Waste Management Division
PO Box 95, 29 Hazen Drive
Concord, NH 03302

Type of Submittal (Check One-Most Applicable)

☐ Work Scope ☐ Reimbursement Request	☐ Remedial Action • Remedial Action Plan • Bid Plans and Specifications • Remedial Action Implementation Report ☐ Treatment System and POE O&M ☐ Activity and Use Restriction
☐ UST Facility Report ☐ AST Facility Report	
☐ Emergency/Initial Response Action ☐ Groundwater Quality Assessment	☐ Temporary Surface Water Discharge Permit
☐ Initial Site Characterization ☐ Site Investigation • Site Investigation Report • Supplemental Site Investigation Report • GMZ Delineation • Source Area Investigation • Data Submittal • Annual Summary Report ☒ Unsolicited Phase II Environmental Site Assessment ☐ Closure Documentation	☐ Groundwater Management Permit • Permit Application • Renewal Application • Deed Recordation Documentation • Abutter Notification Documentation • Release of Recordation ☐ Data Submittal ☐ Annual Summary Report

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Ferrari Realty Trust Property
93-119 Memorial Street
Franklin, New Hampshire
NHDES Site #198606087

Prepared For:

Lakes Region Planning Commission, Brownfields Assessment Grant
103 Main Street #3
Meredith, New Hampshire 03253
Phone: (603) 279-8171
Contact: Mr. Jeff Hayes

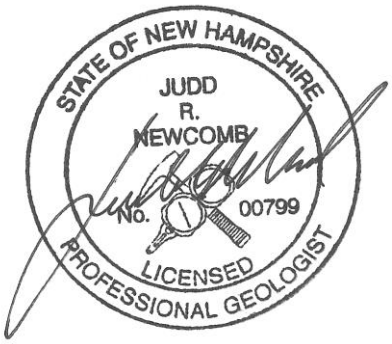
Franklin Falls Downtown Development Authority
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Contact: Mr. Todd Workman

Judd Newcomb

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Prepared By:
CREDERE ASSOCIATES, LLC
776 Main Street
Westbrook, ME 04902
Phone: (207) 828-1272 ext. 16
Contact: Judd Newcomb, CG, PG

June 18, 2015



Recommended Risk Category (check one)

☐ 1. Immediate Human Health Risk (Impacted water supply well, etc.)	☐ 4. Surface Water Impact	☐ 7. Alternate Water Available/Low Level Groundwater Contamination (<1,000 X AGQS)
☐ 2. Potential Human Health Risk (Water supply well within 1,000' or Site within SWPA)	☐ 5. No Alternate Water Available/No Existing Wells in Area	☐ 8. No AGQS Violation/No Source Remaining
☐ 3. Free Product or Source Hazard	☐ 6. Alternate Water Available/High Level Groundwater Contamination (>1,000 X AGQS)	☐ Closure Recommended

CREDERE ASSOCIATES, LLC
776 Main Street
Westbrook, Maine 04092
Phone: 207-828-1272
Fax: 207-887-1051

June 18, 2015

Jeff Hayes
Lakes Region Planning Commission
103 Main Street #3
Meredith, NH 03253

Todd Workman
Franklin Falls Downtown Development Authority
361 Central Street
Franklin, NH 03235

Subject: **Phase II Environmental Site Assessment**
Ferrari Realty Trust Property
NHDES Site #198606087
93-119 Memorial Street, Franklin, New Hampshire

Dear Mr. Workman and Mr. Hayes:

This report has been prepared to present the results of a Phase II Environmental Site Assessment completed for the above referenced property (the Site). Sections 6 and 7 of this report include the conclusions and recommendations generated during the performance of the Phase II Environmental Site Assessment.

Please do not hesitate to contact me at (207) 828-1272 extension 15 if you have any questions, comments, or require additional information regarding this investigation.

Sincerely,

CREDERE ASSOCIATES, LLC

Allison S. Drouin, PG
Primarily Author/Geologist

Judd Newcomb, PG, CG
Geologist/Project Manager

Enclosure: Phase II ESA

CC: Dick Lewis, City of Franklin
Rebecca Williams, NHDES
Alan Peterson, EPA

Phase II Environmental Site Assessment

Ferrari Realty Trust Property
NHDES Site #198606087
93-119 Memorial Street
Franklin, New Hampshire 03235



Prepared for and Funded by:
Brownfields Assessment Grant #: BF-96176301
Lakes Region Planning Commission
103 Main Street #3
Meredith, NH 03253

On Behalf of:
Franklin Falls Downtown Development Authority
361 Central Street
Franklin, NH 03235



June 18, 2015

In Reference to:
Project No. 14001247

Submitted by:
Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092

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EXECUTIVE SUMMARY

Credere Associates, LLC (Credere) was retained by the Lakes Region Planning Commission (LRPC) to conduct a Phase II Environmental Site Assessment (ESA) at the Ferrari Realty Trust Property located at 93-119 Memorial Street in Franklin, New Hampshire (the Site). This Phase II ESA was completed in general conformance with the ASTM International (ASTM) E 1903-11 *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process* and with Credere's US Environmental Protection Agency (EPA) and New Hampshire Department of Environmental Services (NHDES) approved Site-Specific Quality Assurance Project Plan (SSQAPP) for the Site dated October 3, 2014, and electronic mail amendment on November 17, 2014.

The primary objective of this Phase II ESA is to confirm or dismiss the recognized environmental conditions (RECs) and environmental findings and fulfill the recommendations identified in Credere's August 22, 2014, Phase I ESA. The following objectives were established to aid in designing the scope of work:

- Assess for the presence of an underground storage tank (UST) outside the northwest corner of the Armory
- Assess and evaluate the extent of industrial waste fill located at the Site
- Assess sediment along the northern edge of the Site for impacts from onsite and upstream historical operations
- Assess possible releases from the subsurface fuel oil supply lines in the boiler house
- Assess the presumed transformer pad for the presence of polychlorinated biphenyls (PCBs)
- Assess material discharged from a hopper on the eastern side of the Stanley Mill
- Assess surface soil for impacts associated with historical Site use
- Assess for the presence of asbestos-containing materials (ACM), lead-based paint (LBP), and PCB-containing building materials in the Site buildings

The threat of release from drums within the Site buildings identified as REC #5 during the Phase I ESA was not assessed as part of this Phase II ESA; however, it is presumed the drums will be properly disposed offsite by the owner. Additionally, former UST removal identified as Environmental Finding #3 was also not assessed as it was well documented in a January 12, 1999, Tank Closure Summary that soil and groundwater in the UST excavation was not impacted.

The following sampling program was conducted to accomplish the above objectives:

- Performed a ground penetrating radar (GPR) survey

- Advanced soil borings and collected soil samples from each boring location
- Collected surface soil samples
- Excavated test pits and collected soil samples from each test pit
- Collected sediment samples from the Winnipesaukee River
- Installed groundwater monitoring wells and collected groundwater samples
- Performed an asbestos survey of the Site buildings and collected samples of suspect ACM
- Collected samples from areas of stained concrete
- Performed a PCB-containing building material survey of the Site buildings and collected samples of suspect PCB-containing materials
- Performed a LBP screening of the Site buildings
- Performed an inventory of universal, hazardous, and/or other wastes present in the Site buildings

A summary of the results of the field activities are presented hereafter.

A GPR survey was performed on October 20, 2014, to identify evidence of a UST near the northwest corner of the former Armory and other possible anomalies throughout the Site. The GPR survey identified a reflection characteristic of a UST outside the northwest corner of the Armory. A subsequent test pit visually confirmed the UST was present. Only the corner of the UST was uncovered because the UST was rusty and appeared fragile. To avoid causing a possible release, the UST was not further excavated or observed at that time.

During the Phase I ESA Site reconnaissance, the entire length of the riverbank to the north of both Site buildings was observed to contain industrial fill from former saw and tool manufacturing at the Site. The fill material was observed to contain rusty metal coils, sheet metal, hacksaw blades, and other metal debris.

The industrial fill observed in the subsurface was consistent with the content of the fill material observed at the surface during the Phase I ESA. Metal scraps, abundant saw blades, and a rusty metallic matrix were characteristic of the industrial fill onsite. Results for soil samples collected from the industrial fill material were markedly different than those collected from native soil at deeper intervals. The industrial fill material was documented to contain tetrachloroethene (PCE), polycyclic aromatic hydrocarbons (PAHs), and metals in exceedance of the NHDES Soil Remediation Standards (SRSs). The industrial fill north of the former Armory consisted of almost entirely saw blades with limited soil to a depth of at least 4 feet below the ground surface (bgs). Exploratory test pits and physical observation of the northern slope from the vantage point of the river bank, revealed the approximate extent of the industrial fill extending west to stairs on the north side of the former Armory, south approximately 30 feet between the Site buildings, east

at least to Credere's test pit CA-TP-3, and north to the Winnipesaukee River. The fill thickness was variable across the Site and ranged from approximately 3.5 to 8.5 feet.

Groundwater was found to be impacted by PCE and degradation products trichloroethene (TCE) and vinyl chloride in exceedance of the NHDES Ambient Groundwater Quality Standards (AGQS). Concentrations were greatest in groundwater monitoring well CA-MW-5 with exceedances also detected in CA-MW-6. TCE also exceeded the NHDES Method 1 GW-2 and Vapor Intrusion Screening levels in CA-MW-5. Based on the detected concentrations, PCE in groundwater is likely to have leached from the overlying industrial fill material down through the sandy native soil or be from a more concentrated source such as a discharge to basement floor drains to beneath the Stanley Mill. Further investigation is needed to characterize and identify Site source areas.

Credere collected two sediment samples from the northern edge of the Site to assess for impacts associated with erosion of industrial fill material from the Site. Results indicated the presence of benzo(a)pyrene in exceedance of the NHDES SRSs in one location; however, similar results were not detected in the two nearest surface soil samples collected from the soil that would presumably be eroding to the river during high water events. Elevated levels of benzo(a)pyrene were detected elsewhere on the Site and may have entered the river via stormwater runoff. It is also possible this detection is the result of impacts from upstream/offsite sources.

During the Phase I ESA Site reconnaissance, fuel oil supply lines were observed along the northern wall of the boiler house within the Stanley Mill. These lines originated at the former fuel oil UST that was located east of the Stanley Mill and traveled across the basement of the building to the boiler room. The base of these fuel oil supply lines was covered in a pile of brick, which obscured the view of the lines, but it is suspected these fuel oil lines enter the concrete floor prior to feeding the boiler. The former UST closure report did not include a description of any activities associated with the decommissioning of these lines; therefore, the lines may still contain fuel oil with the potential to have reached the environment.

One soil boring and monitoring well was installed adjacent to the boiler house and the location where the fuel oil lines presumably enter the concrete floor. Soil and groundwater analytical results for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and total petroleum hydrocarbons (TPH) were below the laboratory reporting limits and no evidence of petroleum contamination (i.e. photoionization detector [PID] response, odor, staining) was observed.

A fenced presumed transformer area was located outside the northeast corner of the Stanley Mill. All transformers had been removed from this area; however, staining was observed on the concrete slab beneath the transformer rack. Transformers that likely would have been present in this area typically contain a mineral oil dielectric fluid (MODF); based on the timing of the use of the Site through the peak PCB use time period (1950 through 1979), these transformers may have contain PCB-containing MODF. CA-SS-6 and CA-CC-3 were collected from the surface soil and concrete pad, respectively, in this area. Both samples were analyzed for PCBs and

results were below the laboratory reporting limits or below the applicable cleanup guidelines for low and high occupancy spaces (40 CFR 761).

A hopper was observed outside the eastern wall of the Stanley Mill and was observed to have discharged a pile of metal dust and/or soot to the surface soil beneath. The material beneath the hopper was sampled (CA-SS-7) and results indicated the material contained low levels of PAHs and metals; however, results did not exceed the NHDES SRSs.

Based on the nearly 80 year duration of industrial manufacturing at the Site during a time when poor housekeeping was typical, surface soil impacts throughout the Site were anticipated in areas of material storage (reportedly the basement and former garage) and handling (e.g. loading docks and storage areas). Several other areas of environmental concern were observed/identified throughout the Site. Surface soil and concrete samples were collected from these areas and the following summarizes the results of each area of environmental concern:

- Staining in the former Armory: Concrete sample CA-CC-1 was collected from the stained area in the southeast corner of the former Armory and was analyzed for PCBs. Results were below the laboratory reporting limits.
- Staining in the Stanley Mill turbine area: Concrete sample CA-CC-2 was collected from the stained area surrounding turbine equipment in the basement of the Stanley Mill and was analyzed for PCBs. Results were below the laboratory reporting limits.
- Former Garage: Soil boring and monitoring well CA-SB-2/CA-MW-2 was advanced/installed just south of the foundation of the former garage. One surface soil sample was collected to assess possible surface spills associated with material handling and one subsurface sample and groundwater sample were collected to assess possible impacts from drum storage. Soil sample results were below the laboratory reporting limits or below the NHDES SRSs; however, dissolved arsenic was detected in groundwater above the NHDES AGQS. Arsenic was detected in a soil sample collected from nearby test pit CA-TP-3 above the NHDES SRSs, which is located north of CA-MW-2 within the industrial fill material. The source of the arsenic is unclear at this time and may be related to the historical use of the garage, the presence of industrial fill at the Site, or from and offsite upgradient source.
- Discharge pipe on retaining wall: Surface soil sample CA-SS-5 was collected from below the discharge pipe that was presumed to be connected to the floor drain observed in the Stanley Mill basement. At the time of the sampling several other discharge pipes were also observed along the wall; therefore, it is not clear which pipe may be connected to the floor drain. Soil sample results exceeded the NHDES SRSs for antimony, arsenic and lead, and also contained low levels of PAHs. Evidence of fill spillage over the wall was observed as the soil was rusty and hacksaw blades were present surrounding the sample location.
- Loading dock and trucking area at Stanley Mill: Surface soil samples CA-SS-1 and CA-SS-2 were collected from the loading dock and trucking area for the Stanley Mill located

between the two Site buildings. PAHs were detected in exceedance of the NHDES SRSs. PAHs are attributed to general industrial operations, trucking and material handling.

- Loading docks at the former Armory: Surface soil samples CA-SS-3 and CA-SS-4 were collected from a former loading dock and former bay door at the former Armory. Results were below the NHDES SRSs.

Intact pipe wrap, mudded elbows, roofing felt, and window caulk tested positive for asbestos and several types of paint were positive for lead. In some areas of the building asbestos insulation was observed in waste form having sloughed off the piping to the floor. Many fluorescent light fixtures and unlabeled drums were inventoried in both Site buildings. Concrete sample results did not indicate the presence of PCBs in exceedance of the applicable cleanup goals, and building material sample results for PCBs did not exceed the 40 CFR 761.3 definition of bulk product waste; however, some building material sample results did contain low levels of PCBs and will require disposal at an appropriately licensed landfill if removed from use at the Site during redevelopment.

Based on these results, Credere makes the following conclusions with regard to the RECs and environmental findings identified in the Phase I ESA:

- REC #1 – Disposal of industrial waste as fill at the Site: CONFIRMED
- REC #2 – Evidence of a UST outside the northwest corner of the former Armory: CONFIRMED
- REC #3 – Presumed ACM in waste form in the basement of the Stanley Mill: CONFIRMED
- REC #4 – Observed staining on a former transformer pad near the northeast corner of the Stanley Mill: DISMISSED
- REC #6 – Release to surface soil from hopper east of the Stanley Mill: DISMISSED
- REC #7 - Release or threat of release from possible subsurface fuel oil supply lines in the boiler house: The release is DISMISSED; however, the threat of release remains.
- REC #8 – Likely presence of surface soil impacts throughout the Site from historical Site use: CONFIRMED and DISMISSED by area of environmental concern
    - Staining in the former Armory: DISMISSED
    - Staining the Stanley Mill turbine area: DISMISSED
    - Former Garage: INCONCLUSIVE
    - Discharge pipe on retaining wall: CONFIRMED
    - Loading dock and trucking area at Stanley Mill: CONFIRMED
    - Loading docks at the former Armory: DISMISSED

- Environmental Finding #1 – Observed possible hazardous building materials throughout the Site: CONFIRMED
- Environmental Finding #2 – Upstream historical industrial operations: PLAUSIBLE

Based on the findings and conclusions of this investigation, Credere makes the following recommendations:

- Further assessment of the source and delineation of the extent of PCE impacted groundwater
- Assessment of the souce, nature, and extent of arsenic in groundwater in the area of CA-MW-2
- Further delineation of the extent of PAHs in soil outside of the fill area
- Clear delineation of the limits of the industrial waste fill area in the eastern portion of the Site and beneath the Site buildings
- Removal of the former Armory UST in accordance with Env-Or 400 – Underground Storage Tank Program
- Proper abatement of identified ACM prior to renovations/demolition in the Stanley Mill
- Additionally, sampling of ACM if the Armory roof or concrete block walls, or Stanley Mill fire doors or boiler are to be disturbed during renovations
- Proper handling and disposal of LBP and PCB-containing building materials during renovation/demolition
- Proper offsite disposal of the drums within the two Site buildings to eliminate the threat of release
- Proper decommissioning and removal of the fuel oil supply lines entering the concrete floor of the Stanley Mill boiler house to eliminate the threat of release
- Further evaluate the potential for vapor intrusion after the full extent of volatile sources have been assess and the plan for addressing the source has been determined
- Prepare a Remedial Action Plan once contaminants at the Site have been adequately assessed

1. INTRODUCTION

Credere Associates, LLC (Credere) was retained by the Lakes Region Planning Commission (LRPC) on behalf of the Franklin Falls Downtown Development Authority (FFDDA) to conduct a Phase II Environmental Site Assessment (ESA) at the Ferrari Realty Trust Property located at 93-119 Memorial Street in Franklin, New Hampshire (the Site). This Phase II ESA was completed in general conformance with the ASTM International (ASTM) E 1903-11 *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process* and with Credere's US Environmental Protection Agency (EPA) and New Hampshire Department of Environmental Services (NHDES) approved Site Specific Quality Assurance Project Plan (SSQAPP) for the Site dated October 3, 2014 and electronic mail amendment on November 17, 2014. Copies of the SSQAPP and email amendment are included in **Appendix A**.

1.1 PURPOSE

Phase II activities were performed to assess recognized environmental conditions (RECs) identified in Credere's August 22, 2014, Phase I ESA and to support redevelopment planning at the Site.

1.2 STATEMENT OF OBJECTIVES

This section was developed to provide clarity and transparency in communicating and interpreting Phase II ESA results. The primary objective of this Phase II ESA is to confirm or dismiss the RECs and environmental findings and fulfill the recommendations identified in Credere's August 22, 2014, Phase I ESA. The following objectives were established to aid in designing the scope of work:

- Assess for the presence of an underground storage tank (UST) outside the northwest corner of the Armory
- Assess and evaluate the extent of industrial waste fill located at the Site
- Assess sediment along the northern edge of the Site for impacts from onsite and upstream historical operations
- Assess possible releases from the subsurface fuel oil supply lines in the boiler house
- Assess the presumed transformer pad for the presence of polychlorinated biphenyls (PCBs)
- Assess material discharged from the hopper on the eastern side of the Site building
- Assess surface soil for impacts associated with historical Site use
- Assess for the presence of asbestos-containing materials (ACM), lead-based paint (LBP), and PCB-containing building materials in the Site buildings

The threat of release from drums identified as REC #5 was not assessed as part of this Phase II ESA; however, it is presumed the drums will be properly disposed offsite by the owner.

Additionally, the former UST removal identified as Environmental Finding #3 was also not assessed as it was well documented in a January 12, 1999, Tank Closure Summary that soil and groundwater in the UST excavation was not impacted.

2. BACKGROUND INFORMATION

2.1 SITE DESCRIPTION

The 1.219-acre Site is part of the Franklin Falls Historic District and consists of two buildings including the Stanley Mill in the eastern portion of the Site and a former Armory in the western portion of the Site. The northern portion of the Site slopes steeply downward toward the Winnipesaukee River, and a retaining wall extends behind most of the Stanley Mill. This area is apparently filled with evidence of spillage over the retaining wall and erosion/sloughing to the river. The Site is identified by the City of Franklin as Map 117, Lot 142 and is currently owned by Ferrari Realty Trust/Ferrari Trustees L & C. Below is a description of the two buildings:

Stanley Mill

The Stanley Mill is a two-story mill building with a concrete and stone foundation. The original southeast portion of the building was constructed between 1897 and 1911. The mill building was expanded over time and reached its current configuration by 1929.

The building consists of several large open rooms and hallways. The main rooms were accessed by sliding steel fire doors. A boiler room was located extending off the southwest portion of the building. An electric elevator was located in the southeast portion of the building. The building was vacant and generally empty with the exception of some debris. The building was in poor condition with water damaged floors, walls and roofs.

Former Armory

The former Armory building is a single-story masonry structure. The original eastern portion of the Site building was constructed between 1911 and 1923 as a large open single room space. The western portion of the building was added between 1948 and 1956 and contains several rooms and a loading dock area. The former Armory building is vacant and mostly empty with the exception of an electrical hoist and debris. A fill and vent pipe are located near the northwest corner of the building. The building is in fair condition and appeared to need only cosmetic repairs.

Public water and sewer are available to both Site buildings and the surrounding area. A Site Location Plan has been provided as **Figure 1**.

2.2 SITE HISTORY

The Site

The Site was first developed by G. W. Griffin and Company as a hacksaw manufacturing mill (Stanley Mill) between 1897 and 1911. The mill was expanded over the next few decades, and by 1929 the building reached its current configuration. The building was occupied by the G. W. Griffin Company through at least 1967 and likely through 1979 based on historical ownership records. Stanley Works purchased the Site in 1979 and occupied the Site through at least 1986

when ownership was transferred to Franklin Falls Trust. It is presumed the building was vacated shortly thereafter.

The Armory was constructed between 1911 and 1923 and was occupied by the New Hampshire National Guard. G.W. Griffin and Company purchased the Armory in 1935, and the New Hampshire National Guard moved across Memorial Street to the location of the current Franklin Community Center. By 1948, the former Armory was used for storage by the French Mills, Inc., a tenant of G.W. Griffin. An addition was added to the western side of the former Armory by 1956; and by 1964 the former Armory was used as a mica depot. The former Armory was purchased with the mill by Stanley Works in 1979, and ownership was transferred to the Franklin Falls Trusts in 1986. The former Armory was used most recently by PrETCo, a processing equipment manufacturer as indicated by the sign on the side of the building and for storage by a local construction company. The former Armory has been vacant since approximately 2010.

Both Site buildings were transferred to the Ferrari Realty Trust from the Franklin Falls Trust and Louis Ferrari in May 1995.

Surrounding Area

The surrounding area was developed as early as 1884 with a lumber mill to the southeast. Several textile mills, garages, and distribution facilities were located upstream of the Site to the east. Chemicals, coal, dyes, and oils were used and stored at these facilities.

The adjoining property south of the Site (Riverbend Mill) was developed with the Acme Knitting Machine and Needle Company by 1911. By 1961, the factory was converted to the Shepard Grocery Company and was used as a warehouse/storage facility through at least 1967. By 1990, the building was occupied by various commercial and industrial businesses including a chapter of the Red Cross, a gymnastics center, non-ferrous casting, an attorney, wood worker, and nautilus company. The adjoining mill is currently vacant.

2.3 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

The following prior environmental reports were identified for the Site.

Tank Closure Summary for Memorial Street Property, Lakes Region Environmental Contractors, Inc., January 12, 1999

A 10,000-gallon No. 2 fuel oil UST was removed from the Site on December 7, 1998. Based on the figure included in the Tank Closure Summary and conditions observed at the Site, the UST was located east of the Stanley Mill building.

Upon removal, the UST was observed to have minor pitting; however, no evidence of a release was observed within the excavation. Results from one confirmatory composite sample collected from the excavation base were below applicable NHDES Soil Remediation Standards (SRS). Based on the results of the confirmatory sample and observed subsurface conditions, no further

assessment was recommended. The report was reviewed by NHDES on February 3, 1999, and no further action was required.

Phase I Environmental Site Assessment (ESA), August 22, 2014, Credere

Credere completed a Phase I ESA for the Site dated August 22, 2014. Based on reviews of historical sources, environmental databases, interviews, information provided by the City of Franklin, a Site reconnaissance, and judgment by the Environmental Professional, the following RECs were identified in connection with the Site:

- REC #1 – Disposal of industrial waste as fill at the Site
- REC #2 – Evidence of a UST near the northwest corner of the former Armory
- REC #3 – Presumed ACM in waste form in the basement of the Stanley Mill
- REC #4 – Observed staining on a presumed transformer pad outside the northeast corner of the Stanley Mill
- REC #5 – Threat of release from corroded drum in the former Armory and drums in the Stanley Mill
- REC #6 – Release to surface soil from hopper east of the Stanley Mill
- REC #7 - Release or threat of release from possible subsurface fuel oil supply lines in the boiler house
- REC #8 – Likely presence of surface soil impacts throughout the Site from historical Site use

Additionally, the following environmental findings, which did not meet ASTM E 1527-13's definition of a REC, historical REC (HREC), controlled REC (CREC), or *de minimis* condition (DMC), warranted the opinion of an Environmental Professional and which may represent some degree of environmental business risk, were identified:

- Environmental Finding #1 – Observed possible hazardous building materials throughout the Site
- Environmental Finding #2 – Upstream historical industrial operations
- Environmental Finding #3 – Former UST removed from the east side of the Stanley Mill building

Based on the RECs and environmental findings identified during this Phase I ESA, Credere recommended the following:

- Immediate stabilization and removal of the corroded drum in the former Armory and removal of the drums in the Stanley Mill

- A Phase II investigation to confirm or dismiss the RECs and environmental findings identified in this Phase I ESA
- A Hazardous Building Materials Survey (HBMS) to assess the presence of hazardous building materials throughout the Site
- A supplemental Site reconnaissance in the late fall or spring when thick vegetation and foliage is not present

2.4 REDEVELOPMENT SCENARIO

Franklin Falls Downtown Development Authority (FFDDA) intends to redevelop the Site to remove potential environmental concerns, preserve the historic significance, and return the property to a useful condition. Current proposed reuse of the Stanley Mill is a boutique bed and breakfast with function rooms and a restaurant and of the former Armory is as an interior hydroponic farm restaurant or satellite college campus.

3. SCOPE OF WORK & METHODOLOGY

The following sampling program was developed to investigate select environmental media and building materials at the Site and meet the objectives identified in **Section 1**. Sampling was conducted in accordance with Credere's October 3, 2014, SSQAPP and subsequent November 17, 2014, email amendment for the Site, which are included in **Appendix A**. A photo log of field activities in included as **Appendix B**.

3.1 GEOPHYSICAL SURVEY & EXTENT OF FILL INSPECTION

On October 20, 2014, Credere contracted with Vermont Underground Locators (VUL) of South Burlington, Vermont, to perform a ground penetrating radar (GPR) survey at the Site to assess for the presence of a suspected UST outside the northwest corner of the Armory and other possible anomalies. Proposed soil boring locations were also cleared of anomalies/utilities prior to drilling.

VUL performed the GPR survey by transecting the Site in a grid pattern in approximate 5-foot intervals. Identified anomalies were scanned at closer intervals to estimate their extent and were later assessed via test pits. Photographs of anomalies and their subsequent investigation are provided as **Photographs 1** through **9**.

The lateral extent of industrial fill material was also physically observed by inspecting the slope north of the Stanley Mill and former Armory looking south from the riverbank. **Photographs 10** through **15** show pertinent fill observations.

3.2 SOIL BORING ADVANCEMENT & SOIL SAMPLING

On October 27 and 30, 2014, Credere oversaw Geosearch, Inc. of Fitchburg, Massachusetts, advance six (6) soil borings (CA-SB-1 through CA-SB-6, **Photographs 16** through **22**) at the Site using a direct-push Geoprobe® 7820 DT track mounted rig. Soil borings CA-SB-1 was advanced to 15 feet below ground surface (bgs), CA-SB-2 through CA-SB-5 were advanced to 25 feet bgs, and CA-SB-6 was advanced to 20 feet bgs. Soil macrocores were collected continuously using dedicated, disposable polyethylene liners. Macrocores were individually logged, evidence of contamination was noted, and soil was field screened for total volatile organic compounds (VOCs) using a MiniRae 2000 photoionization detector (PID) calibrated with a 100 part per million by volume (ppm_v) isobutylene gas standard with an instrument response factor of 1.0 ppm_v. Soil was screened in accordance with the NHDES HWRB-12 jar headspace technique SOP. Soil boring logs are provided in **Appendix C**.

One (1) surface soil sample was collected from soil boring CA-SB-1 from 0 to 2-feet bgs to assess surface soil conditions at the Site. Two (2) soil samples were collected from soil boring CA-SB-2: one surface soil sample was collected from 0 to 2 feet bgs, and one subsurface sample was collected from the groundwater interface. Both samples were collected to assess impacts associated with drum storage in the former garage. One (1) subsurface soil sample was collected

from CA-SB-3 from the groundwater interface to assess impacts downgradient of the boiler room at the Stanley Mill.

Three (3) soil samples were collected from CA-SB-4 and CA-SB-5: one from the interval of observed industrial fill material, one from the first encountered native material below the fill, and one from the groundwater interface. These samples were collected to assess the industrial fill, assess the vertical extent of fill, and observe possible non-aqueous phase liquid (NAPL) impacts at the groundwater interface. The first encountered native material samples were initially placed on hold pending the results of the above fill material analyses. If results of the fill material analyses exceed their applicable NHDES SRSs, then the exceeding analyses only were authorized for the associated native material sample to vertically delineate the extent of impacts associated with the fill.

Per the SSQAPP, three (3) soil samples were proposed to be collected from CA-SB-6 as well; however, since the first encountered native material was within the same interval as the water table, only two samples were collected: one from the fill material and one from first encountered native material to assess the industrial fill and the vertical extent of fill impacts.

On October 27, seven (7) surface soil samples (**Photographs 23** through **28**) were collected from 0 to 2 feet using hand tools (hand auger or trowel) to assess possible sources of surficial contamination identified during the Phase I ESA including the historical use of the Site (CA-SS-1 through CA-SS-4), the floor drain discharge pipe on the banks of the Winnipesaukee River (CA-SS-5), the former transformer area (CA-SS-6), and the metal dust hopper (CA-SS-7). Surface soil samples locations were biased towards evidence of contamination (e.g., staining, fill materials, etc.).

Based on the analytical results of the initial sampling, an additional four surface soil samples were proposed and approved to assess the fill material spilling over the retaining wall that also may be eroding during high water events. On December 18, 2014, four (4) additional surface samples (CA-SS-8 through CA-SS-11, **Photographs 29, 13, 15, and 30**, respectively) were collected from 0 to 2 feet bgs and were biased towards areas of fill spillage over the wall, eroded or sloughing areas, and/or apparent cut banks. Additional volume from previously collected surface soil samples CA-SS-2, CA-SS-5, and CA-SS-7 was also collected on December 18, 2014, for hexavalent chromium analysis to speciate the chromium previously detected in these samples. These additional samples and analyses were approved by the project team in the November 17, 2014, SSQAPP email amendment.

In all soil samples, representative soil from a 2-foot interval or from the entire observed fill interval was sampled from the macrocore or from the surface using a hand auger. VOC samples were collected with a dedicated soil syringe directly from the hand augured hole or the macrocores immediately after opening to prevent loss of volatiles and degradation. Soil for other analyses was taken from the macrocore or hand augured hole, homogenized in a decontaminated stainless steel bowl, and placed in laboratory provided glassware. Soil samples were stored on ice and submitted to Absolute Resource Associates (ARA) of Portsmouth, New Hampshire, for analysis.

Sample locations are depicted on **Figure 2**, and a summary of soil boring and surface soil samples collected from the Site is provided in **Table 1**.

Excess soil from each boring or surface sample location was returned to its place of origin within the borehole or to the surface surrounding the borehole.

3.3 TEST PIT EXCAVATION & SOIL SAMPLING

On November 12, 2014, Credere oversaw Geosearch, Inc. excavate test pits at the Site using a Bobcat 430 ZHS mini excavator (**Photographs 31 through 34**). Soil was removed and stockpiled adjacent to the test pit. Test pits were excavated until native soil was encountered unless the maximum extent of the excavator was encountered first. The sidewalls of the test pit were logged in the field by a Credere geologist and the thickness of the fill was measured. Test pit logs are included in **Appendix C**.

Test pits were advanced to observe fill constituents. Two soil samples were proposed to be collected from each of three proposed test pits: one sample from the observed fill interval and one from the first encountered native material; however, due to the thickness of the fill extending beyond the maximum reach of excavator, only one soil sample was collected from CA-TP-1 and CA-TP-3. Soil was collected from the entire observed fill interval (i.e., a variable thickness) and from the two foot interval of first encountered native soil below the fill in CA-TP-2. Soil from each interval sampled was collected into a decontaminated stainless steel bowl and homogenized. Soil was transferred to laboratory provided glassware and submitted to ARA for analysis. The first encountered native material sample from CA-TP-2 was initially placed on hold pending the results of the above fill material sample. If results of the CA-TP-2 fill material analyses exceeded their applicable NHDES SRSs, then the exceeding analyses only were authorized for the native material sample to vertically delineate the extent of impacts associated with the fill.

Additional test pits were excavated in areas of anomalies identified during the GPR survey. Samples were not collected from these additional test pits with the exception of CA-TP-A3. One soil sample was collected due to the very dense concentration of saw blades and apparent oily texture of the soil. Additionally, based on the thick interval of the fill material sample collected from CA-SB-6 (0.5 to 10 feet bgs), an additional more focused interval was deemed useful to provide additional data. Approval was obtained from the project team in the November 17, 2014, SSQAPP email amendment prior to submitting the sample for analysis.

The subsurface soil boring samples from CA-SB-5 and CA-SB-6 that were authorized for hexavalent chromium analysis could not be analyzed by the laboratory within the allowed hold time; therefore, on December 18, 2014, one additional test pit (CA-TP-4) was excavated by the City of Franklin Public Works and one subsurface sample was collected for hexavalent chromium analysis to screen for the presence of hexavalent chromium in deeper (i.e., older) industrial fill material.

After sampling, soil was returned to the excavation in the approximate order it was removed. Soil was compacted with the excavator bucket in 1-foot lifts. The surface was finished to the greatest extent that no hazards were protruding from the ground (e.g., sheets of metals, large metal scraps, and saw blades).

Test pit locations are depicted on **Figure 2,** and a summary of test pit soil samples collected from the Site is provided in **Table 1**.

3.4 SEDIMENT SAMPLING

Based on the observed spillage of industrial fill material over the Site's retaining wall and observed apparent erosion of the industrial fill, two sediment samples (CA-SED-1 and CA-SED-2) were proposed and approved in the November 17, 2014, SSQAPP email amendment. On December 18, 2014, Credere collected the two sediment samples from the saturated soil along the riverbank of the Winnipesaukee River at the north edge of the Site. Sediment was collected into a stainless steel bowl. Due to the high flow in the river, sediment could not be collected directly from the riverbed with the soil syringe; therefore, VOC samples were collected immediately from the bowl to minimize volatilization. Sediment for other analyses was then homogenized and placed in laboratory provided glassware. Sediment samples were stored on ice and submitted to ARA for analysis.

Sample locations are depicted on **Figure 2**, and a summary of sediment samples collected from the Site is provided in **Table 1**.

3.5 MONITORING WELL INSTALLATION & GROUNDWATER SAMPLING

Soil borings CA-SB-1 through CA-SB-6 were completed as groundwater monitoring wells (CA-MW-1 through CA-MW-6) using 1-inch diameter PVC materials. Each well was installed with a 10-foot, 0.010-inch slotted screen with at least 5 feet of screen below the depth of the water table and a solid riser to the surface. The well annuluses were constructed using No. 2 washed silica sand and bentonite seals were installed above the screens. The wells were completed with flush mounted road boxes. Each well was developed by over pumping and agitation methods. The wells were purged until a total of at least three well volumes were removed and turbidity had been reduced to less than 20 NTUs.

Following installation, the top of PVC elevation was determined for each monitoring well using a rod and level. A granite corner monument located off the northwest corner of the adjacent R & D Paving building was utilized as a arbitrary benchmark (assumed elevation of 302.00 feet AMSL based on the United States Geological Survey (USGS) Topographic Map of the Franklin Quadrangle, New Hampshire) to allow for the determination of relative groundwater elevations and the calculation of groundwater flow at the Site. A groundwater contour map showing well locations is provided as **Figure 3**.

Following development, Credere allowed at least 14 days for the monitoring wells to equilibrate with the surrounding aquifer prior to sampling. Depth to groundwater and NAPL thickness, if

present, was measured. Groundwater elevations were calculated relative to the top of the well casing and elevations were mapped to assess the groundwater flow direction. A summary of well construction details and gauging data is provided in **Table 2**.

Groundwater samples were collected to document upgradient groundwater conditions (CA-MW-1), to assess groundwater impacts from drum storage in the former garage (CA-MW-2), to assess possible impacts from the boiler room at the Stanley Mill (CA-MW-3), assess groundwater impacts behind the Stanley Mill (CA-MW-4 and CA-MW-5), and assess to the north of the former Armory (CA-MW-6). On November 12 and 13, 2014, Credere sampled each well using low-flow sampling methodologies. During sampling, groundwater was periodically monitored for temperature, pH, oxidation-reduction potential (ORP), specific conductivity, dissolved oxygen, and turbidity using a multi-parameter meter and an in-line flow through cell until parameters stabilized over a period of three readings, spaced at least 5 minutes apart or at a spacing to allow for a complete exchange of flow through the flow through cell calculated based on the flow through cell volume and flow rate. Upon stabilization of field parameters, groundwater samples were collected from immediately after the pump in order of decreasing volatility. Groundwater samples were stored on ice and submitted to ARA for analysis. Field logs from the groundwater sampling event are included in **Appendix C**.

3.6 ASBESTOS SAMPLING

On October 20, 2014, the Site was surveyed for the presence of suspect ACM by a Credere New Hampshire Certified Asbestos Inspector. Copies of asbestos inspector certifications are included in **Appendix D**. Sample results will be used to properly manage ACM during renovation of the Site buildings. Twelve (12) samples of suspect ACM were collected in triplicate (i.e. 36 total ACM samples). The sampling was performed in accordance with NHDES Chapter Env-A 1800 – Asbestos Management and Control. Samples were analyzed by EMSL Analytical, Inc. (EMSL) of South Portland, Maine, using Polarized Light Microscopy (PLM) according to EPA Method 600/R-93/116. A summary of ACM samples collected from the Site is provided in **Table 3**, and sample locations are shown on **Figure 4**.

3.7 CONCRETE SAMPLING

On October 27, 2014, three (3) concrete samples (CA-CC-1 through CA-CC-3) were collected from areas of observed staining within the former Armory, the Stanley Mill basement, and from the former transformer pad to assess if the stained concrete floors/pads would be regulated as PCB remediation waste as a result of a historical release of presumably PCB-containing materials.

A hammer drill with a 1-inch carbide drill bit was used to pulverize the concrete for sampling. A half inch depth was measured and marked on the drill bit. An aluminum foil mat with a 1-inch diameter hole was placed over the location to be sampled. Multiple 0.5-inch depth holes were advanced through the aluminum foil hole using the hammer drill to collect sufficient dust volume for the sample. Concrete dust was collected in a glass container with a stainless steel scoopula and bulb syringe to be analyzed for PCBs. Dedicated sampling tools were used at each location

to prevent cross contamination. A summary of concrete samples collected from the Site is provided in **Table 4**, and sample locations are shown on **Figure 4**.

3.8 PCB-CONTAINING BUILDING MATERIALS SAMPLING

On October 20, 2014, the buildings was surveyed to locate the materials that in Credere's experience are more likely to contain concentrations of PCBs exceeding the PCB bulk product waste criteria as defined by 40 CFR 761.3. Twelve (12) samples of suspect PCB-containing building materials were sampled (CA-PCB-1 through CA-PCB-12). A summary of PCB-containing building materials sampled at the Site is provided in **Table 4**, and sample locations are shown on **Figure 4**.

3.9 LEAD-BASED PAINT SCREENING

Painted surfaces throughout the Site buildings were screened for lead in LBP using an X-ray fluorescence (XRF) meter. Each accessible color and type of paint was screen with the XRF by a New Hampshire Certified Lead Inspector. Inspector certifications are included in **Appendix D**.

LBP was not identified on the exterior of the former Armory (the current exterior or sub-layers); therefore, soil surrounding the building was not screened for lead to assess if chipping or flaking of LBP (presently or in the past) from the Site building has impacted Site surface soil. A summary of areas screened for LBP is provided in **Table 5**.

3.10 UNIVERSAL/HAZARDOUS/OTHER WASTE INVENTORY

Materials that, once removed from use, meet the definition of universal/hazardous waste include, but are not limited to, fluorescent lighting, smoke detectors, thermostats (that contain mercury), and lead acid batteries. In addition, other types of wastes that require special disposal are frequently present in buildings including freon-containing appliances, cathode ray tubes (CRTs), etc. These types of materials at the Site were inventoried and manually counted.

A summary of the universal/hazardous/other waste inventory from the Site is provided in **Table 6**.

3.11 REGULATORY CRITERIA

Sample results were compared to the following applicable state and federal standards and/or guidelines.

Soil

Soil analytical results were compared to the New Hampshire Code of Administrative Rules Chapter Env-Or 600 – Contaminated Site Management Table 600-2 SRSs and Method 1 Appendix E Soil Standard Selection as updated February 2013.

Groundwater

Groundwater analytical results were compared to the New Hampshire Code of Administrative Rules Chapter Env-Or 600 – Contaminated Site Management Table 600-1 Ambient Groundwater Quality Standards (AGQS) and Table 2, Method 1 Groundwater Standards as revised in February 2013. Volatile results were also compared to the February 7, 2013, Table 1 Vapor Intrusion Screening Levels for Groundwater to Indoor Air Screening Levels (i.e. Method 1 GW-2 standards) to assess for the potential for vapor intrusion into the current or future Site buildings.

Asbestos

Laboratory analytical results for asbestos bulk samples were compared to the 1% limit specified in New Hampshire Statute Chapter Env-A 1800 – Asbestos Management and Control.

Concrete

Concrete sample results (CA-CC-1 through CA-CC-3) were compared to the 40 CFR 761.61 definition of PCB remediation waste for high occupancy areas (i.e., unrestricted use) of 1 mg/kg due to the likely source of PCBs being a liquid spill of unknown source concentration.

PCBs in Building Materials

PCB-containing building material results (CA-PCB-1 through CA-PCB-12) were compared to the 40 CFR 761.3 definition of PCB bulk product waste. Results were compared to the 50 mg/kg threshold criteria.

Materials that have been analyzed to contain total PCBs at a concentration of equal to or greater than 1 mg/kg but less than 50 mg/kg are not regulated by the Toxic Substance Control Act (TSCA) for disposal as long as they remain in use. However, if these materials are removed from use, such as through renovation or demolition, they are considered waste and must be disposed at a facility that is licensed to accept this waste. Building materials which have been analyzed to contain total PCBs at a concentration of less than 1 mg/kg are unrestricted for future use and/or disposal.

Lead-Based Paint Screening Results

LBP is defined as paint with a lead concentration of 1.0 milligrams per square centimeter (mg/cm^2) or greater in accordance with the United States Department of Housing, Chapter 7: Lead-Based Paint Inspections, 1997 Revision (HUD Guidelines) and with the Chapter 130 – Lead Paint Poisoning Prevention and Control of New Hampshire Statues (Chapter 130).

4. RESULTS

The following subsections present the results of the data collected during the field work portion of this Phase II ESA.

4.1 GEOPHYSICAL SURVEY, EXPLORATORY TEST PIT RESULTS & PHYSICAL EXTENT OF INDUSTRIAL FILL INSPECTION

The GPR survey was conducted across the Site; however, the focus of the survey was to assess the area of a suspect UST near the northwest corner of the former Armory and to assess the extent of buried debris or industrial fill material across the Site. Test pits were later advanced to investigate the identified anomalies.

The first anomaly (Anomaly #1, **Photograph 1**) was observed near the northwest corner of the Stanley Mill boiler room. The anomaly appeared to be many small metallic pieces, which was thought to indicate industrial fill extended south to this point. However, exploratory test pit CA-TP-A1 (**Photograph 2**) indicated approximately 4 to 6 inches of black ashy fill underlain by more than 4 feet of native river deposits consisting of rounded cobbles with an orange sandy matrix (**Photograph 3**).

A second anomaly (Anomaly #2, **Photograph 4**) consistent with the reflection pattern of a UST was found near the northwest corner of the former Armory. Exploratory test pit CA-TP-A2 (**Photograph 5**) confirmed the presence of a UST (**Photograph 6**). The UST seemed fragile based on the sound and behavior of one exposed side and complete unearthing and observation was not pursued to avoid damaging the UST and causing a possible release. The UST was observed to be buried in a uniform sand matrix and evidence of industrial fill material did not extend to the UST.

A third anomaly (Anomaly #3, **Photograph 7**) was identified behind the former Armory where a very metallic area was noted. Exploratory test pit CA-TP-A3 was excavated in this location and identified industrial fill composed almost entirely of hacksaw blades with little organic soil in the void space (**Photographs 8 and 9**).

No other anomalies were noted during the GPR survey.

The approximate extent of industrial fill material was based on additional exploratory test pits and through inspection of sloughing areas of the slope and erosion along the riverbanks (See **Photographs 10** through **15**). Industrial fill was observed to extend west approximately to the stairs behind the former Armory and to the east approximately to the property line; however, physical delineation to the east was limited due to the nearly vertical slope and thick vegetation and trees. Industrial fill was observed to extend a short distance south between the two buildings but was observed to extend in the greatest volume to the north over the retaining wall and to the riverbank

4.2 SOIL SCREENING RESULTS

Soil was screened in the field for VOCs using the jar headspace methodology. Screening results ranged from non-detect (0.0 ppm_v) to 5.5 ppm_v. Soil screening results are provided on **Table 1** and in the soil boring logs included in **Appendix C**.

4.3 SOIL ANALYTICAL RESULTS

Soil analytical results are summarized on **Table 7** and **Figure 5**, and the complete laboratory analytical reports are provided in **Appendix E**.

VOCs

Cis-1,2-dichloroethene, trichloroethene (TCE), 1,2,4-trimethylbenzene, tetrachloroethene (PCE), and xylenes were detected in soil samples collected from the Site. PCE exceeded the NHDES SRSs of 2 mg/kg in samples CA-SB-4 (3), CA-SB-5 (1), CA-SB-5 (5), CA-TP-1 (2), and CA-TP-2 (1.5).

SVOCs

Several semi-volatile organic compounds (SVOCs), more specifically polycyclic aromatic hydrocarbons (PAHs), were detected in soil samples collected from the Site. Exceedances of the NHDES SRSs occurred for the following SVOCs in the listed samples:

- Benzo(a)anthracene: CA-SB-4 (0-7), CA-TP-1 (0-6), CA-TP-2 (0-3.5), CA-SS-1 (0-2), and CA-SS-2 (0-2)
- Benzo(b)fluoranthene: CA-SB-4 (0-7), CA-TP-1 (0-6), CA-TP-2 (0-3.5), CA-SS-1 (0-2), and CA-SS-2 (0-2)
- Benzo(a)pyrene: CA-SB-4 (0-7), CA-TP-2 (0-3.5), CA-SS-1 (0-2), and CA-SS-2 (0-2)
- Dibenzo(a,h)anthracene: CA-SB-4 (0-7)
- Indeno(1,2,3-cd)pyrene: CA-SB-4 (0-7)
- Naphthalene: CA-TP-A3 (0-4)

The reporting limits for benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene exceeded the regulatory standards in samples CA-SB-5 (0-4), CA-SB-6 (0.5-10), and CA-SS-10 (0-2) as a result of dilution due to matrix interference; therefore, it cannot be confirmed or dismissed if these compounds are present above the NHDES SRSs in these samples.

TPH

Total petroleum hydrocarbons (TPH) results were below the laboratory reporting limits in soil samples collected from the Site.

PCBs

PCB results were below the laboratory reporting limits in soil samples collected from the Site.

Metals

The following metals were detected at concentrations exceeding their respective NHDES SRSs in the listed samples:

- Antimony: CA-SB-5 (0-4), CA-SS-5 (0-2), and CA-SS-10 (0-2)
- Arsenic: CA-SB-4 (0-7), CA-SB-5 (0-4), CA-SB-6 (0.5-10), CA-TP-A3 (0-4), CA-TP-1 (0-6), CA-TP-3 (3.5-8), CA-SS-5 (0-2), CA-SS-9 (0-2), and CA-SS-10 (0-2)
- Chromium: CA-SS-10 (0-2)
- Lead: CA-TP-1 (0-6) and CA-SS-5 (0-2)

Total chromium was detected in exceedance of the hexavalent chromium SRS in several samples; however, the chromium was speciated in samples CA-TP-4 (1-4), CA-SS-2 (0-2, CA-SS-5 (0-2), and CA-SS-7 (0-2) and hexavalent chromium results were below the SRS. Therefore, the less conservative total chromium SRS was compared to the analytical results and results were below the total chromium SRS with the exception of the above identified CA-SS-10 (0-2).

Other priority pollutant metals were detected in soil samples; however, results were below the applicable NHDES SRSs.

4.4 SEDIMENT ANALYTICAL RESULTS

Sediment analytical results are summarized on **Table 8** and **Figure 5**, and the complete laboratory analytical reports are provided in **Appendix E**.

VOCs

Cis-1,2-dichloroethene was detected in sediment sample CA-SED-1 collected from the Site; however, the result was below the NHDES SRSs.

SVOCs

Several SVOCs, more specifically PAHs, were detected in sediment sample CA-SED-1 collected from the Site. Results were below their respective NHDES SRSs with the exception of benzo(a)pyrene.

Metals

Antimony, chromium, and lead were detected in CA-SED-1 and antimony, arsenic, chromium, and lead were detected in CA-SED-2. Results were all below their respective NHDES SRSs.

4.5 GROUNDWATER ANALYTICAL RESULTS

Groundwater analytical results are summarized on **Table 9** and **Figure 6**, and the complete laboratory analytical report is provided in **Appendix E**.

VOCs

Vinyl chloride, cis-1,2-dichloroethene, TCE, and PCE were detected in monitoring wells CA-MW-5 and/or CA-MW-6. Results for cis-1,2-dichloroethene were below the NHDES AGQS and Method 1 GW-2 Groundwater Standards in both wells and TCE was below the AGQS and GW-2 Standards in CA-MW-6 ; however, the following VOCs were detected in exceedance of the NHDES AGQS:

- Vinyl chloride: CA-MW-5
- TCE: CA-MW-5
- PCE: CA-MW-5 and CA-MW-6

TCE results in CA-MW-5 also exceeded the Method 1 GW-2 and Vapor Intrusion Screening groundwater standards.

VOCs were not detected in monitoring wells CA-MW-1, CA-MW-2, CA-MW-3, or CA-MW-4.

SVOCs

SVOC results were below the laboratory reporting limits in groundwater samples collected from the Site.

Metals

Arsenic was detected in groundwater samples collected from monitoring wells CA-MW-2, CA-MW-3 and CA-MW-4; however, results only exceeded the NHDES AGQS at CA-MW-2. Other metal concentrations were below the laboratory reporting limits.

4.6 ASBESTOS RESULTS

Asbestos was identified in samples CA-PACM-1 through 6 and CA-PACM-8 collected from the Stanley Mill. Asbestos was not found in the former Armory. These samples were collected from pipe wrap and mudded elbows, roofing felt paper on the main roof, and window caulking. The following approximate quantities of ACM were identified in the Stanley Mill:

- 300 linear feet for pipe wrap
- 25 mudded elbows
- 10,500 square feet of double layer roofing felt
- Window caulking on an unknown number of windows

ACM was not identified in the former Armory. Based on the planned renovation of the Site buildings, the fire doors in the Stanley Mill and intact former Armory roof were not sampled to avoid destruction and the concrete block walls of the former Armory were not perforated to observe possible insulation. Additionally, the breaching and gaskets on the Stanley Mill boiler were also not sampled during the Phase II ESA.

A summary of asbestos samples collected from the Site and results is provided in **Table 3**, sample locations are shown on **Figure 4**, and the laboratory report is provided in **Appendix E**.

4.7 CONCRETE ANALYTICAL RESULTS

Trace PCBs were detected in sample CA-CC-3; however, were below the 40 CFR 761 cleanup levels for high and low occupancy spaces.

Concrete sample locations are show on **Figure 4**. A summary of samples collected and results is provided in **Table 4**, and the complete laboratory analytical report is included in **Appendix E**.

4.8 PCBS-CONTAINING BUILDING MATERIALS

PCBs were detected in samples CA-PCB-1 and CA-PCB-3 collected from light blue/dark blue paint and pale green/green paints in the Stanley Mill. Results were below the 40 CFR 761.3 definition of PCB bulk product waste; however, the results of CA-PCB-1 exceed the waste threshold of 1 mg/kg.

PCBs were not detected at the former Armory.

Building material sample locations are show on **Figure 4**. A summary of samples collected and results is provided in **Table 4**, and the complete laboratory analytical report is included in **Appendix E**.

4.9 LBP SCREENING RESULTS

Three painted surfaces on the Stanley Mill tested positive for LBP. LBP coated surfaces include the following:

- White painted exterior window frames
- Green painted exterior window frames
- Black painted metal fire doors throughout the Site building (approximately 20)

No painted surfaces on the former Armory tested positive for lead. A summary of LBP screening results is provided in **Table 5**.

4.10 UNIVERSAL/HAZARDOUS/OTHER WASTE INVENTORY RESULTS

Fluorescent light fixtures (i.e. bulbs and ballasts) and drums of unknown substances were noted at the Site. Quantities of these materials counted at the Site are provided on **Table 6**.

4.11 DATA USABILITY ASSESSMENT

The contracted laboratory, ARA, provided analytical data in accordance with Credere's New Hampshire Generic Quality Assurance Project Plan (QAPP, RFA#14123) and the Ferrari Realty Trust SSQAPP Addendum and subsequent email amendment. The laboratories provided the following information in analytical reports:

- Data results sheets
- Method blank results
- Surrogate recoveries and acceptance limits
- Duplicate results/acceptance limits
- Spike/duplicate results/acceptance limits
- Laboratory control sample results
- Description of analytical methods and results
- Other pertinent results/limits as deemed appropriate

As outlined in the SSQAPP, at the completion of the field tasks and upon receipt of the analytical results, a data usability analysis was conducted to document the precision, bias, accuracy, representativeness, comparability, and completeness of the results. The following sections present this analysis.

General Summary

In general, the data reviewed for this project are usable for making project decisions. Data are considered representative with regard to the sample design as the highest detected concentrations were generally found in the samples collected from the most obviously contaminated soil (i.e. the industrial fill material). Data qualified as estimated (J+ or J-) were evaluated relative to the respective regulatory criteria. No qualified results were noted in proximity to their respective criteria and therefore the qualifications are not expected to alter the conclusions drawn from the data. The following significant concerns were noted:

- Non-detect VOCs results for samples CA-SB-4 (7.5), CA-SB-5 (5), CA-SB-6 (11) and CA-TP-A3 (2) are rejected (R) since the samples were analyzed outside the method allowed hold times. Since these samples were intended to delineate the vertical extent of industrial fill in their respective locations and since the overlying sample results were either also non-detect or below the regulatory criteria, these data are considered useable for these delineations.

- Samples were analyzed in accordance with the SSQAPP and email amendment; however, non-detect results for soil samples CA-SB-5 (0-4), CA-SB-6 (0.5-10), and CA-SS-10 (0-2) had reporting limits that exceeded the regulatory criteria for certain PAHs as a result of dilutions. Per Credere's Generic QAPP, these non-detect results are not considered to exceed the regulatory criteria; however, the results cannot be used to rule out exceedances in these samples.

The complete Data Usability Assessment (DUA) is included in **Appendix F**.

5. UPDATED CONCEPTUAL SITE MODEL

The conceptual site model (CSM) was updated using the results of this Phase II ESA and prior reports and will be updated in subsequent reports as new information becomes available. This CSM includes a description of the physical setting of the Site, contaminants of concern (COCs), exposure pathways, and potential human and environmental receptors.

5.1 PHYSICAL SETTING

Topography

Based on Credere's observations and the United States Geological Survey (USGS) Topographic Map of the Franklin Quadrangle, New Hampshire, topography at the Site is generally flat to gently sloping to the north. The northern property boundary slopes steeply down to the Winnipesaukee River. Elevation at the Site is approximately 300 feet above mean sea level. An excerpt from the USGS map has been included as **Figure 1**.

Geological Characteristics

Surficial Geology

Soil at the Site consisted of thin surface materials including topsoil, leaf litter, and gravel underlain by fill material in all borings except CA-SB-3. CA-SB-3 appeared to contain native riverine deposits consisting of fine sand with varying amounts of silt and rounded gravel mixed or laminated with sand. The fine sand and silt observed throughout the Site was likely deposited on the point bar of the stream during this migration of the oxbow. Slightly west of CA-SB-3, test pit CA-TP-A1 was excavated and soil consisted of approximately 4 to 6 inches of black ashy fill underlain by orange rounded cobbles with a silt and sand matrix.

Fill material thicknesses varied inconsistently across the Site and ranged from 3.5 to approximately 8.5 feet thick. Fill consisted of ash, coal, and brick in a silt and sand matrix in the southeastern and eastern portion of the Site (CA-SB-1 and CA-SB-2), and consisted of more industrial components such as abundant hack saw blades of various sizes, metal scraps, large slabs of dense metallic rock, and a general metallic, rusty matrix of sand and metal dust in the western portion of the Site (between CA-SB-4 and CA-TP-A3). The industrial fill was primarily observed along the northern edge of the Site extending west to the stairs and access door behind the former Armory, to the east at least to CA-TP-3 east of the Stanley Mill, and to the south at least to the Site buildings. Industrial fill was observed immediately against the Site buildings' foundations and is, therefore, presumed to extend beneath the foundations. Observation of the steep slope along the northern edge of the Site reveals several cross sections of the industrial fill material with large trees established within the material.

Bedrock Geology

According to the Bedrock Geologic Map of New Hampshire, bedrock beneath the Site consists of Lower Silurian meta-argillite, meta-conglomerate, and calc-silicate rocks of the lower part of the Rangley Formation. Rocks were formed by metamorphosis of sedimentary deposits in the Central Maine Composite Terrane (Central Maine Trough) and igneous intrusive rocks. No

bedrock outcrops were observed and bedrock was not encountered in soil borings that were advanced to a maximum depth of 25 feet at the Site.

Hydrology

The nearest surface water body to the Site is the Winnipesaukee River, which is located along the northern edge of the Site. The Winnipesaukee River flows west and joins the Pemigewasset River approximately 0.6-miles south of the Site. Storm drains were observed along Memorial Street, which likely accept runoff from the southern portion of the Site. Stormwater likely infiltrates permeable areas of the northern portion of the Site or flows overland to the Winnipesaukee River.

Groundwater was encountered at depths ranging from 12.75 to 16.54 feet bgs and was mapped to flow generally to the west towards the oxbow of the Winnipesaukee River. Hydraulic gradient between wells across the Site ranges from 0.0076 to 0.011 feet per foot (ft/ft) and is calculated as 0.0104 ft/ft between the upgradient most well CA-MW-1 in the east and the downgradient well CA-MW-6 to the west. A groundwater contour map is provided as **Figure 3**.

5.2 CURRENT CONTAMINANTS OF CONCERN

Based on the results of this Phase II ESA, an updated list of COCs is provided below. PCBs in soil, and unlisted metals, VOCs and SVOCs have been dismissed as COCs.

Soil

COCs in soil include the following:

- PCE was detected in exceedance of the NHDES SRS.
- PAHs, specifically benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, naphthalene, and indeno(1,2,3-cd)pyrene, were detected in exceedance of the NHDES SRSs.
- Antimony, arsenic, chromium (total and hexavalent), and lead exceeded their respective NHDES SRSs.

Groundwater

COCs in groundwater include the following:

- PCE and its degradation products, TCE and vinyl chloride, exceeded their NHDES AGQSs and TCE also exceeded the Method 1 GW-2 and Vapor Intrusion Screening criteria in one well (CA-MW-5).
- Arsenic exceeded the NHDES AGQS in CA-MW-2 and was detected at the AGQS in CA-MW-3.

Hazardous Building Materials

- Asbestos was identified both intact and in waste form.
- Lead was detected in paint (i.e., LBP).
- PCB concentrations do not exceed their respective regulatory criteria; however, low levels of PCBs are present in certain building materials and will require proper disposal if removed from use.

5.3 MIGRATION ANALYSIS & EXTENT OF CONTAMINATION

The complete extent of COCs is not thoroughly delineated at this time. Based on available data, the physical setting, and COC characteristics, the migration and extent of contamination at the Site has been inferred as follows.

PCE

PCE is a dense non-aqueous phase liquid (DNAPL) solvent that was reportedly used during manufacture of hacksaw blades at the Stanley Mill.

At the Site PCE was detected in soil and groundwater, and PCE's degradation products (TCE, cis-1,2-dichloroethene and vinyl chloride) were detected in groundwater at the Site. Exceedances in soil were generally confined to soil samples collected from the observed industrial fill material. Results of samples collected from the first encountered native material were below the NHDES SRSs in CA-SB-4 and CA-TP-2 and the groundwater interface sample from CA-SB-5. Based on this trend, it appears PCE concentration to not extend into the native material underlying the fill and the native material can be used as an initial target depth for future vertical delineation of PCE from industrial fill. Based on analytical results and observed extent of the industrial fill, PCE impacted industrial fill is presumed to extend from at least CA-SB-4 in the east to CA-TP-1 in the west. However, the industrial fill material is presumed to date prior to the construction of the northernmost addition of the Stanley Mill and the former Armory and is presumed to extend beneath these structures. Unassessed industrial fill material beneath these structures may also be a contributing source of PCE. The estimated PCE extent in soil is depicted on **Figure 5**.

PCE and PCE degradation products were detected in groundwater samples collected from monitoring wells screened below the observed industrial fill intervals indicating dissolved phase product is presumably leached from the overlying industrial fill, down through the native sandy soil and to the groundwater interface in the dissolved phase. The sandy native soil is not conducive to adsorption of PCE as PCE adsorbs more readily to soil with high organic content; therefore, it appears PCE leaching from the industrial fill would likely continue through the native materials to the groundwater interface. The fine sand native soil beneath the industrial fill is ideal for dissolved PCE migration with little to no loss by adsorption to organics. Groundwater exceedances were detect at CA-MW-5 and CA-MW-6, which are located hydraulically downgradient of the Stanley Mill and the greatest identified soil impacts in CA-SB-4 and CA-SB-5. The greatest groundwater concentrations were detected in CA-MW-5, which is also downgradient of an observed floor drain and the reported location of drum storage,

which may also be a source area of PCE. Additionally, unassessed industrial fill material beneath the Site buildings may be a contributing source of PCE to groundwater.

Based on the observed extent of industrial fill toward the western edge of the Site, decrease of PCE concentration between CA-MW-5 and CA-MW-6 and relatively low hydraulic gradient at the Site, migration of PCE, TCE, and vinyl chloride in groundwater is not expected to have migrated far beyond the western Site boundary; however, the extent is currently unknown.

PCE may also enter the vapor phase through volatilization from dry contaminated soil or contaminated groundwater. PCE degrades in certain conditions to daughter products including TCE, cis-1,2-dichloroethene, trans-1,2-dichloroethylene, and vinyl chloride, some of which were detected in soil or groundwater at the Site. These daughter products are more volatile and represent an increased potential for vapor intrusion. Given the elevated concentration of PCE in CA-MW-5, there is still a likely source of PCE to degrade into TCE and vinyl chloride. Groundwater concentrations of TCE currently exceed the Vapor Intrusion Screening levels in CA-MW-5, and vinyl chloride concentration are in proximity to exceeding the vinyl chloride Vapor Intrusion Screening level. These exceedances within 100 feet of the Site buildings indicate vapor intrusion is a concern for the Site. With the continued source of PCE, these concentrations are expected to persist. These persistent concentrations in groundwater indicate potential for the continued production of vapor phase product and for vapor intrusion into current or future Site buildings, particularly into the Stanley Mill. Additionally, the presumed source of PCE is located within the unsaturated zone where volatilization readily occurs. Based on the available soil and groundwater data, the extent of vapor phase product is expected to be greatest around CA-MW-5 with other possible impacts in the area of CA-MW-4 and CA-MW-6.

PAHs

PAH exceedances were detected in the soil samples collected from the industrial fill material extending from CA-SB-4 to the east and CA-TP-A3 to the west. Results for CA-SB-5 and CA-SB-6 are located within this expanse; however, laboratory reporting limits exceeded the regulatory criteria, and therefore the entire volume of industrial fill between CA-SB-4 and CA-TP-A3 is considered to be impacted by PAHs.

PAH exceedances also occurred in surface soil samples CA-SS-1 and CA-SS-2 collected from between the two Site buildings. These impacts are attributed to material handling, and transportation operations in this area where the loading dock was located, as well as general surface soil impacts typical of mill yards. Surface impacts in this area are expected to extend the entire area between CA-SS-1 and CA-SS-2.

PAHs are generally persistent in the environment and generally do not dissolve into groundwater. Despite the soil exceedances observed throughout the Site, groundwater at the Site was not found to be impacted by PAHs.

The inferred extent of PAH impacts is depicted on **Figure 5**.

Metals

Antimony exceeded the NHDES SRS in three samples. Results for samples collected from the industrial fill material only slightly exceeded the SRS; however, the result for CA-SS-5 collected from the location of a discharge pipe was several orders of magnitude higher than the SRS. Generally, antimony exceedances were discontinuous and are attributed to a short term use of antimony in the manufacturing process and subsequent disposal in the stratigraphy of the industrial fill material. Therefore, the extent cannot be delineated from available data.

Lead was detected in exceedance of the NHDES SRS in two locations: one from a sample collected from the industrial fill material and one from the sample collected from the location of a discharge pipe (CA-SS-5). Similarly, the lead exceedances are discontinuous and cannot be delineated from available data.

Chromium exceeded the NHDES SRS in CA-SS-10 at the Site. Chromium was also detected below the NHDES SRS across the Site. CA-SS-10 was collected from a discrete depth from a cross section of industrial fill material below the retaining wall. Although this location was the only exceedance, similar levels of chromium may be present at similar elevations within the stratigraphy of the industrial fill. Therefore, the complete extent of chromium exceeding the SRS is unknown from available data.

The most widespread metal exceedance was for arsenic. Arsenic was detected in exceedance of the NHDES SRS in eight samples that were collected from the industrial fill material. Results appeared to be highest near the center of the industrial fill and decrease radially outward. The inferred extent of arsenic impacts is depicted on **Figure 5;** however, additional assessment is needed to delineate the extent of arsenic impacts.

With the exception of arsenic, metals did not appear to be leaching to groundwater at the Site. Arsenic was detected in groundwater in exceedance of the AGQS in one monitoring well at the Site (CA-MW-2). There were no similar exceedances of arsenic in soil collected from this soil boring and no other obvious source of arsenic (e.g., industrial fill). Metals are generally stable in soil unless at high concentrations or abnormal chemical conditions (e.g., acidic pH, low oxidation-reduction potential, etc.) are present. Elemental arsenic may be bound to oxides in the soil in the more oxygenated areas of the Site; the dissolution of oxides in the reducing environment free arsenic for solution in groundwater. Review of the groundwater monitoring field parameters indicates ORP is slightly lower in CA-MW-2 than throughout the rest of the Site which may indicate lower ORP groundwater and/or arsenic may be mobilizing from an offsite upgradient source and migrating toward CA-MW-2, the result of an unknown source of arsenic from the historical garage, or from the nearby industrial fill; however, additional assessment is necessary to determine the source. The nearby test pit CA-TP-3 soil sample did contain arsenic concentrations exceeding the NHDES SRS. Arsenic was detected in groundwater below the AGQS in wells CA-MW-3 and CA-MW-4 and, being in a downgradient position, these wells are considered to delineate the extent of arsenic downgradient of CA-MW-2.

Hazardous Building Materials

ACM and LBP were identified in the Stanley Mill. The extent of these COCs is confined to in/on the Stanley Mill; however, these COCs have the potential to become air-borne if not properly managed during building renovations/demolition.

PCBs were identified in light-blue and dark-blue paint over a brick substrate in the Stanley Mill western hallways. If removed from use, this paint will require proper disposal at an appropriately licensed facility.

Fluorescent light fixtures (i.e. ballasts and bulbs), and several drums were inventoried at the Site. The light fixtures are still in use and are contained to the Site building; however, the drums have the potential to be vandalized and their contents could be released to the Site.

5.4 EXPOSURE PATHWAYS AND POTENTIAL RECEPTORS

Exposure pathways describe how a human or environmental receptor comes into contact with contaminants that may be present at the Site. Potential migration pathways through ground water, surface water, air, soils, sediments, and biota were considered for each COC and each source. A migration pathway is considered an exposure pathway if there is a mechanism of contaminant release from primary or secondary sources, a transport medium, and a point of potential contact with a receptors. Both current and potential future releases and migration pathways to receptors are considered. Exposure pathways presented in the CSM include the following:

Active Ingestion: The active ingestion pathway represents exposure which may occur through the active ingestion of contaminant concentrations via a drinking water supply well, through agricultural products, or through direct consumption of soil (typically by children).

Inhalation: This pathway is primarily associated with groundwater contamination within 30 (petroleum volatiles) to 100 (non-petroleum volatiles) feet of an occupied structure or preferential pathway. This pathway is applicable when receptors may inhale impacted media in the form of contaminated vapor. This pathway is also applicable when contaminated soil and/or groundwater are exposed via an excavation.

Dermal Absorption: Exposure via dermal absorption occurs when receptors are exposed to chemical concentrations present in soil, groundwater, surface water, or hazardous building materials through direct contact with the skin.

