID: 480-159204-20
Date Collected: 09/13/19 10:00
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492739	09/18/19 14:03	S1V	TAL BUF

Client Sample ID: AMSF-CS-WS-SS-G2

Lab Sample ID: 480-159204-20
Date Collected: 09/13/19 10:00
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			492516	09/17/19 13:21	LCH	TAL BUF
Total/NA	Analysis	8260C		1	492443	09/17/19 19:23	LCH	TAL BUF

Client Sample ID: AMSF-CS-WS-SS-C1

Lab Sample ID: 480-159204-21
Date Collected: 09/13/19 10:00
Matrix: Solid
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492554	09/17/19 15:36	IMZ	TAL BUF

Client Sample ID: AMSF-CS-WS-SS-C1

Lab Sample ID: 480-159204-21
Date Collected: 09/13/19 10:00
Matrix: Solid
Date Received: 09/14/19 09:00
Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			493581	09/23/19 14:27	SGD	TAL BUF
Total/NA	Analysis	8270D		1	493753	09/24/19 16:34	RJS	TAL BUF
Total/NA	Prep	3550C			492848	09/19/19 07:28	SMP	TAL BUF
Total/NA	Analysis	8081B		1	493205	09/20/19 21:56	JLS	TAL BUF
Total/NA	Prep	3550C			493350	09/21/19 11:23	SGD	TAL BUF
Total/NA	Analysis	8082A		1	493822	09/25/19 00:49	W1T	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493465	09/20/19 22:54	LMH	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493083	09/19/19 23:49	LMH	TAL BUF
Total/NA	Prep	7471B			494125	09/26/19 11:26	BMB	TAL BUF
Total/NA	Analysis	7471B		1	494349	09/26/19 13:41	BMB	TAL BUF
Total/NA	Prep	9012B			494412	09/26/19 20:30	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494533	09/27/19 11:19	CLT	TAL BUF

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Client Sample ID: AMSF-CS-WS-SS-C2

Lab Sample ID: 480-159204-22

Date Collected: 09/13/19 10:00

Matrix: Solid

Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492554	09/17/19 15:36	IMZ	TAL BUF

Client Sample ID: AMSF-CS-WS-SS-C2

Lab Sample ID: 480-159204-22

Date Collected: 09/13/19 10:00

Matrix: Solid

Date Received: 09/14/19 09:00

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			493581	09/23/19 14:27	SGD	TAL BUF
Total/NA	Analysis	8270D		5	493753	09/24/19 16:58	RJS	TAL BUF
Total/NA	Prep	3550C			492848	09/19/19 07:28	SMP	TAL BUF
Total/NA	Analysis	8081B		1	493333	09/21/19 15:49	MAN	TAL BUF
Total/NA	Prep	3550C			493350	09/21/19 11:23	SGD	TAL BUF
Total/NA	Analysis	8082A		1	493822	09/25/19 01:01	W1T	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493465	09/20/19 22:58	LMH	TAL BUF
Total/NA	Prep	3050B			492504	09/18/19 05:20	NSW	TAL BUF
Total/NA	Analysis	6010C		1	493083	09/19/19 23:53	LMH	TAL BUF
Total/NA	Prep	7471B			494125	09/26/19 11:26	BMB	TAL BUF
Total/NA	Analysis	7471B		1	494349	09/26/19 13:43	BMB	TAL BUF
Total/NA	Prep	9012B			494412	09/26/19 20:30	LAW	TAL BUF
Total/NA	Analysis	9012B		1	494533	09/27/19 11:22	CLT	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Stantec Consulting Corp.
Job ID: 480-159204-1
Project/Site: Alliance BCP Site (AMSF)

Laboratory: Eurofins TestAmerica, Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
9012B	Cyanide, Total andor Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7470A	Preparation, Mercury	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: Alliance BCP Site (AMSF)