Incidental Uptake: This pathway is applicable when receptors may incidentally inhale or ingest impacted media in the form of contaminated dust, chips, or airborne asbestos fibers.

Potential Receptors are categorized by duration of exposure and intensity of use at the Site. The receptor categories described in the CSM include the following:

Recreational or Park User:	Park users (including trespassers) are characterized by low duration, i.e. less than two hours per day, and low intensity usage such as that which would occur during activities such as walking, shopping, and bird watching.
Commercial Worker:	Outdoor commercial receptors are those which are present at the Site for long durations but with low intensity exposure such as groundskeepers, parking lot attendants, and mechanics. This category is also conservatively applied for indoor office workers at the Site.
Excavation or Construction Worker:	Excavation or construction workers are present at the Site for short durations though intensity of use is high, such as during non-routine activities including construction or utility work. Examples include utility and construction contractors and landscapers.

5.5 CSM SUMMARY

COCs at the Site include PCE and its degradation products TCE and vinyl chloride; PAHs; metals including antimony, arsenic, chromium, and lead; asbestos and lead in LBP. PCE, PAHs and metals in soil were generally detected in the observed industrial fill interval, which was observed to extend from the surface to a maximum depth of approximately 8.5 feet bgs. PAHs are also present in other areas of surface soil particularly between the two Site buildings in the area of the loading dock. Based on available data, PAHs and metals (excluding arsenic) are relatively stable and are not leaching to groundwater. PCE detected from within the industrial fill area has impacted groundwater above the AGQS. The PCE degradation products TCE and vinyl chloride are also present in groundwater above the AGQS. These degradation products are highly volatile and represent a vapor intrusion concern for the Site. Vapors may enter the Site building(s) through preferential utility pathways or cracks in the foundation, which were observed throughout the Stanley Mill foundation.

Due to the proximity to the Winnipesaukee River and observed evidence of erosion along the northern edge of the Site, there is potential for continued erosion of contaminated soil and discharge of contaminated groundwater to the river. This may result in exposure of terrestrial and aquatic biota to COCs.

Due to the current vacant nature of the Site buildings, exposure to these COCs is limited to trespassers; however, the proposed reuses of the Site building would result in exposure to patrons of the restaurants, hotel, satellite college, and/or event center; commercial workers and grounds keepers for any reuse; and construction/utility workers during redevelopment and maintenance. Exposure pathways would include possible inhalation of vapors via vapor intrusion into the Site building, active ingestion of contaminated soil by children present in the area due to the presence of contamination at the surface, dermal absorption through direct contact with impacted soil or groundwater, and incidental uptake of contaminated dust.

6. CONCLUSIONS

We have performed a Phase II ESA at Ferrari Realty Trust Property located at 93-119 Memorial Street in Franklin, New Hampshire, in general conformance with the scope and limitations of ASTM E 1903-11 and for the following objectives:

- Assess for the presence of a UST outside the northwest corner of the Armory
- Assess and evaluate the extent of industrial fill located at the Site
- Assess sediment along the northern edge of the Site for impacts from onsite and upstream historical operations
- Assess possible releases from the subsurface fuel oil supply lines in the boiler house
- Assess the presumed transformer pad for the presence of PCBs
- Assess material discharged from a hopper on the eastern side of the Stanley Mill
- Assess surface soil for impacts associated with historical Site use
- Assess for the presence of ACM, LBP, and PCB-containing building materials in the Site buildings

The threat of release from drums identified as REC #5 was not assessed as part of this Phase II ESA; however, proper offsite disposal of the drums by the owner in accordance with all applicable regulations is necessary. Additionally, former UST removal identified as Environmental Finding #3 was also not assessed as it was well documented in a January 12, 1999, Tank Closure Summary that soil and groundwater in the UST excavation was not impacted. This REC and environmental finding were not assessed as part of this Phase II ESA.

Credere's conclusions considering the cumulative work conducted in relation to the identified environmental condition and the investigation results are presented below:

REC #1 – Disposal of industrial waste as fill at the Site: CONFIRMED

During the Phase I ESA Site reconnaissance, the entire length of the riverbank behind both Site buildings was observed to contain industrial fill from former saw and tool manufacturing at the Site. The industrial fill material was observed to contain rusty metal coils, sheet metal, hacksaw blades, and other metal debris.

Results for soil samples collected from the industrial fill material were markedly different than those collected from native soil at deeper intervals. The industrial fill material was documented to contain PCE, PAHs, and metals in exceedance of the NHDES SRSs. The fill was further observed in the subsurface to be consistent with the content of the fill material observed at the surface during the Phase I ESA. Metal scraps, abundant saw blades, and a rusty metallic matrix were characteristic of the industrial fill. The area behind the former Armory consisted of almost entirely saw blades to a depth of at least 4 feet bgs. Exploratory test pits and physical observation of the northern riverbank revealed the approximate extent of the industrial fill

extending west to the stairs along the northern wall of the former Armory, south approximately 30 feet between the Site buildings, east at least to CA-TP-3, and north to the Winnipesaukee River. The fill thickness was variable across the Site and ranged from approximately 3.5 to 8.5 feet thick.

Additionally, groundwater was found to be impacted by PCE and degradation products TCE and vinyl chloride in exceedance of the NHDES AGQSs. Concentrations were greatest in monitoring well CA-MW-5 with exceedances also detected in CA-MW-6. Based on the detected concentrations, PCE in groundwater is likely to have leached from the overlying industrial fill material down through the sandy native soil or be from a more concentrated source such as a discharge to basement floor drains to beneath the Stanley Mill. Further investigation is needed to characterize and identify Site source areas.

Based on the documented environmental impacts, observed components and significant extent, the disposal of industrial waste fill at the Site is confirmed.

REC #2 – Evidence of a UST near the northwest corner of the former Armory: CONFIRMED

During the Phase I ESA Site reconnaissance, fill and vent pipes and a fuel pump with cut off supply lines were observed in and outside of the northwest corner of the former Armory. Review of the EDR and the NHDES OneStop database revealed no UST registration or removal from this area of the Site. Based on the observed conditions and the lack of removal documentation, it was presumed a UST was still present in this location.

A GPR survey was performed to identify evidence of a UST. The GPR survey identified a reflection characteristic of a UST. A subsequent test pit confirmed the UST was present. Only the corner of the UST was uncovered because the UST was rusty and appeared fragile. To avoid causing a possible release, the UST was not further observed at that time.

The presence of a UST outside the northwest corner of the former Armory was confirmed.

REC #3 – Presumed ACM in waste form in the basement of the Stanley Mill: CONFIRMED

Thermal pipe insulation observed throughout the Stanley Mill building was presumed to be ACM based on the age and observed characteristics of the insulation. In some areas of the building the presumed asbestos insulation was observed in waste form having sloughed off the piping to the floor. The ACM in waste form was sampled and confirmed to be ACM; therefore, the release of ACM to the environment has been confirmed.

REC #4 – Observed staining on a former transformer pad near the northeast corner of the Stanley Mill: DISMISSED

A fenced former transformer area was located outside the northeast corner of the Stanley Mill. All transformers had been removed from this area; however, staining was observed on the concrete slab beneath the transformer rack. Transformers that likely would have been present in

this area typically contain a mineral oil dielectric fluid (MODF), which sometimes contains PCBs. Based on the timing of the use of the Site through the peak PCB use time period (1950 through 1979), these transformers may have contained PCB-containing MODF. CA-SS-6 and CA-CC-3 were collected from the surface soil and concrete pad, respectively, in this area. Both samples were analyzed for PCBs and results were below the laboratory reporting limits or below the applicable cleanup guidelines for low and high occupancy spaces (40 CFR 761). Based on these results, the presence of PCBs in the area of the former transformer has been dismissed.

REC #6 – Release to surface soil from hopper east of the Stanley Mill: DISMISSED

A hopper was observed on the eastern side of the Stanley Mill, and was observed to have discharged a pile of an apparent metal dust or soot to the surface soil beneath. The material beneath the hopper was sampled (CA-SS-7) and results indicated the material contained low levels of PAHs and metals; however, results did not exceed the NHDES SRSs. Therefore, the release to surface soil has been dismissed.

REC #7 - Release or threat of release from possible subsurface fuel oil supply lines in the boiler house: The release is DISMISSED; however, the threat of release remains.

During the Phase I ESA Site reconnaissance, fuel oil supply lines were observed along the northern wall of the boiler house of the Stanley Mill. These lines originated at the former fuel oil UST that was located east of the Stanley Mill and traveled across the basement of the building to the boiler room. The base of these fuel oil supply lines was covered in a pile of brick, which obscured the view of the lines, but it is suspected these fuel oil lines enter the concrete floor prior to feeding the boiler. The former UST closure report did not include a description of any activities associated with the decommissioning of these lines; therefore, the may have or still contain fuel oil that has the potential to have reached the environment.

One soil boring and monitoring well was installed adjacent to the boiler house and the location where the fuel oil lines presumably enter the concrete floor. Soil and groundwater analytical results for VOCs, SVOCs and TPH were below the laboratory detection limits and no evidence of petroleum contamination (i.e. PID response, odor, staining) was observed. Therefore, a release of petroleum from these fuel lines has been dismissed; however, the unknown content of the fuel lines and location in the concrete foundation are still a threat of release.

REC #8 – Likely presence of surface soil impacts throughout the Site from historical Site use: CONFIRMED and DISMISSED by area of environmental concern

Based on the nearly 80 year duration of industrial manufacturing at the Site during a time when poor housekeeping was typical, surface soil impacts throughout the Site were anticipated in areas of material storage (reportedly the basement and former garage) and handling (e.g. loading docks and storage areas). Several areas of environmental concern were observed/identified throughout the Site including areas of staining in the former Armory and Stanley Mill turbine area, the former garage east of the Stanley Mill, and the basement floor drain that likely discharges through an exposed pipe to the bank of the Winnipesaukee River.

Surface samples were collected from soil in the above areas of environmental concerns and concrete samples were collected from the two areas of staining in the Site buildings. The following summarizes the results of each area of environmental concern:

- Staining in the former Armory: Concrete sample CA-CC-1 was collected from the stained area in the southeast corner of the former Armory and was analyzed for PCBs. Results were below the laboratory reporting limits for this sample and this area of environmental concern has been dismissed.
- Staining in the Stanley Mill turbine area: Concrete sample CA-CC-2 was collected from the stained area surrounding turbine equipment in the basement of the Stanley Mill and was analyzed for PCBs. Results were below the laboratory reporting limits for this sample and this area of environmental concern has been dismissed.
- Former Garage: Soil boring and monitoring well CA-SB-2/CA-MW-2 was advanced/installed just south of the foundation of the former garage. One surface soil sample was collected to assess possible surface spills associated with material handling and one subsurface sample and groundwater sample were collected to assess possible impacts from drum storage. Soil sample results were below the laboratory reporting limits or below the NHDES SRSs; however, dissolved arsenic was detected in groundwater in exceedance of the NHDES AGQS. Arsenic was detected in a soil sample collected from nearby test pit CA-TP-3 above the NHDES SRSs, which is located north of CA-MW-2 within the industrial fill material. The source of the arsenic is unclear at this time and may be related to the historical use of the garage, the presence of industrial fill at the Site, or from and offsite upgradient source; therefore, environmental impacts as the result of the historical garage is inconclusive.
- Discharge pipe on retaining wall: Surface soil sample CA-SS-5 was collected from below the discharge pipe that was presumed to be connected to the floor drain observed in the Stanley Mill basement. At the time of the sampling, several other discharge pipes were also observed along the wall; therefore, it is not clear which pipe may be connected to the floor drain. Soil sample results exceeded the NHDES SRSs for antimony, arsenic and lead, and also contained low levels of PAHs. Evidence of industrial fill spillage over the wall was observed as the soil was rusty and hacksaw blades were present surrounding the sample location. Therefore, environmental impacts in this area have been confirmed.
- Loading dock and trucking area at Stanley Mill: Surface soil samples CA-SS-1 and CA-SS-2 were collected from the loading dock and trucking area for the Stanley Mill located between the two Site buildings. PAHs were detected in exceedance of the NHDES SRSs. PAHs are attributed to general industrial operations, trucking and material handling. Based on the results surface soil impacts in this area are confirmed.
- Loading docks at the former Armory: Surface soil samples (CA-SS-3 and CA-SS-4) were collected from a former loading dock and former bay door at the former Armory. Results were below the NHDES SRSs and environmental impacts in these areas are dismissed.

Environmental Finding #1 – Observed possible hazardous building materials throughout the Site: CONFIRMED

Asbestos and LBP were confirmed to be present in the Stanley Mill. Pipe wrap, mudded elbows, roofing felt and window caulk tested positive for asbestos and several types of paint were positive for lead. No asbestos or lead was observed in the former Armory building. Many fluorescent light fixtures and unlabeled drums were inventories in both Site buildings. Concrete sample results did not indicate the presence of PCBs in exceedance of the applicable cleanup goals, and building material sample results for PCBs did not exceed the 40 CFR 761.3 definition of bulk product waste; however, building material sample results did contain low levels of PCBs and will require disposal if removed from use at the Site during redevelopment.

Based on the planned renovation of the Site buildings, the fire doors in the Stanley Mill and intact former Armory roof were not sampled to avoid destruction and the concrete block walls of the former Armory were not perforated to observe possible insulation. Additionally, the breaching and gaskets on the Stanley Mill boiler were also not sampled. If these materials are to be removed during future renovation to the Site buildings, they should be sampled prior to assess for the presence of asbestos.

Environmental Finding #2 – Upstream historical industrial operations: PLAUSIBLE

Credere collected two sediment samples from the northern edge of the Site to assess for impacts associated with sloughing/erosion of industrial fill material from the Site. Results indicated the presence of benzo(a)pyrene in exceedance of the NHDES SRSs in one location; however, similar results were not detected in the two nearest surface soil samples collected from the soil that would presumably be eroding to the river during high water events. Elevated levels of benzo(a)pyrene were detected elsewhere on the Site and may have entered the river via stormwater runoff. It is also possible this sediment detection is the result of impacts from upstream sources. This environmental finding cannot be confirmed or dismissed from available data.

7. RECOMMENDATIONS

Based on the findings and conclusions of this investigation, Credere makes the following recommendations:

- Further assessment of the nature and extent of source area(s), and delineation of the extent of PCE and other chlorinated VOC impacted groundwater
- Assessment of the source, nature, and extent of arsenic in groundwater in the area of CA-MW-2
- Further delineation of the extent of PAHs in soil outside of the industrial fill area
- Clear delineation of the limits of the industrial fill area in the eastern portion of the Site and beneath the Site buildings
- Removal of the former Armory UST in accordance with Env-Or 400 – Underground Storage Tank Program
- Proper abatement of identified ACM prior to renovations/demolition in the Stanley Mill
- Additionally, sampling of ACM if the Armory roof or concrete block walls, or Stanley Mill fire doors or boiler are to be disturbed during renovations
- Proper handling and disposal of LBP and PCB-containing building materials during renovation/demolition
- Proper offsite disposal of the drums within the two Site buildings to eliminate the threat of release
- Proper decommissioning and removal of the fuel oil supply lines entering the concrete floor of the Stanley Mill boiler house to eliminate the threat of release
- Further evaluate the potential for vapor intrusion after the full extent of volatile sources have been assess and the plan for addressing the source has been determined
- Prepare a Remedial Action Plan once contaminants at the Site have been adequately assessed

8. LIMITATIONS

This report has been prepared by Credere for the LRPC Brownfields Assessment program in order to provide LRPC or other project stakeholders with information upon which it can rely concerning the existence or likely existence of various environmental contaminants on or adjacent to the property evaluated.

This report does not reflect:

1. Conditions in untested areas and the characteristics of untested media.
2. Variations in chemical concentrations that can occur between sample locations.
3. The total understanding of historical Site activities, uses, equipment, or fixtures that may have contributed or are currently contributing to Site contamination, particularly relating to building material history.
4. Knowledge of the potential presence of compound sources other than what was surficially visible at the time of survey performance.
5. The potential presence of analytes that were not analyzed or that may be present below minimum laboratory reporting limits for the methods tested.
6. Potential variation in the Site conditions that may have occurred at a time other than when the Site survey was completed.

In the event that any conditions different from those described herein are encountered at a later time, Credere requests an opportunity to review such differences and modify the assessment and conclusions of this report. This report was prepared expressly for the purpose described. The information in this report may not be suitable for any other use without adaptation for the specific purpose intended. Any such reuse of this report, without adaptation, shall be at the sole risk and liability of the party undertaking the reuse.

9. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The following individual(s) meet the qualifications for individuals completing or overseeing all appropriate inquiries, and possess sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding the existence of environmental conditions on the Site. Any work completed on this ESA by an individual who is not considered an environmental professional was completed under the supervision or responsible charge of the environmental professional.

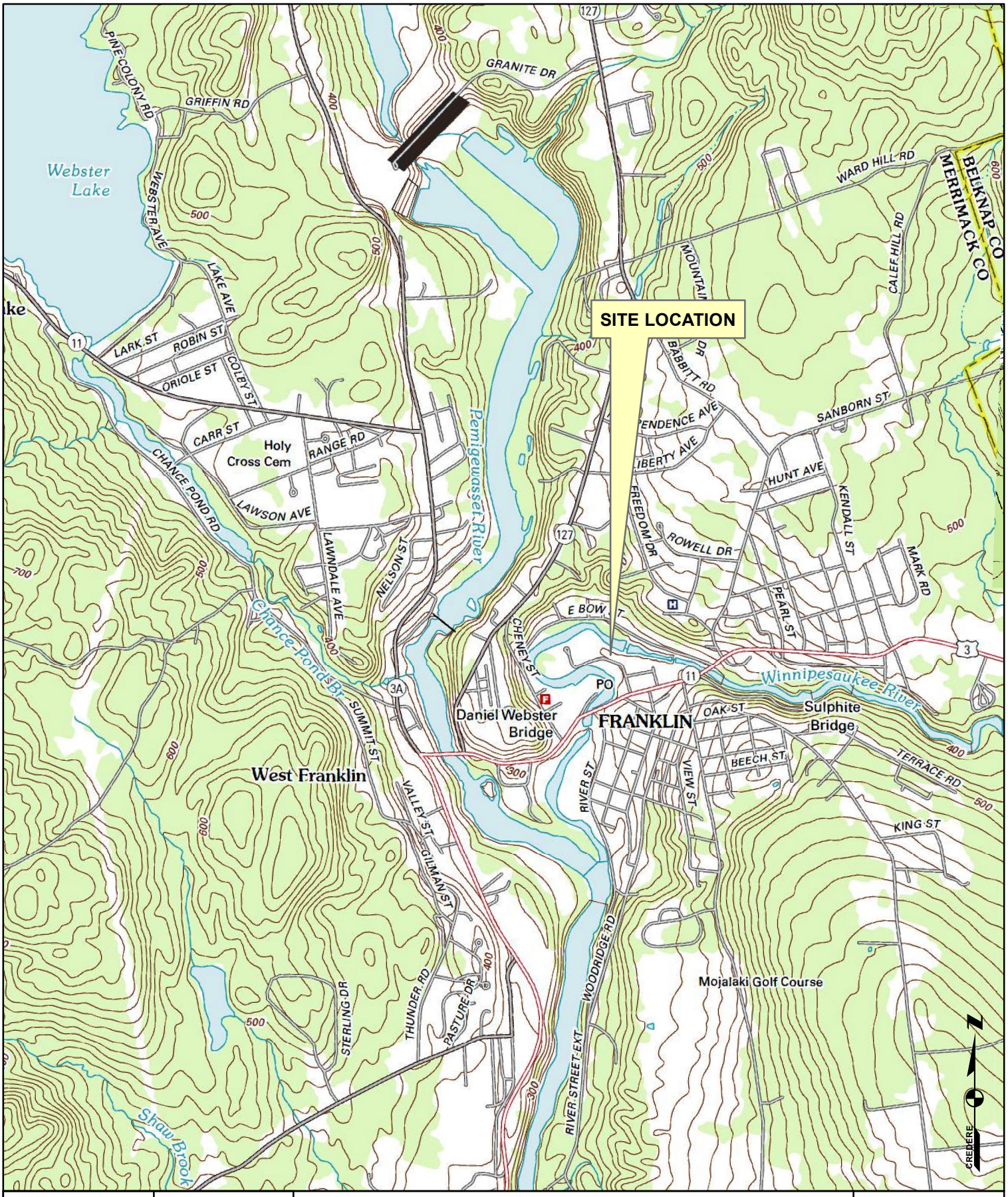
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President

FIGURES



DRAWN BY: **SWM**	DATE: **7/15/2014**
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FIGURE 1
SITE LOCATION PLAN

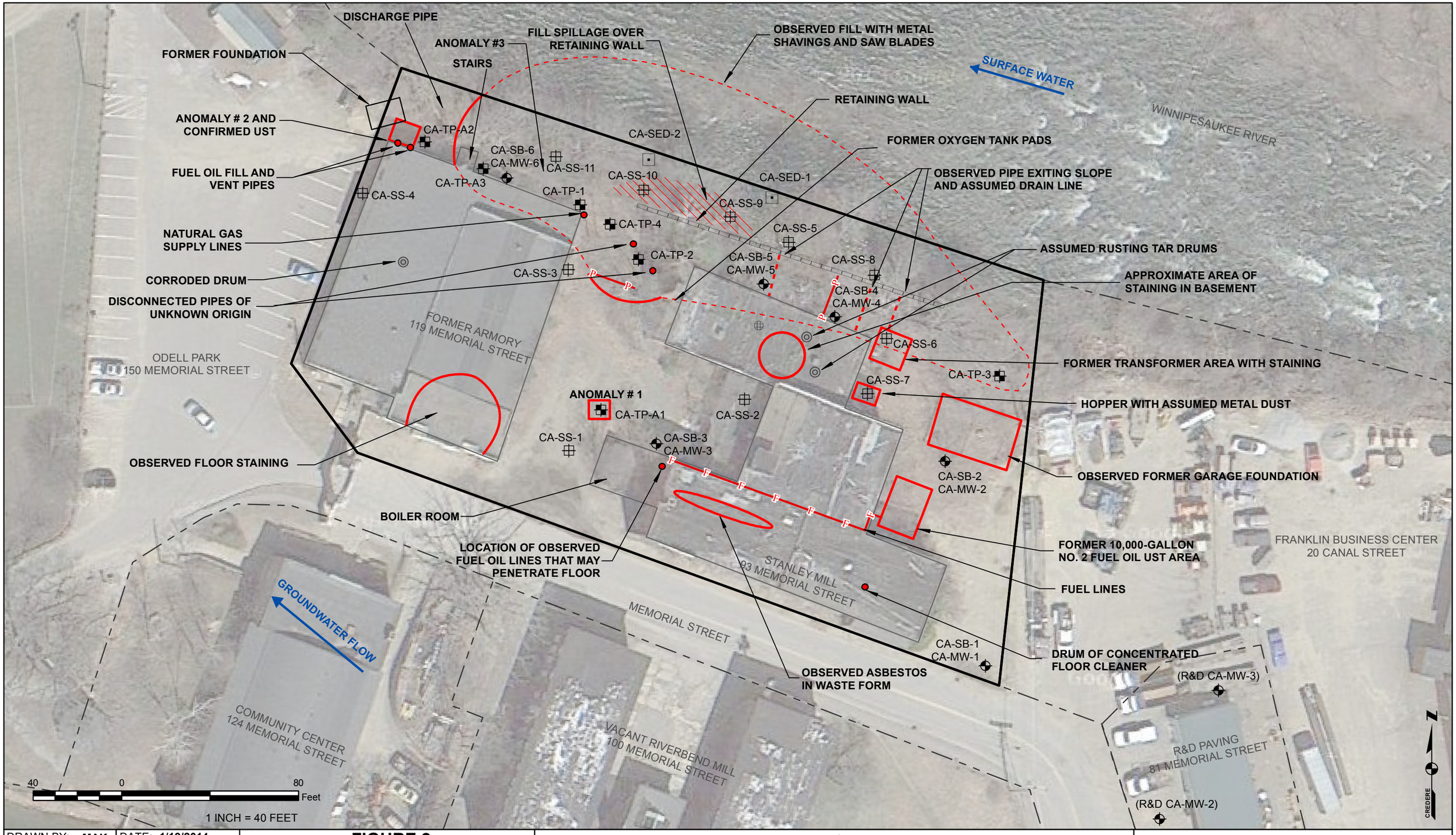
FERRARI REALTY TRUST PROPERTY
93-119 MEMORIAL STREET
FRANKLIN, NEW HAMPSHIRE 03235

1,000 0 2,000 Feet
1 inch = 2,000 feet.



Data Source: USGS Quadrangles: Franklin, New Hampshire 7.5 minute series 2012

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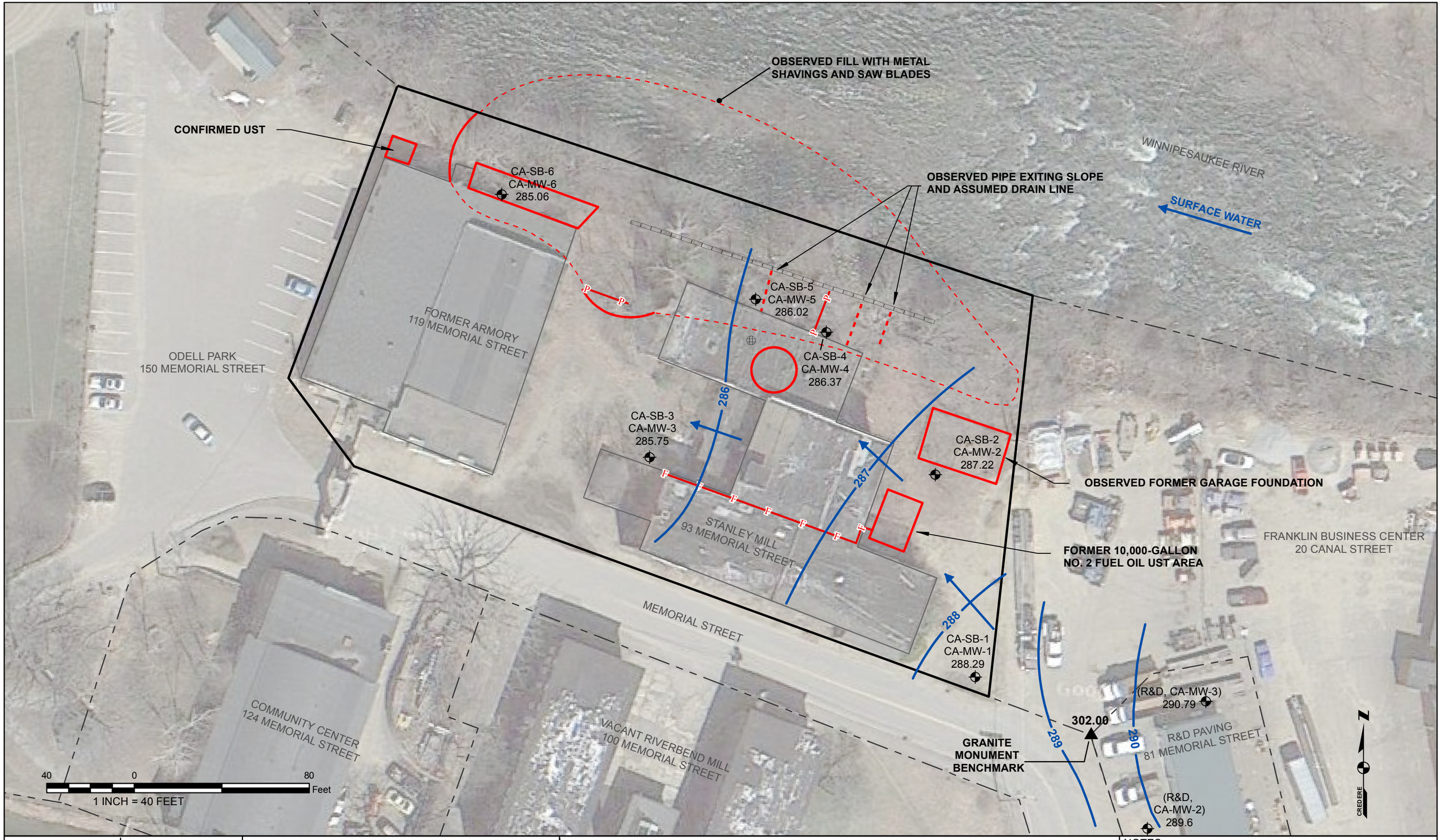
FIGURE 2
SOIL AND GROUNDWATER SAMPLE LOCATION PLAN

FERRARI REALTY TRUST PROPERTY
93-119 MEMORIAL STREET
FRANKLIN, NEW HAMPSHIRE 03235

- SITE BOUNDARY
- PARCEL BOUNDARY
- AREA OF CONCERN
- RETAINING WALL
- FUEL LINE
- PIPE
- INFERRED DRAIN LINE
- APPROXIMATE/ UNDELINATED EXTENT OF FILL
- TEST PIT
- SOIL BORING/ MONITORING WELL
- SURFACE SOIL SAMPLE
- SEDIMENT SAMPLE
- POINT OF CONCERN
- DRUM
- FLOOR DRAIN

NOTES:
1. EXISTING CONDITIONS FEATURES SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE BASED ON INFORMATION OBTAINED FROM THE CITY OF FRANKLIN TAX MAP 117, 2013 ORTHO IMAGES AND THE SITE VISITS PERFORMED DURING PHASE II WORK.

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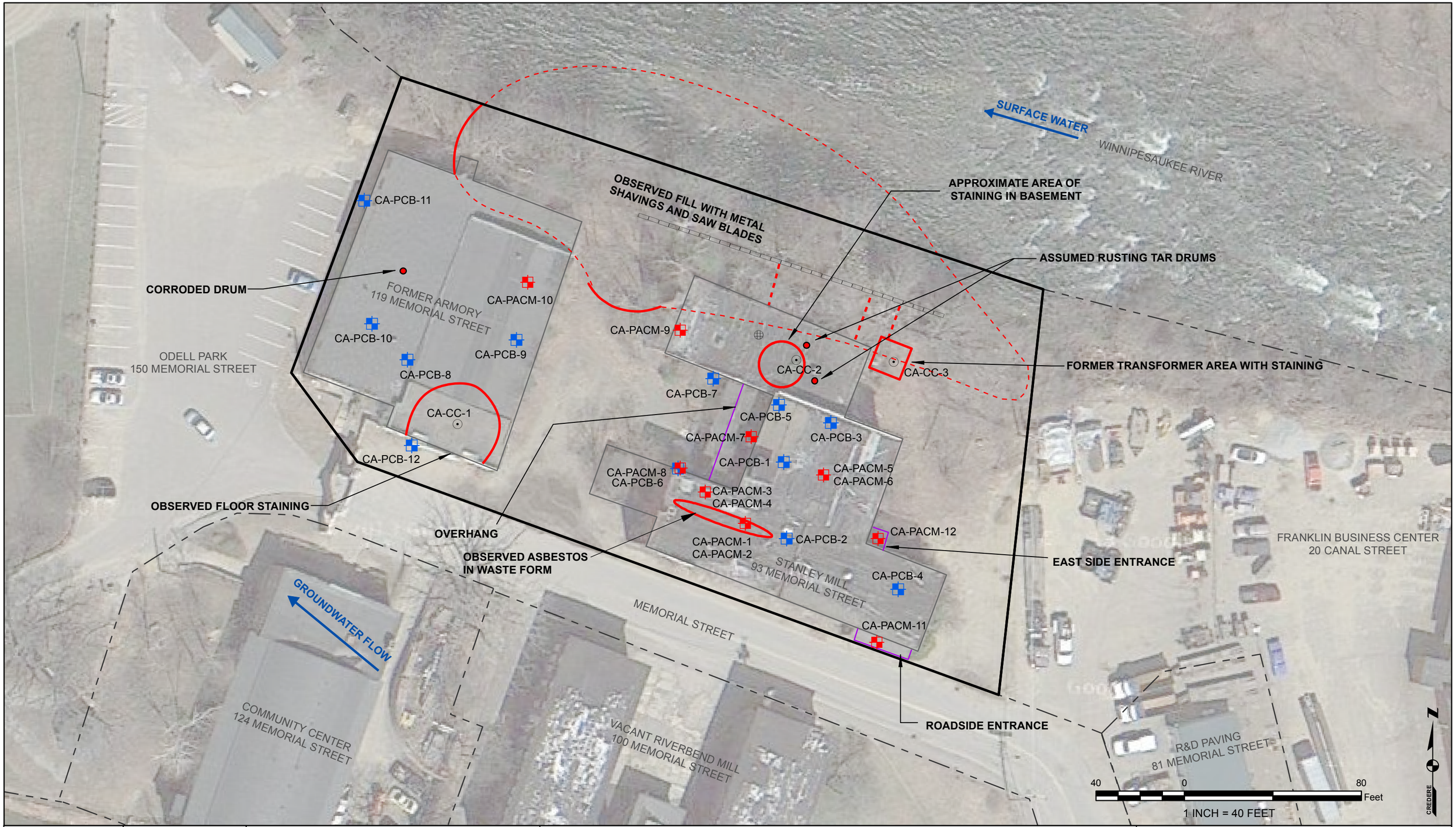
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FIGURE 3
GROUNDWATER CONTOUR MAP

FERRARI REALTY TRUST PROPERTY
93-119 MEMORIAL STREET
FRANKLIN, NEW HAMPSHIRE 03235

- SITE BOUNDARY
- PARCEL BOUNDARY
- APPROX/UNDELINEATED EXTENT OF FILL
- AREA OF CONCERN
- FUEL LINE
- PIPE
- INFERRED DRAIN LINE
- RETAINING WALL
- BENCHMARK
- SOIL BORING/ MONITORING WELL
- FLOOR DRAIN
- INTERPOLATED GW CONTOUR
- GW FLOW DIRECTION

NOTES:
1. EXISTING CONDITIONS FEATURES SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE BASED ON INFORMATION OBTAINED FROM THE CITY OF FRANKLIN TAX MAP 117, 2013 ORTHO IMAGES AND THE SITE RECONNAISSANCE PERFORMED DURING PHASE II WORK.
2. CONTOURS BASED ON 11/12/2014 AND 11/13/2014 GAUGING DATA



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FIGURE 4
ACM AND PCB SAMPLE LOCATION PLAN

FERRARI REALTY TRUST PROPERTY
93-119 MEMORIAL STREET
FRANKLIN, NEW HAMPSHIRE 03235

- AREA OF POTENTIAL CONCERN
- POINT OF POTENTIAL CONCERN
- FLOOR DRAIN
- APPROX/UNDELINEATED EXTENT OF FILL
- PCB SAMPLE LOCATION
- ACM SAMPLE LOCATION
- SITE BOUNDARY
- CONCRETE PCB SAMPLE
- INFERRED DRAIN LINES
- PARCEL BOUNDARY
- BUILDING BOUNDARY
- OVERHANG

NOTES:
1. EXISTING CONDITIONS FEATURES SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE BASED ON INFORMATION OBTAINED FROM THE CITY OF FRANKLIN TAX MAP 117, 2013 ORTHO IMAGES AND THE SITE WORK PERFORMED ON DURING PHASE II WORK.

Document Path: T:\Data\NH\Town\Franklin\14001247 - LRPC Brownfields\Ferrari Mill\Figure 4 - ACM and PCB Sample Location.mxd

CA-SS-10	0-2
antimony	14
arsenic	55
chromium	1,300

CA-SS-9	0-2
arsenic	35

CA-SED-1	Grab
benzo(a)pyrene	0.8

CA-SB-5	0-4/1	4-6/5	20-22/20
tetrachloroethene (PCE)	6.0	6.5 J-	ND<0.1
antimony	11	ND<0.3	NS
arsenic	47	10	NS

CA-TP-A3	0-4/2
naphthalene	10
arsenic	92

CA-SS-5	0-2
antimony	63
arsenic	37
lead	650

CA-SB-6	0.5-10/2	10.5-12.5/11
arsenic	48	0.9

CA-SB-4	0-7/3	7-9/7.5	14-16/15
tetrachloroethene (PCE)	13	0.1 J-	ND<0.1
benzo(a)anthracene	7.2	ND<0.05	ND<0.06
benzo(b)fluoranthene	7.8	0.06	ND<0.06
benzo(a)pyrene	6.2	ND<0.05	ND<0.06
dibenzo(a,h,)anthracene	0.75	ND<0.05	ND<0.06
indeno(1,2,3-cd)pyrene	1.5	ND<0.05	ND<0.06
arsenic	16	4.1	NS

CA-TP-1	0-6/2
tetrachloroethene (PCE)	2.8
benzo(a)anthracene	1.6 J-
benzo(b)fluoranthene	1.2 J-
arsenic	19
lead	870

CA-TP-3	3.5-8/4
arsenic	24

CA-TP-2	0-3.5/1.5	3.5-5.5/4
tetrachloroethene (PCE)	5.4	0.2
benzo(a)anthracene	2.6	ND<0.06
benzo(b)fluoranthene	2.3	ND<0.06
benzo(a)pyrene	2.4	ND<0.06

CA-SS-1	0-2
benzo(a)anthracene	1.1
benzo(b)fluoranthene	1.1
benzo(a)pyrene	1.1

CA-SS-2	0-2
benzo(a)anthracene	2.5
benzo(b)fluoranthene	2.3
benzo(a)pyrene	2.3

CA-TP-A2
CA-SB-6
CA-MW-6
CA-SS-11
CA-TP-A3
CA-SS-4
CA-TP-1
CA-SS-10
CA-SED-2
CA-SS-9
CA-SED-1
CA-TP-4
CA-SS-5
CA-TP-2
CA-SB-5
CA-MW-5
CA-SS-8
CA-SS-3
CA-SB-4
CA-MW-4
CA-SS-6
CA-TP-3
CA-SS-7
CA-SS-2
CA-TP-A1
CA-SS-1
CA-SB-3
CA-MW-3
CA-SB-2
CA-MW-2
CA-SB-1
CA-MW-1
(R&D CA-MW-3)
(R&D CA-MW-2)

ODELL PARK
150 MEMORIAL STREET

FORMER ARMORY
119 MEMORIAL STREET

STANLEY MILL
93 MEMORIAL STREET

FRANKLIN BUSINESS CENTER
20 CANAL STREET

MEMORIAL STREET

VACANT RIVERBEND MILL
100 MEMORIAL STREET

R&D PAVING
81 MEMORIAL STREET

KEY	
Sample ID	(Depth interval/ volatile) results in mg/kg
Detected compound	1.52
Non-detected compound	ND<0.1
Result exceeds applicable NHDES SRS	0.69
Not sampled	NS
Value is estimated with a low bias	100 J-

40 0 80 Feet

1 INCH = 40 FEET

N

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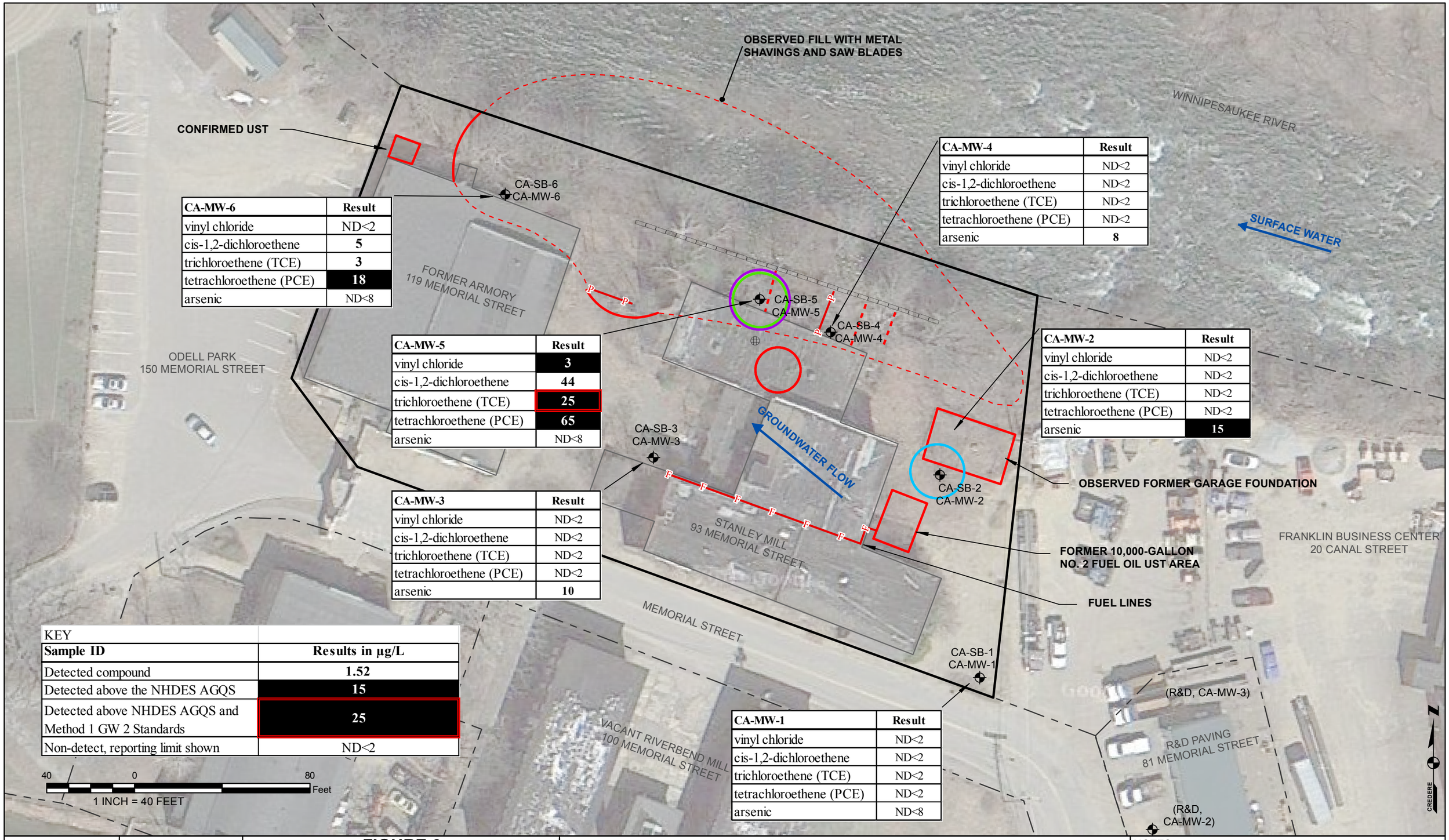
FIGURE 5
SOIL AND SEDIMENT ANALYTICAL RESULTS MAP

FERRARI REALTY TRUST PROPERTY
93-119 MEMORIAL STREET
FRANKLIN, NEW HAMPSHIRE 03235

SITE BOUNDARY
PARCEL BOUNDARY
APPROXIMATE/ UNDELINEATED EXTENT OF FILL
PIPE
INFERRED DRAIN LINE
FUEL LINE
RETAINING WALL
TEST PIT
SOIL BORING/ MONITORING WELL
SURFACE SOIL SAMPLE
SEDIMENT SAMPLE
EXTENT OF PAH IMPACTS
EXTENT OF PCE IMPACTS
EXTENT OF ARSENIC IMPACTS

NOTES:
1. EXISTING CONDITIONS FEATURES SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE BASED ON INFORMATION OBTAINED FROM THE CITY OF FRANKLIN TAX MAP 117, 2013 ORTHO IMAGES AND THE SITE VISITS PERFORMED DURING PHASE II WORK.
2. ONLY EXCEEDANCES OF NHDES SOIL REMEDIATION STANDARDS ARE SHOWN.

Document Path: T:\Data\NH\Town\Franklin\14001247 - LRPC Brownfields\Ferrari Mill\Figure 5 - Soil Analytical Results Map.mxd



CA-MW-6	Result
vinyl chloride	ND<2
cis-1,2-dichloroethene	**5**
trichloroethene (TCE)	**3**
tetrachloroethene (PCE)	**18**
arsenic	ND<8

CA-MW-5	Result
vinyl chloride	**3**
cis-1,2-dichloroethene	**44**
trichloroethene (TCE)	**25**
tetrachloroethene (PCE)	**65**
arsenic	ND<8

CA-MW-3	Result
vinyl chloride	ND<2
cis-1,2-dichloroethene	ND<2
trichloroethene (TCE)	ND<2
tetrachloroethene (PCE)	ND<2
arsenic	**10**

CA-MW-4	Result
vinyl chloride	ND<2
cis-1,2-dichloroethene	ND<2
trichloroethene (TCE)	ND<2
tetrachloroethene (PCE)	ND<2
arsenic	**8**

CA-MW-2	Result
vinyl chloride	ND<2
cis-1,2-dichloroethene	ND<2
trichloroethene (TCE)	ND<2
tetrachloroethene (PCE)	ND<2
arsenic	**15**

CA-MW-1	Result
vinyl chloride	ND<2
cis-1,2-dichloroethene	ND<2
trichloroethene (TCE)	ND<2
tetrachloroethene (PCE)	ND<2
arsenic	ND<8

KEY

Sample ID	Results in µg/L
Detected compound	**1.52**
Detected above the NHDES AGQS	**15**
Detected above NHDES AGQS and Method 1 GW 2 Standards	**25**
Non-detect, reporting limit shown	ND<2

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FIGURE 6
GROUNDWATER ANALYTICAL RESULTS MAP

FERRARI REALTY TRUST PROPERTY
93-119 MEMORIAL STREET
FRANKLIN, NEW HAMPSHIRE 03235

SITE BOUNDARY
PARCEL BOUNDARY
AREA OF CONCERN
APPROXIMATE/ UNDELINEATED EXTENT OF FILL
FUEL LINE
PIPE
INFERRED DRAIN LINE
RETAINING WALL
EXTENT OF PCE IMPACT
EXTENT OF ARSENIC IMPACT
EXTENT OF VINYL CHLORIDE IMPACT
FLOOR DRAIN
SOIL BORING/ MONITORING WELL

NOTES:
1. EXISTING CONDITIONS FEATURES SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE BASED ON INFORMATION OBTAINED FROM THE CITY OF FRANKLIN TAX MAP 117, 2013 ORTHO IMAGES AND THE SITE RECONNAISSANCE PERFORMED DURING PHASE II WORK
2. CONTOURS BASED ON 11/12/2014 AND 11/13/2014 GAUGING DATA

Document Path: T:\Data\NH\Town\Franklin\14001247 - LRPC Brownfields\Ferrari Mill\Figure 6 - Groundwater Analytical Results Map.mxd

TABLES

Table 1
Soil Sample Summary Table
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Location	Depth (feet bgs)	Screening Results (ppm_v)	Analytical Sample ID	Requested Analyses	Sample Rationale	Pertinent Observations
CA-SB-1	0	0.3	CA-SB-1 (0-2)	SVOCs, priority pollutant metals, and PCBs	To assess surface soil impacts	Observed fill interval (0-6.5')
	1	0.5				
	2	0.5				
	3	2.9				
	4	2.3				
	5	1.2				
	6	3.5				
CA-SB-2	0	0.0	CA-SB-2 (0-2)	SVOCs, priority pollutant metals, and PCBs	To assess surface soil in the area outside the former garage where drums were formerly stored	Observed fill interval (0-4')
	1	0.0				
	2	0.0				
	3	0.0				
	15	0.0	CA-SB-2 (15-17/15)	VOCs, SVOCs, priority pollutant metals, PCBs	Groundwater interface beneath garage where drums were formerly stored	None
	16	0.0				
CA-SB-3	16	0.0	CA-SB-3 (16-18/17)	VOCs, SVOCs, TPH, priority pollutant metals	Groundwater interface downgradient of the boiler room	None
	17	0.0				
CA-SB-4	0	0.0	CA-SB-4 (0-7/3) DUP-1	VOCs, SVOCs, PCBs, priority pollutant metals	Observed fill interval to assess industrial fill	Observed fill interval (0-7.5')
	1	0.0				
	2	0.0				
	3	0.0				
	4	0.0				
	5	0.0				
	6	0.0				
	7	0.0	CA-SB-4 (7-9/7.5)	VOCs, SVOCs, As	First encountered native material to assess vertical extent of fill impacts	None
	8	0.0				
	9	0.0				
	14	0.0	CA-SB-4 (14-16/15)	VOCs and SVOCs	Groundwater interface to assess migration from the Stanley Mill	
	15	0.0				
CA-SB-5	0	0.7	CA-SB-5 (0-4/1)	VOCs, SVOCs, PCBs, priority pollutant metals	Observed fill interval to assess industrial fill	Observed fill interval (0-3.5')
	1	5.5				
	2	3.1				
	3	4.4				
	4	1.9	CA-SB-5 (4-6/5)	VOCs, Sb, As, Cr	First encountered native material to assess vertical extent of fill impacts	None
	5	0.0				
	20	0.0	CA-SB-5 (20-22/20)	VOCs and SVOCs	Groundwater interface to assess migration from the Stanley Mill	
	21	0.0				
CA-SB-6	0	0.0	CA-SB-6 (0.5-10/2)	VOCs, SVOCs, PCBs, priority pollutant metals	Observed fill interval to assess industrial fill	Observed fill interval (0-8.5')
	1	0.1				
	2	0.3				
	3	0.0				
	4	0.0				
	5	0.0				
	6	0.0				
	7	0.0				
	8	0.0				
	9	0.0				
	10	0.0	CA-SB-6 (10.5-12.5/11)	VOCs, SVOCs,As, Cr	First encountered native material/groundwater interface to delineate the vertical extent of fill impacts and downgradient of the former Armory	None
	11	0.0				
	12	0.0				
CA-TP-1	0	0.0	CA-TP-1 (0-6/2)	VOCs, SVOCs, PCBs, priority pollutant metals	Observed fill interval to assess industrial fill	Entirely fill (0-7')
CA-TP-2	0	0.0	CA-TP-2 (0-3.5/1.5) DUP-2	VOCs, SVOCs, PCBs, priority pollutant metals	Observed fill interval to assess industrial fill	Observed fill interval (0-3.5')
	3.5	0.0	CA-TP-2 (3.5-5.5/4)	VOCs and SVOCs	First encountered native material to assess vertical extent of fill impacts	None
CA-TP-3	3.5	0.0	CA-TP-3 (3.5-8/4)	VOCs, SVOCs, PCBs, priority pollutant metals	Observed fill interval to assess industrial fill	Observed fill interval (3.5-8')
CA-TP-4	1	0.0	CA-TP-4 (1-4)	Cr^{+6}	Subsurface fill sample to speciate subsurface chromium	Observed fill interval (1-4')
CA-TP-A3	0	0.0	CA-TP-A3 (0-4)	VOCs, PAHs, Sb, As, Cr, Pb	Observed fill interval to assess industrial fill	Entirely fill (0-4'), nearly entirely saw blades, oily soil
CA-SS-1	0-2	NA	CA-SS-1 (0-2)	SVOCs, PCBs, and priority pollutant metals	Assess surface soil impacts from historical use and support Site reuse planning	None
CA-SS-2	0-2	NA	CA-SS-2 (0-2)	SVOCs, PCBs, and priority pollutant metals, Cr^{+6}	Assess surface soil impacts from historical use and support Site reuse planning	None
CA-SS-3	0-2	NA	CA-SS-3 (0-2)	SVOCs, PCBs, and priority pollutant metals	Assess surface soil impacts from historical use and support Site reuse planning	None
CA-SS-4	0-2	NA	CA-SS-4 (0-2)	SVOCs, PCBs, and priority pollutant metals	Assess surface soil impacts from historical use and support Site reuse planning	None
CA-SS-5	0-2	NA	CA-SS-5 (0-2)	SVOCs, PCBs, and priority pollutant metals, Cr^{+6}	Assess the discharge location of a discharge pipe presumed to originate from the floor drain observed in the Stanley Mill	Organic sheen in auger hole, saw blades and metal shavings present
CA-SS-6	0-2	NA	CA-SS-6 (0-2)	PCBs	Assess surface soil surrounding the presumed former transformer pad	Dark staining
CA-SS-7	0-2	NA	CA-SS-7 (0-2)	SVOCs, PCBs, and priority pollutant metals, Cr^{+6}	Assess metal dust discharged from from hopper	None
CA-SS-8	0-2	NA	CA-SS-8 (0-2)	VOCs, SVOCs, Sb, As, Cr, Pb	Assess impacts below retaining wall that can be eroded by the river	Collected from other observed discharge pipe
CA-SS-9	0-2	NA	CA-SS-9 (0-2)	VOCs, SVOCs, Sb, As, Cr, Pb	Assess impacts below retaining wall that can be eroded by the river	Collected from observed fill spilling over wall
CA-SS-10	0-2	NA	CA-SS-10 (0-2) DUP-3	VOCs, SVOCs, Sb, As, Cr, Pb	Assess impacts below retaining wall that can be eroded by the river	Collected from observed fill spilling over wall
CA-SS-11	0-2	NA	CA-SS-11 (0-2)	VOCs, SVOCs, Sb, As, Cr, Pb	Assess impacts below retaining wall that can be eroded by the river	Collected from observed fill
CA-SED-1	NA	NA	CA-SED-1	VOCs, SVOCs, Sb, As, Cr, Pb	Assess impacts to the river from eroded fill material	River sediment is granular/coarse
CA-SED-2	NA	NA	CA-SED-2	VOCs, SVOCs, Sb, As, Cr, Pb	Assess impacts to the river from eroded fill material	River sediment is granular/coarse

NA - Not applicable
ppm_v - parts per million by volume
bgs - below ground surface
VOC - volatile organic compounds
SVOC - semi-volatile organic compounds
Priority pollutant metals - antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), zinc (Zn)
PCBs - polychlorinated biphenyls
PAHs - polycyclic aromatic hydrocarbons
TPH - total petroleum hydrocarbons

Table 2
Monitoring Well Construction Details
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Monitoring Well ID	Approx. Screened Interval (feet bgs)	Top of Riser Elevation[1] (AMSL)	Gauging Date	Depth to Bottom (feet bgs)	Depth to Water (feet bgs)	Water Level Elevation (AMSL)
CA-MW-1	5-15	301.04	11/12/2014	14.71	12.75	288.29
CA-MW-2	12-22	302.11	11/13/2014	21.51	14.89	287.22
CA-MW-3	15-25	302.29	11/13/2014	24.38	16.54	285.75
CA-MW-4	12-22	300.62	11/13/2014	21.61	14.25	286.37
CA-MW-5	12-22	300.05	11/13/2014	21.35	14.03	286.02
CA-MW-6	10-20	298.72	11/13/2014	21.25	13.66	285.06

bgs - below ground surface

AMSL - above mean sea level

[1)] Elevation survey was referenced to the granite corner post off the northwest corner of the adjacent R & D Paving building, assumed to be 302.00 feet AMSL.

Table 3
Asbestos Sample Summary
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Sample Name	Location	Material	Amount Asbestos	Approximate Quantity (unit)
CA-PACM-1	**Stanley Mill/Basement**	**Pipe wrap**	**50% Chrysotile**	**200 (linear feet)**
CA-PACM-2	**Stanley Mill/Basement**	**Mudded elbow**	**40% Chrysotile**	**20 (each)**
CA-PACM-3	**Stanley Mill/1st Floor**	**Pipe wrap**	**25% Chrysotile**	**100 (linear feet)**
CA-PACM-4	**Stanley Mill/1st Floor**	**Mudded elbow**	**75% Chrysotile**	**5 (each)**
CA-PACM-5	**Stanley Mill/Roof**	**Felt paper**	**50% Chrysotile**	**10,500 (square feet)**
CA-PACM-6	**Stanley Mill/Roof**	**Felt paper**	**50% Chrysotile**	**10,500 (square feet)**
CA-PACM-7	Stanley Mill/Overhang roof	Asphalt shingles	ND	-
CA-PACM-8	**Stanley Mill/1st Floor**	**Hard window caulking**	**5% Chrysotile**	**Unknown**
CA-PACM-9	Stanley Mill/1st Floor	Window glazing	ND	-
CA-PACM-10	Armory	Ceiling tile	ND	-
CA-PACM-11	Stanley Mill/Roadside entrance roof	Asphalt shingles	ND	-
CA-PACM-12	Stanley Mill/East side entrance	Asphalt shingles	ND	-
	Stanley Mill/East side entrance	Felt paper	ND	-

ND - None detect

Table 4
Concrete and Suspect PCB-Containing Building Material Analytical Results
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Sample Name	Location	Material	Substrate	Regulatory Criteria (mg/kg)	Total PCBs (mg/kg)
CA-CC-1	Former Armory stained floor in southeast portion	Concrete	NA	1*	ND
CA-CC-2	Stanley Mill stained concrete near basement equipment	Concrete	NA		ND
CA-CC-3 DUP-CC	Stanley Mill tranformer pad	Concrete	NA		**0.2**
CA-PCB-1	Stanley Mill western hallway	Light blue over dark blue paint	Brick	50^	**1.3**
CA-PCB-2	Stanley Mill southern main room	Off white over yellow paint	Brick		ND
CA-PCB-3	Stanley Mill	Pale green over green paint	Brick		**0.7**
CA-PCB-4	Stanley Mill - basement	Dark green paint	Brick		ND
CA-PCB-5	Stanley Mill metal fire door	Black paint	Metal fire door		ND
CA-PCB-6	Stanley Mill window	White caulk	Wood		ND
CA-PCB-7	Stanley Mill exterior window	Green over red paint	Wood		ND
CA-PCB-8	Former Armory main room eastern wall	Dark-gray paint	Concrete block		ND
CA-PCB-9 DUP-1	Former Armory main room	Gray floor coating	Concrete		ND
CA-PCB-10	Former Armory	Orange paint with skim coat	Plaster		ND
CA-PCB-11	Former Armory exterior wall	Light green paint	Concrete block		ND
CA-PCB-12	Former Armory exterior wall	White paint	Concrete block		ND

ND - None detect

*Results were compared to the 40 CFR 761.61 remediation waste cleanup goal for high occupancy spaces.

^Results were compared to the 40 CFR 761.3 definition of PCB bulk product waste

Table 5
Lead-Based Paint Screening Results for the Site Building
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Building	Room/Location	Substrate	Color	Lead Concentration (mg/cm^2)
Standardization				
Standardization				
0 calibration check				0.0
0 calibration check				0.0
0 calibration check				0.0
1.02 calibration check				0.98
1.02 calibration check				0.94
1.02 calibration check				0.97
Stanley Mill	**Exterior window frame**	**Wood**	**White**	**1.70**
Stanley Mill	**Exterior window frame**	**Wood**	**Green**	**4.47**
Stanley Mill	Garage door	Wood	Green	0.03
Stanley Mill	Upper wall	Brick	Light blue	0.0
Stanley Mill	Lower wall	Brick	Blue	0.0
Stanley Mill	Upper wall	Brick	Off white	0.0
Stanley Mill	Lower wall	Brick	Yellow	0.0
Stanley Mill	**Large fire door**	**Metal**	**Black**	**4.58**
Stanley Mill	Upper wall	Brick	Light green	0.01
Stanley Mill	Lower wall	Brick	Green	0.0
Stanley Mill	Basement ceiling	Wood	White	0.0
Stanley Mill	Basement lower wall	Wood	Green	0.0
Stanley Mill	Basement upper wall	Wood	Green	0.12
Armory	Exterior wall	Block	White	0.0
Armory	Exterior wall	Block	Light green	0.0
Armory	Exterior wall	Block	Green	0.0
Armory	Interior wall	Block	White	0.0
Armory	Interior wall	Block	Blue	0.02
Armory	Interior wall	Block	White	0.0
Armory	Interior wall	Block	Orange	0.06
Standardization				

Notes:
mg/cm^2 – milligrams per square centimeter
Gray – calibration and standardization data

Table 6
Universal/Hazardous/Other Waste Inventory
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Universal Waste	Quantity Inventoried
Flourecent Light Fixtures (including ballasts and bulbs)	Approx. 200
Unlabelled 55-gallon drums	3
Unlabeled 5-gallon drums	2

Table 7
Summary of Soil Analytical Results
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Parameter*	Regulatory Criteria[1] (mg/kg)	Sample ID, Depth (interval/VOC), Sample Date												
		CA-SB-1	CA-SB-2		CA-SB-3	CA-SB-4				CA-SB-5			CA-SB-6	
		0-2	0-2	15-17/15.5	16-18/17	0-7/3		7-9/7.5	14-16/15	0-4/1	4-6/5	20-22/20	0.5-10/2	10.5-12.5/11
		10/27/2014	10/30/2014	10/30/2014	10/30/2014	10/30/2014	DUP-1	10/30/2014	10/30/2014	10/30/2014	10/30/2014	10/30/2014	10/30/2014	10/30/2014
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)														
cis-1,2-dichloroethene	2	NS	NS	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1 R	ND<0.1	ND<0.1	ND<0.1 R	ND<0.1	ND<0.1	ND<0.1 R
trichloroethene (TCE)	0.8	NS	NS	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1 R	ND<0.1	**0.1**	ND<0.1 R	ND<0.1	ND<0.1	ND<0.1 R
1,2,4-trimethylbenzene	130	NS	NS	ND<0.1	ND<0.1	**0.4**	**0.2**	ND<0.1 R	ND<0.1	ND<0.1	ND<0.1 R	ND<0.1	ND<0.1	ND<0.1 R
tetrachloroethene (PCE)	2	NS	NS	ND<0.1	ND<0.1	**13**	**5.9**	**0.1 J-**	ND<0.1	**6.0**	**6.5 J-**	ND<0.1	**0.2**	ND<0.1 R
m&p-xylenes	500	NS	NS	ND<0.1	ND<0.1	**0.4**	**0.3**	ND<0.1 R	ND<0.1	ND<0.1	ND<0.1 R	ND<0.1	ND<0.1	ND<0.1 R
Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270D (mg/kg)														
2-methylnaphthalene	96	ND<0.27	ND<0.06	ND<0.06	ND<0.06	ND<0.58	**0.66**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
acenaphthene	340	ND<0.27	ND<0.06	ND<0.06	ND<0.06	**0.71**	**1.9**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
acenaphthylene	490	ND<0.27	ND<0.06	ND<0.06	ND<0.06	ND<0.58	ND<0.57	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
anthracene	1,000	ND<0.27	ND<0.06	ND<0.06	ND<0.06	**1.0**	**2.2**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
benzo(a)anthracene	1	**0.64**	**0.06**	ND<0.06	ND<0.06	**2.7**	**7.2**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
benzo(b)fluoranthene	1	**0.75**	**0.06**	ND<0.06	ND<0.06	**2.8**	**7.8**	**0.06**	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
benzo(k)fluoranthene	12	**0.57**	**0.08**	ND<0.06	ND<0.06	**1.9**	**7**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
benzo(a)pyrene	0.7	**0.67**	**0.06**	ND<0.06	ND<0.06	**2.2**	**6.2**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
benzo(g,h,i)perylene	960	**0.31**	ND<0.06	ND<0.06	ND<0.06	**0.77**	**1.4**	**0.06**	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
carbazole	NE	ND<1.1	ND<0.2	ND<0.3	ND<0.2	ND<2.3	ND<2.3	ND<0.2	ND<0.3	ND<4.2	NS	ND<0.2	ND<4.7	ND<0.3
chrysene	120	**0.88**	**0.10**	ND<0.06	ND<0.06	**2.9**	**7.2**	ND<0.05	ND<0.06	**2.9**	NS	ND<0.06	ND<1.2	ND<0.06
dibenzofuran	NE	ND<0.27	ND<0.06	ND<0.06	ND<0.06	ND<0.58	**1.2**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
dibenzo(a,h)anthracene	0.7	ND<0.27	ND<0.06	ND<0.06	ND<0.06	ND<0.58	**0.75**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
fluorene	77	ND<0.27	ND<0.06	ND<0.06	ND<0.06	**0.64**	**1.6**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
fluoranthene	960	**1.1**	**0.12**	ND<0.06	ND<0.06	**6.5**	**16**	ND<0.05	ND<0.06	**1.2**	NS	ND<0.06	ND<1.2	ND<0.06
indeno(1,2,3-cd)pyrene	1.0	**0.34**	ND<0.06	ND<0.06	ND<0.06	**0.82**	**1.5**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
naphthalene	5	ND<0.27	ND<0.06	ND<0.06	ND<0.06	**0.79**	**2.2**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
phenanthrene	960	**0.46**	**0.07**	ND<0.06	ND<0.06	**5.9**	**15**	ND<0.05	ND<0.06	ND<1.1	NS	ND<0.06	ND<1.2	ND<0.06
pyrene	720	**1.0**	**0.11**	ND<0.06	ND<0.06	**4.8**	**14**	**0.06**	ND<0.06	**1.9**	NS	ND<0.06	ND<1.2	ND<0.06
Total Petroleum Hydrocarbons (TPH) by EPA Method 8100 (mg/kg)														
TPH	10,000	NS	NS	NS	<230	NS	NS	NS	NS	NS	NS	NS	NS	NS
Polychlorinated Biphenyls (PCBs) by EPA Method 8082A (mg/kg)														
Total PCBs	1	ND<0.2	ND<0.2	ND<0.2	NS	ND<0.2	ND<0.2	NS	NS	ND<0.2	NS	NS	ND<0.2	NS
Priority Pollutant Metals by EPA Method 6010C (mg/kg)														
antimony	9	ND<0.3	ND<0.3	ND<0.4	ND<0.4	ND<0.4	**3.2**	NS	NS	**11**	ND<0.3	NS	**6.9**	NS
arsenic	11	**11**	**7**	**2**	**1.7**	**14**	**16**	**4.1**	NS	**47**	**10**	NS	**48**	**0.9**
barium	1,000	**51**	**53**	**34**	**31**	**63**	**110**	NS	NS	**29**	NS	NS	**41**	NS
beryllium	1	**0.2**	ND<0.2	ND<0.2	ND<0.3	**0.3**	**0.4**	NS	NS	ND<0.2	NS	NS	ND<0.2	NS
cadmium	33	ND<0.2	ND<0.2	ND<0.2	ND<0.3	ND<0.2	ND<0.2	NS	NS	ND<0.2	NS	NS	ND<0.2	NS
chromium (total)	1,000	**12**	**11**	**13**	**9**	**65**	**83**	NS	NS	**150**	**29**	NS	**210**	**10**
chromium (6+)	130	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
copper	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
lead	400	**130**	**31**	**3.5**	**2.9**	**250**	**160**	NS	NS	**43**	NS	NS	**98**	NS
mercury	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
nickel	400	**10 J**	**13 J**	**10 J**	**9 J**	**63 J**	**43**	NS	NS	**140 J**	NS	NS	**150 J**	NS
selenium	180	ND<3	ND<3	ND<3	ND<3	**4**	**4**	NS	NS	ND<3	NS	NS	ND<3	NS
silver	89	ND<0.4	ND<0.4	ND<0.4	ND<0.4	ND<0.4	ND<0.4	NS	NS	ND<0.4	NS	NS	ND<0.4	NS
thallium	10	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	NS	NS	ND<0.2	NS	NS	ND<0.2	NS
vanadium	NE	**19**	**23**	**21**	**18**	**35**	**42**	NS	NS	**31**	NS	NS	**38**	NS
zinc	1,000	**41 J-**	**60 J-**	**23 J-**	**21 J-**	**210 J-**	**250**	NS	NS	**98 J-**	NS	NS	**90 J-**	NS

NOTES:
*Only analytes with detections are shown, all other sample results analyses were below the laboratory reporting limit.
1 - New Hampshire Department of Environmental Services (NHDES) Code of Administrative Rules Chapter Env-Or 600, Soil Remediation Standards, Table 600-2
mg/kg - milligrams per kilogram
J- - Data is estimated due to quality control/quality check (QA/QC) non-conformances, data may be biased low
J +- Data is estimated due to quality control/quality check (QA/QC) non-conformances, data may be biased high
UJ - Results were below the laboratory reporting limits but are estimated dur to QA/QC non-conformances
R - Data are rejected
NE - not established
NS - not sampled
ND<0.2 - Results were below the laboratory reporting limits, laboratory reporting limit shown
Reporting limit exceeds regulatory criteria
Bold Exceeds laboratory reporting limit
Exceeds applicable regulatory guideline

Table 7
Summary of Soil Analytical Results
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Parameter	Regulatory Criteria[1] (mg/kg)	Sample ID, Depth (interval/VOC), Sample Date						
		CA-TP-A3	CA-TP-1	CA-TP-2			CA-TP-3	CA-TP-4
		0-4/2	0-6/2	0-3.5/1.5		3.5-5.5/4	3.5-8/4	1-4
		11/12/2014	11/12/2014	11/12/2014	DUP-2	11/12/2014	11/12/2014	12/18/2014
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)								
cis-1,2-dichloroethene	2	ND<0.1 R	ND<0.2	ND<0.1	ND<0.1	ND<0.1	ND<0.3	NS
trichloroethene (TCE)	0.8	ND<0.1 R	ND<0.2	ND<0.1	ND<0.1	ND<0.1	ND<0.3	NS
1,2,4-trimethylbenzene	130	ND<0.1 R	ND<0.2	ND<0.1	ND<0.1	ND<0.1	ND<0.3	NS
tetrachloroethene (PCE)	2	ND<0.1 R	**2.8**	**5.4**	**3.5**	**0.2**	ND<0.3	NS
m&p-xylenes	500	ND<0.1 R	ND<0.2	ND<0.1	ND<0.1	ND<0.1	ND<0.3	NS
Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270D (mg/kg)								
2-methylnaphthalene	96	**6.3**	ND<1.1 UJ	ND<0.3	ND<0.06	ND<0.06	ND<1.4	NS
acenaphthene	340	ND<0.6	ND<1.1 UJ	ND<0.3	**0.36**	ND<0.06	ND<1.4	NS
acenaphthylene	490	**0.9**	ND<1.1 UJ	ND<0.3	**0.07**	ND<0.06	ND<1.4	NS
anthracene	1,000	ND<0.6	ND<1.1 UJ	**0.89**	**1.0**	ND<0.06	ND<1.4	NS
benzo(a)anthracene	1	**0.6**	**1.6 J-**	**2.1**	**2.6**	ND<0.06	ND<1.4	NS
benzo(b)fluoranthene	1	ND<0.6	**1.2 J-**	**1.4**	**2.3**	ND<0.06	ND<1.4	NS
benzo(k)fluoranthene	12	ND<0.6	ND<1.1 UJ	**1.8**	**2.8**	ND<0.06	ND<1.4	NS
benzo(a)pyrene	0.7	ND<0.6	ND<1.1 UJ	**1.7**	**2.4**	ND<0.06	ND<1.4	NS
benzo(g,h,i)perylene	960	ND<0.6	ND<1.1 UJ	**0.98**	**0.63**	ND<0.06	ND<1.4	NS
carbazole	NE	NS	ND<4.4 UJ	ND<1.2	**0.5**	ND<0.2	ND<5.7	NS
chrysene	120	**3.0**	**2.9 J-**	**2.2**	**2.5**	ND<0.06	ND<1.4	NS
dibenzofuran	NE	ND<0.6	ND<1.1 UJ	ND<0.3	**0.21**	ND<0.06	ND<1.4	NS
dibenzo(a,h)anthracene	0.7	ND<0.6	ND<1.1 UJ	**0.4**	**0.3**	ND<0.06	ND<1.4	NS
fluorene	77	**1.5**	ND<1.1 UJ	ND<0.3	**0.38**	ND<0.06	ND<1.4	NS
fluoranthene	960	**1.0**	**3.2 J-**	**4.5**	**7.5**	ND<0.06	ND<1.4	NS
indeno(1,2,3-cd)pyrene	1.0	ND<0.6	ND<1.1 UJ	**0.89**	**0.66**	ND<0.06	ND<1.4	NS
naphthalene	5	**10**	ND<1.1 UJ	ND<0.3	**0.08**	ND<0.06	ND<1.4	NS
phenanthrene	960	**3.3**	**2.7 J-**	**4.2**	**6.1**	ND<0.06	ND<1.4	NS
pyrene	720	**1.8**	**4.1 J-**	**4.3**	**6.5**	ND<0.06	ND<1.4	NS
Total Petroleum Hydrocarbons (TPH) by EPA Method 8100 (mg/kg)								
NS	NS	NS	NS	NS	NS	NS	NS	NS
Polychlorinated Biphenyls (PCBs) by EPA Method 8082A (mg/kg)								
Total PCBs	1	NS	ND<0.8	ND<0.2	ND<0.2	NS	ND<1.1	NS
Priority Pollutant Metals by EPA Method 6010C (mg/kg)								
antimony	9	ND<0.4	ND<0.4	ND<0.3	ND<0.3	NS	ND<0.4	NS
arsenic	11	**92**	**19**	**11**	**10**	NS	**24**	NS
barium	1,000	NS	NS	NS	NS	NS	NS	NS
beryllium	1	NS	ND<0.3	**0.3**	**0.3**	NS	ND<0.3	NS
cadmium	33	NS	ND<0.3	**0.4**	**0.2**	NS	**0.5**	NS
chromium (total)	1,000	**460**	**110**	**38**	**41**	NS	**35**	NS
chromium (6+)	130	NS	NS	NS	NS	NS	NS	**5.7**
copper	NE	NS	**130**	**48**	**52**	NS	**140**	NS
lead	400	**380**	**870**	**90**	**74**	NS	**95**	NS
mercury	6	NS	ND<0.22	ND<0.21	ND<0.81	NS	ND<0.26	NS
nickel	400	NS	**110**	**35**	**21**	NS	**40**	NS
selenium	180	NS	ND<3	ND<3	ND<3	NS	ND<4	NS
silver	89	NS	ND<0.4	ND<0.4	ND<0.4	NS	ND<0.5	NS
thallium	10	NS	ND<0.3	ND<0.2	ND<0.2	NS	ND<0.3	NS
vanadium	NE	NS	NS	NS	NS	NS	NS	NS
zinc	1,000	NS	**370**	**130**	**94**	NS	**360**	NS

NOTES:
*Only analytes with detections are shown, all other sample results analyses were below the laboratory reporting limit.
1 - New Hampshire Department of Environmental Services (NHDES) Code of Administrative Rules Chapter Env-Or 600, Soil Remediation Standards, Table 600-2
mg/kg - milligrams per kilogram
J- - Data is estimated due to quality control/quality check (QA/QC) non-compliances, data may be biased low
J +- Data is estimated due to quality control/quality check (QA/QC) non-compliances, data may be biased high
UJ - Results were below the laboratory reporting limits but are estimated dur to QA/QC non-conformances
R - Data are rejected
NE - not established
NS - not sampled
ND<0.2 - Results were below the laboratory reporting limits, laboratory reporting limit shown
Reporting limit exceeds regulatory criteria
Bold Exceeds laboratory reporting limit
Exceeds applicable regulatory guideline

Table 7
Summary of Soil Analytical Results
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Parameter	Regulatory Criteria[1] (mg/kg)	Sample ID, Depth (interval/VOC), Sample Date														
		CA-SS-1	CA-SS-2		CA-SS-3	CA-SS-4	CA-SS-5		CA-SS-6	CA-SS-7		CA-SS-8	CA-SS-9	CA-SS-10		CA-SS-11
		0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2/0.5	0-2/0.5	0-2/0.5		0-2/0.5
		10/27/2014	10/27/2014	12/18/2014	10/30/2014	10/27/2014	10/27/2014	12/18/2014	10/27/2014	10/27/2014	12/18/2014	12/18/2014	12/18/2014	12/18/2014	DUP-3	12/18/2014
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)																
cis-1,2-dichloroethene	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.5**	ND<0.1	ND<0.2	ND<0.2	ND<0.1
trichloroethene (TCE)	0.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**0.6**	ND<0.1	ND<0.2	ND<0.2	ND<0.1
1,2,4-trimethylbenzene	130	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND<0.2	ND<0.1	ND<0.2	ND<0.2	ND<0.1
tetrachloroethene (PCE)	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**1.6**	ND<0.1	**0.9**	**1.1**	ND<0.1
m&p-xylenes	500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND<0.2	ND<0.1	ND<0.2	ND<0.2	ND<0.1
Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270D (mg/kg)																
2-methylnaphthalene	96	ND<0.27	ND<0.27	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
acenaphthene	340	ND<0.27	**0.42**	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
acenaphthylene	490	ND<0.27	ND<0.27	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
anthracene	1,000	ND<0.27	**0.60**	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
benzo(a)anthracene	1	**1.1**	**2.5**	NS	**0.44**	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
benzo(b)fluoranthene	1	**1.1**	**2.3**	NS	**0.31**	ND<0.27	**0.48**	NS	NS	**0.08**	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
benzo(k)fluoranthene	12	**1.1**	**2.4**	NS	**0.41**	ND<0.27	ND<0.44	NS	NS	**0.08**	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
benzo(a)pyrene	0.7	**1.1**	**2.3**	NS	**0.38**	ND<0.27	**0.58**	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
benzo(g,h,i)perylene	960	**0.36**	**0.79**	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
carbazole	NE	ND<1.1	ND<1.1	NS	ND<1.1	ND<1.1	ND<1.7	NS	NS	ND<0.2	NS	NS	NS	NS	NS	NS
chrysene	120	**1.3**	**2.7**	NS	**0.50**	ND<0.27	**1.7**	NS	NS	**0.07**	NS	ND<0.7	**0.7**	ND<3.4	ND<3.4	ND<0.6
dibenzofuran	NE	ND<0.27	ND<0.27	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
dibenzo(a,h)anthracene	0.7	ND<0.27	**0.39**	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
fluorene	77	ND<0.27	**0.28**	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
fluoranthene	960	**1.9**	**5.7**	NS	**0.81**	ND<0.27	ND<0.44	NS	NS	**0.08**	NS	**1.1**	**1.1**	**4.9**	ND<3.4	**1.2**
indeno(1,2,3-cd)pyrene	1.0	**0.38**	**0.85**	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
naphthalene	5	ND<0.27	ND<0.27	NS	ND<0.27	ND<0.27	ND<0.44	NS	NS	ND<0.06	NS	ND<0.7	ND<0.6	ND<3.4	ND<3.4	ND<0.6
phenanthrene	960	**1.1**	**4.0**	NS	**0.62**	ND<0.27	**0.62**	NS	NS	ND<0.06	NS	**0.8**	**0.7**	**5.2**	ND<3.4	**1.1**
pyrene	720	**1.9**	**4.8**	NS	**0.77**	ND<0.27	ND<0.44	NS	NS	**0.08**	NS	**1.1**	**0.9**	**3.8**	ND<3.4	**1.2**
Total Petroleum Hydrocarbons (TPH) by EPA Method 8100 (mg/kg)																
Total PCBs	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Polychlorinated Biphenyls (PCBs) by EPA Method 8082A (mg/kg)																
Total PCBs	1	ND<0.2	ND<0.2	NS	ND<0.2	ND<0.2	ND<0.3	NS	ND<0.2	ND<0.2	NS	NS	NS	NS	NS	NS
Priority Pollutant Metals by EPA Method 6010C (mg/kg)																
antimony	9	ND<0.3	**1.9**	NS	ND<0.3	**0.6**	**63**	NS	NS	ND<0.4	NS	ND<0.4	ND<0.4	**14**	ND<0.4	ND<0.4
arsenic	11	**6.2**	**5.8**	NS	**6.3**	**8.1**	**37**	NS	NS	**6.3**	NS	**4.2**	**35**	**55**	**24**	**5.0**
barium	1,000	**45**	**43**	NS	**33**	**35**	**60**	NS	NS	**190**	NS	NS	NS	NS	NS	NS
beryllium	1	ND<0.2	ND<0.2	NS	ND<0.2	**0.5**	ND<0.4	NS	NS	ND<0.3	NS	NS	NS	NS	NS	NS
cadmium	33	ND<0.2	**0.4**	NS	ND<0.2	ND<0.2	**0.7**	NS	NS	ND<0.3	NS	NS	NS	NS	NS	NS
chromium (total)	1,000	**27**	**150**	NS	**16**	**46**	**530**	NS	NS	**450**	NS	**30**	**200**	**1,300**	**610**	**53**
chromium (6+)	130	NS	NS	ND<0.50	NS	NS	NS	ND<0.60	NS	NS	**4.4**	NS	NS	NS	NS	NS
copper	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
lead	400	**80**	**97**	NS	**36**	**46**	**650**	NS	NS	**150**	NS	**74**	**140**	**220**	**270**	**34**
mercury	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
nickel	400	**15 J**	**48 J**	NS	**12 J**	**33 J**	**99 J**	NS	NS	**97 J**	NS	NS	NS	NS	NS	NS
selenium	180	ND<3	ND<3	NS	ND<3	ND<3	**11**	NS	NS	**5**	NS	NS	NS	NS	NS	NS
silver	89	ND<0.4	ND<0.4	NS	ND<0.4	ND<0.4	ND<0.7	NS	NS	ND<0.4	NS	NS	NS	NS	NS	NS
thallium	10	ND<0.2	ND<0.2	NS	ND<0.2	ND<0.2	ND<0.4	NS	NS	ND<0.3	NS	NS	NS	NS	NS	NS
vanadium	NE	**29**	**88**	NS	**25**	**38**	**140**	NS	NS	**320**	NS	NS	NS	NS	NS	NS
zinc	1,000	**35 J-**	**200 J-**	NS	**38 J-**	**69 J-**	**550 J-**	NS	NS	**120 J-**	NS	NS	NS	NS	NS	NS

NOTES:
*Only analytes with detections are shown, all other sample results analyses were below the laboratory reporting limit.
1 - New Hampshire Department of Environmental Services (NHDES) Code of Administrative Rules Chapter Env-Or 600, Soil Remediation Standards, Table 600-2
mg/kg - milligrams per kilogram
J- - Data is estimated due to quality control/quality check (QA/QC) non-compliances, data may be biased low
J +- Data is estimated due to quality control/quality check (QA/QC) non-compliances, data may be biased high
UJ - Results were below the laboratory reporting limits but are estimated dur to QA/QC non-conformances
R - Data are rejected
NE - not established
NS - not sampled
ND<0.2 - Results were below the laboratory reporting limits, laboratory reporting limit shown
Reporting limit exceeds regulatory criteria
Bold Exceeds laboratory reporting limit
Exceeds applicable regulatory guideline

Table 8
Summary of Sediment Analytical Results
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Parameter*	Regulatory Criteria[1] (mg/kg)	Sample ID, Sample Date	
		CA-SED-1	CA-SED-2
		12/18/2014	12/18/2014
Volatile Organic Compounds (VOCs) by EPA Method 8260C (mg/kg)			
cis-1,2-dichloroethene	70	**0.2**	ND<0.1
Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8260C (mg/kg)			
phenanthrene	960	**1.4**	ND<0.6
fluoranthene	960	**2.1**	ND<0.6
pyrene	720	**2.1**	ND<0.6
benzo(a)anthracene	1	**0.9**	ND<0.6
chrysene	120	**1.3**	ND<0.6
benzo(b)fluoranthene	1	**0.9**	ND<0.6
benzo(k)fluoranthene	12	**0.9**	ND<0.6
benzo(a)pyrene	0.7	**0.8**	ND<0.6
Priority Pollutant Metals by EPA Method 6010C (mg/kg)			
antimony	9	**2.2**	**3**
arsenic	11	ND<0.8	**6.2**
chromium	1,000	**140**	**11**
lead	400	**63**	**68**

NOTES:

*Only analytes with detections are shown, all other sample results analyses were below the laboratory reporting limit.

1 - New Hampshire Department of Environmental Services (NHDES) Code of Administrative Rules Chapter Env-Or 600, Soil Remediation Standards, Table 600-2

mg/kg - milligrams per kilogram

ND<0.2 - analyte not detected above laboratory reporting limit, reporting limit shown

Bold Exceeds laboratory reporting limit

Exceeds applicable regulatory guideline

Table 9
Summary of Groundwater Analytical Results
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Parameter*	Regulatory Criteria (ug/L)		Sample ID, Sample Date						
	AGQS[1]	Method 1 GW-2[1]/Vapor Instrusion Screening Levels[2]	CA-MW-1	CA-MW-2	CA-MW-3	CA-MW-4		CA-MW-5	CA-MW-6
			11/12/2014	11/13/2014	11/13/2014	11/13/2014	DUP-GW-1	11/13/2014	11/13/2014
Volatile Organic Compounds (VOCs) by EPA Method 8260C (ug/L)									
vinyl chloride	2	4	ND<2	ND<2	ND<2	ND<2	ND<2	**3**	ND<2
cis-1,2-dichloroethene	70	NE	ND<2	ND<2	ND<2	ND<2	ND<2	**44**	**5**
trichloroethene (TCE)	5	20	ND<2	ND<2	ND<2	ND<2	ND<2	**25**	**3**
tetrachloroethene (PCE)	5	240	ND<2	ND<2	ND<2	ND<2	ND<2	**65**	**18**
Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270D (ug/L)									
All analytes	NA	NA	ND	ND	ND	ND	ND	ND	ND
Priority Pollutant Metals by EPA Method 6010C (ug/L)									
arsenic	10	NE	ND<8	**15**	**10**	ND<8	**8**	ND<8	ND<8

NOTES:

*Only analytes with detections are shown, all other sample results analyses were below the laboratory reporting limit.

1 - New Hampshire Department of Environmental Services (NHDES) Code of Administrative Rules Chapter Env-Or 600, Table 600-1 Ambient Groundwater Quality Standards (AGQS), and Table 2, Method 1 Groundwater Standards from the NHDES Risk Characterization and Management Policy (Section 7.4(4)), Febraury 2013

2 - NHDES, Vapor Instrusion Guidance, Table 1 Vapor Instrusion Screening Levels for Groundwater to Indoor Air, revised February 2013

ug/L - micrograms per liter

NA - not applicable, standards are variable

ND<0.2 - Results were below the laboratory reporting limits, laboratory reporting limit shown

ND - Results were below the laboratory reporting limits, reporting limits vary between analytes

Bold Exceeds laboratory reporting limit

Exceeds AGQS

Exceeds AGQS and Method 1 GW-2/Vapor Intrusion Screening Level

APPENDIX A

SITE-SPECIFIC QUALITY ASSURANCE PROJECT PLAN

Waste Management Division
PO Box 95, 29 Hazen Drive
Concord, NH 03302

Type of Submittal (Check One-Most Applicable)

☒ Work Scope ☐ Reimbursement Request	☐ Remedial Action • Remedial Action Plan • Bid Plans and Specifications • Remedial Action Implementation Report ☐ Treatment System and POE O&M ☐ Activity and Use Restriction
☐ UST Facility Report ☐ AST Facility Report	
☐ Emergency/Initial Response Action ☐ Groundwater Quality Assessment	☐ Temporary Surface Water Discharge Permit
☐ Initial Site Characterization ☐ Site Investigation • Site Investigation Report • Supplemental Site Investigation Report • GMZ Delineation • Source Area Investigation • Data Submittal • Annual Summary Report ☐ Unsolicited Phase I Environmental Site Assessment ☐ Closure Documentation	☐ Groundwater Management Permit • Permit Application • Renewal Application • Deed Recordation Documentation • Abutter Notification Documentation • Release of Recordation ☐ Data Submittal ☐ Annual Summary Report

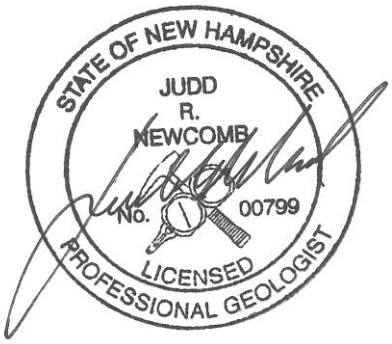
SITE SPECIFIC QUALITY ASSURANCE PROJECT PLAN

Ferrari Realty Trust Property
93-119 Memorial Street
Franklin, New Hampshire
NHDES Site #198606087

Prepared For:

Franklin Falls Downtown Development Authority
361 Central Street
Franklin, New Hampshire 03235
Phone: (603) 731-4219
Contact: Mr. Todd Workman

Lakes Region Planning Commission, Brownfields Assessment Grant
103 Main Street #3
Meredith, New Hampshire 03253
Phone: (603) 279-8171
Contact: Mr. Jeff Hayes



Prepared By:

CREDERE ASSOCIATES, LLC
776 Main Street
Westbrook, ME 04902
Phone: (207) 828-1272 ext. 16
Contact: Judd Newcomb, CG, PG

October 3, 2014

Recommended Risk Category (check one)

☐ 1. Immediate Human Health Risk (Impacted water supply well, etc.)	☐ 4. Surface Water Impact	☐ 7. Alternate Water Available/Low Level Groundwater Contamination (<1,000 X AGQS)
☐ 2. Potential Human Health Risk (Water supply well within 1,000' or Site within SWPA)	☐ 5. No Alternate Water Available/No Existing Wells in Area	☐ 8. No AGQS Violation/No Source Remaining
☐ 3. Free Product or Source Hazard	☐ 6. Alternate Water Available/High Level Groundwater Contamination (>1,000 X AGQS)	☐ Closure Recommended

1. TITLE AND APPROVAL PAGE

SITE-SPECIFIC QUALITY ASSURANCE PROJECT PLAN (SSQAPP)
ADDENDUM TO NEW HAMPSHIRE GENERIC QAPP RFA #14123

PROPERTY:
Ferrari Realty Trust Property
NHDES #198606087
93-119 Memorial Street, Franklin, New Hampshire
EPA Brownfields Assessment Grant # BF-96176301

PREPARED BY:
Credere Associates, LLC
776 Main Street, Westbrook, Maine 04092
(207) 828-1272

October 3, 2014

Below is a listing of the names, titles, signatures, and signature dates of officials approving this Site Specific Quality Assurance Project Plan (SSQAPP) Addendum:

Alan Peterson — Date: 10/14/2014
EPA Brownfields Project Officer

Stephen DiMattei — Date: 10-14-14
EPA Quality Assurance Officer

Jeff Hayes — Date: 10-14-14
Lakes Region Planning Commission, Brownfields Assessment Grantee

Rebecca Williams — Date: 10/14/2014
NHDES Project Manager

Judd R. Newcomb, PG, CG — Date: 10/14/2014
Credere Associates, LLC QA/QC Manager

Rip Patten, PE, LSP, LEED-AP — Date: 10/14/2014
Credere Associates, LLC Program Manager

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2. INTRODUCTION

Credere Associates, LLC (Credere) was retained by Lakes Region Planning Commission (LRPC) to prepare this Site-Specific Quality Assurance Project Plan (SSQAPP). LRPC is using funding from a U.S. Environmental Protection Agency (EPA) Brownfields Assessment Grant (Grant number: BF-96176301) to conduct assessment activities at the Ferrari Realty Trust Property located at 93-119 Memorial Street in the City of Franklin, New Hampshire (the Site).

This SSQAPP presents the following information:

- Problem definition including a Site description and summary of background information for the Site
- Project description and timeline
- Preliminary conceptual site model (CSM)
- Assessment objectives and proposed sampling design and rationale
- Site-specific field sampling and analytical methodology
- Regulatory standards applicable to the Site for each proposed sampling media

This SSQAPP was prepared to be used in concert with Credere's Generic Quality Assurance Project Plan (QAPP) EPA Quality Assurance Tracking: Request for Assistance (RFA) #14123 revision dated September 4, 2014, which was prepared for all of Credere's EPA Brownfields work in New Hampshire. The quality assurance and quality control (QA/QC) procedures outlined in Credere's Generic QAPP will be followed for this investigation program including sample collection, handling, and analysis of samples; chain-of-custody; and data management, documentation, validation and usability assessment. Sampling as outlined in this SSQAPP will not occur until receipt of approval from EPA and the New Hampshire Department of Environmental Services (NHDES).

Figure 1 shows the general location of the Site in Franklin, New Hampshire; **Figure 2** presents pertinent Site features and proposed sampling locations; and **Figure 3** is a Project Organization Flow Chart for the Ferrari Realty Trust Property project team.

3. PROBLEM DEFINITION

3.1 SITE DESCRIPTION

The 1.219-acre Site is part of the Franklin Falls Historic District and consists of two buildings including the Stanley Mill in the eastern portion of the Site and a former Armory in the western portion of the Site. The Site is identified by the City of Franklin as Map 117, Lot 142 and is currently owned by Ferrari Realty Trust/Ferrari Trustees L & C. Below is a description of the two buildings including details of conditions observed during the Phase I ESA Site reconnaissance; however, Credere was limited in their ability to observed portions of the Site due to thick vegetation.

Stanley Mill

The Stanley Mill was observed to be a two-story mill building with a concrete and stone foundation. The original southeast portion of the building was constructed between 1897 and 1911. The mill building was expanded over time and reached its current configuration by 1929.

The building consisted of several large open rooms and hallways. The main rooms were accessed by sliding steel fire doors. A boiler room was located extending off the southwest portion of the building. An electric elevator was located in the southeast portion of the building. The building was vacant and generally empty with the exception of some debris. The building was in poor condition with water damaged floors, walls, and roofs.

Former Armory

The former Armory building was observed to be a single-story masonry structure. The original eastern portion of the Site building was constructed between 1911 and 1923 as a large open single room space. The western portion of the building was added between 1948 and 1956 and contains several rooms and a loading dock area. The former Armory building was vacant and mostly empty with the exception of an electrical hoist and debris. A fill and vent pipe were observed at the former Armory near the northwest corner of the building, and an underground storage tank (UST) is suspected to be located in this area. The building was in fair condition and appeared to need only cosmetic repairs.

3.2 SITE HISTORY

The Site

The Site was first developed by the G. W. Griffin and Company as a hacksaw manufacturing mill (Stanley Mill) between 1897 and 1911. The mill was expanded over the next few decades, and by 1929 the building reached its current configuration. The building was occupied by the G. W. Griffin Company through at least 1967 and likely through 1979 based on historical ownership records. Stanley Tool purchased the Site in 1979 and occupied the Site through at least 1986 when ownership was transferred to Franklin Falls Trust. It is presumed the building was vacated shortly thereafter.

The Armory was constructed between 1911 and 1923 and was occupied by the New Hampshire National Guard. G.W. Griffin and Company purchased the Armory in 1935, and the New Hampshire National Guard moved across Memorial Street to the location of the current Franklin Community Center. By 1948, the former Armory was used for storage by the French Mills, Inc., a tenant of G.W. Griffin. An addition was added to the western side of the former Armory by 1956; and by 1964 the former Armory was used as a mica depot. The former Armory was used most recently by PrETCo, a processing equipment manufacturer as indicated by the sign on the side of the building, and for storage by a local construction company. The former Armory has been vacant since approximately 2010.

Surrounding Area

The surrounding area was developed as early as 1884 with a lumber mill to the southeast. Several textile mills, garages, and distribution facilities were located upstream of the Site to the east. Chemicals, coal, dyes, and oils were used and stored at these facilities.

The adjoining property south of the Site (Riverbend Mill) was developed with the Acme Knitting Machine and Needle Company by 1911. By 1961, the factory was converted to the Shepard Grocery Company and was used as a warehouse/storage facility through at least 1967. By 1990, the building was occupied by various commercial and industrial businesses including a chapter of the Red Cross, a gymnastics center, non-ferrous casting, an attorney, wood worker, and nautilus company. The adjoining mill was vacant at the time of our Site visit.

3.3 PRIOR INVESTIGATIONS

The following prior environmental reports were identified for the Site.

Tank Closure Summary for Memorial Street Property, Lakes Region Environmental Contractors, Inc., January 12, 1999

A 10,000-gallon No. 2 fuel oil UST was removed from the Site on December 7, 1998. Based on the figure included in the Tank Closure Summary and conditions observed at the Site, the UST was located east of the Stanley Mill building.

Upon removal, the UST was observed to have minor pitting; however, no evidence of a release was observed within the excavation. Results from one confirmatory composite sample collected from the excavation base were below applicable NHDES Soil Remediation Standards (SRS). Based on the results of the confirmatory sample and observed subsurface conditions, no further assessment was recommended. The report was reviewed by NHDES on February 3, 1999, and no further action was required.

Phase I Environmental Site Assessment (ESA), August 8, 2014, Credere

Credere prepared a Phase I ESA for the Site dated August 8, 2014. Based on reviews of historical sources, environmental databases, interviews, information provided by the City of Franklin, a Site reconnaissance, and judgment by the Environmental Professional, the following recognized environmental conditions (RECs) were identified in connection with the Site:

- REC #1 – Disposal of industrial waste as fill at the Site
- REC #2 – Evidence of a UST near the northwest corner of the former Armory
- REC #3 – Presumed ACMs in waste form in the basement of the Stanley Mill
- REC #4 – Observed staining on a former transformer pad near the northeast corner of the Stanley Mill
- REC #5 – Threat of release from corroded drum in the former Armory and drums in the Stanley Mill
- REC #6 – Release to surface soil from hopper east of the Stanley Mill
- REC #7 - Release or threat of release from possible subsurface fuel oil supply lines in the boiler house
- REC #8 – Likely presence of surface soil impacts throughout the Site from historical Site use

Additionally, the following environmental findings, which did not meet ASTM E 1527-13's definition of a REC, historical REC (HREC), controlled REC (CREC), or *de minimis* condition (DMC), warranted the opinion of an Environmental Professional, were identified:

- Environmental Finding #1 – Observed possible hazardous building materials throughout the Site
- Environmental Finding #2 – Upstream historical industrial operations
- Environmental Finding #3 – Former UST removed from the east side of the Stanley Mill building

Based on the RECs and environmental findings identified during this Phase I ESA, Credere recommended the following:

- Immediate stabilization and removal of the corroded drum in the former Armory and removal of the drums in the Stanley Mill
- A Phase II investigation to confirm or dismiss the RECs and environmental findings identified in this Phase I ESA
- A Hazardous Building Materials Survey (HBMS) to assess the presence of hazardous building materials throughout the Site
- A supplemental Site reconnaissance in the late fall or spring when thick vegetation and foliage is not present

4. PROJECT DESCRIPTION & TIMELINE

4.1 REDEVELOPMENT SCENARIO

Franklin Falls Downtown Development Authority (FFDDA) intends to redevelop the Site to remove potential environmental concerns, preserve the historic significance, and return the property to a useful condition. Current proposed reuse is a boutique bed and breakfast with function rooms, a restaurant, and for a satellite college campus.

4.2 PROPOSED PROJECT TIMELINE

The following schedule is proposed for the assessment work. This is a dynamic schedule and tasks may be performed later based on document regulatory review time and contractor availability.

TENTATIVE DATE	ACTION
August 2014	Submit Draft SSQAPP
September 2014	EPA and NHDES SSQAPP Review Period
October 2014	Finalize SSQAPP and Begin Phase II ESA and HBMS
November 2014	Submit Draft Phase II ESA and HBMS Summary Report
December 2014	NHDES Review Period
January 2014	Finalize Phase II ESA and HBMS Summary Report

5. CONCEPTUAL SITE MODEL

A CSM was developed using the findings from prior environmental investigations and the Phase I ESA and will be updated in subsequent reports as new information becomes available. This CSM includes a description of the physical setting of the Site, contaminants of concern (COCs), extent of contamination, exposure pathways, and potential human and environmental receptors.

5.1 PHYSICAL SETTING

Topography

Based on Credere's observations and the United States Geological Survey (USGS) Topographic Map of the Franklin Quadrangle, New Hampshire, topography at the Site is generally flat to gently sloping to the north. The northern property boundary is further characterized by a steep northward slope that meets the Winnipesaukee River. Elevation at the Site is approximately 300 feet above mean sea level. An excerpt from the USGS map has been included as **Figure 1**.

Geology

Surficial Geology

According to the physical Setting Source Summary in the Environmental Database Report (EDR) reviewed during the Phase I ESA, which is derived from the US Department of Agriculture's Soil Conservation Service National Cooperative Survey, Site soils are mapped as Paxton soils, which typically consist of well drained very stony fine sandy loam with slow infiltration rates.

Credere also observed fill material through the surface of the northern edge of the Site.

Bedrock Geology

According to the Bedrock Geologic Map of New Hampshire, bedrock beneath the Site consists of Lower Silurian meta-argillite, meta-conglomerate, and calc-silicate rocks of the lower part of the Rangley Formation. Rocks were formed by metamorphosis of sedimentary deposits in the Central Maine Composite Terrane (Central Maine Trough) and igneous intrusive rocks. No bedrock outcrops were observed during Credere's Site reconnaissance.

Hydrology

The nearest surface water body to the Site is the Winnipesaukee River, which is located along the northern edge of the Site. The Winnipesaukee River flows west and joins the Pemigewasset River approximately 0.6-miles south of the Site. Storm drains were observed along Memorial Street, which likely accept runoff from the southern portion of the Site. Stormwater likely infiltrates permeable areas of the northern portion of the Site or flows overland to the Winnipesaukee River.

Based on observed grades and mapped topography, groundwater at the Site is presumed to flow to the north towards the Winnipesaukee River. However, due to the oxbow path of the river,

groundwater at the adjoining property to the south flows southwest as documented by prior investigations at that property.

5.2 CURRENT CONTAMINANTS OF CONCERN

Based on the historical use of the Site, current COCs include volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) associated with the use of degreasers at the Stanley Mill and the suspect UST at the former Armory, heavy metals associated with the historical manufacturing of metals tools, and polychlorinated biphenyls (PCBs) typically found in cutting and lubricating oils used in machining during the time period of the mill's operation and associated with the former transformer pad.

Asbestos, lead contained in lead-based paint (LBP), and PCBs in building materials may be present in/on the current Site building and are also considered COCs.

5.3 EXTENT OF CONTAMINATION

The extent of COCs at the Site is currently unknown based on lack of prior environmental assessment at the Site; however, based on Site observations and historical information reviewed during the Phase I ESA, COCs are potentially located in the following areas.

- VOCs and SVOCs are potentially located in areas where cutting and lubricating oils or degreasers were used, handled (e.g. loading docks), stored (e.g. the basement or former garage), or possibly discharged to the surface or subsurface (e.g. the floor drain/discharge in the Stanley Mill and industrial fill), as well as in the area of the suspect UST at the former Armory. In addition, fuel oil related petroleum hydrocarbons may be in the location of the UST or in the vicinity of the fuel oil supply lines.

- Metals may be found in surface soil throughout the Site due to the long history of metals parts manufacturing, in areas of material handling areas (e.g. loading docks and the garage), and in areas of industrial waste disposal (e.g. the fill areas along the north edge of the Site, and the hopper east of the Stanley Mill).

- PCBs are potentially located in oil handling areas (e.g. loading docks), in surface soils due to tracking of oils across the Site by trucks or by foot traffic, surrounding the former transformer pad, in the industrial waste fill, and in areas of concrete staining within the Site buildings.

- If ACM, PCBs, and LBP are identified in/on the Site buildings they are presumed to be confined to the Site buildings or immediately surrounding the Site buildings in soil.

5.4 EXPOSURE PATHWAYS AND POTENTIAL RECEPTORS

Exposure pathways describe how a human or environmental receptor comes into contact with contaminants that may be present at the Site. Exposure pathways presented in the CSM include the following:

Active Ingestion:	The active ingestion pathway represents exposure which may occur through the active ingestion of contaminant concentrations via a drinking water supply well, through agricultural products, or through direct consumption of soil (typically by children).
Inhalation:	This pathway is primarily associated with groundwater contamination within 30 feet of an occupied structure when groundwater elevation is less than 15 feet below surface grade, or when depth to groundwater is unknown. This pathway is applicable when receptors may inhale impacted media in the form of contaminated vapor.
Dermal Absorption:	Exposure via dermal absorption occurs when receptors are exposed to chemical concentrations present in soil, groundwater, surface water, or hazardous building materials through direct contact with the skin.
Incidental Uptake:	This pathway is applicable when receptors may incidentally inhale or ingest impacted media in the form of contaminated dust, chips, or airborne asbestos fibers.

Potential Receptors are categorized by duration of exposure and intensity of use at the Site. The receptor categories described in the CSM include the following:

Commercial Workers:	Commercial receptors are those which are present at the Site for long durations but with low intensity exposure such as indoor office workers.
Recreational or Park User:	Park users are characterized by low duration (i.e. less than two hours per day) and low intensity usage such as that which would occur during activities such as walking, shopping, and bird watching.
Excavation or Construction Worker:	Excavation or construction workers are present at the Site for short durations though intensity of use is high, such as during non-routine activities including construction or utility work. Examples include utility and construction contractors and landscapers.
Terrestrial Biota:	These receptors include flora and fauna which may be exposed to contaminants in their respective environments.

5.6 CONCEPTUAL SITE MODEL SUMMARY

Under current conditions, exposure to possible remaining or unassessed contamination at the Site is limited. However, the planned use of the Site as a bed and breakfast, event center, and for a satellite college increases exposure to future occupants of the Site.

Under the proposed reuse, potential receptors include construction workers during construction, future employees of the Site, future students of the college, and future patrons of the bed and breakfast and event center, as well as terrestrial biota. If contaminants are detected near the floor drain discharge pipe, aquatic biota may also be affected. Exposure pathways include ingestion by terrestrial and aquatic biota; inhalation of contaminants in indoor air due to the potential for vapor intrusion if soil or groundwater near the Site buildings have been impacted by VOCs; dermal absorption through terrestrial and aquatic biota, use of the property by future occupants, and construction workers contact with soil or groundwater during construction; and incidental uptake of contaminated dust or asbestos fibers both during construction and by future occupants.

6. SAMPLING DESIGN

6.1 OBJECTIVE

The main objective of this assessment is to assess the RECs and environmental findings and fulfill the recommendations identified during the Phase I ESA. Data collected at the Site during this assessment will be considered in the planning stages for possible cleanup activities and Site reuse. The following tasks are proposed to address this objective:

- Perform a ground penetrating radar (GPR) survey
- Advance soil borings and collect soil samples from each boring location
- Collect surface soil samples
- Install groundwater monitoring wells and collect groundwater samples
- Excavate test pits and collect soil samples from each test pit
- Collect samples from areas of stained concrete
- Perform an asbestos survey of the Site buildings and collect samples of suspect ACM
- Perform PCB-containing building material survey of the Site buildings and collect samples of suspect PCB-containing materials
- Perform a LBP screening of the Site buildings and perimeter soil and collect surface soil samples from the building perimeter
- Perform an inventory of universal and/or hazardous wastes present in the Site buildings

Specific sampling methodologies are described in **Section 7**. **Table 1** includes the number and type of samples that are proposed to be collected with accompanying rationale, selected analytical methods, and sample volume and preservation details. **Table 2** is a Standard Operating Procedure (SOP) reference table detailing the version of each SOP that will be used during the field sampling program.

6.2 GROUND PENETRATING RADAR SURVEY

Credere will contract with Vermont Underground Locators (VUL) to perform a GPR survey at the Site to assess if the suspect UST behind the former Armory is currently present, assess the remainder of the Site (particularly surrounding the Stanley Mill boiler house), and clear test pit and soil boring locations for utilities (in addition to DigSafe).

6.3 SOIL BORING ADVANCEMENT & SOIL SAMPLING

Six (6) soil borings (CA-SB-1 through CA-SB-6) will be advanced at the Site. Soil samples will be collected from either the surface to assess surface soil impacts from historical use of the Site; from the area of greatest observed contamination or from the groundwater interface to assess possible light non aqueous phase liquid (LNAPL) or dense non-aqueous phase liquid (DNAPL) impacts associated with historical use of the Site; from the observe fill interval to assess impacts

associated with the industrial waste fill along the river; and from the first encountered native soil below the fill to assess the leaching of contaminants to native material or delineate the extent of fill impacts.

One (1) surface soil sample will be collected from soil boring CA-SB-1 from 0 to 2-feet to assess surface soil conditions at the Site.

Two (2) soil samples will be collected from soil boring CA-SB-2: one surface soil sample will be collected from 0 to 2 feet, and one subsurface sample will be collected from the depth interval of greatest observed contamination. In the absence of evidence of contamination, the subsurface samples will be collected from the groundwater interface.

One (1) subsurface soil sample will be collected from soil boring CA-SB-3 from the depth interval of greatest observed contamination to assess the potential for fuel oil releases to have occurred from the fuel oil supply lines (CA-SB-3). In the absence of evidence of contamination, the subsurface samples will be collected from the groundwater interface.

Three (3) soil samples will be collected from CA-SB-4, CA-SB-5, and CA-SB-6: one from the interval of observed industrial fill material, one from the first encountered native material below the fill, and one from the area of greatest observed contamination. In the absence of evidence of contamination the sample from the area of greatest observed contamination will be collected from the groundwater interface. If the first encountered native material is within the same interval as the water table and no evidence of contamination is identified, or within the same interval as the area of greatest observed contamination, only two samples will collected: one from the fill material and one from first encountered native material. The first encountered native material samples will be placed on hold pending the results of the above fill material analyses. If results of the fill material analyses exceed their applicable NHDES SRSs, then the associated native material sample will be authorized for analysis in an effort to vertically delineate the extent of impacts associated with the fill. If only two soil samples are collected from any of the borings, VOCs and SVOCs will initially be authorized for analysis and only the PCBs and priority pollutant metals will be placed on hold pending the results of the above fill material sample.

Seven (7) surface soil samples will be collected from 0 to 2 feet using hand tools (hand auger or trowel) to assess possible sources of surficial contamination identified during the Phase I ESA including the historical use of the Site (CA-SS-1 through CA-SS-4), the floor drain discharge pipe on the banks of the Winnipesaukee River (CA-SS-5), the former transformer area (CA-SS-6), and the metal dust hopper (CA-SS-7). Surface soil samples locations will be biased towards evidence of contamination (e.g. staining, fill materials, etc.).

Proposed sample locations are depicted on **Figure 2,** and the rationale for each sample is summarized in **Table 1**.

6.4 MONITORING WELL INSTALLATION & GROUNDWATER SAMPLING

Soil borings CA-SB-1 through CA-SB-6 will be completed as groundwater monitoring wells (CA-MW-1 through CA-MW-6). Groundwater samples will be collected from the newly installed wells after development and at least a 14 day stabilization period. Groundwater samples will be collected to assess groundwater at the upgradient most position of the Site (CA-MW-1), impacts associated with the storage of oil and hazardous materials in the former garage (CA-MW-2), groundwater downgradient of the Stanley Mill boiler house (CA-MW-3), groundwater downgradient of the Stanley Mill and within the industrial fill material (CA-MW-4), groundwater downgradient of the basement floor drain and within the fill material (CA-MW-5), and downgradient of the former Armory and within the fill material (CA-MW-6).

Proposed monitoring well locations are depicted on **Figure 2,** and the rationale for each sample is summarized on **Table 1**.

6.5 TEST PIT EXCAVATION & SOIL SAMPLING

Three test pits (CA-TP-1 through CA-TP-3) are proposed to be excavated by ENPRO Services Inc. (ENPRO) to observe the extent of the industrial fill material along the northern side of the Site. Two (2) soil samples will be collected from each test pit from the observed fill interval and from the first encountered native soil beneath the fill. Additional test pits may be excavated to further delineate the visual extent of fill; however, no additional samples will be collected from these additional test pits.

Proposed test pit locations are depicted on **Figure 2,** and the rationale for each sample is summarized on **Table 1**.

6.6 CONCRETE SAMPLING

Three (3) concrete samples (CA-CC-1 through CA-CC-3) will be collected from areas of observed staining within the former Armory, the Stanley Mill basement, and from the former transformer pad. Samples will be analyzed for PCBs to assess if the concrete floors/pads are regulated as PCB remediation waste as a result of a historical release of presumably PCB containing materials.

6.7 ASBESTOS SAMPLING

Credere will perform a survey of the Site buildings to identify suspect ACM, and each suspect ACM will be sampled. Sample results will be used to properly manage ACM during renovation to the Site buildings. Twenty-five (25) samples of suspect ACMs will be collected in triplicate (i.e. 75 total ACM samples). This sampling will be performed in accordance with NHDES Chapter Env-A 1800 – Asbestos Management and Control. The number of samples actually collected will be dependent on the number and volume of suspect ACMs that are encountered, but will not exceed 75 individual samples without project team approval.

6.8 PCB-CONTAINING BUILDING MATERIAL SAMPLING

To assess the potential presence of PCB-containing building materials, the buildings will be inspected and suspect materials will be inventoried and considered for sampling. Materials that typically contain PCBs include caulk/sealants, paint, and mastics/adhesives that were manufactured between approximately 1930 and 1980 and are most commonly in areas that endure high wear, weather, high heat, or moisture. Typical materials and locations where PCBs are encountered include, but are not limited to:

- exterior caulks and sealants around doors and windows or within expansion joints
- wall paints in high heat or moisture areas such as boiler rooms, equipment rooms, or basements
- floor paints in high traffic areas such as hallways or building entrances
- mastics beneath floor tiles

Considering the size of the Site buildings and variety of building materials that are expected to be inventoried, 12 suspect PCB-containing building materials (CA-PCB-1 through CA-PCB-12) that are more likely to contain PCBs will be collected for analysis. One field duplicate from each distinctive type of material sampled (e.g. caulks/sealants/adhesives and paints) to a maximum of two duplicate samples will be collected for analysis. Samples will be collected to assess if any hazards are present associated with PCBs in building materials and if the building materials are regulated as PCB bulk product waste as defined by 40 CFR 761.3. If based on the initial results, additional assessment of PCB-containing building materials is needed, approval for additional samples will be proposed and approved under a separate SSQAPP amendment. Data will be used to properly manage building materials that may contain PCBs during renovations to the Site buildings.

6.9 LBP SCREENING

Painted surfaces throughout the Site buildings will be screened for lead in LBP using an X-ray fluorescence (XRF) meter. LBP is defined as paint with a lead concentration of 1.0 milligrams per square centimeter (mg/cm^2) or greater in accordance with the United States Department of Housing, Chapter 7: Lead-Based Paint Inspections, 1997 Revision (HUD Guidelines) and with the Chapter 130 – Lead Paint Poisoning Prevention and Control of New Hampshire Statues (Chapter 130). The number of screening points will be dependent on the number of different types/colors of painted surfaces encountered in/on the Site buildings.

If LBP is identified on the exterior of the former Armory (the current exterior or sub-layers), soil surrounding the building will be screened for lead using an XRF meter to assess if chipping or flaking of LBP (presently or in the past) from the Site building has impacted Site surface soil. Soil surrounding the former Armory will be presumed to be impacted if XRF screening results exceed 240 parts per million (ppm) (40% error range for the XRF relative to the NHDES Soil Remediation Standard (SRS) for lead of 400 milligrams per kilogram (mg/kg)).

The Stanley Mill building is not painted on the exterior and exterior screening will not be conducted at the Stanley Mill.

6.10 LBP PERIMETER SOIL SAMPLING

If surface soil surrounding the former Armory is found to be impacted by LBP (see **Section 6.9**), surface soil samples will be collected from soil surrounding the building to quantify soil concentrations from chipping or flaking LBP from the exterior of the Site building. Two (2) samples locations will be selected from the south side of the former Armory, one (1) location will be selected from the east side of the Site building (in additional to a separate surface soil sample proposed along this wall, CA-SS-3), two (2) locations will be selected from the north side of the former Armory, and one (1) location will be selected from the west side of the former Armory (in addition to a separate surface soil sample proposed along this wall, CA-SS-4). Samples locations will be biased to locations of the highest XRF screening values.

Two samples will be collected from each location (a total of 12 samples) at 0 to 0.5-feet and 0.5 to 1-foot. The 0.5 to 1-foot samples will be placed on hold pending the results of the 0 to 0.5-feet samples. If results of the related 0 to 0.5-feet sample exceed applicable NHDES SRSs, the associated 0.5 to 1-foot sample analysis will be authorized to delineate the vertical extent of lead impacted soil

No analytical soil samples will be collected if LBP is not found on the exterior of the Site building or if soil XRF field screening results do not exceed 240 ppm.

6.11 UNIVERSAL/HAZARDOUS WASTE INVENTORY

Materials that once removed will meet the definition of universal/hazardous waste include, but are not limited to, fluorescent lighting, smoke detectors, thermostats (that contain mercury), and lead acid batteries. These types of materials at the Site will be inventoried. Inventory results will be used to properly manage universal and/or hazardous wastes during renovation or demolition of the Site building.

7. SAMPLING & ANALYTICAL METHODS REQUIREMENTS

The proposed sampling activities will be conducted according to **Table 1**. Field activities will be conducted in accordance with Credere's Generic QAPP RFA #14123 and the SOPs referenced on **Table 2**.

7.1 GROUND PENETRATING RADAR SURVEY

VUL will perform their GPR survey by transecting the Site in a grid pattern. Anomalies will be reported to Credere in real time, and Credere will document the location of the anomalies, if any. The GPR results will be summarized in the Phase II ESA report.

7.2 SOIL BORING ADVANCEMENT & SOIL SAMPLING

Six (6) soil borings (CA-SB-1 through CA-SB-6) will be advanced at the Site. Soil borings CA-SB-1 through CA-SB-3 will be advanced to approximately 5 feet below the water table, and soil borings CA-SB-4 through CA-SB-6 will be advanced to the first confining layer below the water table or to bedrock. Borings will be advanced using direct push drilling methods with a Geoprobe® macrocore sampling device, or equivalent. Soil cores will be collected continuously using dedicated, disposable polyethylene liners. Macrocores will be individually logged, evidence of contamination will be noted, and soil will be field screened for total volatile organic compounds (VOCs) using a Thermo 580B OVM PID (or similar) calibrated with a 100 part per million by volume (ppm_v) isobutylene gas with a response factor of 1.0 ppm_v. Soil will be screened in accordance with the NHDES HWRB-12 jar headspace technique SOP.

Visible asphalt and base materials, landscaping materials, and other organic detritus will be removed prior to sampling.

Sample target depths are summarized in **Section 6.4** and on **Table 1**, which is to be used as a field guide.

In all soil samples, representative soil from a 2-foot interval will be sampled from the macrocore or from the surface using decontaminated hand tools (hand auger or trowel) and placed in a decontaminated stainless steel bowl. Volatile samples (VOCs) collected from boring locations will be collected directly from the macrocores using a dedicated soil syringe immediately after opening to prevent loss of volatiles and degradation. Soil for other analyses will be homogenized and placed in laboratory provided glassware. Proposed sample analysis for each respective sample as well as the required volume and preservation is provided on **Table 1**. Soil samples will be stored on ice and submitted to ARA for analysis.

Excess soil from each boring or surface sample location will be returned to its place of origin within the borehole or to the surface surrounding the borehole.

7.3 MONITORING WELL INSTALLATION & GROUNDWATER SAMPLING

Each boring will be completed as a groundwater monitoring well. Each groundwater monitoring well will be constructed using 10 feet of 0.010-inch slotted PVC screen with at least 5 feet of screen below the depth of the water table and enough solid PVC riser to reach the ground surface. The well annulus will be filled with No. 2 washed silica sand with a bentonite seal and the wells will be completed with flush mounted road boxes or stand pipes depending on the location.

Following installation, each monitoring well's top of PVC elevation will be surveyed to an onsite benchmark, if available, or an arbitrary datum if necessary to allow for the determination of relative groundwater elevations and the calculation of groundwater flow at the Site.

Each well will be developed by overpumping and agitation methods. The wells will be purged until a total of at least three well volumes have been removed and turbidity has been reduced to less than 20 NTUs.

Following development, Credere will allow at least two weeks for the monitoring wells to equilibrate with the surrounding aquifer prior to sampling. Depth to groundwater and non-aqueous phase liquid (NAPL) thickness, if present, will then be measured. Groundwater elevations will be calculated relative to the top of the well casing and elevations will be mapped to assess the groundwater flow direction.

Credere will sample each well in accordance with **Table 1** using low-flow sampling methodologies. During sampling, groundwater will be periodically monitored for temperature, pH, oxidation-reduction potential, specific conductivity, dissolved oxygen, and turbidity using a multi-parameter meter and an in-line flow-through cell until parameters have stabilized over a period of three readings, spaced at least 5 minutes apart or at a spacing to allow for a complete exchange of flow through the flow-through cell based on the flow-through cell volume and flow rate. Upon stabilization of field parameters, groundwater samples will be collected immediately after the pump and directly into the appropriate bottle ware in order of decreasing volatility. Proposed sample analysis for each respective sample as well as the required volume and preservation is provided on **Table 1**. Groundwater samples will be stored on ice and submitted to ARA for analysis.

7.4 TEST PIT EXCAVATION & SOIL SAMPLING

Soil will be removed from the test pits by an excavator and stockpiled adjacent to the test pit on polyethylene sheeting to prevent surface contamination of the adjoining area. Test pits will be excavated until native soil is encountered unless the maximum extent of the excavator is encountered first. The sidewalls of the test pit will be logged in the field by a Credere geologist and the thickness of the fill will be measured.

Two soil samples will be collected from each of three proposed test pits. Soil will be collected from the entire observed fill interval (i.e. a variable thickness) and from the two foot interval of first encountered native soil below the fill. Soil from each interval to be sampled will be

collected into a decontaminated stainless steel bowl and homogenized. Soil will be transferred to laboratory provided glassware and submitted to ARA for analysis in accordance with **Table 1**. The first encountered native material samples will be placed on hold pending the results of the above fill material samples. If results of the fill material analyses exceed their applicable NHDES SRSs, then the associated native material sample will be authorized for analysis in an effort to vertically delineate the extent of impacts associated with the fill.

After sampling, soil will be returned to the excavation in the approximate order it was removed. Soil will be compacted with the excavator bucket in 1-foot lifts. The surface will be finished such that no hazards are protruding from the ground (e.g. sheets of metals, large metal scraps).

7.5 CONCRETE SAMPLING

Concrete samples will be collected from three areas of observed staining (CA-CC-1 through CA-CC-3). A hammer drill with a 1-inch carbide drill bit will be used to pulverize the concrete for sampling. A half inch depth should be measured and marked on the drill bit. An aluminum foil mat with a 1-inch diameter hole will be placed over the location to be sampled. A 0.5-inch depth hole will be advanced through the aluminum foil hole using the hammer drill. Concrete dust will be collected in a glass container to be analyzed for PCBs. Multiple 0.5-inch holes in adjacent locations may be advanced to obtain adequate volume for sample analysis. Additionally, a stainless steel scoopula or bulb syringe may be used to extract concrete dust from the 0.5-inch hole. Dedicated sampling tools will be used at each location to prevent cross contamination.

7.6 ASBESTOS SAMPLING

Any sampling of suspect ACM at the Site will be conducted by a New Hampshire Certified Asbestos Inspector and in accordance with Chapter 130. Three discrete bulk samples will be collected from each type of homogenous suspect ACM (25 suspected ACMs sampled in triplicate for a total of 75 samples). Minor destructive sampling may be required. Samples will be analyzed by EMSL Analytical, Inc. (EMSL) of South Portland, Maine, using Polarized Light Microscopy (PLM) according to EPA Method 600/R-93/116.

7.7 PCB-CONTAINING BUILDING MATERIAL SAMPLING

The buildings will be surveyed to locate the materials that in Credere's experience are more likely to contain concentrations of PCBs exceeding the PCB bulk waste criteria. Twelve (12) samples (CA-PCB-1 through CA-PCB-12) will be collected using dedicated disposable tools and placed in laboratory provided glassware. Samples will be submitted to ARA for analysis of PCBs by EPA Method 8082 using soxhlet extraction method 3540C.

7.8 LBP SCREENING

Painted surfaces will be screened for the presence of lead in the form of LBP using an XRF meter. Each accessible color and type of paint throughout the Site building will be screened. Paints with screening concentrations of lead exceeding 1.0 mg/cm^2 will be considered LBP. If the white paint (or sub-layers) on the exterior of the former Armory is identified as LBP, soil around the perimeter of the building will be screened to assess if flaking or chipping paint has

impacted Site soils. Soil will be screened in 10-foot intervals around the perimeter of the Site building with a focus on areas of the building with the most significant chipping paint.

XRF precision will be assessed by performing precision measurements at one soil screening location. A 7 time replicate will be performed and the relative standard deviation (RSD) will be calculated (RSD = (SD/mean concentrations) x 100). RSD should not exceed 20 percent. If LBP screening results are within the instrument error range (0.6 to 1.1 mg/cm^2), the presumed LBP coated surface will be screened in triplicate at three adjoining locations on the same surface to assure similar results. If the RSD exceeds the relative percent difference, the XRF will be recalibrated and locations selected for analytical samples will be rescreened to confirm the elevated concentration. Additionally, if the precision test fails, the soil analytical results will be relied upon for future risk assessment and/or remediation planning. An SOP for use of an XRF is included in **Appendix B**.

7.9 LBP PERIMETER SOIL SAMPLING

If soil is found to be impacted by LBP chips (See **Section 6.10**), 12 soil samples will be collected from 6 locations (CA-SS-LBP-1 through CA-SS-LBP-6). Samples will be collected using a hand auger. Soil from 0 to 0.5-feet will be collected by hand auger, placed in a decontaminated stainless steel bowl, and homogenized. Soil will then be transferred to laboratory provided glassware and submitted to ARA to be analyzed for lead by EPA Method 6010C. Soil from 0.5-1-foot will be collected by the same method and placed on hold pending the results of the 0 to 0.5-foot sample. If results of the 0 to 0.5-foot sample exceed the NHDES lead SRS of 400 mg/kg, the associated 0.5 to 1-foot sample will be authorized for analysis.

7.10 UNIVERSAL/HAZARDOUS WASTE INVENTORY

Materials as described in **Section 6.12** will be manually counted to inventory what will require disposal as universal or hazardous wastes prior to building demolition and preparation of the Site for residential use.

8. REGULATORY STANDARDS

Sample results will be compared to the applicable state and/or federal standards/guidelines described below. **Appendix A** includes Analytical Sensitivity and Project Criteria Tables for the Site, which compares regulatory standards for each contaminant to the analytical limits of the laboratory method used.

8.1 SOIL ANALYTICAL RESULTS

Soil analytical results will be compared to the New Hampshire Code of Administrative Rules Chapter Env-Or 600 – Contaminated Site Management Table 600-2 SRSs.

8.2 GROUNDWATER ANALYTICAL RESULTS

Groundwater analytical results will be compared to the New Hampshire Code of Administrative Rules Chapter Env-Or 600 – Contaminated Site Management Table 600-1 Ambient Groundwater Quality Standards (AGQS) and Table 2, Method 1 Groundwater Standards as revised in February 2013.

8.3 CONCRETE ANALYTICAL RESULTS

PCB results from the three concrete samples will be compared to the remediation waste cleanup guidelines of 1 or 25 mg/kg for low or high occupancy areas, respectively, based on the future reuse of each area sampled in accordance with 40 CFR 761.61.

8.4 ASBESTOS RESULTS

Laboratory analytical results for asbestos bulk samples will be compared to the 1% limit specified in Chapter Env-A 1800 – Asbestos Management and Control.

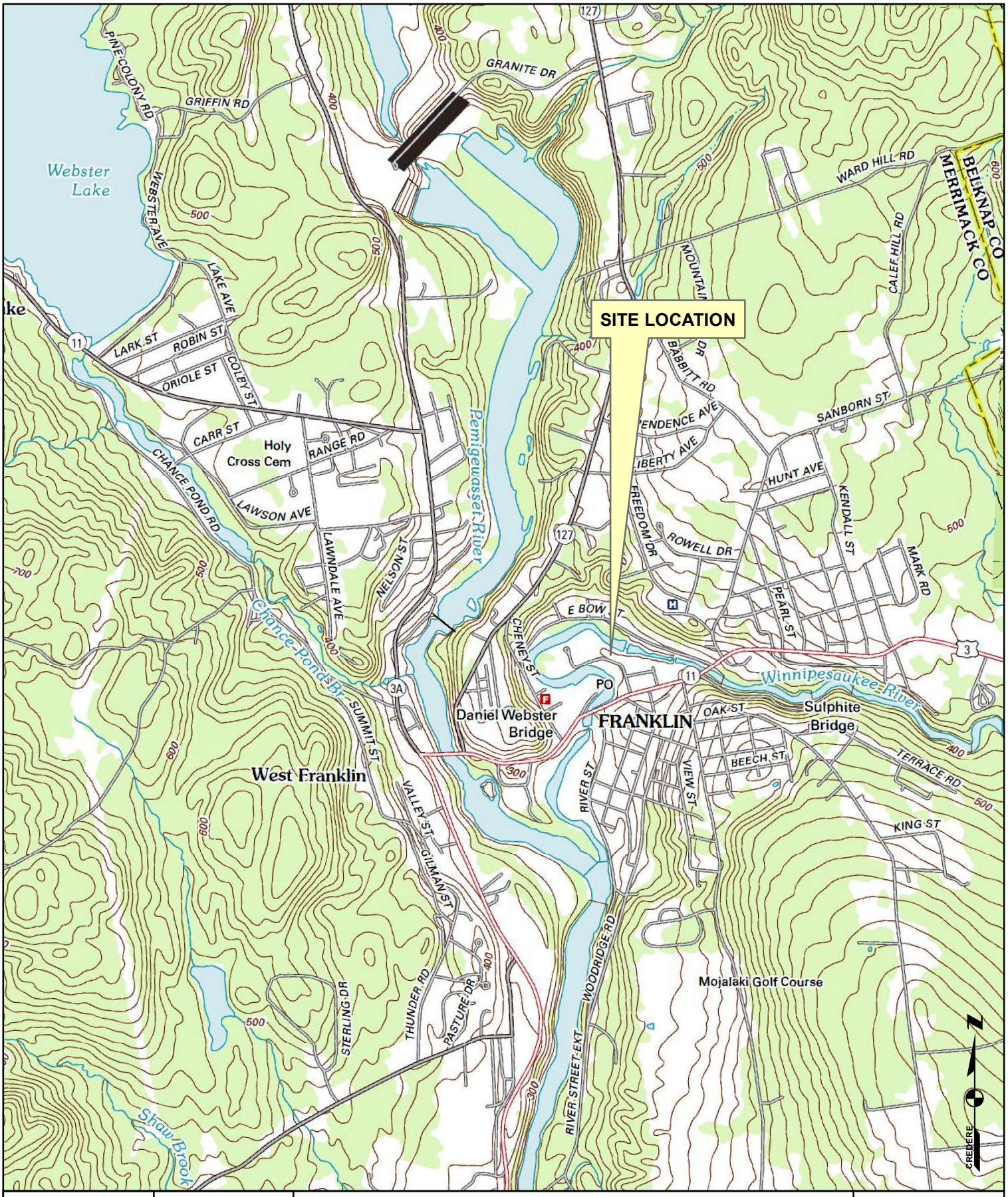
8.5 PCBS IN BUILDING MATERIALS RESULTS

PCB containing building materials will be compared to the 40 CFR 761.3 definition of PCB bulk product waste. Results will be compared to the 50 mg/kg threshold criteria.

8.6 LBP SCREENING RESULTS

Screening results will be compared to the 1.0 mg/cm^2 HUD Guideline and Chapter 130.

FIGURES



DRAWN BY: **SWM**	DATE: **7/15/2014**
CHECKED BY: **ASD**	PROJECT: **14001247**

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WESTBROOK, MAINE
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FIGURE 1
SITE LOCATION PLAN

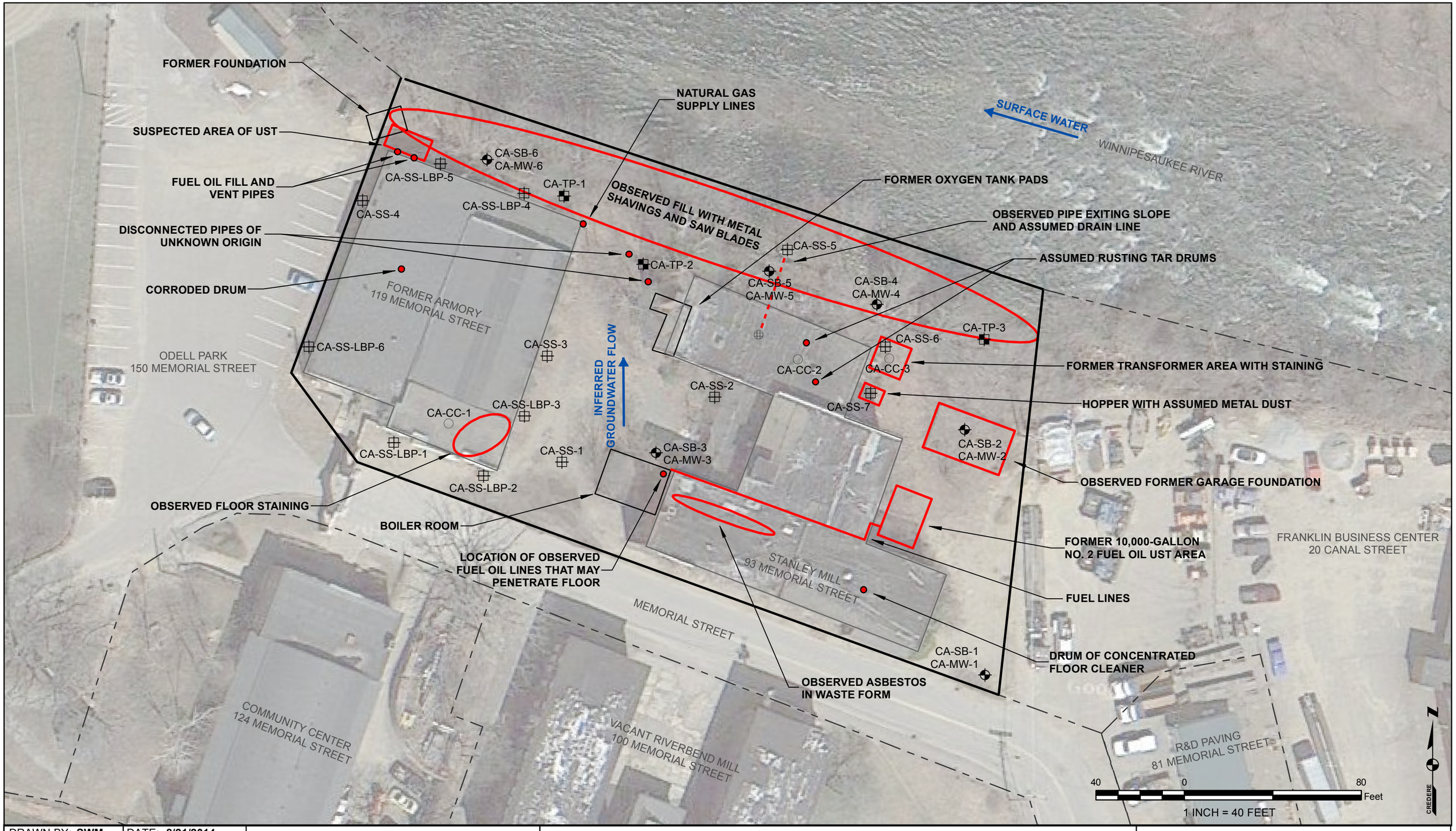
FERRARI REALTY TRUST PROPERTY
93-119 MEMORIAL STREET
FRANKLIN, NEW HAMPSHIRE 03235

1,000 0 2,000 Feet
1 inch = 2,000 feet.



Data Source: USGS Quadrangles: Franklin, New Hampshire 7.5 minute series 2012

T:\Data\NH\Town\Franklin\14001247-Ferrari Mill



DRAWN BY: **SWM**	DATE: **8/21/2014**
CHECKED BY: **ASD**	PROJECT: **14001247**

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FIGURE 2
SAMPLE LOCATION PLAN

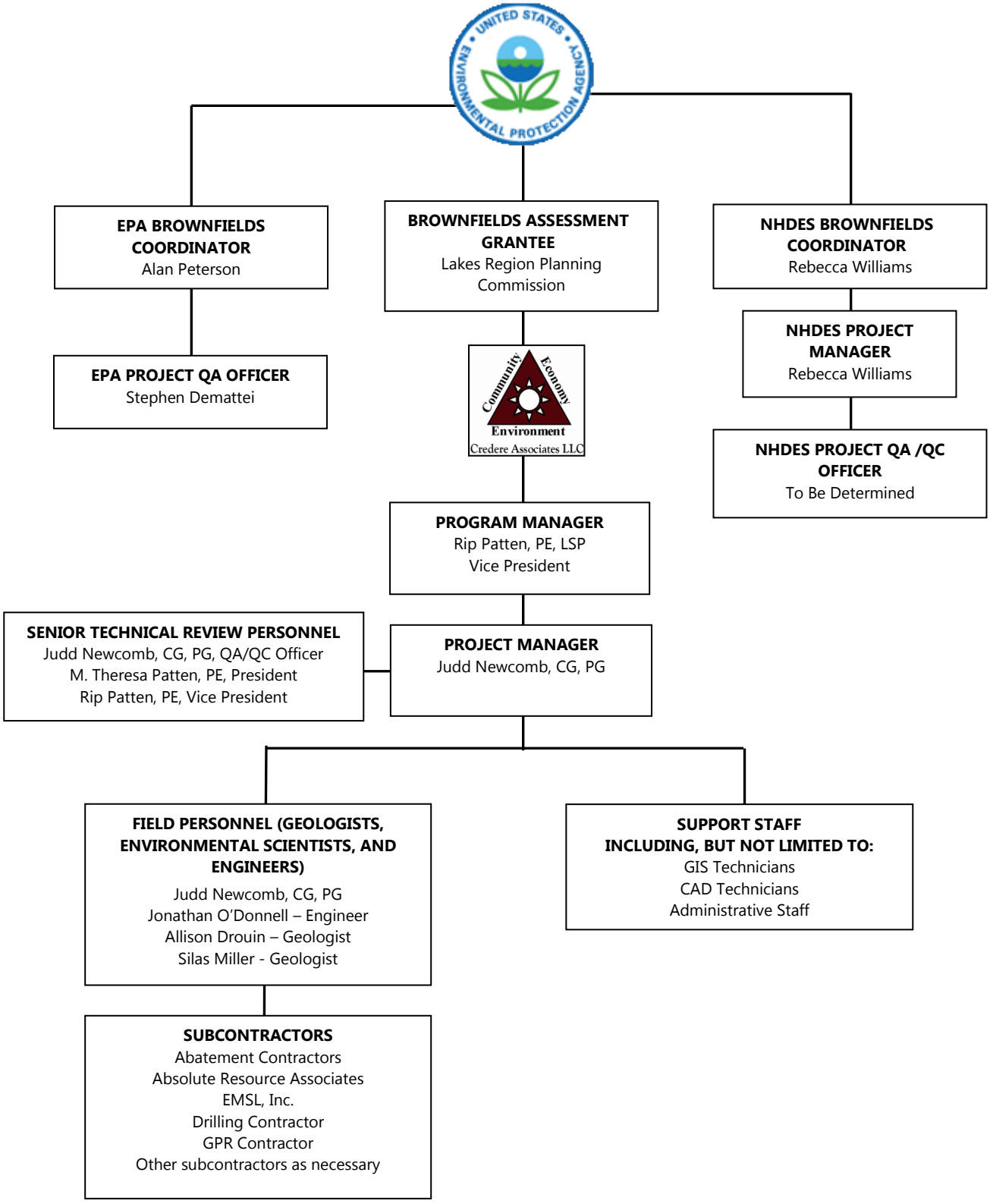
FERRARI REALTY TRUST PROPERTY
93-119 MEMORIAL STREET
FRANKLIN, NEW HAMPSHIRE 03235

- AREA OF POTENTIAL CONCERN
- POINT OF POTENTIAL CONCERN
- FLOOR DRAIN
- TEST PIT
- SOIL BORING AND MONITORING WELL
- SOIL SAMPLE
- CONCRETE SAMPLE
- INFERRED LINES
- SITE BOUNDARY
- PARCEL BOUNDARY
- BUILDING BOUNDARY

NOTES:
1. EXISTING CONDITIONS FEATURES SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE BASED ON INFORMATION OBTAINED FROM THE CITY OF FRANKLIN TAX MAP 117, 2013 ORTHO IMAGES AND THE SITE RECONNAISSANCE PERFORMED ON JULY 9, 2014.