Job ID: 480-159204-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-159204-1	AMSF-CS-SS-SS-G1	Solid	09/13/19 15:30	09/14/19 09:00	
480-159204-2	AMSF-CS-SS-SS-G2	Solid	09/13/19 15:30	09/14/19 09:00	
480-159204-3	AMSF-CS-SS-SS-C1	Solid	09/13/19 15:30	09/14/19 09:00	
480-159204-4	AMSF-CS-SS-SS-C2	Solid	09/13/19 15:30	09/14/19 09:00	
480-159204-5	AMSF-CS-DUP-SS-G1	Solid	09/13/19 15:40	09/14/19 09:00	
480-159204-8	AMSF-CS-DUP-SS-C2	Solid	09/13/19 15:40	09/14/19 09:00	
480-159204-9	AMSF-CS-ES-SS-G1	Solid	09/13/19 14:00	09/14/19 09:00	
480-159204-10	AMSF-CS-ES-SS-G2	Solid	09/13/19 14:00	09/14/19 09:00	
480-159204-11	AMSF-CS-ES-SS-C1	Solid	09/13/19 14:00	09/14/19 09:00	
480-159204-12	AMSF-CS-RB-W-1	Water	09/13/19 09:10	09/14/19 09:00	
480-159204-13	TRIP BLANK	Water	09/13/19 09:00	09/14/19 09:00	
480-159204-14	AMSF-CS-ES-SS-C2	Solid	09/13/19 14:00	09/14/19 09:00	
480-159204-15	AMSF-CS-NS-SS-G1	Solid	09/13/19 11:30	09/14/19 09:00	
480-159204-16	AMSF-CS-NS-SS-G2	Solid	09/13/19 11:30	09/14/19 09:00	
480-159204-17	AMSF-CS-NS-SS-C1	Solid	09/13/19 11:30	09/14/19 09:00	
480-159204-18	AMSF-CS-NS-SS-C2	Solid	09/13/19 11:30	09/14/19 09:00	
480-159204-19	AMSF-CS-WS-SS-G1	Solid	09/13/19 10:00	09/14/19 09:00	
480-159204-20	AMSF-CS-WS-SS-G2	Solid	09/13/19 10:00	09/14/19 09:00	
480-159204-21	AMSF-CS-WS-SS-C1	Solid	09/13/19 10:00	09/14/19 09:00	
480-159204-22	AMSF-CS-WS-SS-C2	Solid	09/13/19 10:00	09/14/19 09:00	

Quantitation Limit Exceptions Summary

Client: Stantec Consulting Corp.
Job ID: 480-159204-1
Project/Site: Alliance BCP Site (AMSF)

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Analyte	Matrix	Prep Type	Unit	Client RL	Lab PQL
8270D	2,4-Dinitrophenol	Solid	Total/NA	mg/Kg	0.33	1.66
8270D	3,3'-Dichlorobenzidine	Solid	Total/NA	mg/Kg	0.17	0.33
8082A	PCB-1016	Solid	Total/NA	mg/Kg	0.017	0.25
8082A	PCB-1221	Solid	Total/NA	mg/Kg	0.017	0.25
8082A	PCB-1232	Solid	Total/NA	mg/Kg	0.017	0.25
8082A	PCB-1242	Solid	Total/NA	mg/Kg	0.017	0.25
8082A	PCB-1248	Solid	Total/NA	mg/Kg	0.017	0.25
8082A	PCB-1254	Solid	Total/NA	mg/Kg	0.017	0.25
8082A	PCB-1260	Solid	Total/NA	mg/Kg	0.017	0.25
8082A	PCB-1262	Solid	Total/NA	mg/Kg	0.017	0.25
8082A	PCB-1268	Solid	Total/NA	mg/Kg	0.017	0.25

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Amanda Matkosky	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-135136-30410.1
Client Contact: Mr. Thomas Wells	Phone: 585-413-5208	E-Mail: ryan.vandette@testamericainc.com		Page: Page 1 of 2
Company: Stantec Consulting Services Inc				Job #:
Address: 61 Commercial Street Suite100	Due Date Requested:			
City: Rochester	TAT Requested (days): 10			
State, Zip: NY, 14614				
Phone: 585-413-5310(Tel)	PO #: 190500647.280			
Email: tom.wells@stantec.com	WO #:			
Project Name: Alliance BCP Site (AMSF)	Project #: 48019746			
Site: AMSF	SSOW#:			

Analysis Requested

Preservation Codes:

480-159204 Chain of Custody

J - DI Water; K - EDTA; L - EDA; V - MCAA; W - pH 4-5; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 7471B	8081B, 8082A, 8270D	9012B - Cyanide	8260C - TCL list OLM04.2	6010C, 7470A	8260C - TCL list OLM04.2	8270D - TCL SVOA - OLM04.2	8081B - TCL Pesticides - OLM04.2	8082A - TCL PCBs - OLM04.2	9012B - Cyanide				Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	D	A	N	N	N	B				X	
AMSF-CS-SS-SS-G1	9/13/19	1530	G	Solid	N	N	X	X	X	X										1	only 8260
AMSF-CS-SS-SS-G2			G	Solid						X										1	
AMSF-CS-SS-SS-C1			C	Solid			X	X	X											4	
AMSF-CS-SS-SS-C2		↓	C	Solid			X	X	X											4	
AMSF-CS-Dup-SS-G1		1540	G	Solid						X										1	
AMSF-CS-Dup-SS-G2			G	Solid						X										1	
AMSF-CS-Dup-SS-C1			C	Solid			X	X	X											4	
AMSF-CS-Dup-SS-C2		↓	C	Solid			X	X	X											4	
AMSF-CS-ES-SS-G1		1400	G	Solid		Y				X										3	
AMSF-CS-ES-SS-G2			G	Solid		Y				X										3	
AMSF-CS-ES-SS-C1	↓	↓	C	Solid		Y	X	X	X											12	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Cat B, Stantec EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	1945 9/13/19	Stantec	Fedex		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				9/14/19 0900	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		FF 3.6