T:\Data\NH\Town\Franklin\14001247\Ferrari Mill

Figure 3 – Project Organization Flow Chart



TABLES

Table 1: Sample Reference Table
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Media to be Collected	Proposed Sample IDs[2]	Sample Type	Sample Rational	Sample Depth (feet bgs)	Field Analysis/ Observations	No. of Samples for Analysis	QA/QC Samples	Analytical Method	Sample Container Information & Preservative (per location)*,[1]	Laboratory To be Used
Soil	CA-SB-1	Surface soil	-To assess surface soil impacts for historical use of the Site (REC #8) and document surface soil condition in support of Site reuse	0-2	PID Screening Visual Olfactory	1	1 Field Duplicates 1 MS/MSD (metals only)	SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2- 8 oz amber glass	Absolute Resource Associates, Portsmouth, NH
	CA-SB-2	Surface soil	-To assess soil in the former garage where oil and hazardous materials were reportedly stored (REC #8)	0-2		1		SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2- 8 oz amber glass	
		Subsurface soil	-To assess soil beneath the former garage where oil and hazardous materials were reportedly stored (REC #8)	Area of greatest observed contamination or groundwater interface		1		VOC (EPA Method 8260) SVOCs (EPA Method 8270D) PCBs (EPA Method 8082) Priority pollutant metals (EPA Method 6010C & 7471B)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
	CA-SB-3	Subsurface soil	-To assess a possible release from fuel oil supply lines downgradient of the boiler room (REC #7) and Site impacts for historical use (REC #8)	Area of greatest observed contamination or groundwater interface		1		VOC (EPA Method 8260) SVOCs (EPA Method 8270D) TPH (EPA Method 8015C) Priority pollutant metals (EPA Method 6010C & 7471B)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
	CA-SB-4[4]	Subsurface soil	-To assess the industrial fill material (REC #1)	Observed fill interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
		Subsurface soil	-To assess the leaching of contaminants to native material beneath the fill or delineate the extent of contamination associated with the industrial waste fill (REC #1)	First encountered native material beneath the industrial waste fill[3]		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
		Subsurface soil	-To assess possible contamination migrating downgradient of the Stanley Mill (REC #4, REC #6, REC #8)	Area of greatest observed contamination or groundwater interface		1		VOC (EPA Method 8260) SVOCs (EPA Method 8270D)	1 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
	CA-SB-5[4]	Subsurface soil	-To assess the industrial fill material (REC #1)	Observed fill interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
		Subsurface soil	-To assess the leaching of contaminants to native material beneath the fill or delineate the extent of contamination associated with the industrial waste fill (REC #1)	First encountered native material beneath the industrial waste fill[3]		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
		Subsurface soil	-To assess possible contamination migrating downgradient of the Stanley Mill and the floor drain (REC #8)	Area of greatest observed contamination or groundwater interface		1		VOC (EPA Method 8260) SVOCs (EPA Method 8270D)	1 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
	CA-SB-6[4]	Subsurface soil	-To assess the industrial fill material (REC #1)	Observed fill interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
		Subsurface soil	-To assess the leaching of contaminants to native material beneath the fill or delineate the extent of contamination associated with the industrial waste fill (REC #1)	First encountered native material beneath the industrial waste fill[3]		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
		Subsurface soil	-To assess possible contamination migrating downgradient of the former Armory (REC #8)	Area of greatest observed contamination or groundwater interface		1		VOC (EPA Method 8260) SVOCs (EPA Method 8270D)	1 - 8 oz amber glass 1 - 40 mL VOA (methanol)	

Table 1: Sample Reference Table
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Media to be Collected	Proposed Sample IDs[2]	Sample Type	Sample Rational	Sample Depth (feet bgs)	Field Analysis/ Observations	No. of Samples for Analysis	QA/QC Samples	Analytical Method	Sample Container Information & Preservative (per location)*,[1]	Laboratory To be Used
Soil	CA-TP-1	Subsurface soil	-To assess the industrial fill material (REC #1)	Observed fill interval	PID Screening Visual Olfactory	1	1 Field Duplicates 1 MS/MSD (metals only)	VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	Absolute Resource Associates, Portsmouth, NH
		Subsurface soil	-To assess the leaching of contaminants to native material beneath the fill or delineate the extent of contamination associated with the industrial waste fill (REC #1)	First encountered native material beneath the industrial waste fill[3]		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
	CA-TP-2	Subsurface soil	-To assess the industrial fill material (REC #1)	Observed fill interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
		Subsurface soil	-To assess the leaching of contaminants to native material beneath the fill or delineate the extent of contamination associated with the industrial waste fill (REC #1)	First encountered native material beneath the industrial waste fill[3]		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
	CA-TP-3	Subsurface soil	-To assess the industrial fill material (REC #1)	Observed fill interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
		Subsurface soil	-To assess the leaching of contaminants to native material beneath the fill or delineate the extent of contamination associated with the industrial waste fill (REC #1)	First encountered native material beneath the industrial waste fill[3]		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass 1 - 40 mL VOA (methanol)	
	CA-SS-1	Surface soil	-To assess surface soil impacts from historical use of the Site (REC #8) and document surface soil condition in support of Site reuse	0-2		1		SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass	
	CA-SS-2	Surface soil	-To assess surface soil impacts near former loading dock (REC #8) and document surface soil condition in support of Site reuse	0-2		1				
	CA-SS-3	Surface Soil	-To assess surface soil impacts in areas of material handling (REC #8), assess possible impacts from LBP on the former Armory (Environmental Finding #1), and document surface soil condition in support of Site reuse	0-2		1				
	CA-SS-4	Surface Soil		0-2		1				

Table 1: Sample Reference Table
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Media to be Collected	Proposed Sample IDs[2]	Sample Type	Sample Rational	Sample Depth (feet bgs)	Field Analysis/ Observations	No. of Samples for Analysis	QA/QC Samples	Analytical Method	Sample Container Information & Preservative (per location)*,[1]	Laboratory To be Used
Soil	CA-SS-5	Surface Soil	-To assess the discharge location of the floor drain from the Stanley Mill basement where materials were stored (REC #8)	0-2	PID Screening Visual Olfactory	1	1 Field duplicate 1 MS/MSD	SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass	Absolute Resource Associates, Portsmouth, NH
	CA-SS-6	Surface Soil	-To assess surface soil surrounding the stained former transformer pad (REC #4)	0-2		1		PCBs (EPA Method 8082)	1 - 8 oz clear glass	
	CA-SS-7	Surface soil	-To assess the metal dust discharged to surface soil in the area of the hopper (REC #6)	0-2		1		SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7471B) PCBs (EPA Method 8082)	2 - 8 oz amber glass	
	CA-SS-LBP-1 through CA-SS-LBP-6	Surface soil	Samples will be collected if the exterior of the Site building is found to contain LBP and if soil surrounding the Site building is screened to be impacted by lead. Samples will be biased towards the locations of highest XRF screening values to assess impacts to soil from possible chipping of LBP from the Site building (Environmental Finding #1)	0-0.5	XRF Screening	6		Lead (EPA Method 6010C)	1 - 8 oz clear glass	
				0.5-1		6				
Groundwater	CA-MW-1		-To document upgradient groundwater conditions at the Site	Screened interval	pH, ORP, DO, specific conductivity, turbidity, temperature	1	1 Field duplicate 1 MS/MSD	VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7470A)	2 - 1L amber jars 1 - 40 mL VOAs (HCl) 1 - 500 mL poly (HNO3)	
	CA-MW-2		-To assess groundwater beneath the former garage where oil and hazardous materials were reportedly stored (REC #8)	Screened interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7470A)	2 - 1L amber jars 1 - 40 mL VOAs (HCl) 1 - 500 mL poly (HNO3)	
	CA-MW-3		-To assess a possible release from fuel oil supply lines downgradient of the boiler room (REC #7) and groundwater impacts from historical Site use (REC #8)	Screened interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7470A)	2 - 1L amber jars 1 - 40 mL VOAs (HCl) 1 - 500 mL poly (HNO3)	
	CA-MW-4		-To assess groundwater downgradient of the Stanley Mill and within the industrial waste fill that may be entering the Winnipesaukee River (REC #1, REC #4, REC #6, REC #8)	Screened interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7470A)	2 - 1L amber jars 1 - 40 mL VOAs (HCl) 1 - 500 mL poly (HNO3)	
	CA-MW-5		-To assess groundwater downgradient of the Stanley Mill that may have been impacted by discharges to the Stanley Mill floor drain (REC #8)	Screened interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7470A)	2 - 1L amber jars 1 - 40 mL VOAs (HCl) 1 - 500 mL poly (HNO3)	
	CA-MW-6		-To assess groundwater downgradient of the former Armory and within the industrial waste fill that may be entering the Winnipesaukee River (REC #1 and REC #8)	Screened interval		1		VOCs (EPA Method 8260B) SVOCs (EPA Method 8270D) Priority pollutant metals (EPA Method 6010C & 7470A)	2 - 1L amber jars 1 - 40 mL VOAs (HCl) 1 - 500 mL poly (HNO3)	

Table 1: Sample Reference Table
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Media to be Collected	Proposed Sample IDs[2]	Sample Type	Sample Rational	Sample Depth (feet bgs)	Field Analysis/ Observations	No. of Samples for Analysis	QA/QC Samples	Analytical Method	Sample Container Information & Preservative (per location)*,[1]	Laboratory To be Used
Building Materials	CA-CC-1	Concrete	-To assess the area of staining at the southern end of the former Armory building (REC #8)	0 to 0.5-inches	Visual	1	2 Field Duplicates (1 caulk/sealant/ adhesive type material and 1 paint)	PCBs (EPA Method 8082 with soxhlet extraction)	1 - 4 oz glass	Absolute Resource Associates, Portsmouth, NH
	CA-CC-2	Concrete	-To assess the area of staining surround the turbine in the basement of the Site building (REC #8)			1				
	CA-CC-3	Concrete	-To assess the area of staining observed on the former transformer pad near the northeast corner of the Stanley Mill (REC #4)			1				
	CA-PCB-1 through CA-PCB-12	Building materials	-To assess for the presence of PCB containing building materials in the Site buildings (Environmental Finding #1). Data will be used to properly manage building materials during Site renovations.	NA		12				
Asbestos	CA-PACM-1(A-C) through CA-PACM-25(A-C)	Bulk Materials	-Three samples will be collected from each suspected asbestos-containing material (REC #3, Environmental Finding #1)	NA	Visual	25	Triplicate Sampling	Polarized Light Microscopy EPA 600/R-93/116	Plastic zipper bags	EMSL Analytical, Inc., South Portland, ME

Notes:

1 - All samples will be chilled to 4°C (+/- 2°C) and submitted to the laboratory on ice.

2 - If contamination is identified in the UST excavation, CA-UST-1 and CA-UST-2 will be collected from the areas of greatest PID response. If no contamination is encountered one composite sample (CA-CompUST-1) consisting of aliquots from the four sidewalls and base of the excavation will be collected. If no UST is encountered, one grab sample will be collected from the end point of the piping (CA-Pipe-1).

3 - Samples will be placed on hold pending the results of the above fill material samples. If results of the fill material samples exceed applicable regulatory standards, the associated native sample will be authorized for analysis in an effort to delineate the extent of fill.

4 - If the first encountered native material is within the same interval as the water table and no evidence of contamination is identified, or within the same interval as the area of greatest observed contamination, only two samples will collected: duplicate samples will not be collected from the same interval.

* - Additional details regarding analytical method, sample preservation, sample volume, and hold times can be found in Appendix D of Credere's Generic Maine QAPP.

"greatest observed contamination" shall be defined as the interval of highest PID response, visual staining, or sheens.

MS/MSD - Matrix Spike/Matrix Spike Duplicate
NA - not applicable
bgs - below ground surface
DO - Dissolved Oxygen
ORP - Oxidation-reduction potential
SVOCs - semi-volatile organic compounds
VOC - volatile organic compounds
Priority pollutant metals: Sb, As, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Ti, Zn
PCB - polychlorinated biphenyl
XRF-X-ray fluorescence meter

Table 2: Standard Operating Procedure (SOP) Reference Table
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire

Field SOPs

SOP	SOP Description	Date
Credere-001	SOP for Field Measurement of Groundwater Level	March 2008
Credere-002	SOP for Geoprobe Sampling	38991
Credere-003	SOP for Test Pit Sampling	October 2006
Credere-004	SOP for Log Book Entries	October 2006
Credere-007	SOP for EM and GPR Surveys (SOP by: Northeast Geophysical Services)	October 2006
Credere-009	SOPs for Typical Asbestos Bulk and Air Sampling (SOP by: Environmental Safety & Hygiene Associates, Inc.)	NA
HWRB-1	Water Level Measurements, Revision 2	December 2011
HWRB-2	Calculation of Purge Volume, Revision 1	January 2012
HWRB-9	Low Flow Groundwater Purging and Sampling, Revision 5	January 2012
HWRB-11	Soil Sampling, Revision 1	January 2012
HWRB-12	Jar headspace Technique for Field Screening Soil Samples, Revision 2	January 2012
HWRB-15	Decontamination, Revision 3	January 2012
HWRB-17	Calibration of Field Instruments, Revision 4	January 2012
HWRB-18	Chain of Custody, Sample Handling & Shipping, Revision 2	January 2012
RWM-DR-025	Protocol for Collecting Data Using an Innov-X Field Portable X-Ray Fluorescence Spectrometer for Certain metals in Solid Media (Included in Appendix B)	Febraury 29, 2009
EPASOP#2048	Monitoring Well Installation	March 18, 1996
EIASOP_POROUSSAMPLING1	Standard Operating Procedure for Sampling Porous Surfaces for PCBs	May 5, 2011
EIASOP_SOILSAMPLING2	Standard Operating Procedure for Soil, Sediment and Solid Waste Sampling	Rev #2, February 13, 2004
EPA 600/R-93/116	Method for the Determination of Asbestos in Bulk Building Materials	July 1993
EQAGUI-DO	Quality Assurance Bulletin for Calibration of Dissolved Oxygen Meters	February 2006
EQASOP_FieldCalibrat	Standard Operating Procedure Calibration of Field Instruments	Rev #2, January 19, 2010
EQASOP-GW 001	Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells	Rev #3, January 19, 2010

Laboratory SOPs

SOP	SOP Description	Date
EMSL: PLM SOP	Polarized Light Microscopy	November 12, 2010
RL-4	Analysis of Polychlorinated Biphenyls in Soil and Water Extracts by EPA 8082	January 2013
RL-5	Trace Metals by ICP EPA 200.7/6010C	January 2013
RL-6	Mercury Analysis by Cold Vapor Methods 245.1, 7470A/7471B	January 2013
RL-7	Analysis of Diesel Range Organics in Extracts of Soil and Water by Method 8015 and Method 8100	August 2011
RL-9	Analysis of VOCs in Water and Solid Samples by EPA Method 8260B	June 2012
RL-12	Preparation and analysis of PAHs, Base/Neutrals, and Acids by EPA Method 8270D	August 2011
RL-28	Soxhlet Extraction by EPA method 3540C	August 2011

APPENDIX A

Analytical Sensitivity and Project Criteria Tables

As of the date of this SSQAPP Addendum, the current state and/or federal standards have been reviewed for accuracy.

VOCs in Soil by EPA Method 8260C		
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standard[1]**
1,1,1,2-tetrachloroethane	0.1	0.8
1,1,1-trichloroethane	0.1	78
1,1,2,2-tetrachloroethane	0.1	4
1,1,2-trichloroethane	0.1	0.1
1,1-dichloroethane	0.1	3
1,1-dichloroethe	0.1	2
1,1-dichloropropene	0.1	NE
1,2,3-trichlorobenzene	0.1	4.9
1,2,3-trichloropropane	0.1	0.2
1,2,4-trichlorobenzene	0.1	19
1,2,4-trimethylbenzene	0.1	130
1,2-dibromo-3-chloropropane (DBCP)	0.1	0.1
1,2-dibromoethane (EDB)	0.1	0.1
1,2-dichlorobenzene	0.1	88
1,2-dichloroethane	0.1	0.1
1,2-dichloropropane	0.1	0.1
1,3,5-trichlorobenzene	0.1	340
1,3,5-trimethylbenzene	0.1	96
1,3-dichlorobenzene	0.1	150
1,3-dichloropropane	0.1	160*
1,4-dichlorobenzene	0.1	7
1,4-dioxane	2	5
2,2-dichloropropane	0.1	NE
2-butanone (MEK)	0.3	51
2-chlorotoluene	0.1	15
2-hexanone	0.5	20
4-chlorotoluene	0.1	2,400
4-isopropyltoluene	0.1	3,400
4-methyl-2-pentanone (MIBK)	0.4	29
acetone	2	75
benzene	0.1	0.3
bromobenzene	0.1	6.2
bromochloromethane	0.1	8.3
bromodichloromethane	0.1	0.1
bromoform	0.1	0.1
bromomethane	0.2	0.3
carbon disulfide	0.1	460
carbon tetrachloride	0.1	12
chlorobenzene	0.1	28
chloroethane	0.1	NE
chloroform	0.1	0.73
chloromethane	0.1	3
cis-1,2-dichloroethene	0.1	NE
cis-1,3-dichloropropene	0.1	NE
dibromochloromethane	0.1	1
dibromomethane	0.1	25*
dichlorodifluoromethane	0.1	1,000
diethyl ether	0.1	3,900
diisopropyl ether (DIPE)	0.1	10
ethyl t-butyl ether (ETBE)	0.1	0.7

VOCs in Soil by EPA Method 8260C		
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standard[1]**
ethylbenzene	0.1	140
hexachlorobutadiene	0.1	7
isopropylbenzene	0.1	330
m&p-xylenes	0.1	500**
methyl t-butyl ether (MTBE)	0.1	0.2
methylene chloride	0.1	0.1
naphthalene	0.1	5
n-butylbenzene	0.1	110
n-propylbenzene	0.1	85
o-xylene	0.1	500**
sec-butylbenzene	0.1	130
styrene	0.1	17
t-amyl-methyl ether (TAME)	0.1	3
t-butanol (TBA)	2	2
tert-butylbenzene	0.1	100
tetrachloroethene (ethylene, PCE)	0.1	2
tetrahydrofuran (THF)	0.5	200
toluene	0.1	100
trans-1,2-dichloroethene (ethylene)	0.1	9
trans-1,3-dichloropropene	0.1	NE
trichloroethene (TCE)	0.1	0.8
trichlorofluoromethane	0.1	1,000
vinyl chloride	0.1	1

Notes:

All values are in mg/kg.

PQLs from Absolute Resource Associates of Portsmouth, New Hampshire

1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Soil Remediation Standards and Appendix E, Method 1 Soil Standards from NHDES Risk Characterization and Management Policy, unless marked with an *.

* - United States Environmental Protection Agency Regions 3, 6, and 9. (accessed May 2014). Regional Screening Levels for Chemical Contaminants at Superfund Sites (Residential Soil). http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm

** NDHES mixed isomer standard.

NE = Regulatory guideline not established

VOCs in Groundwater by EPA Method 8260C			
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standards[1]**	
		AGQS and GW-1	**GW-2**
1,1,1,2-tetrachloroethane	2	70	NE
1,1,1-trichloroethane	2	200	27,000
1,1,2,2-tetrachloroethane	2	2	120
1,1,2-trichloroethane	2	5	20
1,1-dichloroethane	2	81	130
1,1-dichloroethene	1	7	630
1,1-dichloropropene	2	NE	NE
1,2,3-trichlorobenzene	2	0.7*	NE
1,2,3-trichloropropane	2	40	NE
1,2,4-trichlorobenzene	2	70	150
1,2,4-trimethylbenzene	2	330	1,300
1,2-dibromo-3-chloropropane (DBCP)	2	0.2	NE
1,2-dibromoethane (EDB)	2	0.05	NE
1,2-dichlorobenzene	2	600	14,000
1,2-dichloroethane	2	5	50
1,2-dichloropropane	2	5	50
1,3,5-trichlorobenzene	2	40	NE
1,3,5-trimethylbenzene	2	330	NE
1,3-dichlorobenzene	2	600	NE
1,3-dichloropropane	2	37*	NE
1,4-dichlorobenzene	2	75	80
1,4-dioxane	50	3	NE
2,2-dichloropropane	2	NE	NE
2-butanone (MEK)	10	4,000	50,000
2-chlorotoluene	2	100	NE
2-hexanone	10	3.8*	NE
4-chlorotoluene	2	25*	NE
4-isopropyltoluene	2	260	NE
4-methyl-2-pentanone (MIBK)	10	2,000	NE
acetone	50	6,000	NE
benzene	2	5	2,900
bromobenzene	2	6,2	NE
bromochloromethane	2	8.3	NE
bromodichloromethane	0.6	0.6	NE
bromoform	2	4	2,800
bromomethane	2	10	10
carbon disulfide	2	70	NE
carbon tetrachloride	2	0.2	10
chlorobenzene	2	7.8	1,500
chloroethane	2	NE	NE
chloroform	2	70	70
chloromethane	2	30	NE
cis-1,2-dichloroethene	2	70	NE
cis-1,3-dichloropropene	2	NE	NE
dibromochloromethane	2	60	NE

VOCs in Groundwater by EPA Method 8260C

Analyte	Laboratory Practical	Regulatory Standards[1]	
dibromomethane	2	0.8	NE
dichlorodifluoromethane	2	1,000	NE
diethyl ether	5	1,400	NE
ethyl t-butyl ether (ETBE)	2	40	NE
ethylbenzene	2	700	1,500
hexachlorobutadiene	0.5	0.5	NE
diisopropyl ether (DIPE)	2	120	NE
isopropylbenzene	2	800	NE
m&p-xylenes	2	10,000**	17,000
methyl t-butyl ether (MTBE)	2	13	2,600
methylene chloride	5	5	24,000
naphthalene	5	20	1,700
n-butylbenzene	2	260	NE
n-propylbenzene	2	260	NE
o-xylene	2	10,000**	17,000
sec-butylbenzene	2	260	NE
styrene	2	100	43,00
t-amyl-methyl ether (TAME)	2	140	NE
t-butanol (TBA)	30	40	NE
tert-butylbenzene	2	260	NE
tetrachloroethene	2	5	240
tetrahydrofuran (THF)	10	154	NE
toluene	2	1,000	50,000
trans-1,2-dichloroethene	2	100	560
trans-1,3-dichloropropene	2	NE	NE
trichloroethene	2	5	20
trichlorofluoromethane	2	2,000	NE
vinyl chloride	2	2	4

Notes:

All values are in ug/L.

PQLs from Absolute Resource Associates of Portsmouth, New Hampshire

1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Ambient Groundwater Quality Standards and Table 2, Method 1 Groundwater Standards for NHDES Risk Characterization and Management Policy (Section. 7.4(4)), unless marked with an *.

* - United States Environmental Protection Agency Regions 3, 6, and 9. (accessed May 2014). Regional Screening Levels for Chemical Contaminants at Superfund Sites. http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm

** - NHDES mixed isomer NOTE

NHDES mixed isomer standard.

NE = Regulatory guideline not established.

TPH in Solids by EPA Method 8100		
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standard[1]**
Total Petroleum Hydrocarbons	200	10,000

Notes:
All values are in mg/kg.
PQLs from Absolute Resource Associates of Portsmouth, New Hampshire
1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Soil Remediation Standards and Appendix E, Method 1 Soil Standards from NHDES Risk Characterization and Management Policy, unless marked with an *.

SVOC in Soil by EPA Method 8270D		
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standard[1]**
1,2,4-trichlorobenzene	0.5	19
1,2-dichlorobenzene	0.2	88
1,3-dichlorobenzene	0.2	150
1,4-dichlorobenzene	0.2	7
2,4,5-trichlorophenol	0.2	24
2,4,6-trichlorophenol	0.2	0.7
2,4-dichlorophenol	0.5	0.7
2,4-dimethylphenol	0.2	4
2,4-dinitrophenol	5	0.7
2,4-dinitrotoluene	0.2	0.7
2,6-dinitrotoluene	0.2	0.36
2-chloronaphthalene	0.5	NE
2-chlorophenol	0.5	2
2-methylnaphthalene	0.05	96
2-methylphenol	0.2	0.9
2-nitroaniline	0.2	61
2-nitrophenol	0.2	NE
3,3'-dichlorobenzidine	3	0.7
3-nitroaniline	0.2	NE
4,6-dinitro-2-methylphenol	2	4.9*
4-bromophenyl phenyl ether	0.2	NE
4-chloro-3-methylphenol	0.2	6,100*
4-chloroaniline	0.2	1.3
4-chlorophenyl phenyl ether	0.5	NE
4-methylphenol	0.2	0.7
4-nitroaniline	0.5	25
4-nitrophenol	2	NE
acenaphthene	0.05	340
acenaphthylene	0.05	490
aniline	0.2	43
anthracene	0.05	1000
azobenzene	0.2	5,6
benzidine	3	0.004
benzo(a)anthracene	0.05	1
benzo(a)pyrene	0.05	0.7
benzo(b)fluoranthene	0.05	1
benzo(g,h,i)perylene	0.05	960
benzo(k)fluoranthene	0.05	12
benzoic acid	5	350
benzyl alcohol	0.2	620
bis(2-chloroethoxy)methane	0.2	18
bis(2-chloroethyl)ether	0.2	0.7
bis(2-chloroisopropyl) ether	0.2	5
bis(2-ethylhexyl)phthalate	0.5	72
butyl benzyl phthalate	0.5	280
carbazole	0.2	NE
chrysene	0.05	120
dibenzo(a,h)anthracene	0.05	0.7
dibenzofuran	0.05	0.72

SVOC in Soil by EPA Method 8270D

Analyte	Laboratory Practical Quantitation Limit	Regulatory Standard[1]
diethyl phthalate	0.5	1000
dimethylphthalate	0.5	700
di-n-butylphthalate	0.5	2,600
di-n-octyl phthalate	0.5	NE
fluoranthene	0.05	960
fluorene	0.05	77
hexachlorobenzene	0.2	0.8
hexachlorobutadiene	0.2	7
hexachlorocyclopentadiene	1	200
hexachloroethane	0.2	0.7
indeno(1,2,3-cd)pyrene	0.05	1
isophorone	0.5	1
naphthalene	0.05	5
nitrobenzene	0.2	5.1
N-nitrosodimethylamine	0.2	0.024
N-nitroso-di-N-propylamine	0.2	0.076
N-nitrosodiphenylamine	0.2	0.19
pentachlorophenol	1	3
phenanthrene	0.05	960
phenol	0.2	56
pyrene	0.05	720

Notes:

All values are in mg/kg.

PQLs from Absolute Resource Associates of Portsmouth, New Hampshire

1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Soil Remediation Standards and Appendix E, Method 1 Soil Standards from NHDES Risk Characterization and Management Policy, unless marked with an *.

NE = Regulatory guideline not established

* - United States Environmental Protection Agency Regions 3, 6, and 9. (accessed May 2014). Regional Screening Levels for Chemical Contaminants at Superfund Sites. http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm

SVOC in Groundwater by EPA Method 8270D			
Analyte	Laboratory Practical Quantitation Limit	Regulatory Standard[1]	
		AGQS and GW-1	GW-2
1,2,4-trichlorobenzene	5	70	150
1,2-dichlorobenzene	2	600	14,000
1,3-dichlorobenzene	2	600	NE
1,4-dichlorobenzene	2	75	80
2,4,5-trichlorophenol	2	700	NE
2,4,6-trichlorophenol	2	5	NE
2,4-dichlorophenol	5	21	NE
2,4-dimethylphenol	2	140	NE
2,4-dinitrophenol	50	14	NE
2,4-dinitrotoluene	2	10	NE
2,6-dinitrotoluene	2	0.048	NE
2-chloronaphthalene	5	550*	NE
2-chlorophenol	5	35	NE
2-methylnaphthalene	0.5	280	NE
2-methylphenol	2	40	NE
2-nitroaniline	2	19	NE
2-nitrophenol	2	NE	NE
3,3'-dichlorobenzidine	30	1.3	NE
3-nitroaniline	2	NE	NE
4,6-dinitro-2-methylphenol	20	1.2*	NE
4-bromophenyl phenyl ether	2	NE	NE
4-chloro-3-methylphenol	2	1,100*	NE
4-chloroaniline (p-)	2	28	NE
4-chlorophenyl phenyl ether	5	NE	NE
4-methylphenol	2	40	NE
4-nitroaniline	5	3.8	NE
4-nitrophenol	10	NE	NE
acenaphthene	0.5	420	NE
acenaphthylene	0.5	420	NE
aniline	2	12*	NE
anthracene	0.5	2100	NE
azobenzene	2	0.12	NE
benzidine	30	0.8	NE
benzo(a)anthracene	0.5	0.1	NE
benzo(a)pyrene	0.2	0.2	NE
benzo(b)fluoranthene	0.5	0.1	NE
benzo(g,h,i)perylene	0.5	210	NE
benzo(k)fluoranthene	0.5	0.5	NE
benzoic acid	50	28,000	NE
benzyl alcohol	2	200	NE
bis(2-chloroethoxy)methane	5	5.9	NE
bis(2-chloroethyl)ether	2	10	NE
bis(2-chloroisopropyl) ether	2	300	NE
bis(2-ethylhexyl)phthalate	5	6	NE
butyl benzyl phthalate	5	14*	NE
carbazole	2	NE	NE
chrysene	0.5	5	NE
dibenzo(a,h)anthracene	0.5	0.1	NE
dibenzofuran	0.5	0.79	NE
diethyl phthalate	5	1,500	NE

SVOC in Groundwater by EPA Method 8270D			
Analyte	Laboratory Practical	Regulatory Standard[1]	
dimethylphthalate	5	50,000	NE
di-n-butylphthalate	5	2,600	NE
di-n-octyl phthalate	2	20	NE
fluoranthene	0.5	280	NE
fluorene	0.5	280	NE
hexachlorobenzene	2	1	NE
hexachlorobutadiene	2	0.5	NE
hexachlorocyclopentadiene	10	50	NE
hexachloroethane	2	1	NE
indeno(1,2,3-cd)pyrene	0.5	0.1	NE
isophorone	5	100	NE
naphthalene	0.5	20	1,700
nitrobenzene	2	0.14	NE
N-nitrosodimethylamine	2	0.00049*	NE
N-nitroso-di-N-propylamine	2	0.011	NE
N-nitrosodiphenylamine	2	12	NE
pentachlorophenol	10	1	NE
phenanthrene	0.5	210	NE
phenol	2	4000	NE
pyrene	0.5	210	NE

Notes:

All values are in ug/L.

PQLs from Absolute Resource Associates of Portsmouth, New Hampshire

1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Ambient Groundwater Quality Standards and Table 2, Method 1 Groundwater Standards for NHDES Risk Characterization and Management Policy (Section. 7.4(4)), unless marked with an *.

* United States Environmental Protection Agency Regions 3, 6, and 9. (accessed May 2014). Regional Screening Levels for Chemical Contaminants at Superfund Sites. http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm

PCBs in Soil by EPA Method 8082A

Analyte	Laboratory Practical Quantitation Limit	Regulatory Standard[1]
PCB-1016	0.2	1 (Total)
PCB-1221	0.2	
PCB-1232	0.2	
PCB-1242	0.2	
PCB-1248	0.2	
PCB-1260	0.2	

Notes:
PQLs from Absolute Resource Associates of Portsmouth, New Hampshire
1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Soil Remediation Standards and Appendix E, Method 1 Soil Standards from NHDES Risk Characterization and Management Policy.

All concentrations in mg/kg
NE = Regulatory guideline not established

PCBs in Building Materials by EPA Method 8082		
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standard (40 CFR 761.3)**
PCB-1016	0.2	50 (Total)
PCB-1221	0.2	
PCB-1232	0.2	
PCB-1242	0.2	
PCB-1248	0.2	
PCB-1254	0.2	
PCB-1260	0.2	
Notes: All values are in mg/kg.		

Hg in Soil by EPA Methods 7471B		
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standard[1]**
Mercury	0.02	6

Notes:
All values are in mg/kg.
PQLs from Absolute Resource Associates of Portsmouth, New Hampshire
1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Soil Remediation Standards and Appendix E, Method 1 Soil Standards from NHDES Risk Characterization and Management Policy.

Hg in Groundwater by EPA Methods 7470A		
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standard[1]**
Mercury	0.2	2

Notes:

All values are in ug/L.

PQLs from Absolute Resource Associates of Portsmouth, New Hampshire

1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Ambient Groundwater Quality Standards and Table 2, Method 1 Groundwater Standards for NHDES Risk Characterization and Management Policy (Section. 7.4(4)).

Asbestos in Solids by PLM by EPA Method 600/R		
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standard[1]**
Asbestos	0.20%	1%

Notes:

1 - New Hampshire Department of Environmental Services Chapter 1800: Asbestos Management Control, October 21, 2008.
PQL from EMSL of Cinnamonsin, New Jersey

Metals in Soil by EPA Method 6010C		
Analyte	**Laboratory Practical Quantitation Limit**	**Regulatory Standard[1]**
Antimony	0.3	9
Arsenic	0.5	11
Beryllium	0.2	1
Cadmium	0.2	33
Chromium (III)	2	1,000
Chromium (VI)	2	130
Copper	2	310
Lead	0.5	400
Nickel	2	400
Selenium	2	180
Silver	0.4	89
Tin	2.5	4,700
Zinc	2	1,000

Notes:

All values are in mg/kg.

PQLs from Absolute Resource Associates of Portsmouth, New Hampshire

1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Soil Remediation Standards and Appendix E, Method 1 Soil Standards from NHDES Risk Characterization and Management Policy, unless marked with an *.

* - United States Environmental Protection Agency Regions 3, 6, and 9. (accessed May 2014). Regional Screening Levels for Chemical Contaminants at Superfund Sites (Residential Soil). http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm

Metals in Groundwater by EPA Method 6010C

Analyte	Laboratory Practical Quantitation Limit	Regulatory Standard[1]
Antimony	6	6
Arsenic	8	10
Beryllium	4	4
Cadmium	4	5
Chromium (TOTAL)	50	100
Copper	50	1,300
Lead	8	15
Nickel	50	100
Selenium	50	50
Silver	7	100
Tin	50	1,200
Zinc	50	600

Notes:

All values are in ug/L.

PQLs from Absolute Resource Associates of Portsmouth, New Hampshire

1 - New Hampshire Department of Environmental Services (NHDES) Chapter 600 Ambient Groundwater Quality Standards for groundwater, unless marked with an *.

* - United States Environmental Protection Agency Regions 3, 6, and 9. (accessed May 2014). Regional Screening Levels for Chemical Contaminants at Superfund Sites. http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm

** - The chromium VI standard was used because it is the lowest and most conservative chromium standard.

APPENDIX B

Maine DEP Protocol for Collecting Data Using an Innov-X Field Portable X-Ray Fluorescence Spectrometer for Certain Metals in Solid Medium

COVERSHEET
STANDARD OPERATING PROCEDURE

Operation Title: **PROTOCOL FOR COLLECTING DATA USING AN INNOV-X FIELD PORTABLE X-RAY FLUORESCENCE SPECTROMETER FOR CERTAIN METALS IN SOLID MEDIA**

Originator: **Brian Beneski**
Quality Assurance Coordinator
Division of Remediation
Bureau of Remediation and Waste Management

Standard Operating Procedure: **DRWM-DR-025**
Revision: **01**
Date: **February 20, 2009**
Written by: **Jean Firth**
Reviewed by: **Brian Beneski**

Five Year Review No Changes Needed:

Print Name: _____ Signature: _____ Date: _____

Print Name: _____ Signature: _____ Date: _____

Print Name: _____ Signature: _____ Date: _____

Print Name: _____ Signature: _____ Date: _____

1.0 PURPOSE

The purpose of this document is to describe the Maine Department of Environmental Protection, Bureau of Remediation and Waste Management, Division of Remediation's (MEDEP/DR) procedure for collecting data using a Innov-X portable x-ray fluorescence spectrometer (XRF) for certain metals in solid media, paint and dust wipe samples.

2.0 APPLICABILITY

MEDEP/DR is responsible for the investigation and subsequent remediation of hazardous substance, petroleum, and landfill Sites throughout Maine. Part of the investigation of these sites is analysis of samples for metals; the XRF is a useful tool in providing this analysis. This SOP applies to all staff that may use the XRF.

3.0 RESPONSIBILITIES

All MEDEP/DR Staff must follow this procedure when using the Innov-X XRF. All managers and supervisors within MEDEP/DR are responsible for ensuring that their staff are familiar with and adhere to this procedure. *Additionally, before any person is allowed to use the Innov-Xx XRF they **MUST:** have completed a radiation training course (proof of completion must be submitted to the DR Radiation Safety Officer (RSO)), wear a radiation dosimeter badge and have 8 hours of supervised field use with the instrument by approved Division of Remediation staff.* Safety procedures are described in detail in DR SOP #24 Safety Protocol for Use of the Innov-X X-Ray Fluorescence Metals Analyzer.

A current list of qualified supervisors and operators will be maintained by the DR RSO.

4.0 INTRODUCTION

This standard operating procedure (SOP) is designed to be a guideline for data collection with Innov-X XRF for solid media (e.g. soil, sediment and sludge), lead in painted surfaces and dust wipe samples. This is a field screening method used for: profiling an area, locating sources of contamination, determining the horizontal or vertical extent of contamination or collecting preliminary data that will be used to design a sampling plan. Samples can be analyzed either in-situ methods or by intrusive sample preparation methods. This SOP will outline collecting data using both methods.

5.0 PREPARATION AND GENERAL INFORMATION

5.1 PREPARATION

Prior to conducting any sampling event, a sampling plan should be developed (see SOP DR#014 - Development of a Sampling and Analysis Plan). Clean containers must be used for each sampling event unless in-situ sampling is to be performed.

An evaluation of the site and the elements of concern should be made prior to using the XRF on a site. Then determine if the XRF can analyze for the elements of concern and if the detection limits are acceptable to meet the Data Quality Objectives for the project.

Before sampling, a decision must be made whether to test the material:
- in-situ (in-place),
- as bagged samples (or for sludge, in cups) with a minimum of preparation, or
- in an XRF cup after preparation as described in Section 5.4.

If the primary objective of the sampling event is to determine whether an element is present (rather than accurately measuring how much is present), in-situ or bagged samples are the quickest, simplest way to proceed. (Note: Preparing a sample by drying, milling and sieving will yield greater accuracy.) Even if the objective is to collect samples and prepare them prior to analysis, preliminary direct measurements can help to survey the site.

5.2 EQUIPMENT

Equipment required for this SOP may include:

-- **XR**F – Innov-X X-Ray Fluorescence Spectrum Analyzer
  a) XRF
  b) Batteries and charger
  c) standardization clip
  d) Sample test stand
  e) in-situ sample test stand
  f) standards
  g) Grinder
  h) Mortar and pestle
  i) various size sieves

-- **Sampling implements** - This includes shovels, Geoprobe® soil boring system, dredges, etc, as outlined in the site specific sampling plan. Please refer to the following MEDEP/DR SOPs for using this equipment:
  -- DR#004 - Sampling Surface Water and Sediment
  -- DR#006 - Soil Sampling
  -- DR#007 - Soil Sampling with a Geoprobe Large Bore Sampler

-- **Sample containers** – Whirl pack bags, zipper locking bags or sample cups.
-- **Radiation dosimeter** – must be worn by any department staff using the XRF.

5.3 GENERAL INFORMATION

5.3.1 Radiation Sources

The Innov-X XRF does not contain a radioactive source, which would constantly emit ionizing radiation. The Innov-X has an x-ray tube which can only emit ionizing radiation when the instrument is powered. The instrument will not power the x-ray tube without the battery or handheld computer installed.

5.3.2 Radiation License and Training Requirements

The Innov-X XRF is registered with the Department of Human Services. Only staff who have completed radiation training and are issued a radiation dosimeter badge may use the XRF. Additionally, staff using the XRF must have 8 hours of supervised field use by approved DR Oil and Hazardous Materials Specialists (OHMS).

5.3.3 Detection Limits

An element will only be shown as detected by the XRF if the measured concentration of the sample is at least three times the standard deviation of the measurement. This detection limit will depend on the composition of the sample.

Detection limits depend on several factors: the analyte of interest, times the sample is irradiated, physical matrix effects, chemical matrix effects, and interelement spectral interferences. For more of an explanation of detection limits see Attachment A "EPA Method 6200". Detected elements are displayed as in the Measurement screen. Non-detected elements are shown as **< xx**, where **xx** is the detection limit for that sample. The detection limit for each element is calculated from each sample.

5.3.4 Interferences

Physical matrix interferences result from variations in the physical character of the sample. These variations may include such parameters as particle size, uniformity, homogeneity, and surface condition.

Moisture content may affect the accuracy of analysis of soil and sediment sample analyses. When the moisture content is between 5 and 20 percent, the overall error from moisture may be minimal. However, moisture content may be a major source of error when analyzing samples of surface soil or sediment that are saturated with water. This error can be minimized by drying the samples in a convection or toaster oven.

Inconsistent positioning of samples in front of the probe window is a potential source of error because the x-ray signal decreases as the distance from the radioactive source increases. This error is minimized by maintaining the same distance between the window and each sample. For the best results, the window of the probe should be in direct contact with the sample, which means that the sample should be flat and smooth to provide a good contact surface.

Chemical matrix effects result from differences in the concentrations of interfering elements. These effects occur as either spectral interferences (peak overlaps) or as x-ray absorption and enhancement phenomena.

When present in a sample, certain x-ray lines from different elements can be very close in energy and, therefore, can cause interference by producing a severely overlapped spectrum.

5.3.5 Precision

The measurement precision for each element displayed appears to the right of the measured concentration, under the heading "**+-**". The **precision** of each measurement is three times the standard deviation.

5.3.6 Maintenance

If there are any problems with how the XRF is working, stop using the instrument and report the problem to the DR's SASS. **Do not attempt to fix the XRF yourself.** Opening the instrument may expose the user to the radiation and will void the warrantee.

5.4 GENERAL PROCEDURE FOR OPERATING THE INNOV-X XRF

Refer to the attached Innov-X User Manual for additional information and figures showing the features of the instrument (Attachment B).

5.4.1 Place a battery in the unit and install the iPAQ. Turn on both the iPAQ (top left hand side) and the XRF (back of the unit).

5.4.2 Make sure the date and time are set correctly on the iPAQ. Data is stored on the instrument by date.

5.4.3 On the iPAQ drop down menu, located at the top left hand side of the screen, choose Innov-X. Note the red light on the end of the instrument will be on when the instrument is on and ready for use. It will flash once the trigger is pulled which indicates the instrument is emitting radiation.

5.4.4 Choose the test mode (soil, paint or dust wipe) from the menu.

5.4.5 The instrument will require you to perform the standardization test at this point. The instrument will not operate without passing this test. Place the standardization clip securely over the sample window, and tap the instruction box on the screen. A small red light on the end of the XRF will begin to flash. This indicates the instrument is operating and emitting radiation. This test will take approximately 1 minute. ***KEEP ALL YOUR BODY PARTS AWAY FROM THE END OF THE INSTRUMENT. MAKE SURE THE INSTRUMENT IS NOT POINTED AT ANYONE AT ANYTIME.*** **All reasonable measures, including labeling, and the concepts of time, distance and shielding should be implemented to limit radiation exposure to as low as reasonably achievable (ALARA).**

Once the standardization is complete, the results will be shown on the screen. If the resolution result is within tolerance limits proceed to the next step. Otherwise run the standardization test again. If the test fails again, turn off the instrument and try again. If the instrument fails a third time you will be prompted to perform a soft restart on the iPAQ. If this fails replace the battery and try again. If you still do not pass call Innov-X customer support (781-938-5005).

5.4.6 Once the instrument has passed the standardization you are ready to begin testing samples.

5.4.7 A padlock icon is also shown on the bottom of the screen. This indicates if the software has been locked or is ready to test. The software will automatically lock when the

instrument has not been used for several minutes. This will prevent anyone from inadvertently activating the instrument. To unlock the software, tap on the icon.

5.4.8 If you will be sampling in the soil mode see section 5.0 Soil Sampling and Analysis Procedure below.

6.0 SOIL SAMPLING AND ANALYSIS PROCEDURE

6.1 SOIL ANALYSIS MODEL

6.1.1 After completing the procedure described in section 5.4 there are two buttons shown on the bottom of the touch screen "Start" and "Info". Tap on the Info button to enter information specific to the samples you are analyzing. In soil mode there are preset options such as Operator, Sample method, Sample Number, Sample Depth and Comment. These can be customized to projects when necessary. Fill in the information for the sample before analysis. The analysis will be stored with this information. You need to change the information prior to each sample that is run.

6.1.2 The bottom menu on the screen shows 4 options: File, Edit, View, Options and Help. From these menus the operator can change the settings for the method of analysis (Standard or LEAP) and the time interval for testing. For a complete description of these menus and how to change the settings, see Attachment B.

6.1.3 To begin testing a sample the operator either taps the start button at the bottom of the screen or pulls the trigger. *Note: the software lock may have to be disabled if the instrument has not be used for more than 5 minutes.*

6.1.4 Check the XRF's calibration with testing standards before using the XRF to analyze samples, use standards that are closest to the levels of elements that are expected onsite. Recheck the standards at least once per hour during testing and after analysis has been completed for the day.

EPA Method 6200 Field Portable X-Ray Fluorescence spectrometry for the determination of elemental concentrations in soil and sediment (Attachment C) provides additional information regarding acceptable testing procedures and may be used in place of the procedure described below.

6.2 IN-SITU ANALYSIS

6.2.1 Clear the area selected for analysis of any surface debris or vegetation. Level the area so the XRF sample window will contact the area evenly. Keep in mind that a finer and more homogeneous material will yield more accurate the results. Increased accuracy can be obtained by loosening the soil and letting it dry in the sun before testing.

6.2.2 Hold the XRF on the ground and pull the trigger or place the XRF in the in-situ test stand and pull the trigger. The stand will allow the instrument to stand on its own. If the deadman trigger lock is engaged the trigger must be held for the duration of the analysis.

If the deadman trigger has been disengaged then the analysis will run for the preset time period. The test can be stopped by pulling the trigger again.

Warning: Always treat radiation with respect. Do not put your hand or any other body part on or near the sample window of the XRF while samples are being analyzed. Never point the XRF at yourself or anyone else. ALARA objectives must be considered whenever staff are using an XRF.

The operator is responsible for controlling access in the area in which the XRF is being used. When possible use signs, barricades or caution tape to restrict access. Never allow anyone to enter within 5 feet of the x-ray path.

6.2.3 Watch the results on the display screen to decide when the test has reached the desired level of accuracy or let the analysis run for the allotted time. NOTE: if the instrument is set to run both standard and LEAP analysis consecutively and the test is ended during the standard analysis mode and before the LEAP analysis has begun your data will not be stored.

6.3 IN-SITU DEPTH PROFILING

An in-situ XRF soil test examines only the top few millimeters of soil. To profile the depth of contamination, remove a vertical slice of soil and test several samples from different depths.

6.4 ANALYSIS OF BAGGED SOLID SAMPLES

Depending on the data quality objectives for your site it may be convenient to screen samples collected in plastic bags and analyze them without preparation. Because samples are tested through a bag, test results will tend to be 5-10% lower than test results obtained from direct analysis.

6.4.1 Place 50-100 grams of sample in a clean whirl pack or zipper locking bag. Remove any large stones or debris. Keep in mind that finer and more homogeneous material will yield more accurate results. Increased accuracy can be obtained by letting the sample dry in the sun before testing. Mix the sample thoroughly by kneading the bag.

6.4.2 The accuracy of measurements will be limited by the thickness of the plastic in the bag used. 1 mil-thick polyethylene bags offer a reasonable compromise between accurate readings and bag durability.

6.4.3 Flatten the bag of soil to form a continuous uniform layer of at least 1 cm. (0.4 inch) thickness. Place the sample window flat against the bag and pull the trigger. **Do not hold bagged samples in your hand during testing.**

Warning: Always treat radiation with respect. Do not put your hand or any other body part on or near the sample window of the XRF while samples are being analyzed. Never point the XRF at yourself or anyone else. ALARA objectives must be considered whenever staff is using an XRF.

The operator is responsible for controlling access in the area in which the XRF is being used. When possible use signs, barricades or caution tape to restrict access. Never allow anyone to enter within 5 feet of the x-ray path.

6.4.3 If you are analyzing many samples at one time the easiest way to analyze samples to set up the test stand. See Attachment B for directions to set up the test stand.

6.4.4 When the XRF is in the test stand all operations are conducted from the iPAQ. The red light on top of the test stand will operate in the same way as the red light on top of the XRF. When the instrument is on and capable of emitting radiation the red light will be on constantly. When the light is flashing the instrument is emitting radiation. The instrument cannot emit radiation while the cover is open. The stand is constructed so that all radiation is absorbed by the stand, however, no one should stand behind the test stand while the XRF is being used. The deadman trigger lock cannot be used while the instrument is in the test stand.

6.4.5 Place the sample over the XRF sample window so that the sample is indirect contact with the window. Start the test from the iPAQ.

Signs must be posted restricting access to the area where the XRF is being used while in the test stand. The operator is responsible for restricting access near the XRF while it is being used. No one should be allowed within 5 feet of the x-ray path.

6.4.6 Watch the display screen results to decide when the test has reached the desired level of accuracy and stop the test through the iPAQ or the test will automatically stop when the preset time has expired. NOTE: if the instrument is set to run both standard and LEAP analysis consecutively and the test is ended during the standard analysis mode and before the LEAP analysis has begun your data will not be stored.

6.5 ANALYSIS OF PREPARED SAMPLES

Prepared sample analysis is the most accurate method for determining the concentration of elements in a solid media. Sample preparation minimizes the effects of moisture, large particle size and variations in particle size.

Following this protocol for preparing and testing samples is vital for achieving a level of accuracy comparable with laboratory results. See Attachment B for EPA's approved method for analyzing samples using and XRF (EPA 6200). MEDEP has developed the following preparation method for samples to be analyzed by an XRF.

6.5.1 Collect 50-100 grams of sample to insure that there is enough sample to be representative and unbiased after mixing, grinding, and sieving it. You must have enough sample to half fill the XRF sample cup.

6.5.2 Place the sample in a clean bowl and mix the sample thoroughly by stirring and by rotating the bowl. Gently break up any dirt clods. Don't shake the sample because the sample may become stratified by weight.

6.5.3 If the sample is moist it should be dried. To best prepare a sample for analysis the material should be dry and well homogenized. Ideally, the entire sample should be dried to constant weight, sieved to remove gravel and debris, and ground or milled to a fine powder.

The sample can be dried in several ways:

- Oven dry the sample for approximately 2 hours at 150° C., until the sample reaches a constant weight;
- air dry the sample overnight at room temperature in a shallow pan;
- gently stir and warm the sample in a pan over a hot plate or burner.

Oven, hot plate or burner drying is inappropriate when volatile compounds may be present in the sample. For example, lead present as tetraethyl lead would be driven off by the heat of drying. Some forms of mercury and arsenic are volatile. If mercury is to be analyzed the sample must be air dried.

6.5.4 Sieve the dried sample with the #10 (2mm) mesh and separate out the larger pieces (stones, organic matter, metallic objects).

6.5.5 Grind the sample with a mortar and pestle or electric grinder until the soil particles are fine and homogenous.

6.5.6 Sieve at least 10 grams of the sample through #60 (250 um) and #120 (125 um) mesh. Re-grind the unpassed material until the required fraction is able to pass. Mix the resulting sample.

6.5.7 Place the sample in a sample cup. To assemble a sample cup: *1)* place a circle of mylar film on top of an XRF sample cup. The window goes on the end of the cup with the indented ring. *2)* Secure the film with the collar. The flange inside the collar faces down and snaps into the indented ring of the cup. Inspect the installed film window for continuity and smooth, taut appearance. *3)* Set the cup, window-side down, on a flat surface. Fill it with at least three grams of the prepared sample (no more than half-full). Take care that there are no voids or layering. *4)* Placing the cup film-side down on a flat surface, tamp the sample into the cup. *5)* Fill the cup with polyester fiber stuffing to prevent sample movement. Use aquarium filter or pillow filling as stuffing. A small supply of stuffing comes with the bulk sample kit. *6)* Fasten the cap on the cup.

6.5.8 Analyze the sample with the XRF. The easiest way to analyze samples in cups is to set up the test stand. See Attachment B for directions to set up the test stand.

6.5.9 When the XRF is in the test stand all operations are conducted from the iPAQ. The red light on top of the test stand will operate in the same way as the red light on top of the XRF. When the instrument is on and capable of emitting radiation the red light will be on constantly. When the light is flashing the instrument is emitting radiation. The instrument cannot emit radiation while the cover is open. The stand is constructed so

that all radiation is absorbed by the stand, however, no one should stand behind the test stand while the XRF is being used.

6.5.10 Place the sample cup over the XRF sample window so that the cup is indirect contact with the window. Start the test from the iPAQ.

Warning: Always treat radiation with respect. Do not put your hand or any other body part on or near the sample window of the XRF while samples are being analyzed. Never point the XRF at yourself or anyone else. ALARA objectives must be considered whenever staff is using an XRF.

Signs must be posted restricting access to the area where the XRF is being used. The operator is responsible for restricting access near the XRF while it is being used. No one should be allowed within 5 feet of the x-ray path.

6.5.11 Watch the display screen results to decide when the test has reached the desired level of accuracy and stop the test through the iPAQ or the test will automatically stop when the preset time has expired. NOTE: if the instrument is set to run both standard and LEAP analysis consecutively and the test is ended during the standard analysis mode and before the LEAP analysis has begun your data will not be stored.

7.0 LEAD PAINT ANALYSIS AND PROCEDURE

7.1 LEAD PAINT ANALYSIS MODE

7.1.1 After completing the procedure described in section 4.4 there are two buttons shown on the bottom of the touch screen "Start" and "Info". Tap on the Info button to enter information specific to the samples you are analyzing. In there are preset options such as Operator, Location and Comment. These can be customized to projects when necessary. Fill in the information for the sample before analysis. The analysis will be stored with this information. You need to change the information prior to each sample that is run.

7.1.2 The bottom menu on the screen shows 4 options: File, Edit, View, Options and Help. From these menus the operator can change the settings for the method of analysis (Inspection or Fixed time). For a complete description of these menus and how to change the settings, see Attachment B.

7.1.3 Inspection mode automatically ends the test when the analyzer reaches a "Positive" or "Negative" determination with 95% confidence. This is based on a preset action level (the default is 1.0 mg/cm^2).

7.1.4 Fixed time mode always test up to the preset time (default 15 seconds). This returns actual results as opposed to the positive or negative results in the inspection mode.

7.1.5 To begin testing a sample the operator either taps the start button at the bottom of the screen or pulls the trigger. Note the software lock may have to be disabled if the instrument has not been used for more than 5 minutes.

7.1.6 Check the XRF's calibration with testing standard before using the XRF to analyze samples. Recheck the standards at least once every 4 hours during testing and after analysis has been completed for the day.

7.1.7 Hold the analyzer up to the sample to be analyzed. Make sure the sample window is as flat as possible against the sample. Start the analysis either from the iPAQ window or with the trigger. The red light on top of the instrument will flash while the analysis is performed and the instrument is emitting radiation. When at all possible use the instrument with the deadman trigger engaged. This means the operator must hold the trigger during the entire analysis. If the deadman trigger is not engaged the test can be stopped by pulling the trigger again or depending on the test mode the instrument will end the test when a positive or negative result is reached or the preset time period has elapsed.

Warning: Always treat radiation with respect. Do not put your hand or any other body part on or near the sample window of the XRF while samples are being analyzed. Never point the XRF at yourself or anyone else. ALARA objectives must be considered whenever staff are using an XRF.

The operator is responsible for controlling access in the area in which the XRF is being used. When possible use signs, barricades or caution tape to restrict access. Never allow anyone to enter within 5 feet of the x-ray path.

8.0 DUST WIPE ANALYSIS AND PROCEDURE

8.1 DUST WIPE TEST MODE

8.1.1 After completing the procedure described in section 4.4 there are two buttons shown on the bottom of the touch screen "Start" and "Info". Tap on the Info button to enter information specific to the samples you are analyzing. There are preset options such as Operator, Location and Comment to choose from. These can be customized to projects when necessary. Fill in the information for the sample before analysis. The analysis will be stored with this information. You need to change the information prior to each sample that is run.

8.1.2 The bottom menu on the screen shows 4 options: File, Edit, View, Options and Help. From these menus the operator can change the settings for the analysis (e.g. 4 or 8 tests per wipe, area of wipe (default $1ft^2$.)) For a complete description of these menus and how to change the settings, see Attachment B.

8.2 SAMPLE PREPARATION

8.2.1 Conduct wipe sample according to Attachment C "Settled Dust Sampling for Lead". However, instead of packaging the wipe for analysis at a laboratory continue as follows.

8.2.2 For best results dry the wipe before analysis.

8.2.3 Fold the wipe so that it will fit into the dust wipe holder as shown in Attachment B. Center the filter in the holder and secure the holder with tape.

8.3 ANALYZING THE DUST WIPE

8.3.1 The XRF can be set to analyze the dust wipe in either 4 or 8 positions on the wipe. If 4 positions are set then they are analyzed in four quadrants of the wipe on the same side. For 8 positions, four quadrants on each side are analyzed.

8.3.2 Place the dust wipe on a flat surface and position the sample window in 1 quadrant of the filter. Pull the trigger. The red light on top of the instrument will flash during analysis indicating the instrument is emitting radiation. When the first position is complete the iPAQ will prompt for the additional readings. Reposition the XRF and tap ok on the screen. Note: If you cancel instead of saying ok the wipe measurement will be aborted and no results will be saved. If you stop the test before any position reading has been completed, no results will be saved.

Warning: Always treat radiation with respect. Do not put your hand or any other body part on or near the sample window of the XRF while samples are being analyzed. Never point the XRF at yourself or anyone else. ALARA objectives must be considered whenever staff are using an XRF.

The operator is responsible for controlling access in the area in which the XRF is being used. When possible use signs, barricades or caution tape to restrict access. Never allow anyone to enter within 5 feet of the x-ray path.

8.3.3 After the last reading has been completed the analyzer will open the results screen and display an average of the readings taken on the dust wipe.

9.0 DOWNLOADING DATA FROM THE XRF

9.1 DOWNLOADING DATA

The Innov-X XRF stores thousands of measurements plus their spectra. This can be downloaded to a computer for reporting in a spreadsheet format. From the Innov-X menu screen choose view on the bottom and then choose results. This will open the last result entered into the iPAQ. Choose "File" on the bottom of the screen them choose "export results". From this screen you can choose the date and analysis mode for the results (analytical results are saved on the iPAQ by date). After these options have been chosen, click "OK" at the bottom of the screen. The next screen allows you to enter a file name and location to save the file to. The file can then be downloaded to your desk top computer by synchronizing the iPAQ with your computer and saving the data file in an excel format. You must have the iPAQ software installed on your computer. See Attachment B for complete directions on downloading data.

Note: Downloading data does not erase readings. To make room for the next set of data, erase readings after verifying that the data was downloaded successfully.

9.2 ERASING READINGS

Once your data has been downloaded from the i-PAQ the file should be erased. From the Innov-X menu screen choose "view" then "results". This will open the last analysis saved to the iPAQ. Choose "file" at the bottom of the screen then "erase readings". You must enter the administrator password (lower case z). Choose which readings you would like to delete then click "OK". Make sure your data has successfully transferred to your desk top prior to deleting data. See Attachment B for complete directions on erasing data.

10.0 DECONTAMINATION

Decontamination of equipment will follow the MEDEP DR SOP DR#017 - "Decontamination Procedures Protocol". Additionally the following methods may be used in the field:

The mortar, pestle, and grinding mill may be cleaned with dry paper towels. Water will also clean the mortar, pestle, and the mill's container, but be sure each is absolutely dry before they are used for another sample. The mortar and pestle may be cleansed by grinding clean dry sand in the mortar. Use the short bristle brushes (included in the Bulk Testing Kit) to clean the sieves.

11.0 CHAIN OF CUSTODY

For confirmatory samples that are submitted to a fixed laboratory, procedures for chain of custody outlined in MEDEP/DR SOP DR#012 - "Chain of Custody" must be followed.

12.0 DOCUMENTATION

All sampling activities must be documented as outlined in MEDEP/DR SOP DR#013 – "Documentation of Field Activities and Development of a Trip Report". Each sample location will be given a unique sample number. This number will be entered into the XRF with the optical pen and or recorded in the field notes. If no number is entered into the XRF, the default number shown on the XRF screen for that sample will be recorded in the field notes.

13.0 QUALITY ASSURANCE/QUALITY CONTROL

13.1 QUALITY ASSURANCE SAMPLES

Depending on the DQO's for a project the following QA samples may be collected. Any QA sample analyzed will be documented in field notes or in a written report. Calculations for QA samples will also be documented and if QA samples are re analyzed the results of will be documented.

13.1.1 Energy Calibration Check

To determine whether the XRF is operating within resolution and stability tolerances, an energy calibration check should be run. Generally, this is run at the beginning of each working day,

after the batteries are changed or the instrument is shut off, at the end of each working day, and at any other time when the instrument operator believes that drift is occurring during analysis.

13.1.2 Blank Samples

Two types of blank samples should be analyzed for XRF analysis: instrument blanks and method blanks. An instrument blank is used to verify that no contamination exists in the spectrometer or on the probe window.

13.1.2.1 Instrument Blank

The instrument blank can be silicon dioxide, a Teflon block, a quartz block, "clean" sand, or lithium carbonate. This instrument blank should be analyzed on each working day before and after analyses are conducted and once per every twenty samples. An instrument blank should also be analyzed whenever contamination is suspected by the analyst. The frequency of analysis will vary with the data quality objectives of the project.

13.1.2.2 Method Blank

A method blank is used to monitor for laboratory-induced contaminants or interferences. The method blank can be "clean" silica sand or lithium carbonate that undergoes the same preparation procedure as the samples. A method blank must be analyzed at least daily. The frequency of analysis will depend on the data quality objectives of the project. To be acceptable, a method blank must not contain any analyte at a concentration above its method detection limit. If an analyte's concentration exceeds its method detection limit, the cause of the problem must be identified, and all samples analyzed with the method blank must be reanalyzed.

13.1.3 Calibration Verification Checks

A calibration verification check sample is used to check the accuracy of the instrument and to assess the stability and consistency of the analysis for the analytes of interest. A check sample should be analyzed at the beginning of each working day, during active sample analyses, and at the end of each working day. The frequency of calibration checks during active analysis will depend on the data quality objectives of the project. The check samples used by the DR will be NIST or other SRM that contains the analytes of interest. These will verify the accuracy of the instrument. The measured value for each target analyte should be within +/-20 percent (%D) of the true value for the calibration verification check to be acceptable. If a measured value falls outside this range, then the check sample should be reanalyzed. If the value continues to fall outside the acceptance range, the instrument should be re-calibrated, and the batch of samples analyzed before the unacceptable calibration verification check must be reanalyzed.

13.1.4 Precision Measurements

The precision of the method is monitored by analyzing a sample with low, moderate, or high concentrations of target analytes. The frequency of precision measurements will depend on the data quality objectives for the data. A minimum of one precision sample should be run per day. Each precision sample should be analyzed 7 times in replicate. It is recommended that precision measurements be obtained for samples with varying concentration ranges to assess

the effect of concentration on method precision. A precision sample is analyzed by the instrument for the same field analysis time as used for other project samples. The relative standard deviation (RSD) of the sample mean is used to assess method precision. For FPXRF data to be considered adequately precise, the RSD should not be greater than 20 percent with the exception of chromium. RSD values for chromium should not be greater than 30 percent.

The equation for calculating RSD is as follows: RSD = (SD/Mean Concentration) x 100 where: RSD = Relative standard deviation for the precision measurement for the analyte SD = Standard deviation of the concentration for the analyte, Mean Concentration = Mean concentration for the analyte.

14.1.5 Confirmatory Samples

The comparability of the XRF analysis is determined by submitting XRF-analyzed samples for analysis at a laboratory. The method of confirmatory analysis must meet the project and XRF measurement data quality objectives. The confirmatory samples must be splits of the well homogenized sample material. In some cases the prepared sample cups can be submitted. A minimum of 1 sample for each 20 XRF-analyzed samples should be submitted for confirmatory analysis. This frequency will depend on data quality objectives. The confirmatory analyses can also be used to verify the quality of the XRF data. The confirmatory samples should be selected from the lower, middle, and upper range of concentrations measured by the XRF. They should also include samples with analyte concentrations at or near the site action levels. Acceptance criteria for comparison of field and lab samples will be 20% difference of sample results or stated in the site specific QAPP or sampling plan. If the acceptance criteria is exceeded the project manager will evaluate the results to determine if they meet the data quality objectives for the project. If the data quality objectives are not met samples will be re-run or collected again for analysis.

14.2 DEVIATIONS FROM SOPS

All deviations from the procedures outlined in this or in any other SOPs followed for XRF sampling must be documented in field notes.

15.0 REFERENCES

- Innov-X User Manual for Alpha Series XRF.
- EPA Method 6200 Field Portable X-Ray Fluorescence Spectrometry For the Determination of Elemental Concentrations in Soil and Sediment.

ATTACHMENT A

EPA Method 6200 Field Portable X-Ray Fluorescence Spectrometry For the Determination of Elemental Concentrations in Soil and Sediment.

FIELD PORTABLE X-RAY FLUORESCENCE SPECTROMETRY FOR THE DETERMINATION OF ELEMENTAL CONCENTRATIONS IN SOIL AND SEDIMENT

SW-846 is not intended to be an analytical training manual. Therefore, method procedures are written based on the assumption that they will be performed by analysts who are formally trained in at least the basic principles of chemical analysis and in the use of the subject technology.

In addition, SW-846 methods, with the exception of required method use for the analysis of method-defined parameters, are intended to be guidance methods which contain general information on how to perform an analytical procedure or technique which a laboratory can use as a basic starting point for generating its own detailed Standard Operating Procedure (SOP), either for its own general use or for a specific project application. The performance data included in this method are for guidance purposes only, and are not intended to be and must not be used as absolute QC acceptance criteria for purposes of laboratory accreditation.

1.0 SCOPE AND APPLICATION

1.1 This method is applicable to the in situ and intrusive analysis of the 26 analytes listed below for soil and sediment samples. Some common elements are not listed in this method because they are considered "light" elements that cannot be detected by field portable x-ray fluorescence (FPXRF). These light elements are: lithium, beryllium, sodium, magnesium, aluminum, silicon, and phosphorus. Most of the analytes listed below are of environmental concern, while a few others have interference effects or change the elemental composition of the matrix, affecting quantitation of the analytes of interest. Generally elements of atomic number 16 or greater can be detected and quantitated by FPXRF. The following RCRA analytes have been determined by this method:

Analytes	CAS Registry No.
Antimony (Sb)	7440-36-0
Arsenic (As)	7440-38-0
Barium (Ba)	7440-39-3
Cadmium (Cd)	7440-43-9
Chromium (Cr)	7440-47-3
Cobalt (Co)	7440-48-4
Copper (Cu)	7440-50-8
Lead (Pb)	7439-92-1
Mercury (Hg)	7439-97-6
Nickel (Ni)	7440-02-0
Selenium (Se)	7782-49-2
Silver (Ag)	7440-22-4
Thallium (Tl)	7440-28-0
Tin (Sn)	7440-31-5

Analytes	CAS Registry No.
Vanadium (V)	7440-62-2
Zinc (Zn)	7440-66-6

In addition, the following non-RCRA analytes have been determined by this method:

Analytes	CAS Registry No.
Calcium (Ca)	7440-70-2
Iron (Fe)	7439-89-6
Manganese (Mn)	7439-96-5
Molybdenum (Mo)	7439-93-7
Potassium (K)	7440-09-7
Rubidium (Rb)	7440-17-7
Strontium (Sr)	7440-24-6
Thorium (Th)	7440-29-1
Titanium (Ti)	7440-32-6
Zirconium (Zr)	7440-67-7

1.2 This method is a screening method to be used with confirmatory analysis using other techniques (e.g., flame atomic absorption spectrometry (FLAA), graphite furnance atomic absorption spectrometry (GFAA), inductively coupled plasma-atomic emission spectrometry, (ICP-AES), or inductively coupled plasma-mass spectrometry, (ICP-MS)). This method's main strength is that it is a rapid field screening procedure. The method's lower limits of detection are typically above the toxicity characteristic regulatory level for most RCRA analytes. However, when the obtainable values for precision, accuracy, and laboratory-established sensitivity of this method meet project-specific data quality objectives (DQOs), FPXRF is a fast, powerful, cost effective technology for site characterization.

1.3 The method sensitivity or lower limit of detection depends on several factors, including the analyte of interest, the type of detector used, the type of excitation source, the strength of the excitation source, count times used to irradiate the sample, physical matrix effects, chemical matrix effects, and interelement spectral interferences. Example lower limits of detection for analytes of interest in environmental applications are shown in Table 1. These limits apply to a clean spiked matrix of quartz sand (silicon dioxide) free of interelement spectral interferences using long (100 -600 second) count times. These sensitivity values are given for guidance only and may not always be achievable, since they will vary depending on the sample matrix, which instrument is used, and operating conditions. A discussion of performance-based sensitivity is presented in Sec. 9.6.

1.4 Analysts should consult the disclaimer statement at the front of the manual and the information in Chapter Two for guidance on the intended flexibility in the choice of methods, apparatus, materials, reagents, and supplies, and on the responsibilities of the analyst for demonstrating that the techniques employed are appropriate for the analytes of interest, in the matrix of interest, and at the levels of concern.

In addition, analysts and data users are advised that, except where explicitly specified in a regulation, the use of SW-846 methods is *not* mandatory in response to Federal testing requirements. The information contained in this method is provided by EPA as guidance to be used by the analyst and the regulated community in making judgments necessary to generate results that meet the data quality objectives for the intended application.

1.5 Use of this method is restricted to use by, or under supervision of, personnel appropriately experienced and trained in the use and operation of an XRF instrument. Each analyst must demonstrate the ability to generate acceptable results with this method.

2.0 SUMMARY OF METHOD

2.1 The FPXRF technologies described in this method use either sealed radioisotope sources or x-ray tubes to irradiate samples with x-rays. When a sample is irradiated with x-rays, the source x-rays may undergo either scattering or absorption by sample atoms. This latter process is known as the photoelectric effect. When an atom absorbs the source x-rays, the incident radiation dislodges electrons from the innermost shells of the atom, creating vacancies. The electron vacancies are filled by electrons cascading in from outer electron shells. Electrons in outer shells have higher energy states than inner shell electrons, and the outer shell electrons give off energy as they cascade down into the inner shell vacancies. This rearrangement of electrons results in emission of x-rays characteristic of the given atom. The emission of x-rays, in this manner, is termed x-ray fluorescence.

Three electron shells are generally involved in emission of x-rays during FPXRF analysis of environmental samples. The three electron shells include the K, L, and M shells. A typical emission pattern, also called an emission spectrum, for a given metal has multiple intensity peaks generated from the emission of K, L, or M shell electrons. The most commonly measured x-ray emissions are from the K and L shells; only metals with an atomic number greater than 57 have measurable M shell emissions.

Each characteristic x-ray line is defined with the letter K, L, or M, which signifies which shell had the original vacancy and by a subscript alpha (α), beta (β), or gamma (γ) etc., which indicates the higher shell from which electrons fell to fill the vacancy and produce the x-ray. For example, a K_α line is produced by a vacancy in the K shell filled by an L shell electron, whereas a K_β line is produced by a vacancy in the K shell filled by an M shell electron. The K_α transition is on average 6 to 7 times more probable than the K_β transition; therefore, the K_α line is approximately 7 times more intense than the K_β line for a given element, making the K_α line the choice for quantitation purposes.

The K lines for a given element are the most energetic lines and are the preferred lines for analysis. For a given atom, the x-rays emitted from L transitions are always less energetic than those emitted from K transitions. Unlike the K lines, the main L emission lines (L_α and L_β) for an element are of nearly equal intensity. The choice of one or the other depends on what interfering element lines might be present. The L emission lines are useful for analyses involving elements of atomic number (Z) 58 (cerium) through 92 (uranium).

An x-ray source can excite characteristic x-rays from an element only if the source energy is greater than the absorption edge energy for the particular line group of the element, that is, the K absorption edge, L absorption edge, or M absorption edge energy. The absorption edge energy is somewhat greater than the corresponding line energy. Actually, the K absorption edge energy is approximately the sum of the K, L, and M line energies of the particular element, and the L absorption edge energy is approximately the sum of the L and M line energies. FPXRF is more sensitive to an element with an absorption edge energy close to but less than

the excitation energy of the source. For example, when using a cadmium-109 source, which has an excitation energy of 22.1 kiloelectron volts (keV), FPXRF would exhibit better sensitivity for zirconium which has a K line energy of 15.77 keV than to chromium, which has a K line energy of 5.41 keV.

2.2 Under this method, inorganic analytes of interest are identified and quantitated using a field portable energy-dispersive x-ray fluorescence spectrometer. Radiation from one or more radioisotope sources or an electrically excited x-ray tube is used to generate characteristic x-ray emissions from elements in a sample. Up to three sources may be used to irradiate a sample. Each source emits a specific set of primary x-rays that excite a corresponding range of elements in a sample. When more than one source can excite the element of interest, the source is selected according to its excitation efficiency for the element of interest.

For measurement, the sample is positioned in front of the probe window. This can be done in two manners using FPXRF instruments, specifically, in situ or intrusive. If operated in the in situ mode, the probe window is placed in direct contact with the soil surface to be analyzed. When an FPXRF instrument is operated in the intrusive mode, a soil or sediment sample must be collected, prepared, and placed in a sample cup. The sample cup is then placed on top of the window inside a protective cover for analysis.

Sample analysis is then initiated by exposing the sample to primary radiation from the source. Fluorescent and backscattered x-rays from the sample enter through the detector window and are converted into electric pulses in the detector. The detector in FPXRF instruments is usually either a solid-state detector or a gas-filled proportional counter. Within the detector, energies of the characteristic x-rays are converted into a train of electric pulses, the amplitudes of which are linearly proportional to the energy of the x-rays. An electronic multichannel analyzer (MCA) measures the pulse amplitudes, which is the basis of qualitative x-ray analysis. The number of counts at a given energy per unit of time is representative of the element concentration in a sample and is the basis for quantitative analysis. Most FPXRF instruments are menu-driven from software built into the units or from personal computers (PC).

The measurement time of each source is user-selectable. Shorter source measurement times (30 seconds) are generally used for initial screening and hot spot delineation, and longer measurement times (up to 300 seconds) are typically used to meet higher precision and accuracy requirements.

FPXRF instruments can be calibrated using the following methods: internally using fundamental parameters determined by the manufacturer, empirically based on site-specific calibration standards (SSCS), or based on Compton peak ratios. The Compton peak is produced by backscattering of the source radiation. Some FPXRF instruments can be calibrated using multiple methods.

3.0 DEFINITIONS

3.1 FPXRF -- Field portable x-ray fluorescence.

3.2 MCA -- Multichannel analyzer for measuring pulse amplitude.

3.3 SSCS -- Site-specific calibration standards.

3.4 FP -- Fundamental parameter.

3.5 ROI -- Region of interest.

3.6 SRM -- Standard reference material; a standard containing certified amounts of metals in soil or sediment.

3.7 eV -- Electron volt; a unit of energy equivalent to the amount of energy gained by an electron passing through a potential difference of one volt.

3.8 Refer to Chapter One, Chapter Three, and the manufacturer's instructions for other definitions that may be relevant to this procedure.

4.0 INTERFERENCES

4.1 The total method error for FPXRF analysis is defined as the square root of the sum of squares of both instrument precision and user- or application-related error. Generally, instrument precision is the least significant source of error in FPXRF analysis. User- or application-related error is generally more significant and varies with each site and method used. Some sources of interference can be minimized or controlled by the instrument operator, but others cannot. Common sources of user- or application-related error are discussed below.

4.2 Physical matrix effects result from variations in the physical character of the sample. These variations may include such parameters as particle size, uniformity, homogeneity, and surface condition. For example, if any analyte exists in the form of very fine particles in a coarser-grained matrix, the analyte's concentration measured by the FPXRF will vary depending on how fine particles are distributed within the coarser-grained matrix. If the fine particles "settle" to the bottom of the sample cup (i.e., against the cup window), the analyte concentration measurement will be higher than if the fine particles are not mixed in well and stay on top of the coarser-grained particles in the sample cup. One way to reduce such error is to grind and sieve all soil samples to a uniform particle size thus reducing sample-to-sample particle size variability. Homogeneity is always a concern when dealing with soil samples. Every effort should be made to thoroughly mix and homogenize soil samples before analysis. Field studies have shown heterogeneity of the sample generally has the largest impact on comparability with confirmatory samples.

4.3 Moisture content may affect the accuracy of analysis of soil and sediment sample analyses. When the moisture content is between 5 and 20 percent, the overall error from moisture may be minimal. However, moisture content may be a major source of error when analyzing samples of surface soil or sediment that are saturated with water. This error can be minimized by drying the samples in a convection or toaster oven. Microwave drying is not recommended because field studies have shown that microwave drying can increase variability between FPXRF data and confirmatory analysis and because metal fragments in the sample can cause arcing to occur in a microwave.

4.4 Inconsistent positioning of samples in front of the probe window is a potential source of error because the x-ray signal decreases as the distance from the radioactive source increases. This error is minimized by maintaining the same distance between the window and each sample. For the best results, the window of the probe should be in direct contact with the sample, which means that the sample should be flat and smooth to provide a good contact surface.

4.5 Chemical matrix effects result from differences in the concentrations of interfering elements. These effects occur as either spectral interferences (peak overlaps) or as x-ray absorption and enhancement phenomena. Both effects are common in soils contaminated with heavy metals. As examples of absorption and enhancement effects; iron (Fe) tends to absorb copper (Cu) x-rays, reducing the intensity of the Cu measured by the detector, while chromium (Cr) will be enhanced at the expense of Fe because the absorption edge of Cr is slightly lower in energy than the fluorescent peak of iron. The effects can be corrected mathematically through the use of fundamental parameter (FP) coefficients. The effects also can be compensated for using SSCS, which contain all the elements present on site that can interfere with one another.

4.6 When present in a sample, certain x-ray lines from different elements can be very close in energy and, therefore, can cause interference by producing a severely overlapped spectrum. The degree to which a detector can resolve the two different peaks depends on the energy resolution of the detector. If the energy difference between the two peaks in electron volts is less than the resolution of the detector in electron volts, then the detector will not be able to fully resolve the peaks.

The most common spectrum overlaps involve the K_β line of element Z-1 with the K_α line of element Z. This is called the K_α/K_β interference. Because the K_α:K_β intensity ratio for a given element usually is about 7:1, the interfering element, Z-1, must be present at large concentrations to cause a problem. Two examples of this type of spectral interference involve the presence of large concentrations of vanadium (V) when attempting to measure Cr or the presence of large concentrations of Fe when attempting to measure cobalt (Co). The V K_α and K_β energies are 4.95 and 5.43 keV, respectively, and the Cr K_α energy is 5.41 keV. The Fe K_α and K_β energies are 6.40 and 7.06 keV, respectively, and the Co K_α energy is 6.92 keV. The difference between the V K_β and Cr K_α energies is 20 eV, and the difference between the Fe K_β and the Co K_α energies is 140 eV. The resolution of the highest-resolution detectors in FPXRF instruments is 170 eV. Therefore, large amounts of V and Fe will interfere with quantitation of Cr or Co, respectively. The presence of Fe is a frequent problem because it is often found in soils at tens of thousands of parts per million (ppm).

4.7 Other interferences can arise from K/L, K/M, and L/M line overlaps, although these overlaps are less common. Examples of such overlap involve arsenic (As) K_α/lead (Pb) L_α and sulfur (S) K_α/Pb M_α. In the As/Pb case, Pb can be measured from the Pb L_β line, and As can be measured from either the As K_α or the As K_β line; in this way the interference can be corrected. If the As K_β line is used, sensitivity will be decreased by a factor of two to five times because it is a less intense line than the As K_α line. If the As K_α line is used in the presence of Pb, mathematical corrections within the instrument software can be used to subtract out the Pb interference. However, because of the limits of mathematical corrections, As concentrations cannot be efficiently calculated for samples with Pb:As ratios of 10:1 or more. This high ratio of Pb to As may result in reporting of a "nondetect" or a "less than" value (e.g., <300 ppm) for As, regardless of the actual concentration present.

No instrument can fully compensate for this interference. It is important for an operator to understand this limitation of FPXRF instruments and consult with the manufacturer of the FPXRF instrument to evaluate options to minimize this limitation. The operator's decision will be based on action levels for metals in soil established for the site, matrix effects, capabilities of the instrument, data quality objectives, and the ratio of lead to arsenic known to be present at the site. If a site is encountered that contains lead at concentrations greater than ten times the concentration of arsenic it is advisable that all critical soil samples be sent off site for confirmatory analysis using other techniques (e.g., flame atomic absorption spectrometry (FLAA), graphite furnance atomic absorption spectrometry (GFAA), inductively coupled plasma-

atomic emission spectrometry, (ICP-AES), or inductively coupled plasma-mass spectrometry, (ICP-MS)).

4.8 If SSCS are used to calibrate an FPXRF instrument, the samples collected must be representative of the site under investigation. Representative soil sampling ensures that a sample or group of samples accurately reflects the concentrations of the contaminants of concern at a given time and location. Analytical results for representative samples reflect variations in the presence and concentration ranges of contaminants throughout a site. Variables affecting sample representativeness include differences in soil type, contaminant concentration variability, sample collection and preparation variability, and analytical variability, all of which should be minimized as much as possible.

4.9 Soil physical and chemical effects may be corrected using SSCS that have been analyzed by inductively coupled plasma (ICP) or atomic absorption (AA) methods. However, a major source of error can be introduced if these samples are not representative of the site or if the analytical error is large. Another concern is the type of digestion procedure used to prepare the soil samples for the reference analysis. Analytical results for the confirmatory method will vary depending on whether a partial digestion procedure, such as Method 3050, or a total digestion procedure, such as Method 3052, is used. It is known that depending on the nature of the soil or sediment, Method 3050 will achieve differing extraction efficiencies for different analytes of interest. The confirmatory method should meet the project-specific data quality objectives (DQOs).

XRF measures the total concentration of an element; therefore, to achieve the greatest comparability of this method with the reference method (reduced bias), a total digestion procedure should be used for sample preparation. However, in the study used to generate the performance data for this method (see Table 8), the confirmatory method used was Method 3050, and the FPXRF data compared very well with regression correlation coefficients (r often exceeding 0.95, except for barium and chromium). The critical factor is that the digestion procedure and analytical reference method used should meet the DQOs of the project and match the method used for confirmation analysis.

4.10 Ambient temperature changes can affect the gain of the amplifiers producing instrument drift. Gain or drift is primarily a function of the electronics (amplifier or preamplifier) and not the detector as most instrument detectors are cooled to a constant temperature. Most FPXRF instruments have a built-in automatic gain control. If the automatic gain control is allowed to make periodic adjustments, the instrument will compensate for the influence of temperature changes on its energy scale. If the FPXRF instrument has an automatic gain control function, the operator will not have to adjust the instrument's gain unless an error message appears. If an error message appears, the operator should follow the manufacturer's procedures for troubleshooting the problem. Often, this involves performing a new energy calibration. The performance of an energy calibration check to assess drift is a quality control measure discussed in Sec. 9.2.

If the operator is instructed by the manufacturer to manually conduct a gain check because of increasing or decreasing ambient temperature, it is standard to perform a gain check after every 10 to 20 sample measurements or once an hour whichever is more frequent. It is also suggested that a gain check be performed if the temperature fluctuates more than 10° F. The operator should follow the manufacturer's recommendations for gain check frequency.

5.0 SAFETY

5.1 This method does not address all safety issues associated with its use. The user is responsible for maintaining a safe work environment and a current awareness file of OSHA regulations regarding the safe handling of the chemicals listed in this method. A reference file of material safety data sheets (MSDSs) should be available to all personnel involved in these analyses.

NOTE: No MSDS applies directly to the radiation-producing instrument because that is covered under the Nuclear Regulatory Commission (NRC) or applicable state regulations.

5.2 Proper training for the safe operation of the instrument and radiation training should be completed by the analyst prior to analysis. Radiation safety for each specific instrument can be found in the operator's manual. Protective shielding should never be removed by the analyst or any personnel other than the manufacturer. The analyst should be aware of the local state and national regulations that pertain to the use of radiation-producing equipment and radioactive materials with which compliance is required. There should be a person appointed within the organization that is solely responsible for properly instructing all personnel, maintaining inspection records, and monitoring x-ray equipment at regular intervals.

Licenses for radioactive materials are of two types, specifically: (1) a general license which is usually initiated by the manufacturer for receiving, acquiring, owning, possessing, using, and transferring radioactive material incorporated in a device or equipment, and (2) a specific license which is issued to named persons for the operation of radioactive instruments as required by local, state, or federal agencies. A copy of the radioactive material license (for specific licenses only) and leak tests should be present with the instrument at all times and available to local and national authorities upon request.

X-ray tubes do not require radioactive material licenses or leak tests, but do require approvals and licenses which vary from state to state. In addition, fail-safe x-ray warning lights should be illuminated whenever an x-ray tube is energized. Provisions listed above concerning radiation safety regulations, shielding, training, and responsible personnel apply to x-ray tubes just as to radioactive sources. In addition, a log of the times and operating conditions should be kept whenever an x-ray tube is energized. An additional hazard present with x-ray tubes is the danger of electric shock from the high voltage supply, however, if the tube is properly positioned within the instrument, this is only a negligible risk. Any instrument (x-ray tube or radioisotope based) is capable of delivering an electric shock from the basic circuitry when the system is inappropriately opened.

5.3 Radiation monitoring equipment should be used with the handling and operation of the instrument. The operator and the surrounding environment should be monitored continually for analyst exposure to radiation. Thermal luminescent detectors (TLD) in the form of badges and rings are used to monitor operator radiation exposure. The TLDs or badges should be worn in the area of maximum exposure. The maximum permissible whole-body dose from occupational exposure is 5 Roentgen Equivalent Man (REM) per year. Possible exposure pathways for radiation to enter the body are ingestion, inhaling, and absorption. The best precaution to prevent radiation exposure is distance and shielding.

6.0 EQUIPMENT AND SUPPLIES

The mention of trade names or commercial products in this manual is for illustrative purposes only, and does not constitute an EPA endorsement or exclusive recommendation for

use. The products and instrument settings cited in SW-846 methods represent those products and settings used during method development or subsequently evaluated by the Agency. Glassware, reagents, supplies, equipment, and settings other than those listed in this manual may be employed provided that method performance appropriate for the intended application has been demonstrated and documented.

6.1 FPXRF spectrometer -- An FPXRF spectrometer consists of four major components: (1) a source that provides x-rays; (2) a sample presentation device; (3) a detector that converts x-ray-generated photons emitted from the sample into measurable electronic signals; and (4) a data processing unit that contains an emission or fluorescence energy analyzer, such as an MCA, that processes the signals into an x-ray energy spectrum from which elemental concentrations in the sample may be calculated, and a data display and storage system. These components and additional, optional items, are discussed below.

6.1.1 Excitation sources -- FPXRF instruments use either a sealed radioisotope source or an x-ray tube to provide the excitation source. Many FPXRF instruments use sealed radioisotope sources to produce x-rays in order to irradiate samples. The FPXRF instrument may contain between one and three radioisotope sources. Common radioisotope sources used for analysis for metals in soils are iron Fe-55 (^{55}Fe), cadmium Cd-109 (^{109}Cd), americium Am-241 (^{241}Am), and curium Cm-244 (^{244}Cm). These sources may be contained in a probe along with a window and the detector; the probe may be connected to a data reduction and handling system by means of a flexible cable. Alternatively, the sources, window, and detector may be included in the same unit as the data reduction and handling system.

The relative strength of the radioisotope sources is measured in units of millicuries (mCi). All other components of the FPXRF system being equal, the stronger the source, the greater the sensitivity and precision of a given instrument. Radioisotope sources undergo constant decay. In fact, it is this decay process that emits the primary x-rays used to excite samples for FPXRF analysis. The decay of radioisotopes is measured in "half-lives." The half-life of a radioisotope is defined as the length of time required to reduce the radioisotopes strength or activity by half. Developers of FPXRF technologies recommend source replacement at regular intervals based on the source's half-life. This is due to the ever increasing time required for the analysis rather than a decrease in instrument performance. The characteristic x-rays emitted from each of the different sources have energies capable of exciting a certain range of analytes in a sample. Table 2 summarizes the characteristics of four common radioisotope sources.

X-ray tubes have higher radiation output, no intrinsic lifetime limit, produce constant output over their lifetime, and do not have the disposal problems of radioactive sources but are just now appearing in FPXRF instruments. An electrically-excited x-ray tube operates by bombarding an anode with electrons accelerated by a high voltage. The electrons gain an energy in electron volts equal to the accelerating voltage and can excite atomic transitions in the anode, which then produces characteristic x-rays. These characteristic x-rays are emitted through a window which contains the vacuum necessary for the electron acceleration. An important difference between x-ray tubes and radioactive sources is that the electrons which bombard the anode also produce a continuum of x-rays across a broad range of energies in addition to the characteristic x-rays. This continuum is weak compared to the characteristic x-rays but can provide substantial excitation since it covers a broad energy range. It has the undesired property of producing background in the spectrum near the analyte x-ray lines when it is scattered by the sample. For this reason a filter is often used between the x-ray tube and the sample to suppress the continuum radiation while passing the characteristic x-rays from the anode. This filter is sometimes incorporated into the window of the x-ray tube. The choice of

accelerating voltage is governed both by the anode material, since the electrons must have sufficient energy to excite the anode, which requires a voltage greater than the absorption edge of the anode material and by the instrument's ability to cool the x-ray tube. The anode is most efficiently excited by voltages 2 to 2.5 times the edge energy (most x-rays per unit power to the tube), although voltages as low as 1.5 times the absorption edge energy will work. The characteristic x-rays emitted by the anode are capable of exciting a range of elements in the sample just as with a radioactive source. Table 3 gives the recommended operating voltages and the sample elements excited for some common anodes.

6.1.2 Sample presentation device -- FPXRF instruments can be operated in two modes: in situ and intrusive. If operated in the in situ mode, the probe window is placed in direct contact with the soil surface to be analyzed. When an FPXRF instrument is operated in the intrusive mode, a soil or sediment sample must be collected, prepared, and placed in a sample cup. For FPXRF instruments operated in the intrusive mode, the probe may be rotated so that the window faces either upward or downward. A protective sample cover is placed over the window, and the sample cup is placed on top of the window inside the protective sample cover for analysis.

6.1.3 Detectors -- The detectors in the FPXRF instruments can be either solid-state detectors or gas-filled, proportional counter detectors. Common solid-state detectors include mercuric iodide (HgI_2), silicon pin diode and lithium-drifted silicon Si(Li). The HgI_2 detector is operated at a moderately subambient temperature controlled by a low power thermoelectric cooler. The silicon pin diode detector also is cooled via the thermoelectric Peltier effect. The Si(Li) detector must be cooled to at least -90 °C either with liquid nitrogen or by thermoelectric cooling via the Peltier effect. Instruments with a Si(Li) detector have an internal liquid nitrogen dewar with a capacity of 0.5 to 1.0 L. Proportional counter detectors are rugged and lightweight, which are important features of a field portable detector. However, the resolution of a proportional counter detector is not as good as that of a solid-state detector. The energy resolution of a detector for characteristic x-rays is usually expressed in terms of full width at half-maximum (FWHM) height of the manganese K_α peak at 5.89 keV. The typical resolutions of the above mentioned detectors are as follows: HgI_2-270 eV; silicon pin diode-250 eV; Si(Li)–170 eV; and gas-filled, proportional counter-750 eV.

During operation of a solid-state detector, an x-ray photon strikes a biased, solid-state crystal and loses energy in the crystal by producing electron-hole pairs. The electric charge produced is collected and provides a current pulse that is directly proportional to the energy of the x-ray photon absorbed by the crystal of the detector. A gas-filled, proportional counter detector is an ionization chamber filled with a mixture of noble and other gases. An x-ray photon entering the chamber ionizes the gas atoms. The electric charge produced is collected and provides an electric signal that is directly proportional to the energy of the x-ray photon absorbed by the gas in the detector.

6.1.4 Data processing units -- The key component in the data processing unit of an FPXRF instrument is the MCA. The MCA receives pulses from the detector and sorts them by their amplitudes (energy level). The MCA counts pulses per second to determine the height of the peak in a spectrum, which is indicative of the target analyte's concentration. The spectrum of element peaks are built on the MCA. The MCAs in FPXRF instruments have from 256 to 2,048 channels. The concentrations of target analytes are usually shown in ppm on a liquid crystal display (LCD) in the instrument. FPXRF instruments can store both spectra and from 3,000 to 5,000 sets of numerical analytical results. Most FPXRF instruments are menu-driven from software built into the

units or from PCs. Once the data–storage memory of an FPXRF unit is full or at any other time, data can be downloaded by means of an RS-232 port and cable to a PC.

6.2 Spare battery and battery charger.

6.3 Polyethylene sample cups -- 31 to 40 mm in diameter with collar, or equivalent (appropriate for FPXRF instrument).

6.4 X-ray window film -- Mylar™, Kapton™, Spectrolene™, polypropylene, or equivalent; 2.5 to 6.0 µm thick.

6.5 Mortar and pestle -- Glass, agate, or aluminum oxide; for grinding soil and sediment samples.

6.6 Containers -- Glass or plastic to store samples.

6.7 Sieves -- 60-mesh (0.25 mm), stainless-steel, Nylon, or equivalent for preparing soil and sediment samples.

6.8 Trowels -- For smoothing soil surfaces and collecting soil samples.

6.9 Plastic bags -- Used for collection and homogenization of soil samples.

6.10 Drying oven -- Standard convection or toaster oven, for soil and sediment samples that require drying.

7.0 REAGENTS AND STANDARDS

7.1 Reagent grade chemicals must be used in all tests. Unless otherwise indicated, it is intended that all reagents conform to the specifications of the Committee on Analytical Reagents of the American Chemical Society, where such specifications are available. Other grades may be used, provided it is first ascertained that the reagent is of sufficiently high purity to permit its use without lessening the accuracy of the determination.

7.2 Pure element standards -- Each pure, single-element standard is intended to produce strong characteristic x-ray peaks of the element of interest only. Other elements present must not contribute to the fluorescence spectrum. A set of pure element standards for commonly sought analytes is supplied by the instrument manufacturer, if designated for the instrument; not all instruments require the pure element standards. The standards are used to set the region of interest (ROI) for each element. They also can be used as energy calibration and resolution check samples.

7.3 Site-specific calibration standards -- Instruments that employ fundamental parameters (FP) or similar mathematical models in minimizing matrix effects may not require SSCS. If the FP calibration model is to be optimized or if empirical calibration is necessary, then SSCSs must be collected, prepared, and analyzed.

7.3.1 The SSCS must be representative of the matrix to be analyzed by FPXRF. These samples must be well homogenized. A minimum of 10 samples spanning the concentration ranges of the analytes of interest and of the interfering elements must be obtained from the site. A sample size of 4 to 8 ounces is recommended, and standard glass sampling jars should be used.

7.3.2 Each sample should be oven-dried for 2 to 4 hr at a temperature of less than 150 °C. If mercury is to be analyzed, a separate sample portion should be dried at ambient temperature as heating may volatilize the mercury. When the sample is dry, all large, organic debris and nonrepresentative material, such as twigs, leaves, roots, insects, asphalt, and rock should be removed. The sample should be homogenized (see Sec. 7.3.3) and then a representative portion ground with a mortar and pestle or other mechanical means, prior to passing through a 60-mesh sieve. Only the coarse rock fraction should remain on the screen.

7.3.3 The sample should be homogenized by using a riffle splitter or by placing 150 to 200 g of the dried, sieved sample on a piece of kraft or butcher paper about 1.5 by 1.5 feet in size. Each corner of the paper should be lifted alternately, rolling the soil over on itself and toward the opposite corner. The soil should be rolled on itself 20 times. Approximately 5 g of the sample should then be removed and placed in a sample cup for FPXRF analysis. The rest of the prepared sample should be sent off site for ICP or AA analysis. The method use for confirmatory analysis should meet the data quality objectives of the project.

7.4 Blank samples -- The blank samples should be from a "clean" quartz or silicon dioxide matrix that is free of any analytes at concentrations above the established lower limit of detection. These samples are used to monitor for cross-contamination and laboratory-induced contaminants or interferences.

7.5 Standard reference materials -- Standard reference materials (SRMs) are standards containing certified amounts of metals in soil or sediment. These standards are used for accuracy and performance checks of FPXRF analyses. SRMs can be obtained from the National Institute of Standards and Technology (NIST), the U.S. Geological Survey (USGS), the Canadian National Research Council, and the national bureau of standards in foreign nations. Pertinent NIST SRMs for FPXRF analysis include 2704, Buffalo River Sediment; 2709, San Joaquin Soil; and 2710 and 2711, Montana Soil. These SRMs contain soil or sediment from actual sites that has been analyzed using independent inorganic analytical methods by many different laboratories. When these SRMs are unavailable, alternate standards may be used (e.g., NIST 2702).

8.0 SAMPLE COLLECTION, PRESERVATION, AND STORAGE

Sample handling and preservation procedures used in FPXRF analyses should follow the guidelines in Chapter Three, "Inorganic Analytes."

9.0 QUALITY CONTROL

9.1 Follow the manufacturer's instructions for the quality control procedures specific to use of the testing product. Refer to Chapter One for additional guidance on quality assurance (QA) and quality control (QC) protocols. Any effort involving the collection of analytical data should include development of a structured and systematic planning document, such as a Quality Assurance Project Plan (QAPP) or a Sampling and Analysis Plan (SAP), which translates project objectives and specifications into directions for those that will implement the project and assess the results.

9.2 Energy calibration check -- To determine whether an FPXRF instrument is operating within resolution and stability tolerances, an energy calibration check should be run. The energy calibration check determines whether the characteristic x-ray lines are shifting,

which would indicate drift within the instrument. As discussed in Sec. 4.10, this check also serves as a gain check in the event that ambient temperatures are fluctuating greatly (more than 10 °F).

9.2.1 The energy calibration check should be run at a frequency consistent with manufacturer's recommendations. Generally, this would be at the beginning of each working day, after the batteries are changed or the instrument is shut off, at the end of each working day, and at any other time when the instrument operator believes that drift is occurring during analysis. A pure element such as iron, manganese, copper, or lead is often used for the energy calibration check. A manufacturer-recommended count time per source should be used for the check.

9.2.2 The instrument manufacturer's manual specifies the channel or kiloelectron volt level at which a pure element peak should appear and the expected intensity of the peak. The intensity and channel number of the pure element as measured using the source should be checked and compared to the manufacturer's recommendation. If the energy calibration check does not meet the manufacturer's criteria, then the pure element sample should be repositioned and reanalyzed. If the criteria are still not met, then an energy calibration should be performed as described in the manufacturer's manual. With some FPXRF instruments, once a spectrum is acquired from the energy calibration check, the peak can be optimized and realigned to the manufacturer's specifications using their software.

9.3 Blank samples -- Two types of blank samples should be analyzed for FPXRF analysis, specifically, instrument blanks and method blanks.

9.3.1 An instrument blank is used to verify that no contamination exists in the spectrometer or on the probe window. The instrument blank can be silicon dioxide, a polytetraflurorethylene (PTFE) block, a quartz block, "clean" sand, or lithium carbonate. This instrument blank should be analyzed on each working day before and after analyses are conducted and once per every twenty samples. An instrument blank should also be analyzed whenever contamination is suspected by the analyst. The frequency of analysis will vary with the data quality objectives of the project. A manufacturer-recommended count time per source should be used for the blank analysis. No element concentrations above the established lower limit of detection should be found in the instrument blank. If concentrations exceed these limits, then the probe window and the check sample should be checked for contamination. If contamination is not a problem, then the instrument must be "zeroed" by following the manufacturer's instructions.

9.3.2 A method blank is used to monitor for laboratory-induced contaminants or interferences. The method blank can be "clean" silica sand or lithium carbonate that undergoes the same preparation procedure as the samples. A method blank must be analyzed at least daily. The frequency of analysis will depend on the data quality objectives of the project. If the method blank does not contain the target analyte at a level that interferes with the project-specific data quality objectives then the method blank would be considered acceptable. In the absence of project-specific data quality objectives, if the blank is less than the lowest level of detection or less than 10% of the lowest sample concentration for the analyte, whichever is greater, then the method blank would be considered acceptable. If the method blank cannot be considered acceptable, the cause of the problem must be identified, and all samples analyzed with the method blank must be reanalyzed.

9.4 Calibration verification checks -- A calibration verification check sample is used to check the accuracy of the instrument and to assess the stability and consistency of the analysis for the analytes of interest. A check sample should be analyzed at the beginning of each working day, during active sample analyses, and at the end of each working day. The frequency of calibration checks during active analysis will depend on the data quality objectives of the project. The check sample should be a well characterized soil sample from the site that is representative of site samples in terms of particle size and degree of homogeneity and that contains contaminants at concentrations near the action levels. If a site-specific sample is not available, then an NIST or other SRM that contains the analytes of interest can be used to verify the accuracy of the instrument. The measured value for each target analyte should be within ±20 percent (%D) of the true value for the calibration verification check to be acceptable. If a measured value falls outside this range, then the check sample should be reanalyzed. If the value continues to fall outside the acceptance range, the instrument should be recalibrated, and the batch of samples analyzed before the unacceptable calibration verification check must be reanalyzed.

9.5 Precision measurements -- The precision of the method is monitored by analyzing a sample with low, moderate, or high concentrations of target analytes. The frequency of precision measurements will depend on the data quality objectives for the data. A minimum of one precision sample should be run per day. Each precision sample should be analyzed 7 times in replicate. It is recommended that precision measurements be obtained for samples with varying concentration ranges to assess the effect of concentration on method precision. Determining method precision for analytes at concentrations near the site action levels can be extremely important if the FPXRF results are to be used in an enforcement action; therefore, selection of at least one sample with target analyte concentrations at or near the site action levels or levels of concern is recommended. A precision sample is analyzed by the instrument for the same field analysis time as used for other project samples. The relative standard deviation (RSD) of the sample mean is used to assess method precision. For FPXRF data to be considered adequately precise, the RSD should not be greater than 20 percent with the exception of chromium. RSD values for chromium should not be greater than 30 percent. If both in situ and intrusive analytical techniques are used during the course of one day, it is recommended that separate precision calculations be performed for each analysis type.

The equation for calculating RSD is as follows:

$$RSD = (SD/Mean\ Concentration) \times 100$$

where:

RSD	=	Relative standard deviation for the precision measurement for the analyte
SD	=	Standard deviation of the concentration for the analyte
Mean concentration	=	Mean concentration for the analyte

The precision or reproducibility of a measurement will improve with increasing count time, however, increasing the count time by a factor of 4 will provide only 2 times better precision, so there is a point of diminishing return. Increasing the count time also improves the sensitivity, but decreases sample throughput.

9.6 The lower limits of detection should be established from actual measured performance based on spike recoveries in the matrix of concern or from acceptable method performance on a certified reference material of the appropriate matrix and within the appropriate calibration range for the application. This is considered the best estimate of the true method sensitivity as opposed to a statistical determination based on the standard deviation of

replicate analyses of a low-concentration sample. While the statistical approach demonstrates the potential data variability for a given sample matrix at one point in time, it does not represent what can be detected or most importantly the lowest concentration that can be calibrated. For this reason the sensitivity should be established as the lowest point of detection based on acceptable target analyte recovery in the desired sample matrix.

9.7 Confirmatory samples -- The comparability of the FPXRF analysis is determined by submitting FPXRF-analyzed samples for analysis at a laboratory. The method of confirmatory analysis must meet the project and XRF measurement data quality objectives. The confirmatory samples must be splits of the well homogenized sample material. In some cases the prepared sample cups can be submitted. A minimum of 1 sample for each 20 FPXRF-analyzed samples should be submitted for confirmatory analysis. This frequency will depend on project-specific data quality objectives. The confirmatory analyses can also be used to verify the quality of the FPXRF data. The confirmatory samples should be selected from the lower, middle, and upper range of concentrations measured by the FPXRF. They should also include samples with analyte concentrations at or near the site action levels. The results of the confirmatory analysis and FPXRF analyses should be evaluated with a least squares linear regression analysis. If the measured concentrations span more than one order of magnitude, the data should be log-transformed to standardize variance which is proportional to the magnitude of measurement. The correlation coefficient (r) for the results should be 0.7 or greater for the FPXRF data to be considered screening level data. If the r is 0.9 or greater and inferential statistics indicate the FPXRF data and the confirmatory data are statistically equivalent at a 99 percent confidence level, the data could potentially meet definitive level data criteria.

10.0 CALIBRATION AND STANDARDIZATION

10.1 Instrument calibration -- Instrument calibration procedures vary among FPXRF instruments. Users of this method should follow the calibration procedures outlined in the operator's manual for each specific FPXRF instrument. Generally, however, three types of calibration procedures exist for FPXRF instruments, namely: FP calibration, empirical calibration, and the Compton peak ratio or normalization method. These three types of calibration are discussed below.

10.2 Fundamental parameters calibration -- FP calibration procedures are extremely variable. An FP calibration provides the analyst with a "standardless" calibration. The advantages of FP calibrations over empirical calibrations include the following:

- No previously collected site-specific samples are necessary, although site-specific samples with confirmed and validated analytical results for all elements present could be used.
- Cost is reduced because fewer confirmatory laboratory results or calibration standards are necessary.

However, the analyst should be aware of the limitations imposed on FP calibration by particle size and matrix effects. These limitations can be minimized by adhering to the preparation procedure described in Sec. 7.3. The two FP calibration processes discussed below are based on an effective energy FP routine and a back scatter with FP (BFP) routine. Each FPXRF FP calibration process is based on a different iterative algorithmic method. The calibration procedure for each routine is explained in detail in the manufacturer's user manual for each FPXRF instrument; in addition, training courses are offered for each instrument.

10.2.1 Effective energy FP calibration -- The effective energy FP calibration is performed by the manufacturer before an instrument is sent to the analyst. Although SSCS can be used, the calibration relies on pure element standards or SRMs such as those obtained from NIST for the FP calibration. The effective energy routine relies on the spectrometer response to pure elements and FP iterative algorithms to compensate for various matrix effects.

Alpha coefficients are calculated using a variation of the Sherman equation, which calculates theoretical intensities from the measurement of pure element samples. These coefficients indicate the quantitative effect of each matrix element on an analyte's measured x-ray intensity. Next, the Lachance Traill algorithm is solved as a set of simultaneous equations based on the theoretical intensities. The alpha coefficients are then downloaded into the specific instrument.

The working effective energy FP calibration curve must be verified before sample analysis begins on each working day, after every 20 samples are analyzed, and at the end of sampling. This verification is performed by analyzing either an NIST SRM or an SSCS that is representative of the site-specific samples. This SRM or SSCS serves as a calibration check. A manufacturer-recommended count time per source should be used for the calibration check. The analyst must then adjust the y-intercept and slope of the calibration curve to best fit the known concentrations of target analytes in the SRM or SSCS.

A percent difference (%D) is then calculated for each target analyte. The %D should be within ±20 percent of the certified value for each analyte. If the %D falls outside this acceptance range, then the calibration curve should be adjusted by varying the slope of the line or the y-intercept value for the analyte. The SRM or SSCS is reanalyzed until the %D falls within ±20 percent. The group of 20 samples analyzed before an out-of-control calibration check should be reanalyzed.

The equation to calibrate %D is as follows:

$$\%D = ((C_s - C_k) / C_k) \times 100$$

where:

%D = Percent difference
C_k = Certified concentration of standard sample
C_s = Measured concentration of standard sample

10.2.2 BFP calibration -- BFP calibration relies on the ability of the liquid nitrogen-cooled, Si(Li) solid-state detector to separate the coherent (Compton) and incoherent (Rayleigh) backscatter peaks of primary radiation. These peak intensities are known to be a function of sample composition, and the ratio of the Compton to Rayleigh peak is a function of the mass absorption of the sample. The calibration procedure is explained in detail in the instrument manufacturer's manual. Following is a general description of the BFP calibration procedure.

The concentrations of all detected and quantified elements are entered into the computer software system. Certified element results for an NIST SRM or confirmed and validated results for an SSCS can be used. In addition, the concentrations of oxygen and silicon must be entered; these two concentrations are not found in standard metals analyses. The manufacturer provides silicon and oxygen concentrations for typical soil types. Pure element standards are then analyzed using a manufacturer-recommended

count time per source. The results are used to calculate correction factors in order to adjust for spectrum overlap of elements.

The working BFP calibration curve must be verified before sample analysis begins on each working day, after every 20 samples are analyzed, and at the end of the analysis. This verification is performed by analyzing either an NIST SRM or an SSCS that is representative of the site-specific samples. This SRM or SSCS serves as a calibration check. The standard sample is analyzed using a manufacturer-recommended count time per source to check the calibration curve. The analyst must then adjust the y-intercept and slope of the calibration curve to best fit the known concentrations of target analytes in the SRM or SSCS.

A %D is then calculated for each target analyte. The %D should fall within ±20 percent of the certified value for each analyte. If the %D falls outside this acceptance range, then the calibration curve should be adjusted by varying the slope of the line the y-intercept value for the analyte. The standard sample is reanalyzed until the %D falls within ±20 percent. The group of 20 samples analyzed before an out-of-control calibration check should be reanalyzed.

10.3 Empirical calibration -- An empirical calibration can be performed with SSCS, site-typical standards, or standards prepared from metal oxides. A discussion of SSCS is included in Sec. 7.3; if no previously characterized samples exist for a specific site, site-typical standards can be used. Site-typical standards may be selected from commercially available characterized soils or from SSCS prepared for another site. The site-typical standards should closely approximate the site's soil matrix with respect to particle size distribution, mineralogy, and contaminant analytes. If neither SSCS nor site-typical standards are available, it is possible to make gravimetric standards by adding metal oxides to a "clean" sand or silicon dioxide matrix that simulates soil. Metal oxides can be purchased from various chemical vendors. If standards are made on site, a balance capable of weighing items to at least two decimal places is necessary. Concentrated ICP or AA standard solutions can also be used to make standards. These solutions are available in concentrations of 10,000 parts per million, thus only small volumes have to be added to the soil.

An empirical calibration using SSCS involves analysis of SSCS by the FPXRF instrument and by a conventional analytical method such as ICP or AA. A total acid digestion procedure should be used by the laboratory for sample preparation. Generally, a minimum of 10 and a maximum of 30 well characterized SSCS, site-typical standards, or prepared metal oxide standards are necessary to perform an adequate empirical calibration. The exact number of standards depends on the number of analytes of interest and interfering elements. Theoretically, an empirical calibration with SSCS should provide the most accurate data for a site because the calibration compensates for site-specific matrix effects.

The first step in an empirical calibration is to analyze the pure element standards for the elements of interest. This enables the instrument to set channel limits for each element for spectral deconvolution. Next the SSCS, site-typical standards, or prepared metal oxide standards are analyzed using a count time of 200 seconds per source or a count time recommended by the manufacturer. This will produce a spectrum and net intensity of each analyte in each standard. The analyte concentrations for each standard are then entered into the instrument software; these concentrations are those obtained from the laboratory, the certified results, or the gravimetrically determined concentrations of the prepared standards. This gives the instrument analyte values to regress against corresponding intensities during the modeling stage. The regression equation correlates the concentrations of an analyte with its net intensity.

The calibration equation is developed using a least squares fit regression analysis. After the regression terms to be used in the equation are defined, a mathematical equation can be developed to calculate the analyte concentration in an unknown sample. In some FPXRF instruments, the software of the instrument calculates the regression equation. The software uses calculated intercept and slope values to form a multiterm equation. In conjunction with the software in the instrument, the operator can adjust the multiterm equation to minimize interelement interferences and optimize the intensity calibration curve.

It is possible to define up to six linear or nonlinear terms in the regression equation. Terms can be added and deleted to optimize the equation. The goal is to produce an equation with the smallest regression error and the highest correlation coefficient. These values are automatically computed by the software as the regression terms are added, deleted, or modified. It is also possible to delete data points from the regression line if these points are significant outliers or if they are heavily weighing the data. Once the regression equation has been selected for an analyte, the equation can be entered into the software for quantitation of analytes in subsequent samples. For an empirical calibration to be acceptable, the regression equation for a specific analyte should have a correlation coefficient of 0.98 or greater or meet the DQOs of the project.

In an empirical calibration, one must apply the DQOs of the project and ascertain critical or action levels for the analytes of interest. It is within these concentration ranges or around these action levels that the FPXRF instrument should be calibrated most accurately. It may not be possible to develop a good regression equation over several orders of analyte concentration.

10.4 Compton normalization method -- The Compton normalization method is based on analysis of a single, certified standard and normalization for the Compton peak. The Compton peak is produced from incoherent backscattering of x-ray radiation from the excitation source and is present in the spectrum of every sample. The Compton peak intensity changes with differing matrices. Generally, matrices dominated by lighter elements produce a larger Compton peak, and those dominated by heavier elements produce a smaller Compton peak. Normalizing to the Compton peak can reduce problems with varying matrix effects among samples. Compton normalization is similar to the use of internal standards in organics analysis. The Compton normalization method may not be effective when analyte concentrations exceed a few percent.

The certified standard used for this type of calibration could be an NIST SRM such as 2710 or 2711. The SRM must be a matrix similar to the samples and must contain the analytes of interests at concentrations near those expected in the samples. First, a response factor has to be determined for each analyte. This factor is calculated by dividing the net peak intensity by the analyte concentration. The net peak intensity is gross intensity corrected for baseline reading. Concentrations of analytes in samples are then determined by multiplying the baseline corrected analyte signal intensity by the normalization factor and by the response factor. The normalization factor is the quotient of the baseline corrected Compton K_{α} peak intensity of the SRM divided by that of the samples. Depending on the FPXRF instrument used, these calculations may be done manually or by the instrument software.

11.0 PROCEDURE

11.1 Operation of the various FPXRF instruments will vary according to the manufacturers' protocols. Before operating any FPXRF instrument, one should consult the manufacturer's manual. Most manufacturers recommend that their instruments be allowed to warm up for 15 to 30 minutes before analysis of samples. This will help alleviate drift or energy calibration problems later during analysis.

11.2 Each FPXRF instrument should be operated according to the manufacturer's recommendations. There are two modes in which FPXRF instruments can be operated: in situ and intrusive. The in situ mode involves analysis of an undisturbed soil sediment or sample. Intrusive analysis involves collection and preparation of a soil or sediment sample before analysis. Some FPXRF instruments can operate in both modes of analysis, while others are designed to operate in only one mode. The two modes of analysis are discussed below.

11.3 For in situ analysis, remove any large or nonrepresentative debris from the soil surface before analysis. This debris includes rocks, pebbles, leaves, vegetation, roots, and concrete. Also, the soil surface must be as smooth as possible so that the probe window will have good contact with the surface. This may require some leveling of the surface with a stainless-steel trowel. During the study conducted to provide example performance data for this method, this modest amount of sample preparation was found to take less than 5 min per sample location. The last requirement is that the soil or sediment not be saturated with water. Manufacturers state that their FPXRF instruments will perform adequately for soils with moisture contents of 5 to 20 percent but will not perform well for saturated soils, especially if ponded water exists on the surface. Another recommended technique for in situ analysis is to tamp the soil to increase soil density and compactness for better repeatability and representativeness. This condition is especially important for heavy element analysis, such as barium. Source count times for in situ analysis usually range from 30 to 120 seconds, but source count times will vary among instruments and depending on the desired method sensitivity. Due to the heterogeneous nature of the soil sample, in situ analysis can provide only "screening" type data.

11.4 For intrusive analysis of surface or sediment, it is recommended that a sample be collected from a 4- by 4-inch square that is 1 inch deep. This will produce a soil sample of approximately 375 g or 250 cm^3, which is enough soil to fill an 8-ounce jar. However, the exact dimensions and sample depth should take into consideration the heterogeneous deposition of contaminants and will ultimately depend on the desired project-specific data quality objectives. The sample should be homogenized, dried, and ground before analysis. The sample can be homogenized before or after drying. The homogenization technique to be used after drying is discussed in Sec. 4.2. If the sample is homogenized before drying, it should be thoroughly mixed in a beaker or similar container, or if the sample is moist and has a high clay content, it can be kneaded in a plastic bag. One way to monitor homogenization when the sample is kneaded in a plastic bag is to add sodium fluorescein dye to the sample. After the moist sample has been homogenized, it is examined under an ultraviolet light to assess the distribution of sodium fluorescein throughout the sample. If the fluorescent dye is evenly distributed in the sample, homogenization is considered complete; if the dye is not evenly distributed, mixing should continue until the sample has been thoroughly homogenized. During the study conducted to provide data for this method, the time necessary for homogenization procedure using the fluorescein dye ranged from 3 to 5 min per sample. As demonstrated in Secs. 13.5 and 13.7, homogenization has the greatest impact on the reduction of sampling variability. It produces little or no contamination. Often, the direct analysis through the plastic bag is possible without the more labor intensive steps of drying, grinding, and sieving given in Secs. 11.5 and 11.6. Of course, to achieve the best data quality possible all four steps should be followed.

11.5 Once the soil or sediment sample has been homogenized, it should be dried. This can be accomplished with a toaster oven or convection oven. A small aliquot of the sample (20 to 50 g) is placed in a suitable container for drying. The sample should be dried for 2 to 4 hr in the convection or toaster oven at a temperature not greater than 150 °C. Samples may also be air dried under ambient temperature conditions using a 10- to 20-g portion. Regardless of what drying mechanism is used, the drying process is considered complete when a constant sample weight can be obtained. Care should be taken to avoid sample cross-contamination and these measures can be evaluated by including an appropriate method blank sample along with any sample preparation process.

CAUTION: Microwave drying is not a recommended procedure. Field studies have shown that microwave drying can increase variability between the FPXRF data and confirmatory analysis. High levels of metals in a sample can cause arcing in the microwave oven, and sometimes slag forms in the sample. Microwave oven drying can also melt plastic containers used to hold the sample.

11.6 The homogenized dried sample material should be ground with a mortar and pestle and passed through a 60-mesh sieve to achieve a uniform particle size. Sample grinding should continue until at least 90 percent of the original sample passes through the sieve. The grinding step normally takes an average of 10 min per sample. An aliquot of the sieved sample should then be placed in a 31.0-mm polyethylene sample cup (or equivalent) for analysis. The sample cup should be one-half to three-quarters full at a minimum. The sample cup should be covered with a 2.5 µm Mylar (or equivalent) film for analysis. The rest of the soil sample should be placed in a jar, labeled, and archived for possible confirmation analysis. All equipment including the mortar, pestle, and sieves must be thoroughly cleaned so that any cross-contamination is below the established lower limit of detection of the procedure or DQOs of the analysis. If all recommended sample preparation steps are followed, there is a high probability the desired laboratory data quality may be obtained.

12.0 DATA ANALYSIS AND CALCULATIONS

Most FPXRF instruments have software capable of storing all analytical results and spectra. The results are displayed in ppm and can be downloaded to a personal computer, which can be used to provide a hard copy printout. Individual measurements that are smaller than three times their associated SD should not be used for quantitation. See the manufacturer's instructions regarding data analysis and calculations.

13.0 METHOD PERFORMANCE

13.1 Performance data and related information are provided in SW-846 methods only as examples and guidance. The data do not represent required performance criteria for users of the methods. Instead, performance criteria should be developed on a project-specific basis, and the laboratory should establish in-house QC performance criteria for the application of this method. These performance data are not intended to be and must not be used as absolute QC acceptance criteria for purposes of laboratory accreditation.

13.2 The sections to follow discuss three performance evaluation factors; namely, precision, accuracy, and comparability. The example data presented in Tables 4 through 8 were generated from results obtained from six FPXRF instruments (see Sec. 13.3). The soil samples analyzed by the six FPXRF instruments were collected from two sites in the United States. The soil samples contained several of the target analytes at concentrations ranging from "nondetect" to tens of thousands of mg/kg. These data are provided for guidance purposes only.

13.3 The six FPXRF instruments included the TN 9000 and TN Lead Analyzer manufactured by TN Spectrace; the X-MET 920 with a SiLi detector and X-MET 920 with a gas-filled proportional detector manufactured by Metorex, Inc.; the XL Spectrum Analyzer manufactured by Niton; and the MAP Spectrum Analyzer manufactured by Scitec. The TN 9000 and TN Lead Analyzer both have a HgI_2 detector. The TN 9000 utilized an Fe-55, Cd-109, and Am-241 source. The TN Lead Analyzer had only a Cd-109 source. The X-Met 920 with the SiLi detector had a Cd-109 and Am-241 source. The X-MET 920 with the gas-filled proportional detector had only a Cd-109 source. The XL Spectrum Analyzer utilized a silicon pin-diode

detector and a Cd-109 source. The MAP Spectrum Analyzer utilized a solid-state silicon detector and a Cd-109 source.

13.4 All example data presented in Tables 4 through 8 were generated using the following calibrations and source count times. The TN 9000 and TN Lead Analyzer were calibrated using fundamental parameters using NIST SRM 2710 as a calibration check sample. The TN 9000 was operated using 100, 60, and 60 second count times for the Cd-109, Fe-55, and Am-241 sources, respectively. The TN Lead analyzer was operated using a 60 second count time for the Cd-109 source. The X-MET 920 with the Si(Li) detector was calibrated using fundamental parameters and one well characterized site-specific soil standard as a calibration check. It used 140 and 100 second count times for the Cd-109 and Am-241 sources, respectively. The X-MET 920 with the gas-filled proportional detector was calibrated empirically using between 10 and 20 well characterized site-specific soil standards. It used 120 second times for the Cd-109 source. The XL Spectrum Analyzer utilized NIST SRM 2710 for calibration and the Compton peak normalization procedure for quantitation based on 60 second count times for the Cd-109 source. The MAP Spectrum Analyzer was internally calibrated by the manufacturer. The calibration was checked using a well-characterized site-specific soil standard. It used 240 second times for the Cd-109 source.

13.5 Precision measurements -- The example precision data are presented in Table 4. These data are provided for guidance purposes only. Each of the six FPXRF instruments performed 10 replicate measurements on 12 soil samples that had analyte concentrations ranging from "nondetects" to thousands of mg/kg. Each of the 12 soil samples underwent 4 different preparation techniques from in situ (no preparation) to dried and ground in a sample cup. Therefore, there were 48 precision data points for five of the instruments and 24 precision points for the MAP Spectrum Analyzer. The replicate measurements were taken using the source count times discussed at the beginning of this section.

For each detectable analyte in each precision sample a mean concentration, standard deviation, and RSD was calculated for each analyte. The data presented in Table 4 is an average RSD for the precision samples that had analyte concentrations at 5 to 10 times the lower limit of detection for that analyte for each instrument. Some analytes such as mercury, selenium, silver, and thorium were not detected in any of the precision samples so these analytes are not listed in Table 4. Some analytes such as cadmium, nickel, and tin were only detected at concentrations near the lower limit of detection so that an RSD value calculated at 5 to 10 times this limit was not possible.

One FPXRF instrument collected replicate measurements on an additional nine soil samples to provide a better assessment of the effect of sample preparation on precision. Table 5 shows these results. These data are provided for guidance purposes only. The additional nine soil samples were comprised of three from each texture and had analyte concentrations ranging from near the lower limit of detection for the FPXRF analyzer to thousands of mg/kg. The FPXRF analyzer only collected replicate measurements from three of the preparation methods; no measurements were collected from the in situ homogenized samples. The FPXRF analyzer conducted five replicate measurements of the in situ field samples by taking measurements at five different points within the 4-inch by 4-inch sample square. Ten replicate measurements were collected for both the intrusive undried and unground and intrusive dried and ground samples contained in cups. The cups were shaken between each replicate measurement.

Table 5 shows that the precision dramatically improved from the in situ to the intrusive measurements. In general there was a slight improvement in precision when the sample was dried and ground. Two factors caused the precision for the in situ measurements to be poorer. The major factor is soil heterogeneity. By moving the probe within the 4-inch by 4-inch square,

measurements of different soil samples were actually taking place within the square. Table 5 illustrates the dominant effect of soil heterogeneity. It overwhelmed instrument precision when the FPXRF analyzer was used in this mode. The second factor that caused the RSD values to be higher for the in situ measurements is the fact that only five instead of ten replicates were taken. A lesser number of measurements caused the standard deviation to be larger which in turn elevated the RSD values.

13.6 Accuracy measurements -- Five of the FPXRF instruments (not including the MAP Spectrum Analyzer) analyzed 18 SRMs using the source count times and calibration methods given at the beginning of this section. The 18 SRMs included 9 soil SRMs, 4 stream or river sediment SRMs, 2 sludge SRMs, and 3 ash SRMs. Each of the SRMs contained known concentrations of certain target analytes. A percent recovery was calculated for each analyte in each SRM for each FPXRF instrument. Table 6 presents a summary of this data. With the exception of cadmium, chromium, and nickel, the values presented in Table 6 were generated from the 13 soil and sediment SRMs only. The 2 sludge and 3 ash SRMs were included for cadmium, chromium, and nickel because of the low or nondetectable concentrations of these three analytes in the soil and sediment SRMs.

Only 12 analytes are presented in Table 6. These are the analytes that are of environmental concern and provided a significant number of detections in the SRMs for an accuracy assessment. No data is presented for the X-MET 920 with the gas-filled proportional detector. This FPXRF instrument was calibrated empirically using site-specific soil samples. The percent recovery values from this instrument were very sporadic and the data did not lend itself to presentation in Table 6.

Table 7 provides a more detailed summary of accuracy data for one particular FPXRF instrument (TN 9000) for the 9 soil SRMs and 4 sediment SRMs. These data are provided for guidance purposes only. Table 7 shows the certified value, measured value, and percent recovery for five analytes. These analytes were chosen because they are of environmental concern and were most prevalently certified for in the SRM and detected by the FPXRF instrument. The first nine SRMs are soil and the last 4 SRMs are sediment. Percent recoveries for the four NIST SRMs were often between 90 and 110 percent for all analytes.

13.7 Comparability -- Comparability refers to the confidence with which one data set can be compared to another. In this case, FPXRF data generated from a large study of six FPXRF instruments was compared to SW-846 Methods 3050 and 6010 which are the standard soil extraction for metals and analysis by inductively coupled plasma. An evaluation of comparability was conducted by using linear regression analysis. Three factors were determined using the linear regression. These factors were the y-intercept, the slope of the line, and the coefficient of determination (r^2).

As part of the comparability assessment, the effects of soil type and preparation methods were studied. Three soil types (textures) and four preparation methods were examined during the study. The preparation methods evaluated the cumulative effect of particle size, moisture, and homogenization on comparability. Due to the large volume of data produced during this study, linear regression data for six analytes from only one FPXRF instrument is presented in Table 8. Similar trends in the data were seen for all instruments. These data are provided for guidance purposes only.

Table 8 shows the regression parameters for the whole data set, broken out by soil type, and by preparation method. These data are provided for guidance purposes only. The soil types are as follows: soil 1--sand; soil 2--loam; and soil 3--silty clay. The preparation methods are as follows: preparation 1--in situ in the field; preparation 2--intrusive, sample collected and homogenized; preparation 3--intrusive, with sample in a sample cup but sample still wet and not

ground; and preparation 4–intrusive, with sample dried, ground, passed through a 40-mesh sieve, and placed in sample cup.

For arsenic, copper, lead, and zinc, the comparability to the confirmatory laboratory was excellent with r^2 values ranging from 0.80 to 0.99 for all six FPXRF instruments. The slopes of the regression lines for arsenic, copper, lead, and zinc, were generally between 0.90 and 1.00 indicating the data would need to be corrected very little or not at all to match the confirmatory laboratory data. The r^2 values and slopes of the regression lines for barium and chromium were not as good as for the other for analytes, indicating the data would have to be corrected to match the confirmatory laboratory.

Table 8 demonstrates that there was little effect of soil type on the regression parameters for any of the six analytes. The only exceptions were for barium in soil 1 and copper in soil 3. In both of these cases, however, it is actually a concentration effect and not a soil effect causing the poorer comparability. All barium and copper concentrations in soil 1 and 3, respectively, were less than 350 mg/kg.

Table 8 shows there was a preparation effect on the regression parameters for all six analytes. With the exception of chromium, the regression parameters were primarily improved going from preparation 1 to preparation 2. In this step, the sample was removed from the soil surface, all large debris was removed, and the sample was thoroughly homogenized. The additional two preparation methods did little to improve the regression parameters. This data indicates that homogenization is the most critical factor when comparing the results. It is essential that the sample sent to the confirmatory laboratory match the FPXRF sample as closely as possible.

Sec. 11.0 of this method discusses the time necessary for each of the sample preparation techniques. Based on the data quality objectives for the project, an analyst must decide if it is worth the extra time necessary to dry and grind the sample for small improvements in comparability. Homogenization requires 3 to 5 min. Drying the sample requires one to two hours. Grinding and sieving requires another 10 to 15 min per sample. Lastly, when grinding and sieving is conducted, time has to be allotted to decontaminate the mortars, pestles, and sieves. Drying and grinding the samples and decontamination procedures will often dictate that an extra person be on site so that the analyst can keep up with the sample collection crew. The cost of requiring an extra person on site to prepare samples must be balanced with the gain in data quality and sample throughput.

13.8 The following documents may provide additional guidance and insight on this method and technique:

13.8.1 A. D. Hewitt, "Screening for Metals by X-ray Fluorescence Spectrometry/Response Factor/Compton K_α Peak Normalization Analysis," American Environmental Laboratory, pp 24-32, 1994.

13.8.2 S. Piorek and J. R. Pasmore, "Standardless, In Situ Analysis of Metallic Contaminants in the Natural Environment With a PC-Based, High Resolution Portable X-Ray Analyzer," Third International Symposium on Field Screening Methods for Hazardous Waste and Toxic Chemicals, Las Vegas, Nevada, February 24-26, 1993, Vol 2, pp 1135-1151, 1993.

13.8.3 S. Shefsky, "Sample Handling Strategies for Accurate Lead-in-soil Measurements in the Field and Laboratory," *International Symposium of Field Screening Methods for Hazardous Waste and Toxic Chemicals*, Las Vegas, NV, January 29-31, 1997.

14.0 POLLUTION PREVENTION

14.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity and/or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The EPA has established a preferred hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the Agency recommends recycling as the next best option.

14.2 For information about pollution prevention that may be applicable to laboratories and research institutions consult *Less is Better: Laboratory Chemical Management for Waste Reduction* available from the American Chemical Society's Department of Government Relations and Science Policy, 1155 16th St., N.W. Washington, D.C. 20036, http://www.acs.org.

15.0 WASTE MANAGEMENT

The Environmental Protection Agency requires that laboratory waste management practices be conducted consistent with all applicable rules and regulations. The Agency urges laboratories to protect the air, water, and land by minimizing and controlling all releases from hoods and bench operations, complying with the letter and spirit of any sewer discharge permits and regulations, and by complying with all solid and hazardous waste regulations, particularly the hazardous waste identification rules and land disposal restrictions. For further information on waste management, consult *The Waste Management Manual for Laboratory Personnel* available from the American Chemical Society at the address listed in Sec. 14.2.

16.0 REFERENCES

1. Metorex, X-MET 920 User's Manual.

2. Spectrace Instruments, "Energy Dispersive X-ray Fluorescence Spectrometry: An Introduction," 1994.

3. TN Spectrace, Spectrace 9000 Field Portable/Benchtop XRF Training and Applications Manual.

4. Unpublished SITE data, received from PRC Environment Management, Inc.

17.0 TABLES, DIAGRAMS, FLOWCHARTS, AND VALIDATION DATA

The following pages contain the tables referenced by this method. A flow diagram of the procedure follows the tables.

TABLE 1

EXAMPLE INTERFERENCE FREE LOWER LIMITS OF DETECTION

Analyte	Chemical Abstract Series Number	Lower Limit of Detection in Quartz Sand (milligrams per kilogram)
Antimony (Sb)	7440-36-0	40
Arsenic (As)	7440-38-0	40
Barium (Ba)	7440-39-3	20
Cadmium (Cd)	7440-43-9	100
Calcium (Ca)	7440-70-2	70
Chromium (Cr)	7440-47-3	150
Cobalt (Co)	7440-48-4	60
Copper (Cu)	7440-50-8	50
Iron (Fe)	7439-89-6	60
Lead (Pb)	7439-92-1	20
Manganese (Mn)	7439-96-5	70
Mercury (Hg)	7439-97-6	30
Molybdenum (Mo)	7439-93-7	10
Nickel (Ni)	7440-02-0	50
Potassium (K)	7440-09-7	200
Rubidium (Rb)	7440-17-7	10
Selenium (Se)	7782-49-2	40
Silver (Ag)	7440-22-4	70
Strontium (Sr)	7440-24-6	10
Thallium (Tl)	7440-28-0	20
Thorium (Th)	7440-29-1	10
Tin (Sn)	7440-31-5	60
Titanium (Ti)	7440-32-6	50
Vanadium (V)	7440-62-2	50
Zinc (Zn)	7440-66-6	50
Zirconium (Zr)	7440-67-7	10

Source: Refs. 1, 2, and 3
These data are provided for guidance purposes only.

TABLE 2

SUMMARY OF RADIOISOTOPE SOURCE CHARACTERISTICS

Source	Activity (mCi)	Half-Life (Years)	Excitation Energy (keV)	Elemental Analysis Range	
Fe-55	20-50	2.7	5.9	Sulfur to Chromium Molybdenum to Barium	K Lines L Lines
Cd-109	5-30	1.3	22.1 and 87.9	Calcium to Rhodium Tantalum to Lead Barium to Uranium	K Lines K Lines L Lines
Am-241	5-30	432	26.4 and 59.6	Copper to Thulium Tungsten to Uranium	K Lines L Lines
Cm-244	60-100	17.8	14.2	Titanium to Selenium Lanthanum to Lead	K Lines L Lines

Source: Refs. 1, 2, and 3

TABLE 3

SUMMARY OF X-RAY TUBE SOURCE CHARACTERISTICS

Anode Material	Recommended Voltage Range (kV)	K-alpha Emission (keV)	Elemental Analysis Range	
Cu	18-22	8.04	Potassium to Cobalt Silver to Gadolinium	K Lines L Lines
Mo	40-50	17.4	Cobalt to Yttrium Europium to Radon	K Lines L Lines
Ag	50-65	22.1	Zinc to Technicium Ytterbium to Neptunium	K Lines L Lines

Source: Ref. 4

Notes: The sample elements excited are chosen by taking as the lower limit the same ratio of excitation line energy to element absorption edge as in Table 2 (approximately 0.45) and the requirement that the excitation line energy be above the element absorption edge as the upper limit (L2 edges used for L lines). K-beta excitation lines were ignored.

TABLE 4

EXAMPLE PRECISION VALUES

Analyte	Average Relative Standard Deviation for Each Instrument at 5 to 10 Times the Lower Limit of Detection					
	TN 9000	TN Lead Analyzer	X-MET 920 (SiLi Detector)	X-MET 920 (Gas-Filled Detector)	XL Spectrum Analyzer	MAP Spectrum Analyzer
Antimony	6.54	NR	NR	NR	NR	NR
Arsenic	5.33	4.11	3.23	1.91	12.47	6.68
Barium	4.02	NR	3.31	5.91	NR	NR
Cadmium	29.84[a]	NR	24.80[a]	NR	NR	NR
Calcium	2.16	NR	NR	NR	NR	NR
Chromium	22.25	25.78	22.72	3.91	30.25	NR
Cobalt	33.90	NR	NR	NR	NR	NR
Copper	7.03	9.11	8.49	9.12	12.77	14.86
Iron	1.78	1.67	1.55	NR	2.30	NR
Lead	6.45	5.93	5.05	7.56	6.97	12.16
Manganese	27.04	24.75	NR	NR	NR	NR
Molybdenum	6.95	NR	NR	NR	12.60	NR
Nickel	30.85[a]	NR	24.92[a]	20.92[a]	NA	NR
Potassium	3.90	NR	NR	NR	NR	NR
Rubidium	13.06	NR	NR	NR	32.69[a]	NR
Strontium	4.28	NR	NR	NR	8.86	NR
Tin	24.32[a]	NR	NR	NR	NR	NR
Titanium	4.87	NR	NR	NR	NR	NR
Zinc	7.27	7.48	4.26	2.28	10.95	0.83
Zirconium	3.58	NR	NR	NR	6.49	NR

These data are provided for guidance purposes only.
Source: Ref. 4

[a] These values are biased high because the concentration of these analytes in the soil samples was near the lower limit of detection for that particular FPXRF instrument.

NR Not reported.

NA Not applicable; analyte was reported but was below the established lower limit detection.

TABLE 5

EXAMPLES OF PRECISION AS AFFECTED BY SAMPLE PREPARATION

Analyte	Average Relative Standard Deviation for Each Preparation Method		
	In Situ-Field	Intrusive-Undried and Unground	Intrusive-Dried and Ground
Antimony	30.1	15.0	14.4
Arsenic	22.5	5.36	3.76
Barium	17.3	3.38	2.90
Cadmium[a]	41.2	30.8	28.3
Calcium	17.5	1.68	1.24
Chromium	17.6	28.5	21.9
Cobalt	28.4	31.1	28.4
Copper	26.4	10.2	7.90
Iron	10.3	1.67	1.57
Lead	25.1	8.55	6.03
Manganese	40.5	12.3	13.0
Mercury	ND	ND	ND
Molybdenum	21.6	20.1	19.2
Nickel[a]	29.8	20.4	18.2
Potassium	18.6	3.04	2.57
Rubidium	29.8	16.2	18.9
Selenium	ND	20.2	19.5
Silver[a]	31.9	31.0	29.2
Strontium	15.2	3.38	3.98
Thallium	39.0	16.0	19.5
Thorium	NR	NR	NR
Tin	ND	14.1	15.3
Titanium	13.3	4.15	3.74
Vanadium	NR	NR	NR
Zinc	26.6	13.3	11.1
Zirconium	20.2	5.63	5.18

These data are provided for guidance purposes only.
Source: Ref. 4

[a] These values may be biased high because the concentration of these analytes in the soil samples was near the lower limit of detection.

ND Not detected.

NR Not reported.

TABLE 6

EXAMPLE ACCURACY VALUES

Analyte	Instrument															
	TN 9000				TN Lead Analyzer				X-MET 920 (SiLi Detector)				XL Spectrum Analyzer			
	n	Range of % Rec.	Mean % Rec.	SD	n	Range of % Rec.	Mean % Rec.	SD	n	Range of % Rec.	Mean % Rec	SD	n	Range of % Rec.	Mean % Rec.	SD
Sb	2	100-149	124.3	NA	--	--	--	--	--	--	--	--	--	--	--	--
As	5	68-115	92.8	17.3	5	44-105	83.4	23.2	4	9.7-91	47.7	39.7	5	38-535	189.8	206
Ba	9	98-198	135.3	36.9	--	--	--	--	9	18-848	168.2	262	--	--	--	--
Cd	2	99-129	114.3	NA	--	--	--	--	6	81-202	110.5	45.7	--	--	--	--
Cr	2	99-178	138.4	NA	--	--	--	--	7	22-273	143.1	93.8	3	98-625	279.2	300
Cu	8	61-140	95.0	28.8	6	38-107	79.1	27.0	11	10-210	111.8	72.1	8	95-480	203.0	147
Fe	6	78-155	103.7	26.1	6	89-159	102.3	28.6	6	48-94	80.4	16.2	6	26-187	108.6	52.9
Pb	11	66-138	98.9	19.2	11	68-131	97.4	18.4	12	23-94	72.7	20.9	13	80-234	107.3	39.9
Mn	4	81-104	93.1	9.70	3	92-152	113.1	33.8	--	--	--	--	--	--	--	--
Ni	3	99-122	109.8	12.0	--	--	--	--	--	--	--	--	3	57-123	87.5	33.5
Sr	8	110-178	132.6	23.8	--	--	--	--	--	--	--	--	7	86-209	125.1	39.5
Zn	11	41-130	94.3	24.0	10	81-133	100.0	19.7	12	46-181	106.6	34.7	11	31-199	94.6	42.5

Source: Ref. 4. These data are provided for guidance purposes only.
n: Number of samples that contained a certified value for the analyte and produced a detectable concentration from the FPXRF instrument.
SD: Standard deviation; NA: Not applicable; only two data points, therefore, a SD was not calculated.
%Rec.: Percent recovery.
-- No data.