Ver: 01/16/2019

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler:	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-135136-30410.2
Client Contact: Mr. Thomas Wells	Phone:	E-Mail: ryan.vandette@testamericainc.com		Page: Page 2 of 2
Company: Stantec Consulting Services Inc				Job #:
Address: 61 Commercial Street Suite100	Due Date Requested:			
City: Rochester	TAT Requested (days):			
State, Zip: NY, 14614				
Phone: 585-413-5310(Tel)	PO #: 190500647.280			
Email: tom.wells@stantec.com	WO #:			
Project Name: Alliance BCP Site (AMSF)	Project #: 48019746			
Site: AMSF	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 7471B	8081B, 8082A, 8270D	9012B - Cyanide	8260C - TCL list OLM04.2	6010C, 7470A	8260C - TCL list OLM04.2	8270D - TCL SVOA - OLM04.2	8081B - TCL Pesticides - OLM04.2	8082A - TCL PCBs - OLM04.2	9012B - Cyanide				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	D	A	N	N	N	B					
AMSF-CS-RB-GW-1	9/13/19	0910	G	Water	N	N					X	X	X	X	X	X				11	
Trip Blank	9/13/19	0900	—	Water	↓	↓						X								3	
AMSF-CS-ES-SS-C2		1400	C	S	N	Y	X	X	X											3	
AMSF-CS-NS-SS-G1		1130	G			N				X										1	
AMSF-CS-NS-SS-G2		↓	G							X										1	
AMSF-CS-NS-SS-C1			C				X	X	X											4	
AMSF-CS-NS-SS-C2		↓	C				X	X	X											4	
AMSF-CS-WS-SS-G1		1000	G							X										1	
AMSF-CS-WS-SS-G2			G							X										1	
AMSF-CS-WS-SS-C1			C				X	X	X											4	
AMSF-CS-WS-SS-C2	↓	↓	C	↓	↓	↓	X	X	X											4	

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) See Page1

Special Instructions/QC Requirements: See page1

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/13/19 1945	Stantec	FedEx		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			Wallace	9/14/19 0900	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #1 3.6

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 480-159204-1

Login Number: 159204
List Number: 1
Creator: Kolb, Chris M

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

APPENDIX C

Fit for Duty Covid-19 Guidance

Fit for Duty COVID-19 Guidance

Pre-mobilization fit for duty questions for Stantec field personnel

Please review the following statements and answer the question below:

You are not fit for duty if any of the following conditions are met.

- You have a temperature above 100.4 °F (38 °C).
- You have any symptoms associated with COVID-19 such as cough, sore throat, shortness of breath, chills, headache, repeated shaking with chills, muscle pain, new loss of taste or smell, or toes and extremities turning blue.
- You have been exposed to someone in the last 14 days that has been diagnosed with COVID-19 or is presumptively positive.
- You or any members of your household travelled internationally in the last 14 days.

Are you Fit for Duty?

Yes ☐ No ☐

If you answer **YES**, you can mobilize to the project field site.

If you answer **NO**, or you choose to not answer, please consult with your supervisor prior to mobilizing to the project field site.

Field Level Risk Assessment

Questions for non-Stantec personnel accessing field sites under Stantec control

"*Hello. As you are aware, COVID-19, also known as the novel coronavirus, was declared a global pandemic on March 11, 2020 by the World Health Organization (WHO). The COVID-19 situation continues to evolve and Stantec is now conducting active fit for duty affirmations prior to allowing access to this site.*"

Please review the following statements and answer the question below:

You are not fit for duty if any of the following conditions are met.

- You have a temperature above 100.4 °F (38 °C).
- You have any symptoms associated with COVID-19 such as cough, sore throat, shortness of breath, chills, headache, repeated shaking with chills, muscle pain, new loss of taste or smell, or toes and extremities turning blue.
- You have been exposed to someone in the last 14 days that has been diagnosed with COVID-19 or is presumptively positive.
- You or any members of your household travelled internationally in the last 14 days.

Are you Fit for Duty?

Yes ☐ No ☐

If the individual answers **YES**, site access can be granted.

If the individual answers **NO**, or refuses to answer, do not allow them access.

Message for Contractor personnel and visitors to the project site:

"Thank you for your honesty and understanding. While at this Stantec project site please adhere to social distancing to the fullest extent possible. Social distancing means staying 2 metres (6 feet) away from others and avoiding crowds. Please advise Stantec if your task requires you to be within 2 metres (6 feet) of another individual."

* Close contact is defined as a person who:

- Provided care for the individual, including healthcare workers, family members or other caregivers, or who had other similar close physical contact with the person without consistent and appropriate use of personal protective equipment OR
- Lived with or otherwise had close prolonged contact (within 2 metres / 6 feet) with the person while the person was infectious OR
- Had direct contact with infectious bodily fluids of the person (e.g., was coughed or sneezed on) while not wearing recommended personal protective equipment.