TABLE 7

EXAMPLE ACCURACY FOR TN 9000[a]

Standard Reference Material	Arsenic			Barium			Copper			Lead			Zinc		
	Cert. Conc.	Meas. Conc.	%Rec.	Cert. Conc.	Meas. Conc.	%Rec.	Cert. Conc.	Meas. Conc.	%Rec.	Cert. Conc.	Meas. Conc.	%Rec.	Cert. Conc.	Meas. Conc.	%Rec.
RTC CRM-021	24.8	ND	NA	586	1135	193.5	4792	2908	60.7	144742	149947	103.6	546	224	40.9
RTC CRM-020	397	429	92.5	22.3	ND	NA	753	583	77.4	5195	3444	66.3	3022	3916	129.6
BCR CRM 143R	--	--	--	--	--	--	131	105	80.5	180	206	114.8	1055	1043	99.0
BCR CRM 141	--	--	--	--	--	--	32.6	ND	NA	29.4	ND	NA	81.3	ND	NA
USGS GXR-2	25.0	ND	NA	2240	2946	131.5	76.0	106	140.2	690	742	107.6	530	596	112.4
USGS GXR-6	330	294	88.9	1300	2581	198.5	66.0	ND	NA	101	80.9	80.1	118	ND	NA
NIST 2711	105	104	99.3	726	801	110.3	114	ND	NA	1162	1172	100.9	350	333	94.9
NIST 2710	626	722	115.4	707	782	110.6	2950	2834	96.1	5532	5420	98.0	6952	6476	93.2
NIST 2709	17.7	ND	NA	968	950	98.1	34.6	ND	NA	18.9	ND	NA	106	98.5	93.0
NIST 2704	23.4	ND	NA	414	443	107.0	98.6	105	106.2	161	167	103.5	438	427	97.4
CNRC PACS-1	211	143	67.7	--	772	NA	452	302	66.9	404	332	82.3	824	611	74.2
SARM-51	--	--	--	335	466	139.1	268	373	139.2	5200	7199	138.4	2200	2676	121.6
SARM-52	--	--	--	410	527	128.5	219	193	88.1	1200	1107	92.2	264	215	81.4

Source: Ref. 4. These data are provided for guidance purposes only.

[a] All concentrations in milligrams per kilogram.

%Rec.: Percent recovery; ND: Not detected; NA: Not applicable.

-- No data.

TABLE 8

EXAMPLE REGRESSION PARAMETERS FOR COMPARABILITY[1]

	Arsenic				Barium				Copper			
	n	r^2	Int.	Slope	n	r^2	Int.	Slope	n	r^2	Int.	Slope
All Data	824	0.94	1.62	0.94	1255	0.71	60.3	0.54	984	0.93	2.19	0.93
Soil 1	368	0.96	1.41	0.95	393	0.05	42.6	0.11	385	0.94	1.26	0.99
Soil 2	453	0.94	1.51	0.96	462	0.56	30.2	0.66	463	0.92	2.09	0.95
Soil 3	—	—	—	—	400	0.85	44.7	0.59	136	0.46	16.60	0.57
Prep 1	207	0.87	2.69	0.85	312	0.64	53.7	0.55	256	0.87	3.89	0.87
Prep 2	208	0.97	1.38	0.95	315	0.67	64.6	0.52	246	0.96	2.04	0.93
Prep 3	204	0.96	1.20	0.99	315	0.78	64.6	0.53	236	0.97	1.45	0.99
Prep 4	205	0.96	1.45	0.98	313	0.81	58.9	0.55	246	0.96	1.99	0.96

	Lead				Zinc				Chromium			
	n	r^2	Int.	Slope	n	r^2	Int.	Slope	n	r^2	Int.	Slope
All Data	1205	0.92	1.66	0.95	1103	0.89	1.86	0.95	280	0.70	64.6	0.42
Soil 1	357	0.94	1.41	0.96	329	0.93	1.78	0.93	—	—	—	—
Soil 2	451	0.93	1.62	0.97	423	0.85	2.57	0.90	—	—	—	—
Soil 3	397	0.90	2.40	0.90	351	0.90	1.70	0.98	186	0.66	38.9	0.50
Prep 1	305	0.80	2.88	0.86	286	0.79	3.16	0.87	105	0.80	66.1	0.43
Prep 2	298	0.97	1.41	0.96	272	0.95	1.86	0.93	77	0.51	81.3	0.36
Prep 3	302	0.98	1.26	0.99	274	0.93	1.32	1.00	49	0.73	53.7	0.45
Prep 4	300	0.96	1.38	1.00	271	0.94	1.41	1.01	49	0.75	31.6	0.56

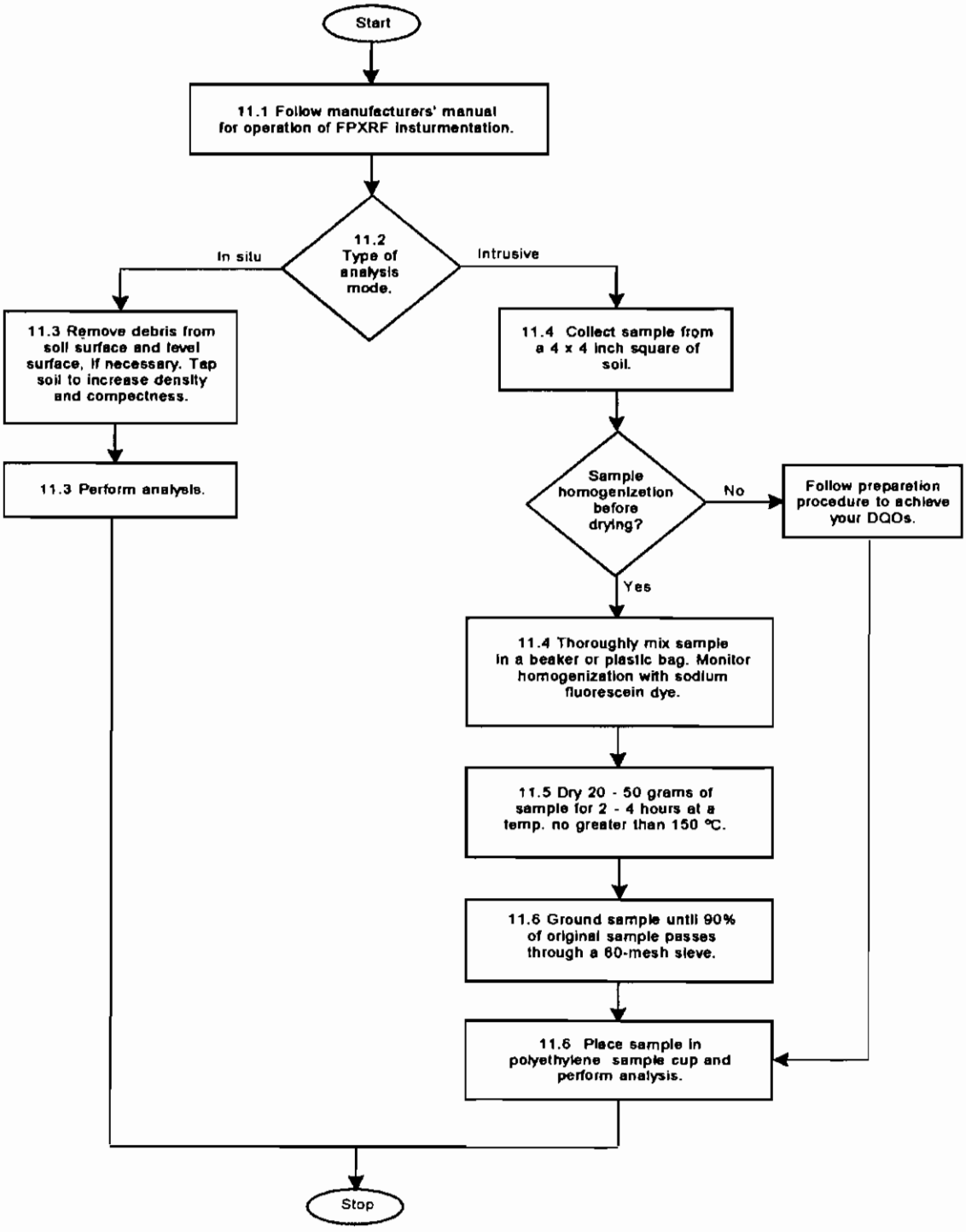
Source: Ref. 4. These data are provided for guidance purposes only.

[1] Log-transformed data

n: Number of data points; r^2: Coefficient of determination; Int.: Y-intercept

— No applicable data

FIELD PORTABLE X-RAY FLUORESCENCE SPECTROMETRY FOR THE DETERMINATION OF ELEMENTAL CONCENTRATIONS IN SOIL AND SEDIMENT



ATTACHMENT B

INNOV-X USER Manual for Alpha Series XRF

THE USER MANUAL CAN BE FOUND WITH THE INSTRUMENT IN ITS CASE, OR ON LINE AT INNOV-X.COM

ATTACHMENT C

MEDEP SOP FOR COLLECTION OF DUST WIPE SAMPLES

Part #7	**Section #3**	**Data Quality Assurance**
Description:	Settled Dust Sampling for Lead	
Type:	Lead Sampling	
Date Issued:	April 20, 2004	

1.0 Scope

1.1 This section establishes sampling procedures and protocols for collecting settled dust samples.

2.0 Policy

2.1 Unit staff shall use these procedures for collecting paint chip samples of building components suspected of containing lead-based paint. Unit staff may deviate from these procedures with warranted justification and shall note deviations on the inspection report.

3.0 General Information

Wipe Sampling for Settled Lead-Contaminated Dust. Wipe samples for settled leaded dust can be collected from floors (both carpeted and uncarpeted), interior and sash/sill contact areas, and other reasonably smooth surfaces. Wherever possible, hard surfaces should be sampled. Wipe media should be sufficiently durable so that it is not easily torn, but can be easily digested in the laboratory. Recovery rates of between 80-120% of the true value should be obtained for all media used for wipe sampling. Blank media should contain no more than 25 ug/wipe (the detection limit using Flame Atomic Absorption)

4.0 Sampling Tools and Materials

4.1 **Type of disposable wipe:** Any wipe material that meets the following criteria may be used:

Contains low background lead levels,
Is a single thickness,
Is durable and does not tear easily (do not use Whatman™ filters),
Does not contain aloe,
Can be digested in the laboratory,
Has been shown to yield 80-120% recovery rates from samples spiked with leaded dust (not lead in solution), and
Must remain moist during the wipe sampling process (wipes containing alcohol may be used as long as they do not dry out).

4.2 **Non-sterilized non-powdered disposable gloves.** Disposable gloves are required to prevent cross-sample contamination from hands.

4.3 Non-sterilized polyethylene centrifuge tubes (50 ml size) or equivalent hard-shell container that can be rinsed quantitatively in the laboratory.

4.4 Dust sample collection forms.

4.5 Camera & film to document exact locations (Optional).

4.6 **Template Options.** Masking tape or hard, smooth, reusable templates may be used to define the area to be wiped. Periodic wipe samples should be taken from the templates to determine if the template is contaminated. Disposal templates are also permitted so long as they are not used for more than a single surface. Templates must be larger than $0.1ft^2$, but smaller than $2ft^2$. Templates for floors are typically $1ft^2$. Templates are usually not used for windows due to the variability in size and shape (use masking tape instead).

Note:	Masking tape may damage the painted surface.

4.7 Container labels or permanent marker.

4.8 Trash bag or other receptacle (do not use pockets or trash containers at the residence).

4.9 Rack, bag, or box to carry tubes (optional).

4.10 Measuring tape.

4.11 Disposable shoe coverings (optional).

5.0 Single Surface Wipe Sampling Procedure

5.1 Outline Wipe Area:

5.1.1 Floors: Identify the area to be wiped. Do not walk on or touch the surface to be sampled (the wipe area). Apply masking tape to perimeter of the wipe area to form a square or rectangle of about one square foot. No measurement is required at this time. The tape should be positioned in a straight line and corners should be nominally perpendicular. When putting down any template, do not touch the interior wipe area.

5.1.2 Window sills and other rectangular surfaces: Identify the area to be wiped. Do not touch the wipe area. Apply two strips of masking tape across the sill to define a wipe area at least 0.1 square foot in size (approx. 4 inches x 4 inches).

5.2 **Preliminary inspection of the disposable wipes.** Inspect the wipes to determine if they are moist. If they have dried out, do not use them. When using

a container that dispenses wipes through a "pop-up" lid, the first wipe in the dispenser at the beginning of the day should be thrown away. The first wipe may be contaminated by the lid and is likely to have dried to some extent. Rotate the container prior to each use to ensure liquid inside the container contacts the wipes.

5.3 **Gloves.** Don a disposable glove on one hand; use a new glove for each sample collected. If two hands are necessary to handle the sample, use new gloves, one for each hand. It is not necessary to wipe the gloved hand before sampling.

5.4 **Collection of sample.** Place the wipe at one corner of the surface to be wiped with wipe fully opened and flat on the surface. For square sample areas, complete a first wipe pass side-to-side as follows. With the fingers together, grasp the wipe between the thumb and the palm. Press down firmly, but not excessively with both the palm and fingers (Do not use only the fingertips or the heel of the hand to hold down the wipe, because there will not be complete contact with the surface and some dust may be missed.) Do not touch the surface with the thumb. Proceed to wipe side-to-side with as many "S"-like motions as are necessary to completely cover the entire wipe area. Exerting excessive pressure on the wipe will cause it to curl. Exerting too little pressure will result in poor collection of dust. Attempt to remove all visible dust from the wipe area.

5.4.1 Next, fold the wipe in half with the contaminated side facing inward. (The wipe can be straightened out by laying it on the wipe area, contaminated side up, and folding it over.) Once folded, place in the top corner of the wipe area and press down firmly with the palm and fingers. Complete a second wipe pass moving from top-to-bottom and wiping the area with "S"-like motions. Attempt to remove all visible dust. Do not touch the contaminated side of the wipe with the hand or fingers. Do not shake the wipe in an attempt to straighten it out, since dust may be lost during shaking.

5.5 For rectangular sample areas: two side-to-side passes must be made over half of this surface, the second pass with the wipe folded so that the contaminated side faces inward. For a window sill, do not attempt to wipe the irregular edges presented by the contour of the window channel. Avoid touching other portions of the window with the wipe. If there are paint chips or gross debris in the window sill, attempt to include as much of it as possible on the wipe. If all of the material cannot be picked up with one wipe, field personnel may use a second wipe at their discretion and insert it in the same container. Consult with the analytical laboratory to determine if they can perform analysis of two wipes as a single sample. When performing single-surface sampling, do not use more than two single surface wipes for each container. If heavily dust-laden, a smaller area should be wiped. It is not necessary to wipe the entire window well but do not wipe less than 0.10 ft^2 (approx. 4" x 4").

6.0 **Packaging the Wipe.** After wiping, fold the wipe with the contaminated side facing inward again, and insert aseptically (without touching anything else) into the centrifuge tube or other hard-shelled container. If gross debris is present, such as paint chips in a

window well, make every attempt to include as much of the debris as possible in the wipe.

6.1 Seal the tube and label with the appropriate identifier. Record the laboratory submittal sample number on the field sampling form.

7.0 Area Measurement. After sampling, measure the surface area wiped to the nearest eighth of an inch using a tape measure or a ruler. The size of the area wiped must be at least 0.10 ft^2 in order to obtain an adequate limit of quantitation. No more than 2 square feet should be wiped with the same wipe or else the wipe may fall apart. Record specific measurements for each area wiped on the field sampling form.

8.0 Form completion. Fill out the appropriate field sampling forms completely. Collect and maintain any field notes regarding type of wipe used, lot number, collection protocol, etc.

9.0 Trash Disposal. After sampling, remove the masking tape and throw it away in a trash bag. Remove the glove; put all contaminated gloves and sampling debris used for the sampling period into a trash bag. Remove the trash bag when leaving the dwelling. Do not throw away gloves or wipes inside the dwelling unit where they could be accessible to young children, resulting in a suffocation hazard.

10.0 Blank Preparation. After sampling the final dwelling unit of the day, but before decontamination, field blank samples should be obtained. Analysis of the field blank samples determines if the sample media is contaminated. Each field blank should be labeled with a unique identifier similar to the others but that identifies the sample as a field blank.

10.1 Blank wipes are collected by removing a wipe from the container with a new glove, shaking the wipe open, refolding as it occurs during the actual sampling procedure, and then inserting it into the centrifuge tube without touching any surface or other object. One blank wipe is collected for each dwelling unit sampled or, if more than one dwelling unit is sampled per day, one blank for every 50 field samples, whichever is less. Also, collect one blank for every lot used. Record the lot number.

11.0 Lead Inspector Decontamination. After sampling, wash hands thoroughly with plenty of soap and water. A bathroom in the dwelling unit may be used for this purpose, with the owner's or resident's permission. If there is not running water in the dwelling unit, use wet wipes to clean the hands. During sampling, inspector must not eat, drink, smoke, or otherwise cause hand to mouth contact.

12.0. Laboratory Submittal. Submittal Form Preparation. The sample numbers on the sample container must be the same as those on the field sampling form and must also be used on the laboratory submittal form. Confirm that all samples recorded are in fact present on the laboratory submittal form. Chain of custody requirements should be followed.

13.0. Laboratory Analytical Procedure. Laboratories analyzing dust samples must participate in the Environmental Lead Laboratory Proficiency Testing Program or equivalent and be an EPA-NLLAP Accredited Laboratory and certified for environmental

lead analysis in accordance with the Maine Department of Human Services Chapter 263, "Maine Comprehensive and Limited Environmental Laboratory Certification Rules". The Maine Health and Environmental Testing Laboratory (HETL) currently meets these standards.

Allison Drouin

From: DiMattei, Steve <DiMattei.Steve@epa.gov>
Sent: Tuesday, November 18, 2014 3:33 PM
To: Allison Drouin
Cc: jhayes@lakesrpc.org; Rip Patten; Judd Newcomb; dlewis@franklinnh.org; rebecca.williams@des.nh.gov; Peterson, Alan
Subject: RE: Ferrari Realty Trust Property Update (EPA RFA# 14123)

Sounds good…

Thanks,

Steve

From: Allison Drouin [mailto:adrouin@crederellc.com]
Sent: Tuesday, November 18, 2014 3:25 PM
To: DiMattei, Steve
Cc: jhayes@lakesrpc.org; rpatten.crederellc.com; Judd Newcomb; dlewis@franklinnh.org; rebecca.williams@des.nh.gov; Peterson, Alan
Subject: RE: Ferrari Realty Trust Property Update (EPA RFA# 14123)

Hi Steve,

The samples were collected on 10/27 and 10/30 so we are still within the 30 day hold time. The lab will be using the 3060A digestion method and will analyze using the 7196A colorimetric method.

Thank you,

Allie Drouin
Geologist

Cell: 207-749-1141
Office: 207-828-1272 ext: 15

From: DiMattei, Steve [mailto:DiMattei.Steve@epa.gov]
Sent: Tuesday, November 18, 2014 2:41 PM
To: Allison Drouin; rebecca.williams@des.nh.gov; Peterson, Alan
Cc: jhayes@lakesrpc.org; Rip Patten; Judd Newcomb; dlewis@franklinnh.org
Subject: RE: Ferrari Realty Trust Property Update (EPA RFA# 14123)

Folks,

I've looked at the information that Allison has submitted in her email, and I have one comment.

Chromium Exceedances Assuming that the analytical lab will be using SW 846 Method 3060A from the hex chrome analysis, please confirm that the analytical laboratory will be able to analyze the soil samples within the 30 day hold time.

Please feel free to email or call me with any questions regarding my comment.

Thanks,

Steve

From: Allison Drouin [mailto:adrouin@crederellc.com]
Sent: Monday, November 17, 2014 10:32 AM
To: rebecca.williams@des.nh.gov; Peterson, Alan; DiMattei, Steve
Cc: jhayes@lakesrpc.org; rpatten.crederellc.com; Judd Newcomb; dlewis@franklinnh.org
Subject: FW: Ferrari Realty Trust Property Update

All,

We have completed the field investigation outlined in the SSQAPP for the Ferrari Realty Trust property. Based on field observations and preliminary results we would like to apprise every one of the following preliminary results and our recommendations for additional sampling. We would like to include this as part of our Phase II and not be recommending additional investigations in our Phase II report. Therefore, the following amendments to the SSQAPP are proposed for approval:

- Additional Fill Sample: Per the SSQAPP, CA-SB-6 was advanced and sampled from the entire fill interval (0.5-10). An exploratory test pit was also advanced in this location during an effort to delineate the fill material. The test pit consisted almost entirely of hack saw blades and metals flakes (see Photo 386). Results of the initial CA-SB-6 samples were generally low considering the observations made in the test pit and concentrations in the upper fill material where saw blades and possible oil were observed may have been diluted due to the long sample interval. A second sample (outside of those proposed in the SSQAPP) was collected from 0 to 4 feet with the VOC collected from an oily layer directly beneath a dense layer of saw blades. Per these observations and based on the thickness of the initial sample interval. Credere would like to analyze this additional sample to focus an analytical sample closer to the surface in this location and also assess the oily material. This sample would be run for the following focused contaminants of concern (COCs): VOCs, PAHs, antimony, arsenic, chromium, and lead similar to the other samples. This is a focused COC list based on the initial soil results. The additional analyses would add approximately $360 to the overall budget.
- Chromium Exceedances: Chromium has been detected in all sampled locations and in 5 locations in exceedance of the NHDES hexavalent chromium soil remediation standard. There is sufficient volume at the lab to analyze these exceedances for hex chrome speciation. We will select 5 of the exceedances to analyze based on the variety of locations where the exceedances occurred (i.e. they were not consistently in the same locations and based on the chronology of deposition of the fill material there may be changes in the materials used and deposited over time). The hex chrome analysis is $100/sample; therefore, adding approximately $500 to the overall budget.
- Fill Overflow to River: Credere fully inspected the banks of the river, the retaining wall that runs the length of the mill building and the extent of the fill. Based on the observations, the retaining wall appears to be generally containing the bulk of the fill material behind the buildings with the exception of an area between the two buildings (see Photo 354). This appears to be a primary dump location based on the observed topography and the fill was placed over the wall making the fill materials essentially the cut bank of the river. Observation of the "flood plain", or flat area below the wall and adjacent to the river, indicated evidence of fill (e.g. saw blades). Therefore, the fill material does not appear to be stable and may be eroded periodically by high river flow, thereby impacting riverbank and downstream sediment. Additionally, some of the highest metals results were detected in CA-SS-5, which is the only sample collected from below the wall. To better assess the material that may be eroded by the river, Credere proposes collection of 4 surface samples (0-2') from along the retaining wall and two sediment samples from the river. Sample locations will be biased towards areas of fill spillage over the wall, eroded or sloughing areas, and apparent cut banks. Samples will be analyzed for VOCs, PAHs, antimony, arsenic, chromium, and lead. We estimate this to add $3,250 to the overall budget.

Attached is the sample location figure (Figure 2) and **draft** soil results table for reference.

Please let us know if you have any questions or concerns regarding this additional investigation.

Allison S. Drouin
Geologist

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Total Control Panel Login

To: adrouin@crederellc.com Remove this sender from my allow list
From: dimattei.steve@epa.gov

You received this message because the sender is on your allow list.

APPENDIX B

PHASE II PHOTO LOG

Phase II Photo Log
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire



1. Location of GPR Anomaly #1 near northwest corner of the Stanley Mill boiler room.



2. Location of test pit CA-TP-A1 excavated to assess GPR Anomaly #1.



3. Orange river deposit consisting of rounded cobbles and an orange sandy matrix with a thin layer of black fill at the surface (Anomaly #1).



4. Location of Anomaly #2 consistent with the reflection pattern of a UST near the northwest corner of the former Armory.

Phase II Photo Log
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire



5. Location of test pit CA-TP-A2 in area of UST (Anomaly #2).



6. Confirmed presence of UST near northwest corner of the former Armory (Anomaly #2).



7. Area of Anomaly #3 and test pit CA-TP-A3.



8. Image showing sidewalls of CA-TP-A3.

Phase II Photo Log
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire



9. Stockpile of soil from test pit CA-TP-A3 consisting mostly of hacksaw blades, metal and rusty soil (Anomaly #3).



10. Approximate western visual extent of industrial fill north of the former Armory.



11. Image showing industrial fill spilling over the retaining wall between the two Site buildings.



12. Cross section of industrial fill material. Evidence of sloughing to the riverbank.

Phase II Photo Log
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire



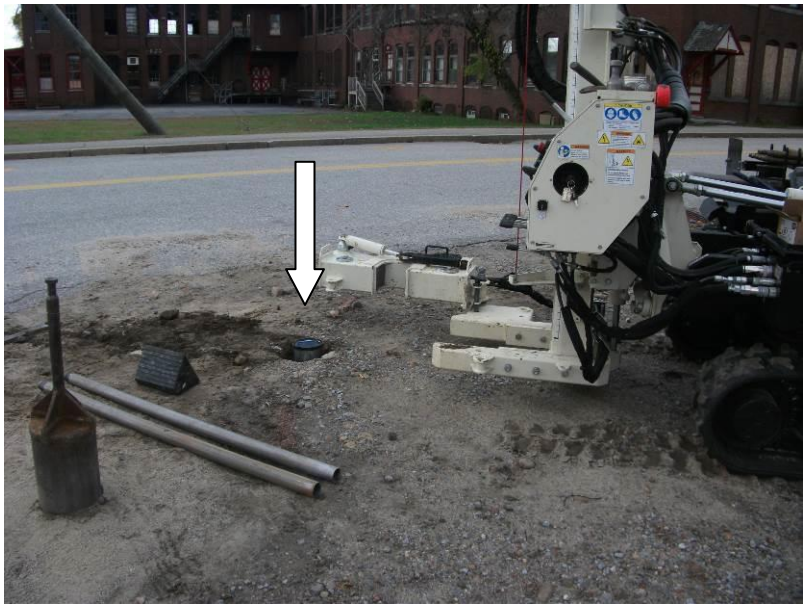
13. Cross section of industrial fill material and evidence of apparent sloughing to the riverbank. Arrow indicates location of CA-SS-9.



14. Area north of the former Armory, note approximate extent of fill indicated by arrow.



15. Industrial fill cross section and evidence of erosion to riverbank. Arrow indicates location of CA-SS-10.



16. Location of CA-SB-1/CA-MW-1 along Memorial Street.

Phase II Photo Log
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire



17. Location of CA-SB-2/CA-MW-2 east of the Stanley Mill.



18. Location of CA-SB-3/CA-MW-3 in the loading dock area of the Stanley Mill.



19. Location of CA-SB-4/CA-MW-4 north of the Stanley Mill.



20. Location of CA-SB-4/CA-MW-4 north of the Stanley Mill.

Phase II Photo Log
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire



21. Location of CA-SB-5/CA-MW-5 north of the Stanley Mll.



22. Location of CA-SB-6/CA-MW-6 north of the former Armory.



23. Location of CA-SS-2 in the loading dock area of the Stanley mill.



24. Location of CA-SS-3 by former bay door on the former Armory.

Phase II Photo Log
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire



25. Bore hole of CA-SS-5 showing fill material along the riverbank.



26. Location of CA-SS-5 along the riverbank.



27. Location of CA-SS-6 adjacent to former transformer pad.



28. Location of CA-SS-7 beneath hopper east of the Stanley Mill.

Phase II Photo Log
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire



29. Location of CA-SS-8 at discharge pipe along the riverbank.



30. Location of CA-SS-11 north of the former Armory.



31. Location of CA-TP-1 northeast of the Stanley Mill.



32. Location of CA-TP-2 between the Site buildings.

Phase II Photo Log
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire



33. View of CA-TP-2 between the Site buildings with arrow showing very dense slab of metal.



34. Location of CA-TP-3 northeast of the Stanley Mill.

APPENDIX C

FIELD LOGS

Soil Boring Log

Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092

CA-SB-1/ CA-MW-1

SITE INFORMATION	
Project Number/Client:	14001247/LRPC Ferrari Realty Trust
Site Location:	93-119 Memorial Street, Franklin NH
Date Start/Finish:	10/27/2014
Credere, LLC Representative:	Allison Drouin

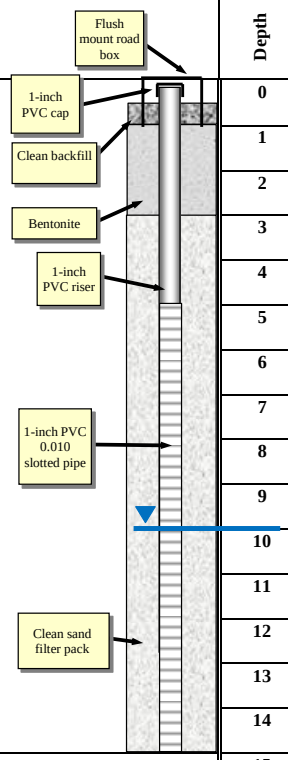
WELL SPECIFICATIONS	
Well Depth (feet) from TOC:	15
Screen Length (feet):	10 (5-15)
TOW Elevation: (feet above mean sea level)	301.04
Well Material	1" PVC, 0.01" slotted screen

CONTRACTOR	
Drilling Contractor:	Geosearch, Inc.
Foreman:	John Chase
Drilling Method:	GeoProbe Direct Push

DRILLING EQUIPMENT	
Equipment:	GeoProbe 7822 DT Track Mounted Rig
Casing Diameter:	2" macrocore
Casing Material:	Steel

Depth	Sample Information: Sample No.	Pen/Rec (In.)	Depth (Ft.)	Blows (/0.5')	PID (ppm) (RF=1.0)		Strata	USCS Code	Depth
0					0.3	0-2" Black SILT and very fine to fine SAND, ashy	Topsoil	SM	0
						2-5" BRICK	Fill	F	
1					0.5	5-9" Brown fine SAND		SP	1
						9-10" Black ASH		F	
2	S-1	60/48	0-5	NA	0.5	10-48" Brown to gray GRAVEL, some fine to coarse Sand, dry		GP	2
3					2.9				3
4					2.3				4
5					1.2	0-18" Dark-brown SILT and fine to coarse SAND, some Fill (ash, brick), dry		SM	5
6					3.5				6
7	S-2	60/60	5-10	NA	0.9	18-36" Brown, gray, orange-brown fine to coarse SAND, dry	Sand	SW	7
8					3.8	36-60" Light-brown to orange-brown very fine to fine SAND, laminated from 36-40", moist		SP	8
9					3.6				9
10	S-3	60/46	10-15	NA	1.8	0-46" Brown very fine to fine SAND, wet			10
11					1.4				11
12					2.9				12
13					1.6				13
14					0.9				14
15						**End of Boring @ 15-feet**			15
16									16
17									17
18									18
19									19
20									20
21									21
22									22
23									23
24									24
25									25

Equipment Installed



Remarks:

CA-SB-1 (0-2) @ 0840 SVOCS, Priority Pollutant Metals, PCBs

▼ Graphically shows depth of the water table as inferred from field observations.

Soils described using "Modified Burmister Method"

TOW Elevation - Top of Well Elevation. Elevations were referenced to the granite corner post off the northwest corner of the adjacent R & D Paving building, assumed to be 302.00 feet AMSL.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings h ave been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Soil Boring Log

Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092

CA-SB-2 / CA-MW-2

SITE INFORMATION	
Project Number/Client:	14001247/LRPC Ferrari Realty Trust
Site Location:	93-119 Memorial Street, Franklin NH
Date Start/Finish:	10/30/2014
Credere, LLC Representative:	Allison Drouin

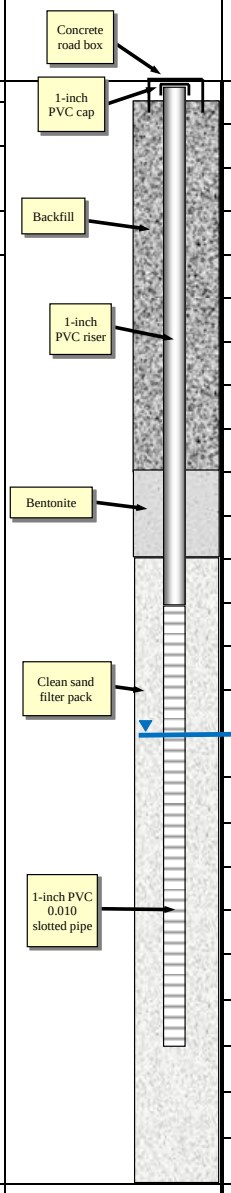
WELL SPECIFICATIONS	
Well Depth (feet) from TOC:	22
Screen Length (feet):	10 (12-22 feet)
TOW Elevation: (feet above mean sea level)	302.11
Well Material	1" PVC, 0.01" slotted screen

CONTRACTOR	
Drilling Contractor:	Geosearch, Inc.
Foreman:	John Chase
Drilling Method:	GeoProbe Direct Push

DRILLING EQUIPMENT	
Equipment:	GeoProbe 7822 DT Track Mounted Rig
Casing Diameter:	2" macrocore
Casing Material:	Steel

Depth	Sample No.	Pen/Rec (In.)	Depth (Ft.)	Blows (/0.5')	PID (ppm) (RF=1.0)		Strata	USCS Code	Depth
0	S-1	60/34	0-5	NA	0.0	0-2" Brown TOPSOIL	Topsoil	SM	0
1					0.0	2-12" Black FILL (ash, coal, brick)	Fill	F	1
2					0.0	12-23" Brown very fine SAND, moist		SP	2
3					0.0	23-30" Black FILL (ash, coal, brick)		F	3
4					0.0	30-34" Brown very fine SAND, moist	Sand	SP	4
5	S-2	60/49	5-10	NA	0.0	0-49" Tan to brown very fine to fine SAND, moist			5
6					0.0				6
7					0.0				7
8					0.0				8
9					0.0				9
10	S-3	60/46	10-15	NA	0.0	0-46" Brown-gray very fine to fine SAND, increasing grain size to fine with depth, moist			10
11					0.0				11
12					0.0				12
13					0.0				13
14					0.0				14
15	S-4	60/60	15-20	NA	0.0	0-60" Gray very fine to fine SAND, wet at 15 feet			15
16					0.0				16
17					0.0				17
18					0.0				18
19					0.0				19
20	S-5	60/60	20-25	NA	0.0	0-60" Gray fine to medium SAND, wet			20
21					0.0				21
22					0.0				22
23					0.0				23
24					0.0				24
25						**End of Boring @ 25-feet**			25

Equipment Installed



Remarks:

CA-SB-2 (0-2) @ 1000 - SVOC, Priority Pollutant Metals, PCBs
CA-SB-2 (15-17/15) @ 1030 - VOC, SVOC, Priority Pollutant Metals, PCBs

Graphically shows depth of the water table as inferred from field observations.

Soils described using "Modified Burmister Method"

TOW Elevation - Top of Well Elevation. Elevations were referenced to the granite corner post off the northwest corner of the adjacent R & D Paving building, assumed to be 302.00 feet AMSL.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Boring No: CA-SB-2

Soil Boring Log

Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092

CA-SB-3 / CA-MW-3

SITE INFORMATION	
Project Number/Client:	14001247/LRPC Ferrari Realty Trust
Site Location:	93-119 Memorial Street, Franklin NH
Date Start/Finish:	10/30/2014
Credere, LLC Representative:	Allison Drouin

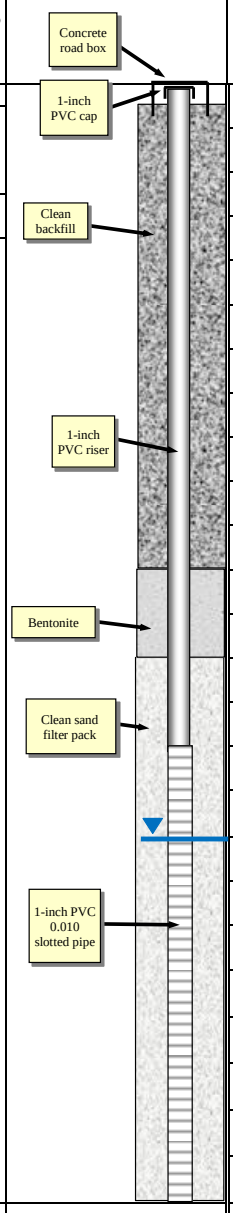
WELL SPECIFICATIONS	
Well Depth (feet) from TOC:	25
Screen Length (feet):	10 (15-25)
TOW Elevation: (feet above mean sea level)	302.29
Well Material	1" PVC, 0.01" slotted screen

CONTRACTOR	
Drilling Contractor:	Geosearch, Inc.
Foreman:	John Chase
Drilling Method:	GeoProbe Direct Push

DRILLING EQUIPMENT	
Equipment:	GeoProbe 7822 DT Track Mounted Rig
Casing Diameter:	2" macrocore
Casing Material:	Steel

Depth	Sample No.	Pen/Rec (In.)	Depth (Ft.)	Blows (/0.5')	PID (ppm) (RF=1.0)		Strata	USCS Code	Depth
0					0.0	0-4" Asphalt	Asphalt	A	0
1					0.0	4-18" Tan very fine to fine SAND, moist	Sand	SP	1
2	S-1	60/30	0-5	NA	0.0				2
3					0.0	18-24" Red-brown SILT and very fine SAND, little rounded Gravel	Sand and silt	SM	3
4					0.0	24-30" Tan to orange-brown very fine to fine SAND, interlayered Silt, moist			4
5					0.0				5
6					0.0				6
7	S-2	60/60	5-10	NA	0.0	0-60" Tan fine SAND, laminated, moist			7
8					0.0				8
9					0.0				9
10					0.0				10
11					0.0				11
12	S-3	60/40	10-15	NA	0.0	0-40" Tan fine SAND, laminated, moist			12
13					0.0				13
14					0.0		Sand	SP	14
15					0.0				15
16					0.0				16
17	S-4	60/43	15-20	NA	0.0	0-43" Tan fine SAND, laminated, moist to wet at 17 feet			17
18					0.0				18
19					0.0				19
20					0.0				20
21					0.0				21
22	S-5	60/60	20-25	NA	0.0	0-60" Brown fine to medium SAND, laminated, wet			22
23					0.0				23
24					0.0				24
25						**End of Boring @ 25-feet**			25

Equipment Installed



Remarks:

CA-SB-3 (16-18/17) @ 1200 - VOC, SVOC, TPH, Priority Pollutant Metals

Graphically shows depth of the water table as inferred from field observations.

Soils described using "Modified Burmister Method"

TOW Elevation - Top of Well Elevation. Elevations were referenced to the granite corner post off the northwest corner of the adjacent R & D Paving building, assumed to be 302.00 feet AMSL.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Soil Boring Log

Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092

CA-SB-4 / CA-MW-4

SITE INFORMATION	
Project Number/Client:	14001247/LRPC Ferrari Realty Trust
Site Location:	93-119 Memorial Street, Franklin NH
Date Start/Finish:	10/30/2014
Credere, LLC Representative:	Allison Drouin

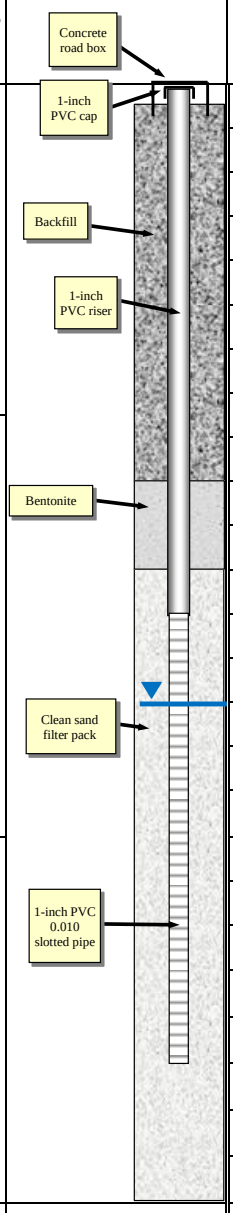
WELL SPECIFICATIONS	
Well Depth (feet) from TOC:	22
Screen Length (feet):	10 (12-22 feet)
TOW Elevation: (feet above mean sea level)	300.62
Well Material	1" PVC, 0.01" slotted screen

CONTRACTOR	
Drilling Contractor:	Georsearch, Inc.
Foreman:	John Chase
Drilling Method:	GeoProbe Direct Push

DRILLING EQUIPMENT	
Equipment:	GeoProbe 7822 DT Track Mounted Rig
Casing Diameter:	2" macrocore
Casing Material:	Steel

Depth	Sample No.	Pen/Rec (In.)	Depth (Ft.)	Blows (/0.5')	PID (ppm) (RF=1.0)		Strata	USCS Code	Depth
0	S-1	60/28	0-5	NA	0.0	0-28" Black-orange industrial FILL (ash, coal, metal), dry	Fill	F	0
1					0.0				1
2					0.0				2
3					0.0				3
4					0.0				4
5	S-2	60/24	5-10	NA	0.0	0-12" Brown industrial FILL (ash, coal fragments) and SILT and fine to medium SAND			5
6					0.0				6
7					0.0				7
8					0.0	12-24" Red-brown SILT and fine to coarse SAND and GRAVEL, dry	Sand, silt and gravel	SW	8
9					0.0				9
10	S-3	60/38	10-15	NA	0.0	0-38" Brown fine to coarse SAND and GRAVEL, wet at 14 feet	Sand and gravel		10
11					0.0				11
12					0.0				12
13					0.0				13
14					0.0				14
15	S-4	60/43	15-20	NA	0.0	0-10" Brown fine to coarse SAND and GRAVEL, wet			15
16					0.0				16
17					0.0	10-43" Brown fine SAND, wet	Sand	SP	17
18					0.0				18
19					0.0				19
20	S-5	60/60	20-25	NA	0.0	0-60" Brown fine SAND, wet			20
21					0.0				21
22					0.0				22
23					0.0				23
24					0.0				24
25						**End of Boring @ 25-feet**			25

Equipment Installed



Remarks:

CA-SB-4 (0-7/3) @ 1405 (DUP-1) - VOC, SVOC, PCB, Priority Pollutant Metals
CA-SB-4 (7-9/7.5) @ 1410 - VOCs, SVOCs, Arsenic
CA-SB-4 (14-16/15) @ 1400 - VOC, SVOC
Graphically shows depth of the water table as inferred from field observations.
Soils described using "Modified Burmister Method"
TOW Elevation - Top of Well Elevation. Elevations were referenced to the granite corner post off the northwest corner of the adjacent R & D Paving building, assumed to be 302.00 feet AMSL.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Soil Boring Log

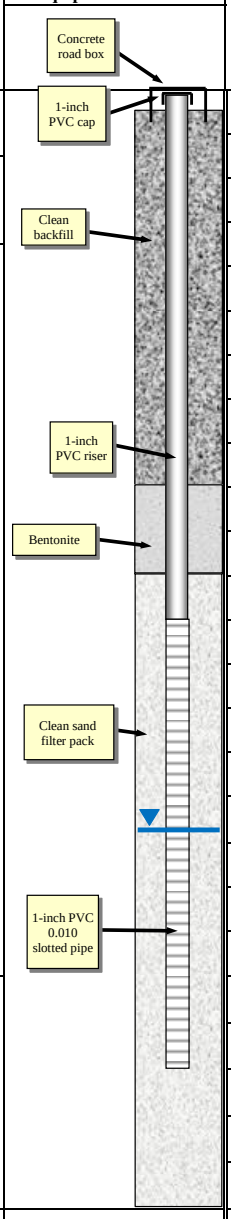
Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092

CA-SB-5 / CA-MW-5

SITE INFORMATION	WELL SPECIFICATIONS
Project Number/Client: 14001247/LRPC Ferrari Realty Trust	**Well Depth (feet) from TOC:** 22
Site Location: 93-119 Memorial Street, Franklin NH	**Screen Length (feet):** 10 (12-22 feet)
Date Start/Finish: 10/30/2014	**TOW Elevation:** 300.05 (feet above mean sea level)
Credere, LLC Representative: Allison Drouin	**Well Material** 1" PVC, 0.01" slotted screen
CONTRACTOR	**DRILLING EQUIPMENT**
Drilling Contractor: Geosearch, Inc.	**Equipment:** GeoProbe 7822 DT Track Mounted Rig
Foreman: John Chase	**Casing Diameter:** 2" macrocore
Drilling Method: GeoProbe Direct Push	**Casing Material:** Steel

Depth	Sample No.	Pen/Rec (In.)	Depth (Ft.)	Blows (/0.5')	PID (ppm) (RF=1.0)		Strata	USCS Code	Depth
0					0.7	0-2" Topsoil	Topsoil		0
1					5.5	2-8" Brown SILT and very fine to fine SAND, some rounded Gravel	Silt and sand	SM	1
2	S-1	60/40	0-5	NA	3.1	8-20" Black industrial FILL (fibrous ash)	Fill	F	2
3					4.4	20-28" Red-brown industrial FILL (coal)			3
4					1.9	28-40" Tan to brown SILT and very fine SAND, trace Gravel	Silt and sand	SM	4
5					0.0				5
6					0.0				6
7	S-2	60/30	5-10	NA	0.0	0-30" Tan SILT and very fine SAND, dry to moist			7
8					0.0				8
9					0.0				9
10					0.0				10
11					0.0				11
12	S-3	60/10	10-15	NA	0.0	0-10" Tan SILT and very fine SAND, dry to moist (poor recovery from single pushed rock)			12
13					0.0				13
14					0.0				14
15					3.0				15
16					1.1				16
17	S-4	60/8	15-20	NA	0.0	0-8" Tan SILT and very fine SAND, wet at bottom (poor recovery from single pushed rock)			17
18					0.0				18
19					0.0				19
20					0.0				20
21					0.0				21
22	S-5	60/56	20-25	NA	0.0	0-56" Brown fine SAND, wet	Sand	SP	22
23					0.0				23
24					0.0				24
25						**End of Boring @ 25-feet**			25

Equipment Installed



Remarks:

CA-SB-5 (0-4/1) @ 1500 - VOC, SVOC, PCB, Priority Pollutant Metals, MS/MSD Volume
CA-SB-5 (4-6/5) @ 1505 - VOC, Antimony, Arsenic, Chromium
CA-SB-5 (20-22/20) @ 1515 - VOC, SVOC
▼ Graphically shows depth of the water table as inferred from field observations.
Soils described using "Modified Burmister Method"
TOW Elevation - Top of Well Elevation. Elevations were referenced to the granite corner post off the northwest corner of the adjacent R & D Paving building, assumed to be 302.00 feet AMSL.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Soil Boring Log

Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092

CA-SB-6 / CA-MW-6

SITE INFORMATION	
Project Number/Client:	14001247/LRPC Ferrari Realty Trust
Site Location:	93-119 Memorial Street, Franklin NH
Date Start/Finish:	10/30/2014
Credere, LLC Representative:	Allison Drouin

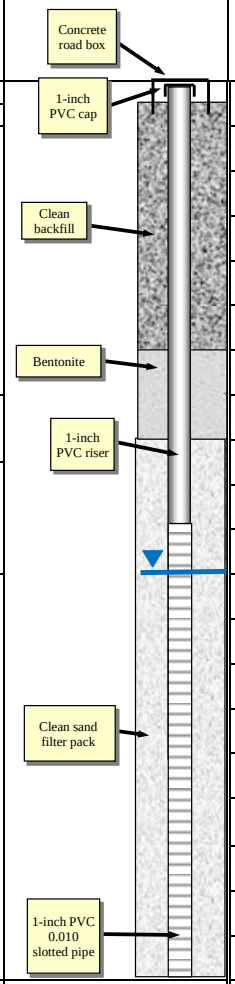
WELL SPECIFICATIONS	
Well Depth (feet) from TOC:	20
Screen Length (feet):	10 (10-20 feet)
TOW Elevation: (feet above mean sea level)	298.72
Well Material	1" PVC, 0.01" slotted screen

CONTRACTOR	
Drilling Contractor:	Geosearch, Inc.
Foreman:	John Chase
Drilling Method:	GeoProbe Direct Push

DRILLING EQUIPMENT	
Equipment:	GeoProbe 7822 DT Track Mounted Rig
Casing Diameter:	2" macrocore
Casing Material:	Steel

Depth	Sample Information: Sample No.	Pen/Rec (In.)	Depth (Ft.)	Blows (/0.5')	PID (ppm) (RF=1.0)		Strata	USCS Code	Depth
0					0.0	0-3" Topsoil	Topsoil	T	0
						3-6" Tan fine SAND	Fill	SP	
1					0.1				1
2	S-1	60/24	0-5	NA	0.3	6-24" Red-brown industrial FILL (metal, nails, saw blades, in rusty metallic matrix)		F	2
3					0.0				3
4					0.0				4
5					0.0	0-5" Red-brown industrial FILL (metal, nails, saw blades, in rusty metallic matrix)			5
6					0.0	5-6" Black ash			6
						6-8" Brick			
7	S-2	60/24	5-10	NA	0.0	8-19" Dark brown SILT, rusty, gray ash laminations		ML	7
8					0.0				8
9					0.0	19-24" Orange SILT and very fine to medium SAND, trace Gravel, moist	Silt and Sand	SM	9
10					0.0	0-3" Orange SILT and very fine to medium SAND, trace Gravel, moist			10
11					0.0	3-31" Brown fine SAND, wet	Sand	SP	11
12	S-3	60/31	10-15	NA	0.0				12
13					0.0				13
14					0.0				14
15					0.0	0-24" Brown fine SAND, wet			15
16					0.0				16
17	S-4	60/24	15-20	NA	0.0				17
18					0.0				18
19					0.0				19
20						**End of Boring @ 20-feet**			20
21									21
22									22
23									23
24									24
25									25

Equipment Installed



Remarks:

CA-SB-6 (0.5-10/2) @ 1255 - VOC, SVOC, PCB, Priority Pollutant Metals

CA-SB-6 (10.5-12.5/11) @ 1300 - VOC, SVOC, PCB, Priority Pollutant Metals

No third sample collected. Groundwater interface and first encountered native were the same interval

Graphically shows depth of the water table as inferred from field observations.

Soils described using "Modified Burmister Method"

TOW Elevation - Top of Well Elevation. Elevations were referenced to the granite corner post off the northwest corner of the adjacent R & D Paving building, assumed to be 302.00 feet AMSL.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present atthe time measurements were made.

LOW FLOW SAMPLING LOG
CREDERE ASSOCIATES

Community Economy Environment
Credere Associates LLC

PROJECT NAME: Ferrari Realty Trust Property
DATE: 11/ 12 /2014

PROJECT NUMBER: LRPC/14001247

SAMPLE LOCATION ID: CA-MW-1

LOCATION ACTIVITY
START: 0720
END: 0900

WELL DATA:

WELL DEPTH (ft): 14.71 [X] MEASURED [ ] HISTORICAL
WATER DEPTH (ft): 12.75 [X] MEASURED [ ] HISTORICAL
[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] ____

WATER LEVEL EQUIPMENT USED:
[ ] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] ____
[ ] ____

DEPTH OF PUMP INTAKE (ft): 14'

WELL MATERIAL: [X] PVC [ ] SS [ ] ____
WELL LOCKED: [ ] YES [X] NO
PROTECTIVE CASING SECURE: [X] YES [ ] NO
CONCRETE COLLAR INTACT: [X] YES [ ] NO

AMBIENT AIR VOC: ____ PPM
WELL MOUTH VOC: ____ PPM

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	PERISTALTIC PUMP
[ ]	[ ]	SUBMERSIBLE
[ ]	[ ]	BLADDER PUMP
[ ]	[ ]	HAND PUMP
[ ]	[ ]	DEDICATED HDPE
[ ]	[ ]	NEW HDPE
[ ]	[ ]	DEDICATED LDPE
[ ]	[ ]	NEW LDPE
	[ ]	FILTER
[ ]	[ ]	____

Equipment: Solinst interface probe, Lamotte 2020 turbidity meter, YSI 650 XL multi-parameter meter with display, geopump peristaltic pump
RED 0.45 MICRON FILTER

DECONTAMINATION FLUIDS USED:
[ ] DISTILLED WATER
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] TSP SOLUTION
[ ] ALCONOX SOLUTION
[ ] NONE
[ ] ____
[ ] ____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	pH	SP. COND. (mS/cm)	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	COMMENTS	DTW
810	15.32	5.03	0.318	236.5	11.82	260	116		13.75
0815	15.27	4.96	0.316	240.3	13.99	150	120		13.78
0820	15.28	4.93	0.315	242.1	15.84	120	116		13.75
0825	15.28	4.96	0.315	241.6	14.0	140	120	Turbidity	13.76
0830	15.23	5.0	0.312	249.6	18.8	140	120	white cloudy and	
0835	15.33	5.01	0.312	245.8	—	130	120	unwavering.	
0840	15.26	4.97	0.312	245.6	—	90			
								Total Purge	
								2.75 g	

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
0845	CA-MW-1	HNO3	1	500 mL poly	Priority Pollutant Metals, field filter
		~~HCl~~ NONE	1	1 L Amber	SVOCs
		HCl	2	40 mL VOA	VOCs

NOTES:

Allen Davis
SAMPLER

LOW FLOW SAMPLING LOG
CREDERE ASSOCIATES

Community Economy Environment
Credere Associates LLC

PROJECT NAME: Ferrari Realty Trust Property DATE: 11/ 13 /2014

PROJECT NUMBER: LRPC/14001247

SAMPLE LOCATION ID: CA-MW-2

LOCATION ACTIVITY
START: 0800
END: 0920

WELL DATA:

WELL DEPTH (ft): 21.51 [X] MEASURED [ ] HISTORICAL
WATER DEPTH (ft): 14.84 [X] MEASURED [ ] HISTORICAL
DEPTH OF PUMP INTAKE (ft): 18

[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[ ] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[X] PVC	[ ] YES	[X] YES	[X] YES
[ ] SS	[X] NO/A	[ ] NO	[ ] NO
[ ] _____			

AMBIENT AIR VOC: _____ PPM
WELL MOUTH VOC: _____ PPM

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	PERISTALTIC PUMP
[ ]	[ ]	SUBMERSIBLE
[ ]	[ ]	BLADDER PUMP
[ ]	[ ]	HAND PUMP
[ ]	[ ]	DEDICATED HDPE
[ ]	[ ]	NEW HDPE
[ ]	[ ]	DEDICATED LDPE
[ ]	[ ]	NEW LDPE
	[ ]	FILTER
[ ]	[ ]	_____

Equipment / 556
Solinst interface probe, Lamotte 2020 turbidity meter, YSI ~~650 XL~~ multi-parameter meter with display, geopump peristaltic pump
0.45 micron filter

DECONTAMINATION FLUIDS USED:
[ ] DISTILLED WATER
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] TSP SOLUTION
[ ] ALCONOX SOLUTION
[ ] NONE
[ ] _____
[ ] _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	pH	SP. COND. (mS/cm)	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	COMMENTS
0835	11.08	6.29	0.934	44.7	1.6	21	108	DTW 15.09
0840	11.12	6.17	0.977	51.1	1.53	19	112	
0845	11.00	6.18	0.915	43.3	1.02	29	116	
0850	11.06	6.23	0.886	39.2	0.94	24	114	
0855	11.09	6.24	0.891	46.7	0.90	18	108	
0900	11.12	6.24	0.864	48.6	0.96	16	114	
0905	11.14	6.27	0.861	48.7	0.91	10	116	
								purged total of 3 gallons

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
0910	CA-MW-2	HNO3	1	500 mL poly	Priority Pollutant Metals, dissolved
		~~HCl~~ NONE	1	1 L Amber	SVOCs
		HCl	2	40 mL VOA	VOCs

NOTES:

SAMPLER

LOW FLOW SAMPLING LOG
CREDERE ASSOCIATES

Community Economy Environment
Credere Associates LLC

PROJECT NAME: Ferrari Realty Trust Property DATE: 11/ 13 /2014

PROJECT NUMBER: LRPC/14001247

SAMPLE LOCATION ID: CA-MW-3

LOCATION ACTIVITY
START: 0955
END: 1100

WELL DATA:

WELL DEPTH (ft): 24.38 [X] MEASURED [ ] HISTORICAL
WATER DEPTH (ft): 16.54 [X] MEASURED [ ] HISTORICAL
[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[ ] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

DEPTH OF PUMP INTAKE (ft): 21'

WELL MATERIAL: [X] PVC [ ] SS [ ] _____
WELL LOCKED: [ ] YES [X] NO NA
PROTECTIVE CASING SECURE: [X] YES [ ] NO
CONCRETE COLLAR INTACT: [X] YES [ ] NO

AMBIENT AIR VOC: _____ PPM
WELL MOUTH VOC: _____ PPM

EQUIPMENT DATA:

PURGING / SAMPLING

PURGING	SAMPLING	
[X]	[X]	PERISTALTIC PUMP
[ ]	[ ]	SUBMERSIBLE
[ ]	[ ]	BLADDER PUMP
[ ]	[ ]	HAND PUMP
[ ]	[ ]	DEDICATED HDPE
[ ]	[ ]	NEW HDPE
[ ]	[ ]	DEDICATED LDPE
[ ]	[ ]	NEW LDPE
	[ ]	FILTER
[ ]	[ ]	_____

Equipment (556)
Solinst interface probe, Lamotte 2020 turbidity meter, YSI ~~650 XL~~ multi-parameter meter with display, geopump peristaltic pump
0.45 Micron Filter

DECONTAMINATION FLUIDS USED:
[ ] DISTILLED WATER
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] TSP SOLUTION
[ ] ALCONOX SOLUTION
[ ] NONE
[ ] _____
[ ] _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	pH	SP. COND. (mS/cm)	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	COMMENTS
1020	10.69	6.14	0.281	71.1	5.85	50	200	DTW 16.68
1025	10.74	6.13	0.278	70.4	5.84	100	200	
1030	10.82	6.13	0.288	69.0	5.20	36	200	
1035	10.77	6.13	0.300	59.8	5.23	45	200	
1040	10.74	6.12	0.288	67.2	6.18	40	200	
1045	10.75	6.10	0.270	71.5	5.77	19	200	
1050	10.78	6.00	0.263	68.0	6.105	14	200	
1055	10.80	6.10	0.264	67.8	5.74	9	200	
								Purged 2 gallons

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1100	CA-MW-3	HNO3	1	500 mL poly	Priority Pollutant Metals, dissolved
		~~HCl~~ None	1	1 L Amber	SVOCs
		HCl	2	40 mL VOA	VOCs

NOTES:

Allison Dreier
SAMPLER

LOW FLOW SAMPLING LOG
CREDERE ASSOCIATES

Community Economy Environment
Credere Associates LLC

PROJECT NAME: Ferrari Realty Trust Property DATE: 11/ 13 /2014

PROJECT NUMBER: LRPC/14001247

LOCATION ACTIVITY
START: 1130
END: 1300

SAMPLE LOCATION ID: CA-MW-4

WELL DATA:

WELL DEPTH (ft): 21.61 [X] MEASURED [ ] HISTORICAL
WATER DEPTH (ft): 14.25 [X] MEASURED [ ] HISTORICAL
[ ] TOP OF WELL [✓] TOP OF CASING [ ] FROM GRADE [ ] ____
WATER LEVEL EQUIPMENT USED: [ ] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER [ ] ____ [ ] ____

DEPTH OF PUMP INTAKE (ft): 18.5'

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[X] PVC	[ ] YES	[X] YES	[✓] YES
[ ] SS	[X] NO NA	[ ] NO	[ ] NO
[ ] ____			

AMBIENT AIR VOC: ____ PPM
WELL MOUTH VOC: ____ PPM

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	PERISTALTIC PUMP
[ ]	[ ]	SUBMERSIBLE
[ ]	[ ]	BLADDER PUMP
[ ]	[ ]	HAND PUMP
[ ]	[ ]	DEDICATED HDPE
[ ]	[ ]	NEW HDPE
[ ]	[ ]	DEDICATED LDPE
[ ]	[ ]	NEW LDPE
	[ ]	FILTER
[ ]	[ ]	____

Equipment (556)
Solinst interface probe, Lamotte 2020 turbidity meter, YSI ~~650 XL~~ multi-parameter meter with display, geopump peristaltic pump
GED 0.45 micron filter

DECONTAMINATION FLUIDS USED:
[ ] DISTILLED WATER
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] TSP SOLUTION
[ ] ALCONOX SOLUTION
[ ] NONE
[ ] ____
[ ] ____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	pH	SP. COND. (mS/cm)	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	COMMENTS DTW
1215	10.04	6.07	0.621	67.3	2.15	13	126	14.46
1220	10.14	5.93	0.624	74.4	1.77	10	126	
1225	10.17	6.0	0.624	69.6	1.61	9.8	126	
1230	10.21	6.01	0.623	69.2	1.75	8.1	126	
1235	10.25	6.01	0.624	69.5	1.65	8.0	126	
								purged total of 6 gallons

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	TYPE	LABORATORY ANALYSIS
1240	CA-MW-4	HNO3	1	500 mL poly	Priority Pollutant Metals, dissolved
	~~MS/MSD~~	~~HCl None~~	1	1 L Amber	SVOCs
	DUP-GW-1	HCl	2	40 mL VOA	VOCs

NOTES: slightest odor + sheen in bucket

Allison Dunn
SAMPLER

LOW FLOW SAMPLING LOG
CREDERE ASSOCIATES

Community Economy Environment
Credere Associates LLC

PROJECT NAME: Ferrari Realty Trust Property
DATE: 11/ 13 /2014

PROJECT NUMBER: LRPC/14001247

SAMPLE LOCATION ID: CA-MW-5

LOCATION ACTIVITY
START: 1210
END: 1350

WELL DATA:

WELL DEPTH (ft): 21.35 [X] MEASURED [ ] HISTORICAL
WATER DEPTH (ft): 14.03 [X] MEASURED [ ] HISTORICAL

[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[ ] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

DEPTH OF PUMP INTAKE (ft): 18'

WELL MATERIAL: [X] PVC [ ] SS [ ] _____
WELL LOCKED: [ ] YES [X] NO NA
PROTECTIVE CASING SECURE: [X] YES [ ] NO
CONCRETE COLLAR INTACT: [X] YES [ ] NO

AMBIENT AIR VOC: _____ PPM
WELL MOUTH VOC: _____ PPM

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	PERISTALTIC PUMP
[ ]	[ ]	SUBMERSIBLE
[ ]	[ ]	BLADDER PUMP
[ ]	[ ]	HAND PUMP
[ ]	[ ]	DEDICATED HDPE
[ ]	[ ]	NEW HDPE
[ ]	[ ]	DEDICATED LDPE
[ ]	[ ]	NEW LDPE
	[ ]	FILTER
[ ]	[ ]	_____

Equipment 5556
Solinst interface probe, Lamotte 2020 turbidity meter, YSI ~~650XL~~ multi-parameter meter with display, geopump peristaltic pump
QED 0.45 micron filters

DECONTAMINATION FLUIDS USED:
[ ] DISTILLED WATER
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] TSP SOLUTION
[ ] ALCONOX SOLUTION
[ ] NONE
[ ] _____
[ ] _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	pH	SP. COND. (mS/cm)	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	COMMENTS
1245	10.72	6.20	1.199	94.7	0.96	80	126	DTW 14.15
1250	10.72	6.20	1.172	95.0	0.76	72	126	↓
1255	10.74	6.20	1.161	95.7	0.73	60	126	↓
1300	10.79	6.20	1.125	86.6	0.67	41	126	14.18
1305	10.83	6.20	1.107	80.7	0.69	60	126	
1310	10.85	6.18	1.104	76.1	0.70	55	126	14.19
1315	10.85	6.15	1.093	72.3	0.77	40	126	14.21
1320	10.88	6.14	1.083	69.8	0.70	55	126	↓
1325	10.89	6.15	1.069	63.9	0.74	48	126	↓
1330	10.84	6.14	1.061	63.0	0.71	50	126	↓
								purged total 4 gallons

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1335	CA-MW-5 MS/MSD	HNO3	1	500 mL poly	Priority Pollutant Metals, dissolved
		~~HCl~~ None	1	1 L Amber	SVOCs
		HCl	2	40 mL VOA	VOCs

NOTES:

Allyn Drinan
SAMPLER

LOW FLOW SAMPLING LOG
CREDERE ASSOCIATES

Community Economy Environment
Credere Associates LLC

PROJECT NAME: Ferrari Realty Trust Property DATE: 11/13/2014

PROJECT NUMBER: LRPC/14001247

SAMPLE LOCATION ID: CA-MW-6

LOCATION ACTIVITY
START: 1250
END: 1420

WELL DATA:

WELL DEPTH (ft): 21.25 [Y] MEASURED [ ] HISTORICAL
WATER DEPTH (ft): 13.66 [Y] MEASURED [ ] HISTORICAL

[ ] TOP OF WELL
[X] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[ ] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

DEPTH OF PUMP INTAKE (ft): 18

WELL MATERIAL:
[✓] PVC
[ ] SS
[ ] _____

WELL LOCKED:
[ ] YES
[X] NO NA

PROTECTIVE CASING SECURE:
[X] YES
[ ] NO

CONCRETE COLLAR INTACT:
[X] YES
[ ] NO

AMBIENT AIR VOC: _____ PPM

WELL MOUTH VOC: _____ PPM

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	PERISTALTIC PUMP
[ ]	[ ]	SUBMERSIBLE
[ ]	[ ]	BLADDER PUMP
[ ]	[ ]	HAND PUMP
[ ]	[ ]	DEDICATED HDPE
[ ]	[ ]	NEW HDPE
[ ]	[ ]	DEDICATED LDPE
[ ]	[ ]	NEW LDPE
	[ ]	FILTER
[ ]	[ ]	_____

Equipment 5556
Solinst interface probe, Lamotte 2020 turbidity meter, YSI ~~650 XL~~ multi-parameter meter with display, geopump peristaltic pump
QED 0.45 micron Filter

DECONTAMINATION FLUIDS USED:
[ ] DISTILLED WATER
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] TSP SOLUTION
[ ] ALCONOX SOLUTION
[ ] NONE
[ ] _____
[ ] _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	pH	SP. COND. (mS/cm)	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	COMMENTS: DTW
1350	11.23	5.99	0.232	67.6	2.84	15	136	13.91
1355	11.24	6.00	0.231	75.7	2.22	12	136	
1400	11.30	5.99	0.229	75.3	2.23	10	136	
1405	11.27	6.03	0.228	78.1	2.24	8.1	136	
1410								
1415								
								Purged 04 gallons

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	TYPE	LABORATORY ANALYSIS
1410	CA-MW-6	HNO3	1	500 mL poly	Priority Pollutant Metals, dissolved
		~~HCl~~ None	1	1 L Amber	SVOCs
		HCl	2	40 mL VOA	VOCs

NOTES:

Allison Winn
SAMPLER

CREDERE ASSOCIATES, LLC
TEST PIT SAMPLING LOG
Credere Associates, LLC - 776 Main Street, Westbrook, Main 04092 - (207) 828-1272

TEST PIT DATA:

PROJECT NAME: Ferrari | LRPC
DATE: 11/12/2014
PROJECT NUMBER: 14001247
LOCATION ACTIVITY
SAMPLE LOCATION ID: CA-TP-1
START: 1245
END: 1315
CREDERE REPRESENTATIVE: Allison Drouin
CONTRACTOR/FOREMAN: Geosearch Inc

NOTES: 2' wide 7' deep 4' long
Bobcat 430 ZHS

FIELD ANALYSIS DATA:

DEPTH (FT)	SAMPLE DEPTH (FT)	SAMPLE NUMBER	MOISTURE	PID (ppm)	SOIL DESCRIPTION / NOTES
0		CA-TP-1 @1300	(0-6/12)	0.0 ↓	0-7' R-brown to orange Fill, 70% hacksaw blades, metal flakes, coal, ash, silt.
1					
2					
3					
4					
5					
6					
7					End of TP @ 7'
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

* - Submitted for laboratory analysis

CREDERE ASSOCIATES, LLC
TEST PIT SAMPLING LOG
Credere Associates, LLC - 776 Main Street, Westbrook, Main 04092 - (207) 828-1272

TEST PIT DATA:

PROJECT NAME: Ferrari / LRPC
DATE: 11/12/2014
PROJECT NUMBER: 14001247
LOCATION ACTIVITY
SAMPLE LOCATION ID: CA-TP-2
START: 1050
END: 1120
CREDERE REPRESENTATIVE: Allison Brown
CONTRACTOR/FOREMAN: Geosearch

NOTES:

Bobcat 430 ZHS

FIELD ANALYSIS DATA:

DEPTH (FT)	SAMPLE DEPTH (FT)	SAMPLE NUMBER	MOISTURE	PID (ppm)	SOIL DESCRIPTION / NOTES
0		CA-TP-2 (0-3.5) @1100	1.5	0.0	0-12" Black TOPSOIL + Fill (metal scrap + ash)
1					
2					12-3.5' Tan vf-fSAND, little cobbles.
3		CA-TP-2 (3.5-5.5) @1110			3.5' Thin layer of black ash.
4					3.5-8' Orange vf SAND and round cobbles - boulders (former river channel.
5					
6					
7					
8					E of TP @ 8'
9					
10					
11					
12					
13					
14					
15					
16					
17					

* - Submitted for laboratory analysis

CREDERE ASSOCIATES, LLC
TEST PIT SAMPLING LOG
Credere Associates, LLC - 776 Main Street, Westbrook, Main 04092 - (207) 828-1272

TEST PIT DATA:

PROJECT NAME: Ferrari
DATE: 11/12/14
PROJECT NUMBER: 14001247
LOCATION ACTIVITY
SAMPLE LOCATION ID: CA-TP-3
START: 0830
END: 1020
CREDERE REPRESENTATIVE: Allison Drain
CONTRACTOR/FOREMAN: Geosearch

NOTES: bobcat 430 ZHS

FIELD ANALYSIS DATA:

DEPTH (FT)	SAMPLE DEPTH (FT)	SAMPLE NUMBER	MOISTURE	PID (ppm)	SOIL DESCRIPTION / NOTES
0		CA-TP-3 (3.5-8/4) @1600			0-8" TOPSOIL 8-42" Tan vf-f SAND w/ boulders 42-8' Dk Br - black + orange FILL could not reach bottom w/ excavator Fill: metal flakes, leaf litter, saw blades, generally light weight
1					
2					
3					
4					
5					
6					
7					
8					30" wide 7' long 8' deep EOL TP @ 8'
9					
10					
11					
12					
13					
14					
15					
16					
17					

* - Submitted for laboratory analysis

CREDERE ASSOCIATES, LLC
TEST PIT SAMPLING LOG
Credere Associates, LLC - 776 Main Street, Westbrook, Main 04092 - (207) 828-1272

TEST PIT DATA:

PROJECT NAME: Ferrari / LRPC
DATE: 11/12/14
PROJECT NUMBER: 14001247
LOCATION ACTIVITY
SAMPLE LOCATION ID: CA-TP-A3
START: 1220
END: 1245
CREDERE REPRESENTATIVE: Allison Drain
CONTRACTOR/FOREMAN: Geosearch Inc.

NOTES:

2' wide ~4' deep
3' long

Bobcat 430 ZHS

FIELD ANALYSIS DATA:

DEPTH (FT)	SAMPLE DEPTH (FT)	SAMPLE NUMBER	MOISTURE	PID (ppm)	SOIL DESCRIPTION / NOTES
0		CA-TP-A3 @1230	(0-4')		0-4' Brown and orange FILL, metal shavings and saw blades in sandy matrix.
1					
2					
3					
4					End of TP @ 4'
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

* - Submitted for laboratory analysis

APPENDIX D

ASBESTOS AND LEAD INSPECTOR CERTIFICATIONS

The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

20-June-2014

JONATHAN O'DONNELL
CREDERE ASSOCIATES LLC
776 MAIN STREET
WESTBROOK ME 04092

Re: New Hampshire certification for Asbestos Inspector (#**AI 000382**)

Dear Mr. O'Donnell:

Your application for certification as an **Asbestos Inspector** has been approved. Attached please find the referenced certificate.

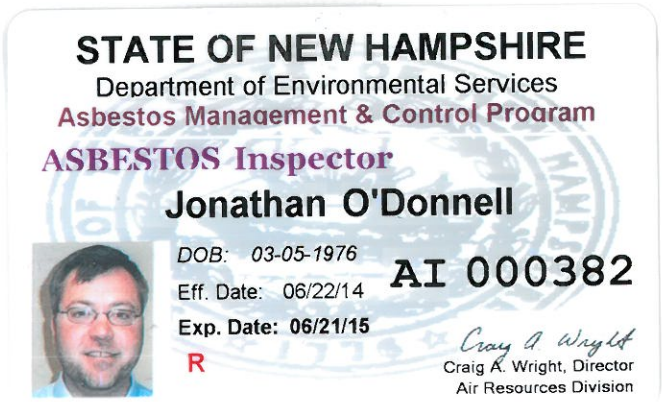
This asbestos inspector certificate is valid until the expiration date shown and for only those disciplines noted in the certificate number. You are responsible for contacting this office for renewal of your certificate prior to the expiration of this certification.

All applicable asbestos rules and regulations for the State of New Hampshire must be adhered to.

If you have any questions, please feel free to contact me at (603) 271-4609.

Sincerely,

Joy EH Perkins
Industrial Hygienist
Asbestos Management & Control Program
Air Resources Division



NOTE: This **letter** is **NOT** a **certification**; it serves as a carrier for mailing your card to you.

CNSLLTR..DOC

State of Maine
Lead Abatement Program

Jonathan B. O'Donnell

Inspector

Cert No. LI-0422
Trn.Exp.Date 03/20/2015

Expiration Date 03/31/2015

This is not a legal form of official identification



The State of New Hampshire
Department of Environmental Services

Thomas S. Burack, Commissioner

25-September-2014

SILAS MILLER
CREDERE ASSOCIATES LLC
776 MAIN STREET
WESTBROOK ME 04092

Re: New Hampshire certification for Asbestos Inspector (#**AI 000436**)

Dear Mr. Miller:

Your application for certification as an **Asbestos Inspector** has been approved. Attached please find the referenced certificate.

This asbestos inspector certificate is valid until the expiration date shown and for only those disciplines noted in the certificate number. You are responsible for contacting this office for renewal of your certificate prior to the expiration of this certification.

All applicable asbestos rules and regulations for the State of New Hampshire must be adhered to.

If you have any questions, please feel free to contact me at (603) 271-4609.

Sincerely,

Joy EH Perkins
Industrial Hygienist
Asbestos Management & Control Program
Air Resources Division



NOTE: This **letter** is **NOT** a **certification**; it serves as a carrier for mailing your card to you.

CNSLLTR..DOC

State of Maine
Lead Abatement Program

Silas W. Miller

Inspector

Cert No. LI-0437
Trn.Exp.Date 06/19/2015

Expiration Date **06/30/2015**

This is not a legal form of official identification



APPENDIX E

LABORATORY ANALYTICAL REPORTS

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Allison Drouin
CREDERE Associates
776 Main Street
Westbrook, ME 04092

PO Number: None
Job ID: 31420
Date Received: 10/31/14

Project: Ferrari 14001247

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 12/1/2014
Total number of pages: 119

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Ferrari 14001247
Lab ID: 31420

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
Trip Blank	Solid	10/27/2014 0:00	31420-001	
				VOCs in solid by 8260 Petro & Haz Waste
DUP-1	Solid	10/27/2014 0:00	31420-002	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SB-1(0-2)	Solid	10/27/2014 8:40	31420-003	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-SS-6(0-2)	Solid	10/27/2014 11:51	31420-004	
				PCBs in soil by 8082
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-SS-7(0-2)	Solid	10/27/2014 12:05	31420-005	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010

Absolute Resource associates

Project ID: Ferrari 14001247

Lab ID: 31420

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-SS-7(0-2)	Solid	10/27/2014 12:05	31420-005	
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-SS-5(0-2)	Solid	10/27/2014 12:30	31420-006	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-SS-4(0-2)	Solid	10/27/2014 12:45	31420-007	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-SS-1(0-2)	Solid	10/27/2014 13:00	31420-008	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010

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Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-SS-1(0-2)	Solid	10/27/2014 13:00	31420-008	
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-SS-2(0-2)	Solid	10/27/2014 13:10	31420-009	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
DUP-CC	Solid	10/27/2014 0:00	31420-010	
				PCBs in soil by 8082
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-CC-3	Solid	10/27/2014 14:00	31420-011	
				PCBs in soil by 8082
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-CC-1	Solid	10/27/2014 14:30	31420-012	
				PCBs in soil by 8082
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-CC-2	Solid	10/27/2014 14:50	31420-013	
				PCBs in soil by 8082
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-SB-2(0-2)	Solid	10/30/2014 10:00	31420-014	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010

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Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-SB-2(0-2)	Solid	10/30/2014 10:00	31420-014	
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-SB-2(15-17/15.5)	Solid	10/30/2014 10:30	31420-015	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SB-3(16-18/17)	Solid	10/30/2014 11:40	31420-016	
				TPH in solids by 8100
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SS-3(0-2)	Solid	10/30/2014 12:00	31420-017	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010

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Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-SS-3(0-2)	Solid	10/30/2014 12:00	31420-017	
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
CA-SB-6(0.5-10/2)	Solid	10/30/2014 12:55	31420-018	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SB-6(10.5-12.5/11)	Solid	10/30/2014 13:00	31420-019	
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Arsenic in solids by 6010
				Chromium in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SB-4(14-16/15)	Solid	10/30/2014 14:00	31420-020	
				Acid & Base/Neutral Extractables in solid by 8270
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SB-4(0-7/3)	Solid	10/30/2014 14:05	31420-021	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010

Project ID: Ferrari 14001247

Lab ID: 31420

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-SB-4(0-7/3)	Solid	10/30/2014 14:05	31420-021	
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SB-4(7-9/75)	Solid	10/30/2014 14:10	31420-022	
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Arsenic in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SB-5(0-4/1)	Solid	10/30/2014 15:00	31420-023	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Barium in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Vanadium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SB-5(4-6/5)	Solid	10/30/2014 15:05	31420-024	
				Soil Digestion for ICP Analysis
				Arsenic in solids by 6010
				Chromium in solids by 6010
				Antimony in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SB-5(20-22/20)	Solid	10/30/2014 15:15	31420-025	
				Acid & Base/Neutral Extractables in solid by 8270
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-001
Sample ID: Trip Blank
Matrix: Solid
Sampled: 10/27/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-001
Sample ID: Trip Blank
Matrix: Solid
Sampled: 10/27/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**99**	78-114	%	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
4-bromofluorobenzene SUR	**100**	86-115	%	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C
a,a,a-trifluorotoluene SUR	**101**	70-130	%	1	LMM	11/4/14	7338	11/7/14	19:08	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-002
Sample ID: DUP-1
Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.
Sampled: 10/27/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
tetrahydrofuran (THF)	< 0.7	0.7	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.6	0.6	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
2-hexanone	< 0.7	0.7	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
tetrachloroethene	**5.9**	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-002
Sample ID: DUP-1
Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.
Sampled: 10/27/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
m&p-xylenes	**0.3**	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,2,4-trimethylbenzene	**0.2**	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
4-bromofluorobenzene SUR	**99**	86-115	%	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C
a,a,a-trifluorotoluene SUR	**93**	70-130	%	1	LMM	11/4/14	7338	11/7/14	21:09	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-015
Sample ID: CA-SB-2(15-17/15.5)
Matrix: Solid Percent Dry: 76% Results expressed on a dry weight basis.
Sampled: 10/30/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-015
Sample ID: CA-SB-2(15-17/15.5)
Matrix: Solid Percent Dry: 76% Results expressed on a dry weight basis.
Sampled: 10/30/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**98**	78-114	%	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
4-bromofluorobenzene SUR	**99**	86-115	%	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C
a,a,a-trifluorotoluene SUR	**96**	70-130	%	1	LMM	11/4/14	7338	11/9/14	7:50	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-016
Sample ID: CA-SB-3(16-18/17)
Matrix: Solid Percent Dry: 80.4% Results expressed on a dry weight basis.
Sampled: 10/30/14 11:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-016
Sample ID: CA-SB-3(16-18/17)
Matrix: Solid Percent Dry: 80.4% Results expressed on a dry weight basis.
Sampled: 10/30/14 11:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**97**	78-114	%	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
4-bromofluorobenzene SUR	**98**	86-115	%	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C
a,a,a-trifluorotoluene SUR	**98**	70-130	%	1	LMM	11/4/14	7338	11/9/14	8:20	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-018
Sample ID: CA-SB-6(0.5-10/2)
Matrix: Solid Percent Dry: 82.8% Results expressed on a dry weight basis.
Sampled: 10/30/14 12:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
tetrachloroethene	**0.2**	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-018
Sample ID: CA-SB-6(0.5-10/2)
Matrix: Solid Percent Dry: 82.8% Results expressed on a dry weight basis.
Sampled: 10/30/14 12:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**99**	78-114	%	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C
a,a,a-trifluorotoluene SUR	**96**	70-130	%	1	LMM	11/4/14	7338	11/10/14	17:13	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-019
Sample ID: CA-SB-6(10.5-12.5/11)
Matrix: Solid Percent Dry: 77.6% Results expressed on a dry weight basis.
Sampled: 10/30/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-019
Sample ID: CA-SB-6(10.5-12.5/11)
Matrix: Solid Percent Dry: 77.6% Results expressed on a dry weight basis.
Sampled: 10/30/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
4-bromofluorobenzene SUR	**105**	86-115	%	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C
a,a,a-trifluorotoluene SUR	**129**	70-130	%	1	LMM	11/4/14	7338	11/17/14	22:20	SW5035A8260C

Note: Sample analysis requested by customer beyond the method recommended holding time.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-020
Sample ID: CA-SB-4(14-16/15)
Matrix: Solid Percent Dry: 76.3% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.5	0.5	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-020
Sample ID: CA-SB-4(14-16/15)
Matrix: Solid Percent Dry: 76.3% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
4-bromofluorobenzene SUR	**102**	86-115	%	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C
a,a,a-trifluorotoluene SUR	**107**	70-130	%	1	LMM	11/4/14	7340	11/10/14	17:43	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-021
Sample ID: CA-SB-4(0-7/3)
Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
bromomethane	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
acetone	< 4	4	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
t-butanol (TBA)	< 4	4	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
tetrahydrofuran (THF)	< 0.7	0.7	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,4-dioxane	< 4	4	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.7	0.7	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
2-hexanone	< 0.7	0.7	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
tetrachloroethene	**13**	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-021
Sample ID: CA-SB-4(0-7/3)
Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
m&p-xylenes	**0.4**	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,2,4-trimethylbenzene	**0.4**	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
4-bromofluorobenzene SUR	**100**	86-115	%	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C
a,a,a-trifluorotoluene SUR	**97**	70-130	%	1	LMM	11/4/14	7340	11/10/14	18:13	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-022
Sample ID: CA-SB-4(7-9/7.5)
Matrix: Solid Percent Dry: 94.5% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
tetrachloroethene	**0.1**	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-022
Sample ID: CA-SB-4(7-9/7.5)
Matrix: Solid Percent Dry: 94.5% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C
a,a,a-trifluorotoluene SUR	**104**	70-130	%	1	LMM	11/4/14	7340	11/17/14	22:50	SW5035A8260C

Note: Sample analysis requested by customer beyond the method recommended holding time.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-023
Sample ID: CA-SB-5 (0-4/1)
Matrix: Solid Percent Dry: 91.3% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
2-butanone (MEK)	< 0.2	0.2	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
trichloroethene	**0.1**	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
tetrachloroethene	**6.0**	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-023
Sample ID: CA-SB-5(0-4/1)
Matrix: Solid Percent Dry: 91.3% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**93**	78-114	%	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
4-bromofluorobenzene SUR	**99**	86-115	%	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C
a,a,a-trifluorotoluene SUR	**96**	70-130	%	1	LMM	11/4/14	7340	11/10/14	18:43	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-024
Sample ID: CA-SB-5(4-6/5)
Matrix: Solid Percent Dry: 93.7% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
tetrachloroethene	**6.5**	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-024
Sample ID: CA-SB-5(4-6/5)
Matrix: Solid Percent Dry: 93.7% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**93**	78-114	%	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
toluene-D8 SUR	**102**	88-110	%	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
4-bromofluorobenzene SUR	**106**	86-115	%	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C
a,a,a-trifluorotoluene SUR	**107**	70-130	%	1	LMM	11/4/14	7340	11/17/14	23:20	SW5035A8260C

Note: Sample analysis requested by customer beyond the method recommended holding time.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-025
Sample ID: CA-SB-5 (20-22/20)
Matrix: Solid Percent Dry: 78.4% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
tetrahydrofuran (THF)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
2-hexanone	< 0.4	0.4	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-025
Sample ID: CA-SB-5(20-22/20)
Matrix: Solid Percent Dry: 78.4% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**98**	78-114	%	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
toluene-D8 SUR	**102**	88-110	%	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
4-bromofluorobenzene SUR	**101**	86-115	%	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C
a,a,a-trifluorotoluene SUR	**98**	70-130	%	1	LMM	11/4/14	7340	11/10/14	19:14	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-002
Sample ID: DUP-1
Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.
Sampled: 10/27/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
aniline	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
phenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2-chlorophenol	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
bis(2-chloroethyl)ether	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
1,3-dichlorobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
1,4-dichlorobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
1,2-dichlorobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
benzyl alcohol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2-methylphenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
bis(2-chloroisopropyl) ether	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
hexachloroethane	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
N-nitroso-di-N-propylamine	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
4-methylphenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
nitrobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
isophorone	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2-nitrophenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2,4-dimethylphenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
bis(2-chloroethoxy)methane	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2,4-dichlorophenol	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
1,2,4-trichlorobenzene	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
naphthalene	**2.2**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
benzoic acid	< 57	57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
4-chloroaniline	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
hexachlorobutadiene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
4-chloro-3-methylphenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2-methylnaphthalene	**0.66**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
hexachlorocyclopentadiene	< 11	11	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2,4,6-trichlorophenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2,4,5-trichlorophenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2-chloronaphthalene	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2-nitroaniline	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
acenaphthylene	< 0.57	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
dimethylphthalate	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2,6-dinitrotoluene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2,4-dinitrotoluene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
acenaphthene	**1.9**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
3-nitroaniline	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2,4-dinitrophenol	< 57	57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
dibenzofuran	**1.2**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
4-nitrophenol	< 23	23	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
fluorene	**1.6**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
diethyl phthalate	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-002
Sample ID: DUP-1
Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.
Sampled: 10/27/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
4-nitroaniline	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
4,6-dinitro-2-methylphenol	< 23	23	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
azobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
N-nitrosodiphenylamine	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
4-bromophenyl phenyl ether	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
hexachlorobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
pentachlorophenol	< 11	11	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
phenanthrene	**15**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
anthracene	**2.2**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
carbazole	< 2.3	2.3	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
di-n-butylphthalate	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
fluoranthene	**16**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
benzidine	< 34	34	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
pyrene	**14**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
butyl benzyl phthalate	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
benzo(a)anthracene	**7.2**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
chrysene	**7.2**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
3,3'-dichlorobenzidine	< 34	34	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
di-n-octyl phthalate	< 5.7	5.7	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
benzo(b)fluoranthene	**7.8**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
benzo(k)fluoranthene	**7.0**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
benzo(a)pyrene	**6.2**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
indeno(1,2,3-cd)pyrene	**1.5**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
dibenzo(a,h)anthracene	**0.75**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
benzo(g,h,i)perylene	**1.4**	0.57	ug/g	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**52**	21-100	%	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
phenol-D5 SUR	**52**	10-102	%	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2,4,6-tribromophenol SUR	**61**	10-123	%	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
nitrobenzene-D5 SUR	**43**	35-114	%	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
2-fluorobiphenyl SUR	**48**	43-116	%	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D
p-terphenyl-D14 SUR	**61**	33-141	%	10	AJD	11/5/14	7345	11/6/14	19:56	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-003
Sample ID: CA-SB-1(0-2)
Matrix: Solid Percent Dry: 89.3% Results expressed on a dry weight basis.
Sampled: 10/27/14 8:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
aniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
phenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2-chlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
bis(2-chloroethyl)ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
1,3-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
1,4-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
1,2-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
benzyl alcohol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
bis(2-chloroisopropyl) ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
hexachloroethane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
N-nitroso-di-N-propylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
4-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
nitrobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
isophorone	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2-nitrophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2,4-dimethylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
bis(2-chloroethoxy)methane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2,4-dichlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
1,2,4-trichlorobenzene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
naphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
benzoic acid	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
4-chloroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
hexachlorobutadiene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
4-chloro-3-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2-methylnaphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
hexachlorocyclopentadiene	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2,4,6-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2,4,5-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2-chloronaphthalene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
acenaphthylene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
dimethylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2,6-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2,4-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
acenaphthene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
3-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2,4-dinitrophenol	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
dibenzofuran	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
4-nitrophenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
fluorene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
diethyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-003
Sample ID: CA-SB-1(0-2)
Matrix: Solid Percent Dry: 89.3% Results expressed on a dry weight basis.
Sampled: 10/27/14 8:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
4-nitroaniline	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
4,6-dinitro-2-methylphenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
azobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
N-nitrosodiphenylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
4-bromophenyl phenyl ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
hexachlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
pentachlorophenol	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
phenanthrene	**0.46**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
anthracene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
carbazole	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
di-n-butylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
fluoranthene	**1.1**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
benzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
pyrene	**1.0**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
butyl benzyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
benzo(a)anthracene	**0.64**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
chrysene	**0.88**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
3,3'-dichlorobenzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
di-n-octyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
benzo(b)fluoranthene	**0.75**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
benzo(k)fluoranthene	**0.57**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
benzo(a)pyrene	**0.67**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
indeno(1,2,3-cd)pyrene	**0.34**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
dibenzo(a,h)anthracene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
benzo(g,h,i)perylene	**0.31**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**51**	21-100	%	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
phenol-D5 SUR	**56**	10-102	%	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2,4,6-tribromophenol SUR	**64**	10-123	%	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
nitrobenzene-D5 SUR	**45**	35-114	%	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
2-fluorobiphenyl SUR	**46**	43-116	%	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D
p-terphenyl-D14 SUR	**61**	33-141	%	5	AJD	11/5/14	7345	11/6/14	16:14	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-005
Sample ID: CA-SS-7(0-2)
Matrix: Solid Percent Dry: 80.5% Results expressed on a dry weight basis.
Sampled: 10/27/14 12:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2-chlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
isophorone	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2,4-dichlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
1,2,4-trichlorobenzene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
naphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
benzoic acid	< 6	6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2-methylnaphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2-chloronaphthalene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
acenaphthylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
dimethylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
acenaphthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2,4-dinitrophenol	< 6	6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
dibenzofuran	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
fluorene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
diethyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-005
Sample ID: CA-SS-7(0-2)
Matrix: Solid Percent Dry: 80.5% Results expressed on a dry weight basis.
Sampled: 10/27/14 12:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
4-nitroaniline	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
phenanthrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
carbazole	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
di-n-butylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
fluoranthene	**0.08**	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
benzidine	< 3	3	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
pyrene	**0.08**	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
butyl benzyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
benzo(a)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
chrysene	**0.07**	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
3,3'-dichlorobenzidine	< 3	3	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
di-n-octyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
benzo(b)fluoranthene	**0.08**	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
benzo(k)fluoranthene	**0.08**	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
benzo(a)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
dibenzo(a,h)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
benzo(g,h,i)perylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**54**	21-100	%	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
phenol-D5 SUR	**55**	10-102	%	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2,4,6-tribromophenol SUR	**63**	10-123	%	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
nitrobenzene-D5 SUR	**44**	35-114	%	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
2-fluorobiphenyl SUR	**48**	43-116	%	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D
p-terphenyl-D14 SUR	**57**	33-141	%	1	AJD	11/5/14	7345	11/7/14	15:52	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-006
Sample ID: CA-SS-5(0-2)
Matrix: Solid Percent Dry: 56.2% Results expressed on a dry weight basis.
Sampled: 10/27/14 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
aniline	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
phenol	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2-chlorophenol	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
bis(2-chloroethyl)ether	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
1,3-dichlorobenzene	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
1,4-dichlorobenzene	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
1,2-dichlorobenzene	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
benzyl alcohol	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2-methylphenol	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
bis(2-chloroisopropyl) ether	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
hexachloroethane	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
N-nitroso-di-N-propylamine	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
4-methylphenol	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
nitrobenzene	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
isophorone	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2-nitrophenol	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2,4-dimethylphenol	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
bis(2-chloroethoxy)methane	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2,4-dichlorophenol	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
1,2,4-trichlorobenzene	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
naphthalene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
benzoic acid	< 44	44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
4-chloroaniline	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
hexachlorobutadiene	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
4-chloro-3-methylphenol	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2-methylnaphthalene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
hexachlorocyclopentadiene	< 9	9	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2,4,6-trichlorophenol	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2,4,5-trichlorophenol	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2-chloronaphthalene	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2-nitroaniline	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
acenaphthylene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
dimethylphthalate	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2,6-dinitrotoluene	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2,4-dinitrotoluene	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
acenaphthene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
3-nitroaniline	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2,4-dinitrophenol	< 44	44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
dibenzofuran	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
4-nitrophenol	< 17	17	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
fluorene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
diethyl phthalate	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-006
Sample ID: CA-SS-5(0-2)
Matrix: Solid Percent Dry: 56.2% Results expressed on a dry weight basis.
Sampled: 10/27/14 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
4-nitroaniline	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
4,6-dinitro-2-methylphenol	< 17	17	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
azobenzene	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
N-nitrosodiphenylamine	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
4-bromophenyl phenyl ether	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
hexachlorobenzene	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
pentachlorophenol	< 9	9	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
phenanthrene	**0.62**	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
anthracene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
carbazole	< 1.7	1.7	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
di-n-butylphthalate	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
fluoranthene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
benzidine	< 26	26	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
pyrene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
butyl benzyl phthalate	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
benzo(a)anthracene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
chrysene	**1.7**	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
3,3'-dichlorobenzidine	< 26	26	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
di-n-octyl phthalate	< 4.4	4.4	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
benzo(b)fluoranthene	**0.48**	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
benzo(k)fluoranthene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
benzo(a)pyrene	**0.58**	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
dibenzo(a,h)anthracene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
benzo(g,h,i)perylene	< 0.44	0.44	ug/g	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**48**	21-100	%	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
phenol-D5 SUR	**47**	10-102	%	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2,4,6-tribromophenol SUR	**59**	10-123	%	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
nitrobenzene-D5 SUR	**35**	35-114	%	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
2-fluorobiphenyl SUR	**46**	43-116	%	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D
p-terphenyl-D14 SUR	**73**	33-141	%	5	AJD	11/5/14	7345	11/6/14	19:19	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-007
Sample ID: CA-SS-4(0-2)
Matrix: Solid Percent Dry: 90% Results expressed on a dry weight basis.
Sampled: 10/27/14 12:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
aniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
phenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2-chlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
bis(2-chloroethyl)ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
1,3-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
1,4-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
1,2-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
benzyl alcohol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
bis(2-chloroisopropyl) ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
hexachloroethane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
N-nitroso-di-N-propylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
4-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
nitrobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
isophorone	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2-nitrophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2,4-dimethylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
bis(2-chloroethoxy)methane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2,4-dichlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
1,2,4-trichlorobenzene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
naphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
benzoic acid	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
4-chloroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
hexachlorobutadiene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
4-chloro-3-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2-methylnaphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
hexachlorocyclopentadiene	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2,4,6-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2,4,5-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2-chloronaphthalene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
acenaphthylene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
dimethylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2,6-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2,4-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
acenaphthene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
3-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2,4-dinitrophenol	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
dibenzofuran	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
4-nitrophenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
fluorene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
diethyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-007
Sample ID: CA-SS-4(0-2)
Matrix: Solid Percent Dry: 90% Results expressed on a dry weight basis.
Sampled: 10/27/14 12:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
4-nitroaniline	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
4,6-dinitro-2-methylphenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
azobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
N-nitrosodiphenylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
4-bromophenyl phenyl ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
hexachlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
pentachlorophenol	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
phenanthrene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
anthracene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
carbazole	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
di-n-butylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
fluoranthene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
benzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
pyrene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
butyl benzyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
benzo(a)anthracene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
chrysene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
3,3'-dichlorobenzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
di-n-octyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
benzo(b)fluoranthene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
benzo(k)fluoranthene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
benzo(a)pyrene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
dibenzo(a,h)anthracene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
benzo(g,h,i)perylene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**63**	21-100	%	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
phenol-D5 SUR	**64**	10-102	%	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2,4,6-tribromophenol SUR	**72**	10-123	%	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
nitrobenzene-D5 SUR	**53**	35-114	%	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
2-fluorobiphenyl SUR	**52**	43-116	%	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D
p-terphenyl-D14 SUR	**69**	33-141	%	5	AJD	11/5/14	7345	11/6/14	15:00	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-008
Sample ID: CA-SS-1(0-2)
Matrix: Solid Percent Dry: 88.2% Results expressed on a dry weight basis.
Sampled: 10/27/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
aniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
phenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2-chlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
bis(2-chloroethyl)ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
1,3-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
1,4-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
1,2-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
benzyl alcohol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
bis(2-chloroisopropyl) ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
hexachloroethane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
N-nitroso-di-N-propylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
4-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
nitrobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
isophorone	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2-nitrophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2,4-dimethylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
bis(2-chloroethoxy)methane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2,4-dichlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
1,2,4-trichlorobenzene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
naphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
benzoic acid	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
4-chloroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
hexachlorobutadiene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
4-chloro-3-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2-methylnaphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
hexachlorocyclopentadiene	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2,4,6-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2,4,5-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2-chloronaphthalene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
acenaphthylene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
dimethylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2,6-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2,4-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
acenaphthene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
3-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2,4-dinitrophenol	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
dibenzofuran	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
4-nitrophenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
fluorene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
diethyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-008
Sample ID: CA-SS-1(0-2)
Matrix: Solid Percent Dry: 88.2% Results expressed on a dry weight basis.
Sampled: 10/27/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
4-nitroaniline	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
4,6-dinitro-2-methylphenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
azobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
N-nitrosodiphenylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
4-bromophenyl phenyl ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
hexachlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
pentachlorophenol	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
phenanthrene	**1.1**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
anthracene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
carbazole	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
di-n-butylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
fluoranthene	**1.9**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
benzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
pyrene	**1.9**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
butyl benzyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
benzo(a)anthracene	**1.1**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
chrysene	**1.3**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
3,3'-dichlorobenzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
di-n-octyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
benzo(b)fluoranthene	**1.1**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
benzo(k)fluoranthene	**1.1**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
benzo(a)pyrene	**1.1**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
indeno(1,2,3-cd)pyrene	**0.38**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
dibenzo(a,h)anthracene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
benzo(g,h,i)perylene	**0.36**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**51**	21-100	%	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
phenol-D5 SUR	**54**	10-102	%	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2,4,6-tribromophenol SUR	**57**	10-123	%	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
nitrobenzene-D5 SUR	**44**	35-114	%	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
2-fluorobiphenyl SUR	**44**	43-116	%	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D
p-terphenyl-D14 SUR	**56**	33-141	%	5	AJD	11/5/14	7345	11/6/14	18:05	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-009
Sample ID: CA-SS-2(0-2)
Matrix: Solid Percent Dry: 87.8% Results expressed on a dry weight basis.
Sampled: 10/27/14 13:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
aniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
phenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2-chlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
bis(2-chloroethyl)ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
1,3-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
1,4-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
1,2-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
benzyl alcohol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
bis(2-chloroisopropyl) ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
hexachloroethane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
N-nitroso-di-N-propylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
4-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
nitrobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
isophorone	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2-nitrophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2,4-dimethylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
bis(2-chloroethoxy)methane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2,4-dichlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
1,2,4-trichlorobenzene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
naphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
benzoic acid	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
4-chloroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
hexachlorobutadiene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
4-chloro-3-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2-methylnaphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
hexachlorocyclopentadiene	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2,4,6-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2,4,5-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2-chloronaphthalene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
acenaphthylene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
dimethylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2,6-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2,4-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
acenaphthene	**0.42**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
3-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2,4-dinitrophenol	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
dibenzofuran	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
4-nitrophenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
fluorene	**0.28**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
diethyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-009
Sample ID: CA-SS-2(0-2)
Matrix: Solid Percent Dry: 87.8% Results expressed on a dry weight basis.
Sampled: 10/27/14 13:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
4-nitroaniline	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
4,6-dinitro-2-methylphenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
azobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
N-nitrosodiphenylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
4-bromophenyl phenyl ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
hexachlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
pentachlorophenol	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
phenanthrene	**4.0**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
anthracene	**0.60**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
carbazole	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
di-n-butylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
fluoranthene	**5.7**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
benzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
pyrene	**4.8**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
butyl benzyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
benzo(a)anthracene	**2.5**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
chrysene	**2.7**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
3,3'-dichlorobenzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
di-n-octyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
benzo(b)fluoranthene	**2.3**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
benzo(k)fluoranthene	**2.4**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
benzo(a)pyrene	**2.3**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
indeno(1,2,3-cd)pyrene	**0.85**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
dibenzo(a,h)anthracene	**0.39**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
benzo(g,h,i)perylene	**0.79**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**56**	21-100	%	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
phenol-D5 SUR	**59**	10-102	%	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2,4,6-tribromophenol SUR	**65**	10-123	%	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
nitrobenzene-D5 SUR	**48**	35-114	%	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
2-fluorobiphenyl SUR	**48**	43-116	%	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D
p-terphenyl-D14 SUR	**64**	33-141	%	5	AJD	11/5/14	7345	11/6/14	17:29	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-014
Sample ID: CA-SB-2(0-2)
Matrix: Solid Percent Dry: 87% Results expressed on a dry weight basis.
Sampled: 10/30/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2-chlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
isophorone	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2,4-dichlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
1,2,4-trichlorobenzene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
naphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
benzoic acid	< 6	6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2-methylnaphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2-chloronaphthalene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
acenaphthylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
dimethylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
acenaphthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2,4-dinitrophenol	< 6	6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
dibenzofuran	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
fluorene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
diethyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-014
Sample ID: CA-SB-2(0-2)
Matrix: Solid Percent Dry: 87% Results expressed on a dry weight basis.
Sampled: 10/30/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
4-nitroaniline	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
phenanthrene	**0.07**	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
carbazole	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
di-n-butylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
fluoranthene	**0.12**	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
benzidine	< 3	3	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
pyrene	**0.11**	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
butyl benzyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
benzo(a)anthracene	**0.06**	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
chrysene	**0.10**	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
3,3'-dichlorobenzidine	< 3	3	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
di-n-octyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
benzo(b)fluoranthene	**0.06**	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
benzo(k)fluoranthene	**0.08**	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
benzo(a)pyrene	**0.06**	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
dibenzo(a,h)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
benzo(g,h,i)perylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**68**	21-100	%	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
phenol-D5 SUR	**72**	10-102	%	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2,4,6-tribromophenol SUR	**79**	10-123	%	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
nitrobenzene-D5 SUR	**55**	35-114	%	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
2-fluorobiphenyl SUR	**56**	43-116	%	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D
p-terphenyl-D14 SUR	**81**	33-141	%	1	AJD	11/5/14	7345	11/6/14	13:46	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-015
Sample ID: CA-SB-2(15-17/15.5)
Matrix: Solid Percent Dry: 76% Results expressed on a dry weight basis.
Sampled: 10/30/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
aniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
phenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2-chlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
bis(2-chloroethyl)ether	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
1,3-dichlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
1,4-dichlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
1,2-dichlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
benzyl alcohol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2-methylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
hexachloroethane	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
4-methylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
nitrobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
isophorone	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2-nitrophenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2,4-dimethylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2,4-dichlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
1,2,4-trichlorobenzene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
naphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
benzoic acid	< 6	6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
4-chloroaniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
hexachlorobutadiene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
4-chloro-3-methylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2-methylnaphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2,4,6-trichlorophenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2,4,5-trichlorophenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2-chloronaphthalene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2-nitroaniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
acenaphthylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
dimethylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2,6-dinitrotoluene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2,4-dinitrotoluene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
acenaphthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
3-nitroaniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2,4-dinitrophenol	< 6	6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
dibenzofuran	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
4-nitrophenol	< 3	3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
fluorene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
diethyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-015
Sample ID: CA-SB-2(15-17/15.5)
Matrix: Solid Percent Dry: 76% Results expressed on a dry weight basis.
Sampled: 10/30/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
4-nitroaniline	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
4,6-dinitro-2-methylphenol	< 3	3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
azobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
N-nitrosodiphenylamine	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
4-bromophenyl phenyl ether	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
hexachlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
phenanthrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
carbazole	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
di-n-butylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
benzidine	< 4	4	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
butyl benzyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
benzo(a)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
chrysene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
3,3'-dichlorobenzidine	< 4	4	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
di-n-octyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
benzo(b)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
benzo(k)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
benzo(a)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
dibenzo(a,h)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
benzo(g,h,i)perylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**66**	21-100	%	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
phenol-D5 SUR	**66**	10-102	%	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2,4,6-tribromophenol SUR	**73**	10-123	%	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
nitrobenzene-D5 SUR	**55**	35-114	%	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
2-fluorobiphenyl SUR	**53**	43-116	%	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D
p-terphenyl-D14 SUR	**78**	33-141	%	1	AJD	11/5/14	7345	11/6/14	11:55	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-016
Sample ID: CA-SB-3(16-18/17)
Matrix: Solid Percent Dry: 80.4% Results expressed on a dry weight basis.
Sampled: 10/30/14 11:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2-chlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
isophorone	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2,4-dichlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
1,2,4-trichlorobenzene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
naphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
benzoic acid	< 6	6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2-methylnaphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2-chloronaphthalene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
acenaphthylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
dimethylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
acenaphthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2,4-dinitrophenol	< 6	6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
dibenzofuran	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
fluorene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
diethyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-016
Sample ID: CA-SB-3(16-18/17)
Matrix: Solid Percent Dry: 80.4% Results expressed on a dry weight basis.
Sampled: 10/30/14 11:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
4-nitroaniline	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
phenanthrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
carbazole	< 0.2	0.2	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
di-n-butylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
benzidine	< 4	4	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
butyl benzyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
benzo(a)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
chrysene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
3,3'-dichlorobenzidine	< 4	4	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
di-n-octyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
benzo(b)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
benzo(k)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
benzo(a)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
dibenzo(a,h)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
benzo(g,h,i)perylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**73**	21-100	%	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
phenol-D5 SUR	**74**	10-102	%	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2,4,6-tribromophenol SUR	**70**	10-123	%	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
nitrobenzene-D5 SUR	**60**	35-114	%	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
2-fluorobiphenyl SUR	**59**	43-116	%	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D
p-terphenyl-D14 SUR	**82**	33-141	%	1	AJD	11/5/14	7345	11/6/14	12:32	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-017
Sample ID: CA-SS-3(0-2)
Matrix: Solid Percent Dry: 89% Results expressed on a dry weight basis.
Sampled: 10/30/14 12:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
aniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
phenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2-chlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
bis(2-chloroethyl)ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
1,3-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
1,4-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
1,2-dichlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
benzyl alcohol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
bis(2-chloroisopropyl) ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
hexachloroethane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
N-nitroso-di-N-propylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
4-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
nitrobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
isophorone	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2-nitrophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2,4-dimethylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
bis(2-chloroethoxy)methane	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2,4-dichlorophenol	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
1,2,4-trichlorobenzene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
naphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
benzoic acid	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
4-chloroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
hexachlorobutadiene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
4-chloro-3-methylphenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2-methylnaphthalene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
hexachlorocyclopentadiene	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2,4,6-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2,4,5-trichlorophenol	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2-chloronaphthalene	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
acenaphthylene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
dimethylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2,6-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2,4-dinitrotoluene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
acenaphthene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
3-nitroaniline	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2,4-dinitrophenol	< 27	27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
dibenzofuran	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
4-nitrophenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
fluorene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
diethyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-017
Sample ID: CA-SS-3(0-2)
Matrix: Solid Percent Dry: 89% Results expressed on a dry weight basis.
Sampled: 10/30/14 12:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
4-nitroaniline	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
4,6-dinitro-2-methylphenol	< 11	11	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
azobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
N-nitrosodiphenylamine	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
4-bromophenyl phenyl ether	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
hexachlorobenzene	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
pentachlorophenol	< 5	5	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
phenanthrene	**0.62**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
anthracene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
carbazole	< 1.1	1.1	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
di-n-butylphthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
fluoranthene	**0.81**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
benzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
pyrene	**0.77**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
butyl benzyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
benzo(a)anthracene	**0.44**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
chrysene	**0.50**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
3,3'-dichlorobenzidine	< 16	16	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
di-n-octyl phthalate	< 2.7	2.7	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
benzo(b)fluoranthene	**0.31**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
benzo(k)fluoranthene	**0.41**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
benzo(a)pyrene	**0.38**	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
dibenzo(a,h)anthracene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
benzo(g,h,i)perylene	< 0.27	0.27	ug/g	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**63**	21-100	%	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
phenol-D5 SUR	**67**	10-102	%	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2,4,6-tribromophenol SUR	**76**	10-123	%	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
nitrobenzene-D5 SUR	**54**	35-114	%	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
2-fluorobiphenyl SUR	**55**	43-116	%	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D
p-terphenyl-D14 SUR	**75**	33-141	%	5	AJD	11/5/14	7345	11/6/14	16:51	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-018
Sample ID: CA-SB-6(0.5-10/2)
Matrix: Solid Percent Dry: 82.8% Results expressed on a dry weight basis.
Sampled: 10/30/14 12:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
aniline	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
phenol	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2-chlorophenol	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
bis(2-chloroethyl)ether	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
1,3-dichlorobenzene	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
1,4-dichlorobenzene	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
1,2-dichlorobenzene	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
benzyl alcohol	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2-methylphenol	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
bis(2-chloroisopropyl) ether	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
hexachloroethane	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
N-nitroso-di-N-propylamine	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
4-methylphenol	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
nitrobenzene	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
isophorone	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2-nitrophenol	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2,4-dimethylphenol	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
bis(2-chloroethoxy)methane	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2,4-dichlorophenol	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
1,2,4-trichlorobenzene	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
naphthalene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
benzoic acid	< 120	120	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
4-chloroaniline	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
hexachlorobutadiene	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
4-chloro-3-methylphenol	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2-methylnaphthalene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
hexachlorocyclopentadiene	< 24	24	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2,4,6-trichlorophenol	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2,4,5-trichlorophenol	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2-chloronaphthalene	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2-nitroaniline	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
acenaphthylene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
dimethylphthalate	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2,6-dinitrotoluene	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2,4-dinitrotoluene	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
acenaphthene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
3-nitroaniline	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2,4-dinitrophenol	< 120	120	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
dibenzofuran	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
4-nitrophenol	< 47	47	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
fluorene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
diethyl phthalate	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-018
Sample ID: CA-SB-6(0.5-10/2)
Matrix: Solid Percent Dry: 82.8% Results expressed on a dry weight basis.
Sampled: 10/30/14 12:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
4-nitroaniline	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
4,6-dinitro-2-methylphenol	< 47	47	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
azobenzene	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
N-nitrosodiphenylamine	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
4-bromophenyl phenyl ether	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
hexachlorobenzene	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
pentachlorophenol	< 24	24	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
phenanthrene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
anthracene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
carbazole	< 4.7	4.7	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
di-n-butylphthalate	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
fluoranthene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
benzidine	< 71	71	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
pyrene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
butyl benzyl phthalate	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
benzo(a)anthracene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
chrysene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
3,3'-dichlorobenzidine	< 71	71	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
di-n-octyl phthalate	< 12	12	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
benzo(b)fluoranthene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
benzo(k)fluoranthene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
benzo(a)pyrene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
dibenzo(a,h)anthracene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
benzo(g,h,i)perylene	< 1.2	1.2	ug/g	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**48**	21-100	%	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
phenol-D5 SUR	**47**	10-102	%	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2,4,6-tribromophenol SUR	**57**	10-123	%	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
nitrobenzene-D5 SUR	**16** *	35-114	%	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
2-fluorobiphenyl SUR	**50**	43-116	%	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D
p-terphenyl-D14 SUR	**54**	33-141	%	20	AJD	11/5/14	7345	11/7/14	12:46	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.
**** This surrogate showed recovery outside the acceptance limits. Hydrocarbon interference suspected.***

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-019
Sample ID: CA-SB-6(10.5-12.5/11)
Matrix: Solid Percent Dry: 77.6% Results expressed on a dry weight basis.
Sampled: 10/30/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
aniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
phenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2-chlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
bis(2-chloroethyl)ether	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
1,3-dichlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
1,4-dichlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
1,2-dichlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
benzyl alcohol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2-methylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
hexachloroethane	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
4-methylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
nitrobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
isophorone	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2-nitrophenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2,4-dimethylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2,4-dichlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
1,2,4-trichlorobenzene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
naphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
benzoic acid	< 6	6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
4-chloroaniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
hexachlorobutadiene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
4-chloro-3-methylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2-methylnaphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2,4,6-trichlorophenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2,4,5-trichlorophenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2-chloronaphthalene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2-nitroaniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
acenaphthylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
dimethylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2,6-dinitrotoluene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2,4-dinitrotoluene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
acenaphthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
3-nitroaniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2,4-dinitrophenol	< 6	6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
dibenzofuran	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
4-nitrophenol	< 3	3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
fluorene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
diethyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-019
Sample ID: CA-SB-6(10.5-12.5/11)
Matrix: Solid Percent Dry: 77.6% Results expressed on a dry weight basis.
Sampled: 10/30/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
4-nitroaniline	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
4,6-dinitro-2-methylphenol	< 3	3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
azobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
N-nitrosodiphenylamine	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
4-bromophenyl phenyl ether	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
hexachlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
phenanthrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
carbazole	< 0.3	0.3	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
di-n-butylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
benzidine	< 4	4	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
butyl benzyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
benzo(a)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
chrysene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
3,3'-dichlorobenzidine	< 4	4	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
di-n-octyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
benzo(b)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
benzo(k)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
benzo(a)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
dibenzo(a,h)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
benzo(g,h,i)perylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**70**	21-100	%	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
phenol-D5 SUR	**71**	10-102	%	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2,4,6-tribromophenol SUR	**72**	10-123	%	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
nitrobenzene-D5 SUR	**59**	35-114	%	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
2-fluorobiphenyl SUR	**54**	43-116	%	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D
p-terphenyl-D14 SUR	**80**	33-141	%	1	AJD	11/5/14	7345	11/21/14	20:36	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-020
Sample ID: CA-SB-4(14-16/15)
Matrix: Solid Percent Dry: 76.3% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
aniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
phenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2-chlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
bis(2-chloroethyl)ether	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
1,3-dichlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
1,4-dichlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
1,2-dichlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
benzyl alcohol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2-methylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
hexachloroethane	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
4-methylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
nitrobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
isophorone	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2-nitrophenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2,4-dimethylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2,4-dichlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
1,2,4-trichlorobenzene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
naphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
benzoic acid	< 6	6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
4-chloroaniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
hexachlorobutadiene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
4-chloro-3-methylphenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2-methylnaphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2,4,6-trichlorophenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2,4,5-trichlorophenol	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2-chloronaphthalene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2-nitroaniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
acenaphthylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
dimethylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2,6-dinitrotoluene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2,4-dinitrotoluene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
acenaphthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
3-nitroaniline	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2,4-dinitrophenol	< 6	6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
dibenzofuran	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
4-nitrophenol	< 3	3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
fluorene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
diethyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-020
Sample ID: CA-SB-4(14-16/15)
Matrix: Solid Percent Dry: 76.3% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
4-nitroaniline	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
4,6-dinitro-2-methylphenol	< 3	3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
azobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
N-nitrosodiphenylamine	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
4-bromophenyl phenyl ether	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
hexachlorobenzene	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
phenanthrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
carbazole	< 0.3	0.3	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
di-n-butylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
benzidine	< 4	4	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
butyl benzyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
benzo(a)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
chrysene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
3,3'-dichlorobenzidine	< 4	4	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
di-n-octyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
benzo(b)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
benzo(k)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
benzo(a)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
dibenzo(a,h)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
benzo(g,h,i)perylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**65**	21-100	%	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
phenol-D5 SUR	**66**	10-102	%	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2,4,6-tribromophenol SUR	**72**	10-123	%	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
nitrobenzene-D5 SUR	**53**	35-114	%	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
2-fluorobiphenyl SUR	**52**	43-116	%	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D
p-terphenyl-D14 SUR	**79**	33-141	%	1	AJD	11/5/14	7353	11/6/14	13:09	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-021
Sample ID: CA-SB-4(0-7/3)
Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
aniline	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
phenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2-chlorophenol	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
bis(2-chloroethyl)ether	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
1,3-dichlorobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
1,4-dichlorobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
1,2-dichlorobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
benzyl alcohol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2-methylphenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
bis(2-chloroisopropyl) ether	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
hexachloroethane	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
N-nitroso-di-N-propylamine	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
4-methylphenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
nitrobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
isophorone	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2-nitrophenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2,4-dimethylphenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
bis(2-chloroethoxy)methane	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2,4-dichlorophenol	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
1,2,4-trichlorobenzene	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
naphthalene	**0.79**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
benzoic acid	< 58	58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
4-chloroaniline	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
hexachlorobutadiene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
4-chloro-3-methylphenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2-methylnaphthalene	< 0.58	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
hexachlorocyclopentadiene	< 12	12	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2,4,6-trichlorophenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2,4,5-trichlorophenol	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2-chloronaphthalene	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2-nitroaniline	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
acenaphthylene	< 0.58	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
dimethylphthalate	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2,6-dinitrotoluene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2,4-dinitrotoluene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
acenaphthene	**0.71**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
3-nitroaniline	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2,4-dinitrophenol	< 58	58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
dibenzofuran	< 0.58	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
4-nitrophenol	< 23	23	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
fluorene	**0.64**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
diethyl phthalate	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-021
Sample ID: CA-SB-4(0-7/3)
Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
4-nitroaniline	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
4,6-dinitro-2-methylphenol	< 23	23	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
azobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
N-nitrosodiphenylamine	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
4-bromophenyl phenyl ether	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
hexachlorobenzene	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
pentachlorophenol	< 12	12	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
phenanthrene	**5.9**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
anthracene	**1.0**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
carbazole	< 2.3	2.3	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
di-n-butylphthalate	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
fluoranthene	**6.5**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
benzidine	< 35	35	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
pyrene	**4.8**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
butyl benzyl phthalate	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
benzo(a)anthracene	**2.7**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
chrysene	**2.9**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
3,3'-dichlorobenzidine	< 35	35	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
di-n-octyl phthalate	< 5.8	5.8	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
benzo(b)fluoranthene	**2.8**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
benzo(k)fluoranthene	**1.9**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
benzo(a)pyrene	**2.2**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
indeno(1,2,3-cd)pyrene	**0.82**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
dibenzo(a,h)anthracene	< 0.58	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
benzo(g,h,i)perylene	**0.77**	0.58	ug/g	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**46**	21-100	%	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
phenol-D5 SUR	**45**	10-102	%	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2,4,6-tribromophenol SUR	**53**	10-123	%	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
nitrobenzene-D5 SUR	**36**	35-114	%	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
2-fluorobiphenyl SUR	**44**	43-116	%	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D
p-terphenyl-D14 SUR	**49**	33-141	%	10	AJD	11/5/14	7353	11/7/14	12:09	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-022
Sample ID: CA-SB-4(7-9/75)
Matrix: Solid Percent Dry: 94.5% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2-chlorophenol	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
isophorone	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2,4-dichlorophenol	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
1,2,4-trichlorobenzene	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
naphthalene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
benzoic acid	< 5	5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2-methylnaphthalene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2-chloronaphthalene	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
acenaphthylene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
dimethylphthalate	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
acenaphthene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2,4-dinitrophenol	< 5	5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
dibenzofuran	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
fluorene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
diethyl phthalate	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-022
Sample ID: CA-SB-4(7-9/75)
Matrix: Solid Percent Dry: 94.5% Results expressed on a dry weight basis.
Sampled: 10/30/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
4-nitroaniline	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
phenanthrene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
anthracene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
carbazole	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
di-n-butylphthalate	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
fluoranthene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
benzidine	< 3	3	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
pyrene	**0.06**	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
butyl benzyl phthalate	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
benzo(a)anthracene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
chrysene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
3,3'-dichlorobenzidine	< 3	3	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
di-n-octyl phthalate	< 0.5	0.5	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
benzo(b)fluoranthene	**0.06**	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
benzo(k)fluoranthene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
benzo(a)pyrene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
dibenzo(a,h)anthracene	< 0.05	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
benzo(g,h,i)perylene	**0.06**	0.05	ug/g	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**71**	21-100	%	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
phenol-D5 SUR	**74**	10-102	%	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2,4,6-tribromophenol SUR	**75**	10-123	%	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
nitrobenzene-D5 SUR	**60**	35-114	%	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
2-fluorobiphenyl SUR	**58**	43-116	%	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D
p-terphenyl-D14 SUR	**87**	33-141	%	1	AJD	11/5/14	7353	11/21/14	21:13	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-023
Sample ID: CA-SB-5(0-4/1)
Matrix: Solid Percent Dry: 91.3% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
aniline	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
phenol	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2-chlorophenol	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
bis(2-chloroethyl)ether	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
1,3-dichlorobenzene	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
1,4-dichlorobenzene	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
1,2-dichlorobenzene	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
benzyl alcohol	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2-methylphenol	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
bis(2-chloroisopropyl) ether	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
hexachloroethane	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
N-nitroso-di-N-propylamine	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
4-methylphenol	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
nitrobenzene	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
isophorone	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2-nitrophenol	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2,4-dimethylphenol	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
bis(2-chloroethoxy)methane	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2,4-dichlorophenol	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
1,2,4-trichlorobenzene	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
naphthalene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
benzoic acid	< 110	110	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
4-chloroaniline	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
hexachlorobutadiene	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
4-chloro-3-methylphenol	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2-methylnaphthalene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
hexachlorocyclopentadiene	< 21	21	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2,4,6-trichlorophenol	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2,4,5-trichlorophenol	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2-chloronaphthalene	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2-nitroaniline	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
acenaphthylene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
dimethylphthalate	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2,6-dinitrotoluene	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2,4-dinitrotoluene	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
acenaphthene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
3-nitroaniline	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2,4-dinitrophenol	< 110	110	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
dibenzofuran	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
4-nitrophenol	< 42	42	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
fluorene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
diethyl phthalate	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-023
Sample ID: CA-SB-5(0-4/1)
Matrix: Solid Percent Dry: 91.3% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
4-nitroaniline	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
4,6-dinitro-2-methylphenol	< 42	42	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
azobenzene	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
N-nitrosodiphenylamine	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
4-bromophenyl phenyl ether	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
hexachlorobenzene	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
pentachlorophenol	< 21	21	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
phenanthrene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
anthracene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
carbazole	< 4.2	4.2	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
di-n-butylphthalate	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
fluoranthene	**1.2**	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
benzidine	< 63	63	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
pyrene	**1.9**	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
butyl benzyl phthalate	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
benzo(a)anthracene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
chrysene	**2.9**	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
3,3'-dichlorobenzidine	< 63	63	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
di-n-octyl phthalate	< 11	11	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
benzo(b)fluoranthene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
benzo(k)fluoranthene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
benzo(a)pyrene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
dibenzo(a,h)anthracene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
benzo(g,h,i)perylene	< 1.1	1.1	ug/g	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**50**	21-100	%	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
phenol-D5 SUR	**51**	10-102	%	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2,4,6-tribromophenol SUR	**56**	10-123	%	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
nitrobenzene-D5 SUR	**29** *	35-114	%	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
2-fluorobiphenyl SUR	**54**	43-116	%	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D
p-terphenyl-D14 SUR	**93**	33-141	%	20	AJD	11/5/14	7353	11/7/14	13:23	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.
**** This surrogate showed recovery outside the acceptance limits. Hydrocarbon interference suspected.***

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-025
Sample ID: CA-SB-5(20-22/20)
Matrix: Solid Percent Dry: 78.4% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2-chlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
isophorone	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2,4-dichlorophenol	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
1,2,4-trichlorobenzene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
naphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
benzoic acid	< 6	6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2-methylnaphthalene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2-chloronaphthalene	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
acenaphthylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
dimethylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
acenaphthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2,4-dinitrophenol	< 6	6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
dibenzofuran	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
fluorene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
diethyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-025
Sample ID: CA-SB-5(20-22/20)
Matrix: Solid Percent Dry: 78.4% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
4-nitroaniline	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
phenanthrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
carbazole	< 0.2	0.2	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
di-n-butylphthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
benzidine	< 4	4	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
butyl benzyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
benzo(a)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
chrysene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
3,3'-dichlorobenzidine	< 4	4	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
di-n-octyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
benzo(b)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
benzo(k)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
benzo(a)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
dibenzo(a,h)anthracene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
benzo(g,h,i)perylene	< 0.06	0.06	ug/g	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**59**	21-100	%	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
phenol-D5 SUR	**60**	10-102	%	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2,4,6-tribromophenol SUR	**72**	10-123	%	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
nitrobenzene-D5 SUR	**49**	35-114	%	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
2-fluorobiphenyl SUR	**48**	43-116	%	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D
p-terphenyl-D14 SUR	**79**	33-141	%	1	AJD	11/5/14	7353	11/6/14	11:18	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31420

Sample#: 31420-002
Sample ID: DUP-1
Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.
Sampled: 10/27/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	15:33	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	15:33	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	15:33	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	15:33	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	15:33	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	15:33	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	15:33	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**81**	30-150	%	1	JZ	11/4/14	7342	11/8/14	15:33	SW3546/8082A
decachlorobiphenyl SUR	**70**	30-150	%	1	JZ	11/4/14	7342	11/8/14	15:33	SW3546/8082A

Sample#: 31420-003
Sample ID: CA-SB-1(0-2)
Matrix: Solid Percent Dry: 89.3% Results expressed on a dry weight basis.
Sampled: 10/27/14 8:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:03	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:03	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:03	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:03	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:03	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:03	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:03	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**89**	30-150	%	1	JZ	11/4/14	7342	11/8/14	16:03	SW3546/8082A
decachlorobiphenyl SUR	**84**	30-150	%	1	JZ	11/4/14	7342	11/8/14	16:03	SW3546/8082A

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-004

Sample ID: CA-SS-6(0-2)

Matrix: Solid Percent Dry: 81.4% Results expressed on a dry weight basis.

Sampled: 10/27/14 11:51

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:34	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:34	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:34	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:34	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:34	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:34	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	16:34	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**87**	30-150	%	1	JZ	11/4/14	7342	11/8/14	16:34	SW3546/8082A
decachlorobiphenyl SUR	**81**	30-150	%	1	JZ	11/4/14	7342	11/8/14	16:34	SW3546/8082A

Sample#: 31420-005

Sample ID: CA-SS-7(0-2)

Matrix: Solid Percent Dry: 80.5% Results expressed on a dry weight basis.

Sampled: 10/27/14 12:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	17:04	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	17:04	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	17:04	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	17:04	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	17:04	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	17:04	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	17:04	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**102**	30-150	%	1	JZ	11/4/14	7342	11/8/14	17:04	SW3546/8082A
decachlorobiphenyl SUR	**112**	30-150	%	1	JZ	11/4/14	7342	11/8/14	17:04	SW3546/8082A

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-006

Sample ID: CA-SS-5(0-2)

Matrix: Solid Percent Dry: 56.2% Results expressed on a dry weight basis.

Sampled: 10/27/14 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.3	0.3	ug/g	1	JZ	11/4/14	7342	11/8/14	17:34	SW3546/8082A
PCB-1221	< 0.3	0.3	ug/g	1	JZ	11/4/14	7342	11/8/14	17:34	SW3546/8082A
PCB-1232	< 0.3	0.3	ug/g	1	JZ	11/4/14	7342	11/8/14	17:34	SW3546/8082A
PCB-1242	< 0.3	0.3	ug/g	1	JZ	11/4/14	7342	11/8/14	17:34	SW3546/8082A
PCB-1248	< 0.3	0.3	ug/g	1	JZ	11/4/14	7342	11/8/14	17:34	SW3546/8082A
PCB-1254	< 0.3	0.3	ug/g	1	JZ	11/4/14	7342	11/8/14	17:34	SW3546/8082A
PCB-1260	< 0.3	0.3	ug/g	1	JZ	11/4/14	7342	11/8/14	17:34	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**78**	30-150	%	1	JZ	11/4/14	7342	11/8/14	17:34	SW3546/8082A
decachlorobiphenyl SUR	**56**	30-150	%	1	JZ	11/4/14	7342	11/8/14	17:34	SW3546/8082A

Sample#: 31420-007

Sample ID: CA-SS-4(0-2)

Matrix: Solid Percent Dry: 90% Results expressed on a dry weight basis.

Sampled: 10/27/14 12:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	18:05	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	18:05	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	18:05	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	18:05	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	18:05	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	18:05	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	18:05	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**84**	30-150	%	1	JZ	11/4/14	7342	11/8/14	18:05	SW3546/8082A
decachlorobiphenyl SUR	**77**	30-150	%	1	JZ	11/4/14	7342	11/8/14	18:05	SW3546/8082A

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-008

Sample ID: CA-SS-1(0-2)

Matrix: Solid Percent Dry: 88.2% Results expressed on a dry weight basis.

Sampled: 10/27/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:08	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:08	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:08	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:08	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:08	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:08	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:08	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**84**	30-150	%	1	JZ	11/4/14	7342	11/8/14	23:08	SW3546/8082A
decachlorobiphenyl SUR	**78**	30-150	%	1	JZ	11/4/14	7342	11/8/14	23:08	SW3546/8082A

Sample#: 31420-009

Sample ID: CA-SS-2(0-2)

Matrix: Solid Percent Dry: 87.8% Results expressed on a dry weight basis.

Sampled: 10/27/14 13:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:39	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:39	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:39	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:39	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:39	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:39	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/8/14	23:39	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**98**	30-150	%	1	JZ	11/4/14	7342	11/8/14	23:39	SW3546/8082A
decachlorobiphenyl SUR	**97**	30-150	%	1	JZ	11/4/14	7342	11/8/14	23:39	SW3546/8082A

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-010

Sample ID: DUP-CC

Matrix: Solid Percent Dry: 95.3% Results expressed on a dry weight basis.

Sampled: 10/27/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	12:30	SW3540C8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	12:30	SW3540C8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	12:30	SW3540C8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	12:30	SW3540C8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	12:30	SW3540C8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	12:30	SW3540C8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	12:30	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**146**	30-150	%	1	JZ	11/4/14	7350	11/10/14	12:30	SW3540C8082A
decachlorobiphenyl SUR	**84**	30-150	%	1	JZ	11/4/14	7350	11/10/14	12:30	SW3540C8082A

Sample#: 31420-011

Sample ID: CA-CC-3

Matrix: Solid Percent Dry: 95.7% Results expressed on a dry weight basis.

Sampled: 10/27/14 14:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:00	SW3540C8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:00	SW3540C8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:00	SW3540C8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:00	SW3540C8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:00	SW3540C8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:00	SW3540C8082A
PCB-1260	**0.2**	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:00	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**102**	30-150	%	1	JZ	11/4/14	7350	11/10/14	13:00	SW3540C8082A
decachlorobiphenyl SUR	**84**	30-150	%	1	JZ	11/4/14	7350	11/10/14	13:00	SW3540C8082A

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-012

Sample ID: CA-CC-1

Matrix: Solid Percent Dry: 97.2% Results expressed on a dry weight basis.

Sampled: 10/27/14 14:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:31	SW3540C8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:31	SW3540C8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:31	SW3540C8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:31	SW3540C8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:31	SW3540C8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:31	SW3540C8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	13:31	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**103**	30-150	%	1	JZ	11/4/14	7350	11/10/14	13:31	SW3540C8082A
decachlorobiphenyl SUR	**95**	30-150	%	1	JZ	11/4/14	7350	11/10/14	13:31	SW3540C8082A

Sample#: 31420-013

Sample ID: CA-CC-2

Matrix: Solid Percent Dry: 96.2% Results expressed on a dry weight basis.

Sampled: 10/27/14 14:50

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	14:32	SW3540C8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	14:32	SW3540C8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	14:32	SW3540C8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	14:32	SW3540C8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	14:32	SW3540C8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	14:32	SW3540C8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7350	11/10/14	14:32	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**86**	30-150	%	1	JZ	11/4/14	7350	11/10/14	14:32	SW3540C8082A
decachlorobiphenyl SUR	**83**	30-150	%	1	JZ	11/4/14	7350	11/10/14	14:32	SW3540C8082A

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-014

Sample ID: CA-SB-2(0-2)

Matrix: Solid Percent Dry: 87% Results expressed on a dry weight basis.

Sampled: 10/30/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:09	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:09	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:09	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:09	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:09	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:09	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:09	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**74**	30-150	%	1	JZ	11/4/14	7342	11/9/14	0:09	SW3546/8082A
decachlorobiphenyl SUR	**75**	30-150	%	1	JZ	11/4/14	7342	11/9/14	0:09	SW3546/8082A

Sample#: 31420-015

Sample ID: CA-SB-2(15-17/15.5)

Matrix: Solid Percent Dry: 76% Results expressed on a dry weight basis.

Sampled: 10/30/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:39	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:39	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:39	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:39	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:39	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:39	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	0:39	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**90**	30-150	%	1	JZ	11/4/14	7342	11/9/14	0:39	SW3546/8082A
decachlorobiphenyl SUR	**102**	30-150	%	1	JZ	11/4/14	7342	11/9/14	0:39	SW3546/8082A

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-017

Sample ID: CA-SS-3(0-2)

Matrix: Solid Percent Dry: 89% Results expressed on a dry weight basis.

Sampled: 10/30/14 12:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:09	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:09	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:09	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:09	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:09	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:09	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:09	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**96**	30-150	%	1	JZ	11/4/14	7342	11/9/14	1:09	SW3546/8082A
decachlorobiphenyl SUR	**102**	30-150	%	1	JZ	11/4/14	7342	11/9/14	1:09	SW3546/8082A

Sample#: 31420-018

Sample ID: CA-SB-6(0.5-10/2)

Matrix: Solid Percent Dry: 82.8% Results expressed on a dry weight basis.

Sampled: 10/30/14 12:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:40	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:40	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:40	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:40	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:40	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:40	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	1:40	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**79**	30-150	%	1	JZ	11/4/14	7342	11/9/14	1:40	SW3546/8082A
decachlorobiphenyl SUR	**61**	30-150	%	1	JZ	11/4/14	7342	11/9/14	1:40	SW3546/8082A

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-021

Sample ID: CA-SB-4(0-7/3)

Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.

Sampled: 10/30/14 14:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:10	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:10	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:10	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:10	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:10	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:10	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:10	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**79**	30-150	%	1	JZ	11/4/14	7342	11/9/14	2:10	SW3546/8082A
decachlorobiphenyl SUR	**75**	30-150	%	1	JZ	11/4/14	7342	11/9/14	2:10	SW3546/8082A

Sample#: 31420-023

Sample ID: CA-SB-5(0-4/1)

Matrix: Solid Percent Dry: 91.3% Results expressed on a dry weight basis.

Sampled: 10/30/14 15:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:40	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:40	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:40	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:40	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:40	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:40	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/4/14	7342	11/9/14	2:40	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**105**	30-150	%	1	JZ	11/4/14	7342	11/9/14	2:40	SW3546/8082A
decachlorobiphenyl SUR	**120**	30-150	%	1	JZ	11/4/14	7342	11/9/14	2:40	SW3546/8082A

Sample#: 31420-016

Sample ID: CA-SB-3(16-18/17)

Matrix: Solid Percent Dry: 80.4% Results expressed on a dry weight basis.

Sampled: 10/30/14 11:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
TPH C10-C36	< 230	230	ug/g	1	JZ	11/6/14	7358	11/7/14	17:25	SW3550C8100m
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**88**	40-140	%	1	JZ	11/6/14	7358	11/7/14	17:25	SW3550C8100m
o-terphenyl SUR	**94**	40-140	%	1	JZ	11/6/14	7358	11/7/14	17:25	SW3550C8100m

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-002

Sample ID: DUP-1

Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.

Sampled: 10/27/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	**3.2**	0.3	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Arsenic	**16**	0.6	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Barium	**110**	3	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Beryllium	**0.4**	0.2	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Chromium	**83**	3	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Lead	**160**	0.6	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Nickel	**43**	3	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Selenium	**4**	3	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Vanadium	**42**	3	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C
Zinc	**250**	3	ug/g	1	AB	11/3/14	7335	11/3/14	19:17	SW3051A6010C

Sample#: 31420-003

Sample ID: CA-SB-1(0-2)

Matrix: Solid Percent Dry: 89.3% Results expressed on a dry weight basis.

Sampled: 10/27/14 8:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Arsenic	**11**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Barium	**51**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Beryllium	**0.2**	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Chromium	**12**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Lead	**130**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Nickel	**10**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Vanadium	**19**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C
Zinc	**41**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:45	SW3051A6010C

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-005

Sample ID: CA-SS-7(0-2)

Matrix: Solid Percent Dry: 80.5% Results expressed on a dry weight basis.

Sampled: 10/27/14 12:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Arsenic	**6.3**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Barium	**190**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Beryllium	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Cadmium	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Chromium	**450**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Lead	**150**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Nickel	**97**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Selenium	**5**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Thallium	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Vanadium	**320**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C
Zinc	**120**	3	ug/g	1	AB	11/5/14	7351	11/5/14	20:52	SW3051A6010C

Sample#: 31420-006

Sample ID: CA-SS-5(0-2)

Matrix: Solid Percent Dry: 56.2% Results expressed on a dry weight basis.

Sampled: 10/27/14 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	**63**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Arsenic	**37**	0.9	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Barium	**60**	5	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Beryllium	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Cadmium	**0.7**	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Chromium	**530**	5	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Lead	**650**	0.9	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Nickel	**99**	5	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Selenium	**11**	5	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Silver	< 0.7	0.7	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Thallium	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Vanadium	**140**	5	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C
Zinc	**550**	5	ug/g	1	AB	11/5/14	7351	11/5/14	20:59	SW3051A6010C

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-007

Sample ID: CA-SS-4(0-2)

Matrix: Solid Percent Dry: 90% Results expressed on a dry weight basis.

Sampled: 10/27/14 12:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	**0.6**	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Arsenic	**8.1**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Barium	**35**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Beryllium	**0.5**	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Chromium	**46**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Lead	**46**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Nickel	**33**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Vanadium	**38**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C
Zinc	**69**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:07	SW3051A6010C

Sample#: 31420-008

Sample ID: CA-SS-1(0-2)

Matrix: Solid Percent Dry: 88.2% Results expressed on a dry weight basis.

Sampled: 10/27/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Arsenic	**6.2**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Barium	**45**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Beryllium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Chromium	**27**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Lead	**80**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Nickel	**15**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Vanadium	**29**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C
Zinc	**35**	3	ug/g	1	AB	11/5/14	7351	11/5/14	21:15	SW3051A6010C

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-009

Sample ID: CA-SS-2(0-2)

Matrix: Solid Percent Dry: 87.8% Results expressed on a dry weight basis.

Sampled: 10/27/14 13:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	**1.9**	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Arsenic	**5.8**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Barium	**43**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Beryllium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Cadmium	**0.4**	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Chromium	**150**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Lead	**97**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Nickel	**48**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Vanadium	**88**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C
Zinc	**200**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:34	SW3051A6010C

Sample#: 31420-014

Sample ID: CA-SB-2(0-2)

Matrix: Solid Percent Dry: 87% Results expressed on a dry weight basis.

Sampled: 10/30/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Arsenic	**7.0**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Barium	**53**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Beryllium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Chromium	**11**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Lead	**31**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Nickel	**13**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Vanadium	**23**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C
Zinc	**60**	3	ug/g	1	AB	11/5/14	7351	11/5/14	22:41	SW3051A6010C

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-015

Sample ID: CA-SB-2(15-17/15.5)

Matrix: Solid Percent Dry: 76% Results expressed on a dry weight basis.

Sampled: 10/30/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Arsenic	**2.0**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Barium	**34**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Beryllium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Chromium	**13**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Lead	**3.5**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Nickel	**10**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Vanadium	**21**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C
Zinc	**23**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:10	SW3051A6010C

Sample#: 31420-016

Sample ID: CA-SB-3(16-18/17)

Matrix: Solid Percent Dry: 80.4% Results expressed on a dry weight basis.

Sampled: 10/30/14 11:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Arsenic	**1.7**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Barium	**31**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Beryllium	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Cadmium	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Chromium	**9**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Lead	**2.9**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Nickel	**9**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Thallium	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Vanadium	**18**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C
Zinc	**21**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:18	SW3051A6010C

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-017

Sample ID: CA-SS-3(0-2)

Matrix: Solid Percent Dry: 89% Results expressed on a dry weight basis.

Sampled: 10/30/14 12:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.3	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Arsenic	**6.3**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Barium	**33**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Beryllium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Chromium	**16**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Lead	**36**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Nickel	**12**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Vanadium	**25**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C
Zinc	**38**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:25	SW3051A6010C

Sample#: 31420-018

Sample ID: CA-SB-6(0.5-10/2)

Matrix: Solid Percent Dry: 82.8% Results expressed on a dry weight basis.

Sampled: 10/30/14 12:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	**6.9**	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Arsenic	**48**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Barium	**41**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Beryllium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Chromium	**210**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Lead	**98**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Nickel	**150**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Vanadium	**38**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C
Zinc	**90**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:55	SW3051A6010C

Sample#: 31420-019

Sample ID: CA-SB-6(10.5-12.5/11)

Matrix: Solid Percent Dry: 77.6% Results expressed on a dry weight basis.

Sampled: 10/30/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Arsenic	**0.9**	0.7	ug/g	1	AB	11/18/14	7400	11/18/14	15:40	SW3051A6010C
Chromium	**10**	3	ug/g	1	AB	11/18/14	7400	11/18/14	15:40	SW3051A6010C

Project ID: Ferrari 14001247

Job ID: 31420

Sample#: 31420-021

Sample ID: CA-SB-4(0-7/3)

Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.

Sampled: 10/30/14 14:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Arsenic	**14**	0.6	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Barium	**63**	3	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Beryllium	**0.3**	0.2	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Chromium	**65**	3	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Lead	**250**	0.6	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Nickel	**63**	3	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Selenium	**4**	3	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Vanadium	**35**	3	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C
Zinc	**210**	3	ug/g	1	AB	11/5/14	7351	11/6/14	0:02	SW3051A6010C

Sample#: 31420-022

Sample ID: CA-SB-4(7-9/75)

Matrix: Solid Percent Dry: 94.5% Results expressed on a dry weight basis.

Sampled: 10/30/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Arsenic	**4.1**	0.5	ug/g	1	AB	11/18/14	7400	11/18/14	23:09	SW3051A6010C

Sample#: 31420-023

Sample ID: CA-SB-5(0-4/1)

Matrix: Solid Percent Dry: 91.3% Results expressed on a dry weight basis.

Sampled: 10/30/14 15:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	**11**	0.3	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Arsenic	**47**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Barium	**29**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Beryllium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Cadmium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Chromium	**150**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Lead	**43**	0.6	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Nickel	**140**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Vanadium	**31**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C
Zinc	**98**	3	ug/g	1	AB	11/5/14	7351	11/5/14	23:32	SW3051A6010C

Project ID: Ferrari 14001247
Job ID: 31420
Sample#: 31420-024
Sample ID: CA-SB-5(4-6/5)
Matrix: Solid Percent Dry: 93.7% Results expressed on a dry weight basis.
Sampled: 10/30/14 15:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Antimony	< 0.3	0.3	ug/g	1	AB	11/18/14	7400	11/18/14	23:16	SW3051A6010C
Arsenic	**10**	0.5	ug/g	1	AB	11/18/14	7400	11/18/14	23:16	SW3051A6010C
Chromium	**29**	3	ug/g	1	AB	11/18/14	7400	11/18/14	23:16	SW3051A6010C

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Case Narrative
Lab # 31420

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 4 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
VOC: Sample analysis for the following samples was authorized by the customer beyond the method recommended holding time: 31420-019, -022, and -024.
The reported results are calculated on a "dry weight" basis.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

SVOC: The surrogate, nitrobenzene-D5, for the samples 31420-018 and -023 was outside the acceptance limits. Interferences from co-eluting hydrocarbons suspected.

Laboratory Control Sample Results

VOC: The MLCS7338 did not meet the acceptance criteria for bromomethane. This compound is known to be problematic in the method. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.
VOC: The MLCS/D7340 did not meet the acceptance criteria for bromomethane. This compound showed high recovery. There is no impact to the data as this analyte was not detected in the associated samples.
Metals: The relative percent difference between the CRM and CRMD7335 was outside the acceptance criteria for Antimony. The percent recovery for this element in each QC parameter was within the acceptance criteria. No impact to the data suspected.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.
Metals: Due to the relatively high native concentrations of Nickel and Zinc in the sample 31420-023, the matrix spike and matrix spike duplicate showed poor recovery for these elements.

Other

ABN: Due to internal standard suppression caused by matrix interference, the sample required a dilution for the analysis of 31420-002, -003, -006, -007, -008, -009, -017, -018, and -021.
Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MB7338	dichlorodifluoromethane		<	0.1	ug/g					
		chloromethane		<	0.1	ug/g					
		vinyl chloride		<	0.1	ug/g					
		bromomethane		<	0.2	ug/g					
		chloroethane		<	0.1	ug/g					
		trichlorofluoromethane		<	0.1	ug/g					
		diethyl ether		<	0.5	ug/g					
		acetone		<	2.5	ug/g					
		1,1-dichloroethene		<	0.1	ug/g					
		methylene chloride		<	0.2	ug/g					
		carbon disulfide		<	0.1	ug/g					
		methyl t-butyl ether (MTBE)		<	0.1	ug/g					
		trans-1,2-dichloroethene		<	0.1	ug/g					
		isopropyl ether (DIPE)		<	0.1	ug/g					
		ethyl t-butyl ether (ETBE)		<	0.1	ug/g					
		1,1-dichloroethane		<	0.1	ug/g					
		t-butanol (TBA)		<	2.5	ug/g					
		2-butanone (MEK)		<	0.5	ug/g					
		2,2-dichloropropane		<	0.1	ug/g					
		cis-1,2-dichloroethene		<	0.1	ug/g					
		chloroform		<	0.1	ug/g					
		bromochloromethane		<	0.1	ug/g					
		tetrahydrofuran (THF)		<	0.5	ug/g					
		1,1,1-trichloroethane		<	0.1	ug/g					
		1,1-dichloropropene		<	0.1	ug/g					
		t-amyl-methyl ether (TAME)		<	0.1	ug/g					
		carbon tetrachloride		<	0.1	ug/g					
		1,2-dichloroethane		<	0.1	ug/g					
		benzene		<	0.1	ug/g					
		trichloroethene		<	0.1	ug/g					
		1,2-dichloropropane		<	0.1	ug/g					
		bromodichloromethane		<	0.1	ug/g					
		1,4-dioxane		<	2.5	ug/g					
		dibromomethane		<	0.1	ug/g					
		4-methyl-2-pentanone (MIBK)		<	0.5	ug/g					
		cis-1,3-dichloropropene		<	0.1	ug/g					
		toluene		<	0.1	ug/g					
		trans-1,3-dichloropropene		<	0.1	ug/g					
		2-hexanone		<	0.5	ug/g					
		1,1,2-trichloroethane		<	0.1	ug/g					
		1,3-dichloropropane		<	0.1	ug/g					
		tetrachloroethene		<	0.1	ug/g					
		dibromochloromethane		<	0.1	ug/g					
		1,2-dibromoethane (EDB)		<	0.1	ug/g					
		chlorobenzene		<	0.1	ug/g					
		1,1,1,2-tetrachloroethane		<	0.1	ug/g					
		ethylbenzene		<	0.1	ug/g					
		m&p-xylenes		<	0.1	ug/g					
		o-xylene		<	0.1	ug/g					
		styrene		<	0.1	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MB7338	bromoform		<	0.1	ug/g						
		isopropylbenzene		<	0.1	ug/g						
		1,1,2,2-tetrachloroethane		<	0.1	ug/g						
		1,2,3-trichloropropane		<	0.1	ug/g						
		n-propylbenzene		<	0.1	ug/g						
		bromobenzene		<	0.1	ug/g						
		1,3,5-trimethylbenzene		<	0.1	ug/g						
		2-chlorotoluene		<	0.1	ug/g						
		4-chlorotoluene		<	0.1	ug/g						
		tert-butylbenzene		<	0.1	ug/g						
		1,2,4-trimethylbenzene		<	0.1	ug/g						
		sec-butylbenzene		<	0.1	ug/g						
		1,3-dichlorobenzene		<	0.1	ug/g						
		4-isopropyltoluene		<	0.1	ug/g						
		1,4-dichlorobenzene		<	0.1	ug/g						
		1,2-dichlorobenzene		<	0.1	ug/g						
		n-butylbenzene		<	0.1	ug/g						
		1,2-dibromo-3-chloropropane (DBCP)		<	0.1	ug/g						
		1,2,4-trichlorobenzene		<	0.1	ug/g						
		1,3,5-trichlorobenzene		<	0.1	ug/g						
		hexachlorobutadiene		<	0.1	ug/g						
		naphthalene		<	0.2	ug/g						
		1,2,3-trichlorobenzene		<	0.1	ug/g						
		dibromofluoromethane SUR			96	%			78	114		
		toluene-D8 SUR			101	%			88	110		
		4-bromofluorobenzene SUR			99	%			86	115		
		a,a,a-trifluorotoluene SUR			95	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS7338	dichlorodifluoromethane			1.0	ug/g	1	96		70	130		
		chloromethane			1.1	ug/g	1	106		70	130		
		vinyl chloride			1.0	ug/g	1	97		70	130		
		bromomethane			0.7	ug/g	1	68	*	70	130		
		chloroethane			1.1	ug/g	1	110		70	130		
		trichlorofluoromethane			1.0	ug/g	1	102		70	130		
		diethyl ether			1.2	ug/g	1	123		70	130		
		acetone		<	2.5	ug/g	1	108					
		1,1-dichloroethene			1.0	ug/g	1	101		70	130		
		methylene chloride			1.1	ug/g	1	109		70	130		
		carbon disulfide			1.0	ug/g	1	101		70	130		
		methyl t-butyl ether (MTBE)			1.1	ug/g	1	109		70	130		
		trans-1,2-dichloroethene			1.1	ug/g	1	106		70	130		
		isopropyl ether (DIPE)			1.1	ug/g	1	106		70	130		
		ethyl t-butyl ether (ETBE)			1.1	ug/g	1	107		70	130		
		1,1-dichloroethane			1.0	ug/g	1	103		70	130		
		t-butanol (TBA)			5.5	ug/g	5	109		70	130		
		2-butanone (MEK)			1.1	ug/g	1	108		70	130		
		2,2-dichloropropane			1.0	ug/g	1	96		70	130		
		cis-1,2-dichloroethene			1.1	ug/g	1	105		70	130		
		chloroform			1.0	ug/g	1	105		70	130		
		bromochloromethane			1.0	ug/g	1	99		70	130		
		tetrahydrofuran (THF)			1.2	ug/g	1	116		70	130		
		1,1,1-trichloroethane			1.0	ug/g	1	100		70	130		
		1,1-dichloropropene			1.0	ug/g	1	104		70	130		
		t-amyl-methyl ether (TAME)			1.0	ug/g	1	103		70	130		
		carbon tetrachloride			0.9	ug/g	1	93		70	130		
		1,2-dichloroethane			1.1	ug/g	1	114		70	130		
		benzene			1.0	ug/g	1	103		70	130		
		trichloroethene			1.1	ug/g	1	108		70	130		
		1,2-dichloropropane			1.1	ug/g	1	105		70	130		
		bromodichloromethane			1.1	ug/g	1	107		70	130		
		1,4-dioxane		<	2.5	ug/g	2	122		70	130		
		dibromomethane			1.0	ug/g	1	105		70	130		
		4-methyl-2-pentanone (MIBK)			1.0	ug/g	1	104		70	130		
		cis-1,3-dichloropropene			1.0	ug/g	1	98		70	130		
		toluene			1.0	ug/g	1	104		70	130		
		trans-1,3-dichloropropene			1.0	ug/g	1	97		70	130		
		2-hexanone			1.0	ug/g	1	104		70	130		
		1,1,2-trichloroethane			1.1	ug/g	1	107		70	130		
		1,3-dichloropropane			1.1	ug/g	1	106		70	130		
		tetrachloroethene			0.9	ug/g	1	95		70	130		
		dibromochloromethane			1.0	ug/g	1	95		70	130		
		1,2-dibromoethane (EDB)			1.1	ug/g	1	111		70	130		
		chlorobenzene			1.1	ug/g	1	107		70	130		
		1,1,1,2-tetrachloroethane			0.9	ug/g	1	92		70	130		
		ethylbenzene			1.0	ug/g	1	98		70	130		
		m&p-xylenes			1.9	ug/g	2	97		70	130		
		o-xylene			1.0	ug/g	1	101		70	130		
		styrene			1.0	ug/g	1	98		70	130		
		bromoform			0.9	ug/g	1	93		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MLCS7338	isopropylbenzene		1.0	ug/g	1	100	70	130		
		1,1,2,2-tetrachloroethane		1.1	ug/g	1	107	70	130		
		1,2,3-trichloropropane		1.1	ug/g	1	111	70	130		
		n-propylbenzene		1.1	ug/g	1	110	70	130		
		bromobenzene		1.1	ug/g	1	110	70	130		
		1,3,5-trimethylbenzene		1.1	ug/g	1	111	70	130		
		2-chlorotoluene		1.1	ug/g	1	112	70	130		
		4-chlorotoluene		1.0	ug/g	1	103	70	130		
		tert-butylbenzene		1.1	ug/g	1	114	70	130		
		1,2,4-trimethylbenzene		1.1	ug/g	1	111	70	130		
		sec-butylbenzene		1.1	ug/g	1	111	70	130		
		1,3-dichlorobenzene		1.1	ug/g	1	109	70	130		
		4-isopropyltoluene		1.1	ug/g	1	110	70	130		
		1,4-dichlorobenzene		1.1	ug/g	1	111	70	130		
		1,2-dichlorobenzene		1.1	ug/g	1	109	70	130		
		n-butylbenzene		1.1	ug/g	1	113	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	97	70	130		
		1,2,4-trichlorobenzene		1.1	ug/g	1	115	70	130		
		1,3,5-trichlorobenzene		1.1	ug/g	1	108	70	130		
		hexachlorobutadiene		1.0	ug/g	1	100	70	130		
		naphthalene		1.2	ug/g	1	118	70	130		
		1,2,3-trichlorobenzene		1.2	ug/g	1	115	70	130		
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		100	%			88	110		
		4-bromofluorobenzene SUR		99	%			86	115		
		a,a,a-trifluorotoluene SUR		101	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MLCSD7338	dichlorodifluoromethane			1.0	ug/g	1	96	70	130	1	30
		chloromethane			1.1	ug/g	1	106	70	130	0	30
		vinyl chloride			1.0	ug/g	1	97	70	130	1	30
		bromomethane			0.8	ug/g	1	81	70	130	18	30
		chloroethane			1.0	ug/g	1	104	70	130	5	30
		trichlorofluoromethane			1.0	ug/g	1	101	70	130	1	30
		diethyl ether			1.1	ug/g	1	114	70	130	7	30
		acetone		<	2.5	ug/g	1	118			8	30
		1,1-dichloroethene			1.0	ug/g	1	98	70	130	2	30
		methylene chloride			1.1	ug/g	1	106	70	130	3	30
		carbon disulfide			1.0	ug/g	1	101	70	130	0	30
		methyl t-butyl ether (MTBE)			1.1	ug/g	1	106	70	130	2	30
		trans-1,2-dichloroethene			1.0	ug/g	1	104	70	130	2	30
		isopropyl ether (DIPE)			1.1	ug/g	1	106	70	130	1	30
		ethyl t-butyl ether (ETBE)			1.0	ug/g	1	104	70	130	2	30
		1,1-dichloroethane			1.0	ug/g	1	98	70	130	4	30
		t-butanol (TBA)			5.8	ug/g	5	116	70	130	6	30
		2-butanone (MEK)			1.1	ug/g	1	110	70	130	2	30
		2,2-dichloropropane			0.9	ug/g	1	93	70	130	3	30
		cis-1,2-dichloroethene			1.0	ug/g	1	102	70	130	4	30
		chloroform			1.0	ug/g	1	102	70	130	3	30
		bromochloromethane			1.0	ug/g	1	97	70	130	3	30
		tetrahydrofuran (THF)			1.1	ug/g	1	110	70	130	6	30
		1,1,1-trichloroethane			1.0	ug/g	1	97	70	130	3	30
		1,1-dichloropropene			1.0	ug/g	1	101	70	130	3	30
		t-amyl-methyl ether (TAME)			1.0	ug/g	1	100	70	130	2	30
		carbon tetrachloride			0.9	ug/g	1	91	70	130	2	30
		1,2-dichloroethane			1.1	ug/g	1	109	70	130	4	30
		benzene			1.0	ug/g	1	100	70	130	3	30
		trichloroethene			1.1	ug/g	1	106	70	130	2	30
		1,2-dichloropropane			1.0	ug/g	1	101	70	130	4	30
		bromodichloromethane			1.0	ug/g	1	103	70	130	4	30
		1,4-dioxane		<	2.5	ug/g	2	107	70	130	13	30
		dibromomethane			1.0	ug/g	1	102	70	130	3	30
		4-methyl-2-pentanone (MIBK)			1.0	ug/g	1	104	70	130	0	30
		cis-1,3-dichloropropene			0.9	ug/g	1	94	70	130	4	30
		toluene			1.0	ug/g	1	100	70	130	4	30
		trans-1,3-dichloropropene			0.9	ug/g	1	93	70	130	4	30
		2-hexanone			1.1	ug/g	1	106	70	130	2	30
		1,1,2-trichloroethane			1.0	ug/g	1	102	70	130	5	30
		1,3-dichloropropane			1.1	ug/g	1	108	70	130	1	30
		tetrachloroethene			1.0	ug/g	1	98	70	130	3	30
		dibromochloromethane			0.9	ug/g	1	95	70	130	0	30
		1,2-dibromoethane (EDB)			1.1	ug/g	1	111	70	130	0	30
		chlorobenzene			1.1	ug/g	1	108	70	130	1	30
		1,1,1,2-tetrachloroethane			0.9	ug/g	1	92	70	130	0	30
		ethylbenzene			1.0	ug/g	1	99	70	130	2	30
		m&p-xylenes			2.0	ug/g	2	98	70	130	2	30
		o-xylene			1.0	ug/g	1	102	70	130	0	30
		styrene			1.0	ug/g	1	98	70	130	1	30
		bromoform			0.9	ug/g	1	92	70	130	1	30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MLCSD7338	isopropylbenzene		1.0	ug/g	1	101	70	130	2	30
		1,1,2,2-tetrachloroethane		1.1	ug/g	1	108	70	130	0	30
		1,2,3-trichloropropane		1.1	ug/g	1	111	70	130	0	30
		n-propylbenzene		1.1	ug/g	1	111	70	130	1	30
		bromobenzene		1.1	ug/g	1	106	70	130	4	30
		1,3,5-trimethylbenzene		1.1	ug/g	1	112	70	130	1	30
		2-chlorotoluene		1.1	ug/g	1	112	70	130	0	30
		4-chlorotoluene		1.0	ug/g	1	101	70	130	2	30
		tert-butylbenzene		1.1	ug/g	1	115	70	130	0	30
		1,2,4-trimethylbenzene		1.1	ug/g	1	111	70	130	1	30
		sec-butylbenzene		1.1	ug/g	1	112	70	130	1	30
		1,3-dichlorobenzene		1.1	ug/g	1	109	70	130	1	30
		4-isopropyltoluene		1.1	ug/g	1	110	70	130	0	30
		1,4-dichlorobenzene		1.1	ug/g	1	110	70	130	1	30
		1,2-dichlorobenzene		1.1	ug/g	1	110	70	130	1	30
		n-butylbenzene		1.1	ug/g	1	113	70	130	0	30
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	97	70	130	0	30
		1,2,4-trichlorobenzene		1.2	ug/g	1	115	70	130	0	30
		1,3,5-trichlorobenzene		1.1	ug/g	1	107	70	130	1	30
		hexachlorobutadiene		1.0	ug/g	1	104	70	130	4	30
		naphthalene		1.2	ug/g	1	119	70	130	1	30
		1,2,3-trichlorobenzene		1.2	ug/g	1	116	70	130	1	30
		dibromofluoromethane SUR		98	%			78	114		
		toluene-D8 SUR		100	%			88	110		
		4-bromofluorobenzene SUR		102	%			86	115		
		a,a,a-trifluorotoluene SUR		99	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MB7340	dichlorodifluoromethane		<	0.1	ug/g					
		chloromethane		<	0.1	ug/g					
		vinyl chloride		<	0.1	ug/g					
		bromomethane		<	0.2	ug/g					
		chloroethane		<	0.1	ug/g					
		trichlorofluoromethane		<	0.1	ug/g					
		diethyl ether		<	0.5	ug/g					
		acetone		<	2.5	ug/g					
		1,1-dichloroethene		<	0.1	ug/g					
		methylene chloride		<	0.2	ug/g					
		carbon disulfide		<	0.1	ug/g					
		methyl t-butyl ether (MTBE)		<	0.1	ug/g					
		trans-1,2-dichloroethene		<	0.1	ug/g					
		isopropyl ether (DIPE)		<	0.1	ug/g					
		ethyl t-butyl ether (ETBE)		<	0.1	ug/g					
		1,1-dichloroethane		<	0.1	ug/g					
		t-butanol (TBA)		<	2.5	ug/g					
		2-butanone (MEK)		<	0.5	ug/g					
		2,2-dichloropropane		<	0.1	ug/g					
		cis-1,2-dichloroethene		<	0.1	ug/g					
		chloroform		<	0.1	ug/g					
		bromochloromethane		<	0.1	ug/g					
		tetrahydrofuran (THF)		<	0.5	ug/g					
		1,1,1-trichloroethane		<	0.1	ug/g					
		1,1-dichloropropene		<	0.1	ug/g					
		t-amyl-methyl ether (TAME)		<	0.1	ug/g					
		carbon tetrachloride		<	0.1	ug/g					
		1,2-dichloroethane		<	0.1	ug/g					
		benzene		<	0.1	ug/g					
		trichloroethene		<	0.1	ug/g					
		1,2-dichloropropane		<	0.1	ug/g					
		bromodichloromethane		<	0.1	ug/g					
		1,4-dioxane		<	2.5	ug/g					
		dibromomethane		<	0.1	ug/g					
		4-methyl-2-pentanone (MIBK)		<	0.5	ug/g					
		cis-1,3-dichloropropene		<	0.1	ug/g					
		toluene		<	0.1	ug/g					
		trans-1,3-dichloropropene		<	0.1	ug/g					
		2-hexanone		<	0.5	ug/g					
		1,1,2-trichloroethane		<	0.1	ug/g					
		1,3-dichloropropane		<	0.1	ug/g					
		tetrachloroethene		<	0.1	ug/g					
		dibromochloromethane		<	0.1	ug/g					
		1,2-dibromoethane (EDB)		<	0.1	ug/g					
		chlorobenzene		<	0.1	ug/g					
		1,1,1,2-tetrachloroethane		<	0.1	ug/g					
		ethylbenzene		<	0.1	ug/g					
		m&p-xylenes		<	0.1	ug/g					
		o-xylene		<	0.1	ug/g					
		styrene		<	0.1	ug/g					
		bromoform		<	0.1	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MB7340	isopropylbenzene		<	0.1	ug/g						
		1,1,2,2-tetrachloroethane		<	0.1	ug/g						
		1,2,3-trichloropropane		<	0.1	ug/g						
		n-propylbenzene		<	0.1	ug/g						
		bromobenzene		<	0.1	ug/g						
		1,3,5-trimethylbenzene		<	0.1	ug/g						
		2-chlorotoluene		<	0.1	ug/g						
		4-chlorotoluene		<	0.1	ug/g						
		tert-butylbenzene		<	0.1	ug/g						
		1,2,4-trimethylbenzene		<	0.1	ug/g						
		sec-butylbenzene		<	0.1	ug/g						
		1,3-dichlorobenzene		<	0.1	ug/g						
		4-isopropyltoluene		<	0.1	ug/g						
		1,4-dichlorobenzene		<	0.1	ug/g						
		1,2-dichlorobenzene		<	0.1	ug/g						
		n-butylbenzene		<	0.1	ug/g						
		1,2-dibromo-3-chloropropane (DBCP)		<	0.1	ug/g						
		1,2,4-trichlorobenzene		<	0.1	ug/g						
		1,3,5-trichlorobenzene		<	0.1	ug/g						
		hexachlorobutadiene		<	0.1	ug/g						
		naphthalene		<	0.2	ug/g						
		1,2,3-trichlorobenzene		<	0.1	ug/g						
		dibromofluoromethane SUR			99	%			78	114		
		toluene-D8 SUR			101	%			88	110		
		4-bromofluorobenzene SUR			100	%			86	115		
		a,a,a-trifluorotoluene SUR			97	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS7340	dichlorodifluoromethane			0.9	ug/g	1	92		70	130		
		chloromethane			1.1	ug/g	1	107		70	130		
		vinyl chloride			1.0	ug/g	1	102		70	130		
		bromomethane			1.4	ug/g	1	142	*	70	130		
		chloroethane			1.1	ug/g	1	106		70	130		
		trichlorofluoromethane			1.0	ug/g	1	102		70	130		
		diethyl ether			1.2	ug/g	1	119		70	130		
		acetone		<	2.5	ug/g	1	109					
		1,1-dichloroethene			1.0	ug/g	1	99		70	130		
		methylene chloride			1.1	ug/g	1	108		70	130		
		carbon disulfide			1.0	ug/g	1	102		70	130		
		methyl t-butyl ether (MTBE)			1.1	ug/g	1	109		70	130		
		trans-1,2-dichloroethene			1.0	ug/g	1	105		70	130		
		isopropyl ether (DIPE)			1.1	ug/g	1	106		70	130		
		ethyl t-butyl ether (ETBE)			1.1	ug/g	1	108		70	130		
		1,1-dichloroethane			1.0	ug/g	1	102		70	130		
		t-butanol (TBA)			5.5	ug/g	5	110		70	130		
		2-butanone (MEK)			1.1	ug/g	1	109		70	130		
		2,2-dichloropropane			1.0	ug/g	1	97		70	130		
		cis-1,2-dichloroethene			1.1	ug/g	1	105		70	130		
		chloroform			1.1	ug/g	1	107		70	130		
		bromochloromethane			1.0	ug/g	1	97		70	130		
		tetrahydrofuran (THF)			1.1	ug/g	1	110		70	130		
		1,1,1-trichloroethane			1.0	ug/g	1	101		70	130		
		1,1-dichloropropene			1.0	ug/g	1	104		70	130		
		t-amyl-methyl ether (TAME)			1.0	ug/g	1	102		70	130		
		carbon tetrachloride			0.9	ug/g	1	94		70	130		
		1,2-dichloroethane			1.1	ug/g	1	115		70	130		
		benzene			1.0	ug/g	1	104		70	130		
		trichloroethene			1.1	ug/g	1	109		70	130		
		1,2-dichloropropane			1.1	ug/g	1	106		70	130		
		bromodichloromethane			1.1	ug/g	1	109		70	130		
		1,4-dioxane		<	2.5	ug/g	2	113		70	130		
		dibromomethane			1.1	ug/g	1	107		70	130		
		4-methyl-2-pentanone (MIBK)			1.0	ug/g	1	104		70	130		
		cis-1,3-dichloropropene			1.0	ug/g	1	100		70	130		
		toluene			1.1	ug/g	1	106		70	130		
		trans-1,3-dichloropropene			1.0	ug/g	1	100		70	130		
		2-hexanone			1.0	ug/g	1	104		70	130		
		1,1,2-trichloroethane			1.1	ug/g	1	109		70	130		
		1,3-dichloropropane			1.1	ug/g	1	110		70	130		
		tetrachloroethene			1.0	ug/g	1	97		70	130		
		dibromochloromethane			1.0	ug/g	1	99		70	130		
		1,2-dibromoethane (EDB)			1.1	ug/g	1	114		70	130		
		chlorobenzene			1.1	ug/g	1	112		70	130		
		1,1,1,2-tetrachloroethane			0.9	ug/g	1	95		70	130		
		ethylbenzene			1.0	ug/g	1	101		70	130		
		m&p-xylenes			2.0	ug/g	2	101		70	130		
		o-xylene			1.0	ug/g	1	105		70	130		
		styrene			1.0	ug/g	1	102		70	130		
		bromoform			1.0	ug/g	1	97		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MLCS7340	isopropylbenzene		1.0	ug/g	1	103	70	130		
		1,1,2,2-tetrachloroethane		1.1	ug/g	1	110	70	130		
		1,2,3-trichloropropane		1.1	ug/g	1	115	70	130		
		n-propylbenzene		1.1	ug/g	1	113	70	130		
		bromobenzene		1.1	ug/g	1	112	70	130		
		1,3,5-trimethylbenzene		1.1	ug/g	1	115	70	130		
		2-chlorotoluene		1.1	ug/g	1	113	70	130		
		4-chlorotoluene		1.1	ug/g	1	108	70	130		
		tert-butylbenzene		1.2	ug/g	1	116	70	130		
		1,2,4-trimethylbenzene		1.2	ug/g	1	116	70	130		
		sec-butylbenzene		1.1	ug/g	1	114	70	130		
		1,3-dichlorobenzene		1.1	ug/g	1	114	70	130		
		4-isopropyltoluene		1.1	ug/g	1	114	70	130		
		1,4-dichlorobenzene		1.2	ug/g	1	116	70	130		
		1,2-dichlorobenzene		1.1	ug/g	1	115	70	130		
		n-butylbenzene		1.2	ug/g	1	117	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	100	70	130		
		1,2,4-trichlorobenzene		1.2	ug/g	1	121	70	130		
		1,3,5-trichlorobenzene		1.1	ug/g	1	112	70	130		
		hexachlorobutadiene		1.1	ug/g	1	105	70	130		
		naphthalene		1.2	ug/g	1	122	70	130		
		1,2,3-trichlorobenzene		1.2	ug/g	1	121	70	130		
		dibromofluoromethane SUR		100	%			78	114		
		toluene-D8 SUR		100	%			88	110		
		4-bromofluorobenzene SUR		101	%			86	115		
		a,a,a-trifluorotoluene SUR		101	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCSD7340	dichlorodifluoromethane			0.9	ug/g	1	90		70	130	2	30
		chloromethane			1.0	ug/g	1	105		70	130	2	30
		vinyl chloride			1.0	ug/g	1	97		70	130	5	30
		bromomethane			1.3	ug/g	1	134	*	70	130	5	30
		chloroethane			1.0	ug/g	1	102		70	130	4	30
		trichlorofluoromethane			1.0	ug/g	1	98		70	130	3	30
		diethyl ether			1.1	ug/g	1	112		70	130	6	30
		acetone		<	2.5	ug/g	1	111				2	30
		1,1-dichloroethene			1.0	ug/g	1	96		70	130	4	30
		methylene chloride			1.0	ug/g	1	104		70	130	4	30
		carbon disulfide			0.9	ug/g	1	93		70	130	9	30
		methyl t-butyl ether (MTBE)			1.1	ug/g	1	106		70	130	3	30
		trans-1,2-dichloroethene			1.0	ug/g	1	102		70	130	3	30
		isopropyl ether (DIPE)			1.0	ug/g	1	104		70	130	3	30
		ethyl t-butyl ether (ETBE)			1.0	ug/g	1	105		70	130	3	30
		1,1-dichloroethane			1.0	ug/g	1	99		70	130	3	30
		t-butanol (TBA)			5.4	ug/g	5	107		70	130	2	30
		2-butanone (MEK)			1.0	ug/g	1	103		70	130	6	30
		2,2-dichloropropane			0.9	ug/g	1	94		70	130	4	30
		cis-1,2-dichloroethene			1.0	ug/g	1	103		70	130	2	30
		chloroform			1.0	ug/g	1	104		70	130	3	30
		bromochloromethane			1.0	ug/g	1	95		70	130	2	30
		tetrahydrofuran (THF)			1.1	ug/g	1	109		70	130	1	30
		1,1,1-trichloroethane			1.0	ug/g	1	97		70	130	4	30
		1,1-dichloropropene			1.0	ug/g	1	100		70	130	4	30
		t-amyl-methyl ether (TAME)			1.0	ug/g	1	100		70	130	2	30
		carbon tetrachloride			0.9	ug/g	1	92		70	130	3	30
		1,2-dichloroethane			1.1	ug/g	1	111		70	130	3	30
		benzene			1.0	ug/g	1	101		70	130	3	30
		trichloroethene			1.0	ug/g	1	105		70	130	4	30
		1,2-dichloropropane			1.0	ug/g	1	102		70	130	4	30
		bromodichloromethane			1.1	ug/g	1	107		70	130	3	30
		1,4-dioxane		<	2.5	ug/g	2	114		70	130	0	30
		dibromomethane			1.0	ug/g	1	102		70	130	5	30
		4-methyl-2-pentanone (MIBK)			1.0	ug/g	1	102		70	130	2	30
		cis-1,3-dichloropropene			1.0	ug/g	1	96		70	130	4	30
		toluene			1.0	ug/g	1	102		70	130	3	30
		trans-1,3-dichloropropene			0.9	ug/g	1	94		70	130	6	30
		2-hexanone			1.0	ug/g	1	102		70	130	1	30
		1,1,2-trichloroethane			1.0	ug/g	1	102		70	130	7	30
		1,3-dichloropropane			1.0	ug/g	1	105		70	130	5	30
		tetrachloroethene			0.9	ug/g	1	95		70	130	3	30
		dibromochloromethane			0.9	ug/g	1	93		70	130	6	30
		1,2-dibromoethane (EDB)			1.1	ug/g	1	108		70	130	5	30
		chlorobenzene			1.1	ug/g	1	107		70	130	4	30
		1,1,1,2-tetrachloroethane			0.9	ug/g	1	92		70	130	3	30
		ethylbenzene			1.0	ug/g	1	97		70	130	3	30
		m&p-xylenes			1.9	ug/g	2	97		70	130	4	30
		o-xylene			1.0	ug/g	1	101		70	130	4	30
		styrene			1.0	ug/g	1	98		70	130	4	30
		bromoform			0.9	ug/g	1	92		70	130	6	30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MLCSD7340	isopropylbenzene		1.0	ug/g	1	99	70	130	4	30
		1,1,2,2-tetrachloroethane		1.1	ug/g	1	106	70	130	4	30
		1,2,3-trichloropropane		1.1	ug/g	1	109	70	130	5	30
		n-propylbenzene		1.1	ug/g	1	110	70	130	2	30
		bromobenzene		1.1	ug/g	1	108	70	130	3	30
		1,3,5-trimethylbenzene		1.1	ug/g	1	112	70	130	2	30
		2-chlorotoluene		1.1	ug/g	1	111	70	130	2	30
		4-chlorotoluene		1.0	ug/g	1	104	70	130	4	30
		tert-butylbenzene		1.1	ug/g	1	114	70	130	2	30
		1,2,4-trimethylbenzene		1.1	ug/g	1	112	70	130	4	30
		sec-butylbenzene		1.1	ug/g	1	112	70	130	2	30
		1,3-dichlorobenzene		1.1	ug/g	1	110	70	130	4	30
		4-isopropyltoluene		1.1	ug/g	1	110	70	130	3	30
		1,4-dichlorobenzene		1.1	ug/g	1	110	70	130	5	30
		1,2-dichlorobenzene		1.1	ug/g	1	109	70	130	6	30
		n-butylbenzene		1.1	ug/g	1	113	70	130	4	30
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	98	70	130	2	30
		1,2,4-trichlorobenzene		1.1	ug/g	1	114	70	130	6	30
		1,3,5-trichlorobenzene		1.1	ug/g	1	110	70	130	2	30
		hexachlorobutadiene		1.0	ug/g	1	100	70	130	5	30
		naphthalene		1.2	ug/g	1	120	70	130	2	30
		1,2,3-trichlorobenzene		1.2	ug/g	1	116	70	130	4	30
		dibromofluoromethane SUR		99	%			78	114		
		toluene-D8 SUR		100	%			88	110		
		4-bromofluorobenzene SUR		101	%			86	115		
		a,a,a-trifluorotoluene SUR		98	%			70	130		

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3540C8082A	BLK7350	PCB-1016		<	0.1	ug/g						
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260		<	0.1	ug/g						
		tetrachloro-m-xylene SUR			82	%			30	150		
		decachlorobiphenyl SUR			102	%			30	150		
SW3540C8082A	LCS7350	PCB-1016			2.2	ug/g	2	111	40	140		
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			2.0	ug/g	2	102	40	140		
		tetrachloro-m-xylene SUR			83	%			30	150		
		decachlorobiphenyl SUR			107	%			30	150		
SW3540C8082A	LCSD7350	PCB-1016			2.0	ug/g	2	100	40	140	11	30
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			2.1	ug/g	2	106	40	140	3	30
		tetrachloro-m-xylene SUR			60	%			30	150		
		decachlorobiphenyl SUR			99	%			30	150		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8082A	BLK7342	PCB-1016		<	0.1	ug/g						
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260		<	0.1	ug/g						
		tetrachloro-m-xylene SUR			87	%			30	150		
		decachlorobiphenyl SUR			104	%			30	150		
SW3546/8082A	LCS7342	PCB-1016			2.7	ug/g	2	133	40	140		
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			2.2	ug/g	2	110	40	140		
		tetrachloro-m-xylene SUR			99	%			30	150		
		decachlorobiphenyl SUR			112	%			30	150		
SW3546/8082A	LCSD7342	PCB-1016			2.8	ug/g	2	138	40	140	4	30
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			2.3	ug/g	2	117	40	140	6	30
		tetrachloro-m-xylene SUR			98	%			30	150		
		decachlorobiphenyl SUR			109	%			30	150		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270D	BLK7345	N-nitrosodimethylamine		<	0.2	ug/g					
		aniline		<	0.2	ug/g					
		phenol		<	0.2	ug/g					
		2-chlorophenol		<	0.5	ug/g					
		bis(2-chloroethyl)ether		<	0.2	ug/g					
		1,3-dichlorobenzene		<	0.2	ug/g					
		1,4-dichlorobenzene		<	0.2	ug/g					
		1,2-dichlorobenzene		<	0.2	ug/g					
		benzyl alcohol		<	0.2	ug/g					
		2-methylphenol		<	0.2	ug/g					
		bis(2-chloroisopropyl) ether		<	0.2	ug/g					
		hexachloroethane		<	0.2	ug/g					
		N-nitroso-di-N-propylamine		<	0.2	ug/g					
		4-methylphenol		<	0.2	ug/g					
		nitrobenzene		<	0.2	ug/g					
		isophorone		<	0.5	ug/g					
		2-nitrophenol		<	0.2	ug/g					
		2,4-dimethylphenol		<	0.2	ug/g					
		bis(2-chloroethoxy)methane		<	0.5	ug/g					
		2,4-dichlorophenol		<	0.5	ug/g					
		1,2,4-trichlorobenzene		<	0.5	ug/g					
		naphthalene		<	0.05	ug/g					
		benzoic acid		<	5.0	ug/g					
		4-chloroaniline		<	0.2	ug/g					
		hexachlorobutadiene		<	0.2	ug/g					
		4-chloro-3-methylphenol		<	0.2	ug/g					
		2-methylnaphthalene		<	0.05	ug/g					
		hexachlorocyclopentadiene		<	1.0	ug/g					
		2,4,6-trichlorophenol		<	0.2	ug/g					
		2,4,5-trichlorophenol		<	0.2	ug/g					
		2-chloronaphthalene		<	0.5	ug/g					
		2-nitroaniline		<	0.2	ug/g					
		acenaphthylene		<	0.05	ug/g					
		dimethylphthalate		<	0.5	ug/g					
		2,6-dinitrotoluene		<	0.2	ug/g					
		2,4-dinitrotoluene		<	0.2	ug/g					
		acenaphthene		<	0.05	ug/g					
		3-nitroaniline		<	0.2	ug/g					
		2,4-dinitrophenol		<	5.0	ug/g					
		dibenzofuran		<	0.05	ug/g					
		4-nitrophenol		<	1.0	ug/g					
		fluorene		<	0.05	ug/g					
		diethyl phthalate		<	0.5	ug/g					
		4-chlorophenyl phenyl ether		<	0.5	ug/g					
		4-nitroaniline		<	0.5	ug/g					
		4,6-dinitro-2-methylphenol		<	2.0	ug/g					
		azobenzene		<	0.2	ug/g					
		N-nitrosodiphenylamine		<	0.2	ug/g					
		4-bromophenyl phenyl ether		<	0.2	ug/g					
		hexachlorobenzene		<	0.2	ug/g					
		pentachlorophenol		<	1.0	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	BLK7345	phenanthrene		<	0.05	ug/g						
		anthracene		<	0.05	ug/g						
		carbazole		<	0.2	ug/g						
		di-n-butylphthalate		<	0.5	ug/g						
		fluoranthene		<	0.05	ug/g						
		benzidine		<	3.0	ug/g						
		pyrene		<	0.05	ug/g						
		butyl benzyl phthalate		<	0.5	ug/g						
		benzo(a)anthracene		<	0.05	ug/g						
		chrysene		<	0.05	ug/g						
		3,3'-dichlorobenzidine		<	3.0	ug/g						
		bis(2-ethylhexyl)phthalate		<	0.5	ug/g						
		di-n-octyl phthalate		<	0.2	ug/g						
		benzo(b)fluoranthene		<	0.05	ug/g						
		benzo(k)fluoranthene		<	0.05	ug/g						
		benzo(a)pyrene		<	0.02	ug/g						
		indeno(1,2,3-cd)pyrene		<	0.05	ug/g						
		dibenzo(a,h)anthracene		<	0.05	ug/g						
		benzo(g,h,i)perylene		<	0.05	ug/g						
		2-fluorophenol SUR			65	%			21	100		
		phenol-D5 SUR			64	%			10	102		
		2,4,6-tribromophenol SUR			68	%			10	123		
		nitrobenzene-D5 SUR			55	%			35	114		
		2-fluorobiphenyl SUR			52	%			43	116		
		p-terphenyl-D14 SUR			81	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCS7345	N-nitrosodimethylamine			1.9	ug/g	4	49	40	140		
		aniline			1.9	ug/g	4	48	40	140		
		phenol			2.5	ug/g	4	61	30	130		
		2-chlorophenol			2.2	ug/g	4	55	30	130		
		bis(2-chloroethyl)ether			2.3	ug/g	4	58	40	140		
		1,3-dichlorobenzene			2.0	ug/g	4	50	40	140		
		1,4-dichlorobenzene			2.1	ug/g	4	51	40	140		
		1,2-dichlorobenzene			2.1	ug/g	4	52	40	140		
		benzyl alcohol			2.3	ug/g	4	58	30	130		
		2-methylphenol			2.4	ug/g	4	60	30	130		
		bis(2-chloroisopropyl) ether			2.1	ug/g	4	53	40	140		
		hexachloroethane			2.1	ug/g	4	52	40	140		
		N-nitroso-di-N-propylamine			2.1	ug/g	4	52	40	140		
		4-methylphenol			2.4	ug/g	4	60	30	130		
		nitrobenzene			2.2	ug/g	4	55	40	140		
		isophorone			2.5	ug/g	4	62	40	140		
		2-nitrophenol			2.2	ug/g	4	54	30	130		
		2,4-dimethylphenol			2.4	ug/g	4	60	30	130		
		bis(2-chloroethoxy)methane			2.3	ug/g	4	58	40	140		
		2,4-dichlorophenol			2.5	ug/g	4	62	30	130		
		1,2,4-trichlorobenzene			2.2	ug/g	4	55	40	140		
		naphthalene			2.1	ug/g	4	52	40	140		
		benzoic acid		<	5.0	ug/g						
		4-chloroaniline			2.5	ug/g	4	61	40	140		
		hexachlorobutadiene			2.2	ug/g	4	56	40	140		
		4-chloro-3-methylphenol			2.7	ug/g	4	67	30	130		
		2-methylnaphthalene			2.14	ug/g	4	54	40	140		
		hexachlorocyclopentadiene			1.9	ug/g	4	48	40	140		
		2,4,6-trichlorophenol			2.7	ug/g	4	67	30	130		
		2,4,5-trichlorophenol			2.6	ug/g	4	66	30	130		
		2-chloronaphthalene			2.2	ug/g	4	55	40	140		
		2-nitroaniline			2.4	ug/g	4	61	40	140		
		acenaphthylene			2.2	ug/g	4	56	40	140		
		dimethylphthalate			2.6	ug/g	4	66	40	140		
		2,6-dinitrotoluene			2.6	ug/g	4	66	40	140		
		2,4-dinitrotoluene			2.8	ug/g	4	70	40	140		
		acenaphthene			2.3	ug/g	4	56	40	140		
		3-nitroaniline			2.7	ug/g	4	67	40	140		
		2,4-dinitrophenol		<	5.0	ug/g						
		dibenzofuran			2.5	ug/g	4	63	40	140		
		4-nitrophenol			2.1	ug/g	4	54	30	130		
		fluorene			2.5	ug/g	4	62	40	140		
		diethyl phthalate			2.6	ug/g	4	66	40	140		
		4-chlorophenyl phenyl ether			2.6	ug/g	4	65	40	140		
		4-nitroaniline			2.7	ug/g	4	67	40	140		
		4,6-dinitro-2-methylphenol			2.4	ug/g						
		azobenzene			2.5	ug/g	4	63	40	140		
		N-nitrosodiphenylamine			3.0	ug/g	4	75	40	140		
		4-bromophenyl phenyl ether			2.6	ug/g	4	66	40	140		
		hexachlorobenzene			2.9	ug/g	4	73	40	140		
		pentachlorophenol			2.4	ug/g	4	59	30	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCS7345	phenanthrene			2.7	ug/g	4	67	40	140		
		anthracene			2.6	ug/g	4	65	40	140		
		carbazole			2.7	ug/g	4	68	40	140		
		di-n-butylphthalate			2.7	ug/g	4	67	40	140		
		fluoranthene			2.7	ug/g	4	68	40	140		
		benzidine		<	3.0	ug/g						
		pyrene			2.9	ug/g	4	73	40	140		
		butyl benzyl phthalate			3.3	ug/g	4	81	40	140		
		benzo(a)anthracene			3.0	ug/g	4	74	40	140		
		chrysene			2.9	ug/g	4	74	40	140		
		3,3'-dichlorobenzidine		<	3.0	ug/g						
		bis(2-ethylhexyl)phthalate			2.8	ug/g	4	70	40	140		
		di-n-octyl phthalate			2.7	ug/g	4	68	40	140		
		benzo(b)fluoranthene			2.8	ug/g	4	70	40	140		
		benzo(k)fluoranthene			2.9	ug/g	4	73	40	140		
		benzo(a)pyrene			2.9	ug/g	4	72	40	140		
		indeno(1,2,3-cd)pyrene			3.1	ug/g	4	77	40	140		
		dibenzo(a,h)anthracene			3.1	ug/g	4	77	40	140		
		benzo(g,h,i)perylene			3.1	ug/g	4	78	40	140		
		2-fluorophenol SUR			67	%			21	100		
		phenol-D5 SUR			68	%			10	102		
		2,4,6-tribromophenol SUR			79	%			10	123		
		nitrobenzene-D5 SUR			58	%			35	114		
		2-fluorobiphenyl SUR			59	%			43	116		
		p-terphenyl-D14 SUR			84	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCSD7345	N-nitrosodimethylamine			2.1	ug/g	4	53	40	140	8	30
		aniline			2.3	ug/g	4	58	40	140	18	30
		phenol			2.7	ug/g	4	68	30	130	10	30
		2-chlorophenol			2.4	ug/g	4	61	30	130	11	30
		bis(2-chloroethyl)ether			2.3	ug/g	4	59	40	140	1	30
		1,3-dichlorobenzene			2.2	ug/g	4	54	40	140	8	30
		1,4-dichlorobenzene			2.2	ug/g	4	55	40	140	7	30
		1,2-dichlorobenzene			2.2	ug/g	4	56	40	140	7	30
		benzyl alcohol			2.6	ug/g	4	64	30	130	10	30
		2-methylphenol			2.6	ug/g	4	66	30	130	10	30
		bis(2-chloroisopropyl) ether			2.3	ug/g	4	58	40	140	9	30
		hexachloroethane			2.2	ug/g	4	56	40	140	7	30
		N-nitroso-di-N-propylamine			2.3	ug/g	4	57	40	140	8	30
		4-methylphenol			2.6	ug/g	4	66	30	130	10	30
		nitrobenzene			2.4	ug/g	4	60	40	140	9	30
		isophorone			2.7	ug/g	4	67	40	140	8	30
		2-nitrophenol			2.4	ug/g	4	59	30	130	9	30
		2,4-dimethylphenol			2.6	ug/g	4	65	30	130	9	30
		bis(2-chloroethoxy)methane			2.5	ug/g	4	63	40	140	8	30
		2,4-dichlorophenol			2.7	ug/g	4	67	30	130	8	30
		1,2,4-trichlorobenzene			2.4	ug/g	4	60	40	140	9	30
		naphthalene			2.3	ug/g	4	57	40	140	10	30
		benzoic acid		<	5.0	ug/g						30
		4-chloroaniline			2.8	ug/g	4	71	40	140	14	30
		hexachlorobutadiene			2.4	ug/g	4	61	40	140	8	30
		4-chloro-3-methylphenol			2.8	ug/g	4	71	30	130	6	30
		2-methylnaphthalene			2.34	ug/g	4	59	40	140	9	30
		hexachlorocyclopentadiene			2.1	ug/g	4	53	40	140	10	30
		2,4,6-trichlorophenol			2.9	ug/g	4	73	30	130	8	30
		2,4,5-trichlorophenol			2.9	ug/g	4	71	30	130	8	30
		2-chloronaphthalene			2.4	ug/g	4	60	40	140	8	30
		2-nitroaniline			2.6	ug/g	4	65	40	140	7	30
		acenaphthylene			2.4	ug/g	4	61	40	140	8	30
		dimethylphthalate			2.8	ug/g	4	70	40	140	7	30
		2,6-dinitrotoluene			2.8	ug/g	4	70	40	140	6	30
		2,4-dinitrotoluene			2.9	ug/g	4	73	40	140	5	30
		acenaphthene			2.4	ug/g	4	61	40	140	7	30
		3-nitroaniline			2.9	ug/g	4	72	40	140	7	30
		2,4-dinitrophenol		<	5.0	ug/g						30
		dibenzofuran			2.7	ug/g	4	68	40	140	7	30
		4-nitrophenol			2.4	ug/g	4	61	30	130	12	30
		fluorene			2.7	ug/g	4	67	40	140	7	30
		diethyl phthalate			2.8	ug/g	4	70	40	140	6	30
		4-chlorophenyl phenyl ether			2.8	ug/g	4	69	40	140	6	30
		4-nitroaniline			3.0	ug/g	4	75	40	140	11	30
		4,6-dinitro-2-methylphenol			2.5	ug/g						30
		azobenzene			2.6	ug/g	4	64	40	140	2	30
		N-nitrosodiphenylamine			3.1	ug/g	4	78	40	140	3	30
		4-bromophenyl phenyl ether			2.7	ug/g	4	68	40	140	3	30
		hexachlorobenzene			3.0	ug/g	4	75	40	140	3	30
		pentachlorophenol			2.4	ug/g	4	61	30	130	3	30

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCSD7345	phenanthrene			2.8	ug/g	4	69	40	140	3	30
		anthracene			2.7	ug/g	4	68	40	140	4	30
		carbazole			2.8	ug/g	4	69	40	140	2	30
		di-n-butylphthalate			2.8	ug/g	4	69	40	140	3	30
		fluoranthene			2.8	ug/g	4	70	40	140	3	30
		benzidine		<	3.0	ug/g						30
		pyrene			3.0	ug/g	4	75	40	140	2	30
		butyl benzyl phthalate			3.4	ug/g	4	84	40	140	4	30
		benzo(a)anthracene			3.1	ug/g	4	76	40	140	3	30
		chrysene			3.0	ug/g	4	75	40	140	2	30
		3,3'-dichlorobenzidine		<	3.0	ug/g						30
		bis(2-ethylhexyl)phthalate			2.9	ug/g	4	72	40	140	4	30
		di-n-octyl phthalate			2.8	ug/g	4	71	40	140	3	30
		benzo(b)fluoranthene			2.9	ug/g	4	72	40	140	3	30
		benzo(k)fluoranthene			3.0	ug/g	4	74	40	140	2	30
		benzo(a)pyrene			3.0	ug/g	4	74	40	140	3	30
		indeno(1,2,3-cd)pyrene			3.2	ug/g	4	79	40	140	3	30
		dibenzo(a,h)anthracene			3.2	ug/g	4	79	40	140	2	30
		benzo(g,h,i)perylene			3.2	ug/g	4	80	40	140	3	30
		2-fluorophenol SUR			75	%			21	100		
		phenol-D5 SUR			76	%			10	102		
		2,4,6-tribromophenol SUR			82	%			10	123		
		nitrobenzene-D5 SUR			65	%			35	114		
		2-fluorobiphenyl SUR			67	%			43	116		
		p-terphenyl-D14 SUR			86	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270D	BLK7353	N-nitrosodimethylamine		<	0.2	ug/g					
		aniline		<	0.2	ug/g					
		phenol		<	0.2	ug/g					
		2-chlorophenol		<	0.5	ug/g					
		bis(2-chloroethyl)ether		<	0.2	ug/g					
		1,3-dichlorobenzene		<	0.2	ug/g					
		1,4-dichlorobenzene		<	0.2	ug/g					
		1,2-dichlorobenzene		<	0.2	ug/g					
		benzyl alcohol		<	0.2	ug/g					
		2-methylphenol		<	0.2	ug/g					
		bis(2-chloroisopropyl) ether		<	0.2	ug/g					
		hexachloroethane		<	0.2	ug/g					
		N-nitroso-di-N-propylamine		<	0.2	ug/g					
		4-methylphenol		<	0.2	ug/g					
		nitrobenzene		<	0.2	ug/g					
		isophorone		<	0.5	ug/g					
		2-nitrophenol		<	0.2	ug/g					
		2,4-dimethylphenol		<	0.2	ug/g					
		bis(2-chloroethoxy)methane		<	0.5	ug/g					
		2,4-dichlorophenol		<	0.5	ug/g					
		1,2,4-trichlorobenzene		<	0.5	ug/g					
		naphthalene		<	0.05	ug/g					
		benzoic acid		<	5.0	ug/g					
		4-chloroaniline		<	0.2	ug/g					
		hexachlorobutadiene		<	0.2	ug/g					
		4-chloro-3-methylphenol		<	0.2	ug/g					
		2-methylnaphthalene		<	0.05	ug/g					
		hexachlorocyclopentadiene		<	1.0	ug/g					
		2,4,6-trichlorophenol		<	0.2	ug/g					
		2,4,5-trichlorophenol		<	0.2	ug/g					
		2-chloronaphthalene		<	0.5	ug/g					
		2-nitroaniline		<	0.2	ug/g					
		acenaphthylene		<	0.05	ug/g					
		dimethylphthalate		<	0.5	ug/g					
		2,6-dinitrotoluene		<	0.2	ug/g					
		2,4-dinitrotoluene		<	0.2	ug/g					
		acenaphthene		<	0.05	ug/g					
		3-nitroaniline		<	0.2	ug/g					
		2,4-dinitrophenol		<	5.0	ug/g					
		dibenzofuran		<	0.05	ug/g					
		4-nitrophenol		<	1.0	ug/g					
		fluorene		<	0.05	ug/g					
		diethyl phthalate		<	0.5	ug/g					
		4-chlorophenyl phenyl ether		<	0.5	ug/g					
		4-nitroaniline		<	0.5	ug/g					
		4,6-dinitro-2-methylphenol		<	2.0	ug/g					
		azobenzene		<	0.2	ug/g					
		N-nitrosodiphenylamine		<	0.2	ug/g					
		4-bromophenyl phenyl ether		<	0.2	ug/g					
		hexachlorobenzene		<	0.2	ug/g					
		pentachlorophenol		<	1.0	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	BLK7353	phenanthrene		<	0.05	ug/g						
		anthracene		<	0.05	ug/g						
		carbazole		<	0.2	ug/g						
		di-n-butylphthalate		<	0.5	ug/g						
		fluoranthene		<	0.05	ug/g						
		benzidine		<	3.0	ug/g						
		pyrene		<	0.05	ug/g						
		butyl benzyl phthalate		<	0.5	ug/g						
		benzo(a)anthracene		<	0.05	ug/g						
		chrysene		<	0.05	ug/g						
		3,3'-dichlorobenzidine		<	3.0	ug/g						
		bis(2-ethylhexyl)phthalate		<	0.5	ug/g						
		di-n-octyl phthalate		<	0.2	ug/g						
		benzo(b)fluoranthene		<	0.05	ug/g						
		benzo(k)fluoranthene		<	0.05	ug/g						
		benzo(a)pyrene		<	0.02	ug/g						
		indeno(1,2,3-cd)pyrene		<	0.05	ug/g						
		dibenzo(a,h)anthracene		<	0.05	ug/g						
		benzo(g,h,i)perylene		<	0.05	ug/g						
		2-fluorophenol SUR			62	%			21	100		
		phenol-D5 SUR			63	%			10	102		
		2,4,6-tribromophenol SUR			69	%			10	123		
		nitrobenzene-D5 SUR			52	%			35	114		
		2-fluorobiphenyl SUR			53	%			43	116		
		p-terphenyl-D14 SUR			83	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCS7353	N-nitrosodimethylamine			1.8	ug/g	4	46	40	140		
		aniline			1.8	ug/g	4	46	40	140		
		phenol			2.5	ug/g	4	61	30	130		
		2-chlorophenol			2.2	ug/g	4	55	30	130		
		bis(2-chloroethyl)ether			2.1	ug/g	4	53	40	140		
		1,3-dichlorobenzene			2.0	ug/g	4	49	40	140		
		1,4-dichlorobenzene			2.0	ug/g	4	51	40	140		
		1,2-dichlorobenzene			2.0	ug/g	4	51	40	140		
		benzyl alcohol			2.3	ug/g	4	57	30	130		
		2-methylphenol			2.4	ug/g	4	59	30	130		
		bis(2-chloroisopropyl) ether			2.1	ug/g	4	53	40	140		
		hexachloroethane			2.0	ug/g	4	50	40	140		
		N-nitroso-di-N-propylamine			2.1	ug/g	4	52	40	140		
		4-methylphenol			2.4	ug/g	4	60	30	130		
		nitrobenzene			2.2	ug/g	4	55	40	140		
		isophorone			2.5	ug/g	4	62	40	140		
		2-nitrophenol			2.2	ug/g	4	54	30	130		
		2,4-dimethylphenol			2.2	ug/g	4	56	30	130		
		bis(2-chloroethoxy)methane			2.3	ug/g	4	57	40	140		
		2,4-dichlorophenol			2.5	ug/g	4	61	30	130		
		1,2,4-trichlorobenzene			2.2	ug/g	4	55	40	140		
		naphthalene			2.1	ug/g	4	52	40	140		
		benzoic acid		<	5.0	ug/g						
		4-chloroaniline			2.4	ug/g	4	59	40	140		
		hexachlorobutadiene			2.3	ug/g	4	57	40	140		
		4-chloro-3-methylphenol			2.7	ug/g	4	68	30	130		
		2-methylnaphthalene			2.19	ug/g	4	55	40	140		
		hexachlorocyclopentadiene			1.7	ug/g	4	42	40	140		
		2,4,6-trichlorophenol			2.6	ug/g	4	65	30	130		
		2,4,5-trichlorophenol			2.6	ug/g	4	64	30	130		
		2-chloronaphthalene			2.2	ug/g	4	55	40	140		
		2-nitroaniline			2.5	ug/g	4	62	40	140		
		acenaphthylene			2.3	ug/g	4	57	40	140		
		dimethylphthalate			2.7	ug/g	4	68	40	140		
		2,6-dinitrotoluene			2.7	ug/g	4	67	40	140		
		2,4-dinitrotoluene			2.8	ug/g	4	71	40	140		
		acenaphthene			2.2	ug/g	4	56	40	140		
		3-nitroaniline			2.6	ug/g	4	65	40	140		
		2,4-dinitrophenol		<	5.0	ug/g						
		dibenzofuran			2.6	ug/g	4	65	40	140		
		4-nitrophenol			2.1	ug/g	4	52	30	130		
		fluorene			2.6	ug/g	4	64	40	140		
		diethyl phthalate			2.7	ug/g	4	68	40	140		
		4-chlorophenyl phenyl ether			2.7	ug/g	4	67	40	140		
		4-nitroaniline			2.6	ug/g	4	64	40	140		
		4,6-dinitro-2-methylphenol			2.3	ug/g						
		azobenzene			2.5	ug/g	4	62	40	140		
		N-nitrosodiphenylamine			2.9	ug/g	4	74	40	140		
		4-bromophenyl phenyl ether			2.7	ug/g	4	66	40	140		
		hexachlorobenzene			3.0	ug/g	4	74	40	140		
		pentachlorophenol			2.1	ug/g	4	53	30	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCS7353	phenanthrene			2.7	ug/g	4	67	40	140		
		anthracene			2.6	ug/g	4	66	40	140		
		carbazole			2.7	ug/g	4	68	40	140		
		di-n-butylphthalate			2.7	ug/g	4	68	40	140		
		fluoranthene			2.8	ug/g	4	70	40	140		
		benzidine		<	3.0	ug/g						
		pyrene			2.9	ug/g	4	72	40	140		
		butyl benzyl phthalate			3.3	ug/g	4	82	40	140		
		benzo(a)anthracene			2.9	ug/g	4	74	40	140		
		chrysene			2.9	ug/g	4	73	40	140		
		3,3'-dichlorobenzidine		<	3.0	ug/g						
		bis(2-ethylhexyl)phthalate			2.8	ug/g	4	71	40	140		
		di-n-octyl phthalate			2.8	ug/g	4	69	40	140		
		benzo(b)fluoranthene			2.9	ug/g	4	73	40	140		
		benzo(k)fluoranthene			2.8	ug/g	4	69	40	140		
		benzo(a)pyrene			2.9	ug/g	4	72	40	140		
		indeno(1,2,3-cd)pyrene			3.0	ug/g	4	75	40	140		
		dibenzo(a,h)anthracene			3.0	ug/g	4	75	40	140		
		benzo(g,h,i)perylene			3.1	ug/g	4	76	40	140		
		2-fluorophenol SUR			68	%			21	100		
		phenol-D5 SUR			71	%			10	102		
		2,4,6-tribromophenol SUR			83	%			10	123		
		nitrobenzene-D5 SUR			60	%			35	114		
		2-fluorobiphenyl SUR			64	%			43	116		
		p-terphenyl-D14 SUR			87	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCSD7353	N-nitrosodimethylamine			2.0	ug/g	4	50	40	140	9	30
		aniline			2.0	ug/g	4	49	40	140	7	30
		phenol			2.6	ug/g	4	66	30	130	7	30
		2-chlorophenol			2.4	ug/g	4	60	30	130	8	30
		bis(2-chloroethyl)ether			2.5	ug/g	4	62	40	140	15	30
		1,3-dichlorobenzene			2.1	ug/g	4	53	40	140	8	30
		1,4-dichlorobenzene			2.2	ug/g	4	54	40	140	7	30
		1,2-dichlorobenzene			2.2	ug/g	4	55	40	140	8	30
		benzyl alcohol			2.5	ug/g	4	61	30	130	7	30
		2-methylphenol			2.6	ug/g	4	65	30	130	10	30
		bis(2-chloroisopropyl) ether			2.3	ug/g	4	58	40	140	9	30
		hexachloroethane			2.2	ug/g	4	55	40	140	9	30
		N-nitroso-di-N-propylamine			2.2	ug/g	4	56	40	140	7	30
		4-methylphenol			2.5	ug/g	4	63	30	130	4	30
		nitrobenzene			2.3	ug/g	4	59	40	140	6	30
		isophorone			2.6	ug/g	4	65	40	140	4	30
		2-nitrophenol			2.3	ug/g	4	57	30	130	5	30
		2,4-dimethylphenol			2.4	ug/g	4	60	30	130	7	30
		bis(2-chloroethoxy)methane			2.5	ug/g	4	61	40	140	7	30
		2,4-dichlorophenol			2.6	ug/g	4	64	30	130	5	30
		1,2,4-trichlorobenzene			2.3	ug/g	4	58	40	140	6	30
		naphthalene			2.2	ug/g	4	55	40	140	6	30
		benzoic acid		<	5.0	ug/g						30
		4-chloroaniline			2.7	ug/g	4	67	40	140	12	30
		hexachlorobutadiene			2.4	ug/g	4	59	40	140	5	30
		4-chloro-3-methylphenol			2.7	ug/g	4	68	30	130	1	30
		2-methylnaphthalene			2.29	ug/g	4	57	40	140	4	30
		hexachlorocyclopentadiene			1.9	ug/g	4	48	40	140	14	30
		2,4,6-trichlorophenol			2.6	ug/g	4	65	30	130	0	30
		2,4,5-trichlorophenol			2.5	ug/g	4	63	30	130	3	30
		2-chloronaphthalene			2.3	ug/g	4	57	40	140	3	30
		2-nitroaniline			2.5	ug/g	4	61	40	140	2	30
		acenaphthylene			2.3	ug/g	4	57	40	140	1	30
		dimethylphthalate			2.6	ug/g	4	66	40	140	3	30
		2,6-dinitrotoluene			2.6	ug/g	4	66	40	140	1	30
		2,4-dinitrotoluene			2.7	ug/g	4	69	40	140	4	30
		acenaphthene			2.2	ug/g	4	56	40	140	0	30
		3-nitroaniline			2.6	ug/g	4	66	40	140	1	30
		2,4-dinitrophenol		<	5.0	ug/g						30
		dibenzofuran			2.5	ug/g	4	63	40	140	3	30
		4-nitrophenol			2.1	ug/g	4	54	30	130	3	30
		fluorene			2.5	ug/g	4	63	40	140	2	30
		diethyl phthalate			2.7	ug/g	4	67	40	140	2	30
		4-chlorophenyl phenyl ether			2.6	ug/g	4	66	40	140	1	30
		4-nitroaniline			2.6	ug/g	4	64	40	140	0	30
		4,6-dinitro-2-methylphenol			2.3	ug/g						30
		azobenzene			2.5	ug/g	4	61	40	140	1	30
		N-nitrosodiphenylamine			2.9	ug/g	4	72	40	140	2	30
		4-bromophenyl phenyl ether			2.6	ug/g	4	64	40	140	3	30
		hexachlorobenzene			2.9	ug/g	4	71	40	140	4	30
		pentachlorophenol			2.1	ug/g	4	52	30	130	2	30

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCSD7353	phenanthrene			2.6	ug/g	4	66	40	140	2	30
		anthracene			2.6	ug/g	4	64	40	140	3	30
		carbazole			2.6	ug/g	4	66	40	140	2	30
		di-n-butylphthalate			2.7	ug/g	4	68	40	140	1	30
		fluoranthene			2.7	ug/g	4	68	40	140	2	30
		benzidine		<	3.0	ug/g						30
		pyrene			2.9	ug/g	4	72	40	140	1	30
		butyl benzyl phthalate			3.3	ug/g	4	81	40	140	1	30
		benzo(a)anthracene			2.9	ug/g	4	74	40	140	0	30
		chrysene			2.9	ug/g	4	71	40	140	3	30
		3,3'-dichlorobenzidine		<	3.0	ug/g						30
		bis(2-ethylhexyl)phthalate			2.8	ug/g	4	70	40	140	1	30
		di-n-octyl phthalate			2.8	ug/g	4	69	40	140	1	30
		benzo(b)fluoranthene			2.7	ug/g	4	67	40	140	8	30
		benzo(k)fluoranthene			3.0	ug/g	4	74	40	140	7	30
		benzo(a)pyrene			2.8	ug/g	4	71	40	140	1	30
		indeno(1,2,3-cd)pyrene			3.0	ug/g	4	74	40	140	2	30
		dibenzo(a,h)anthracene			3.0	ug/g	4	74	40	140	2	30
		benzo(g,h,i)perylene			3.0	ug/g	4	75	40	140	2	30
		2-fluorophenol SUR			71	%			21	100		
		phenol-D5 SUR			74	%			10	102		
		2,4,6-tribromophenol SUR			78	%			10	123		
		nitrobenzene-D5 SUR			62	%			35	114		
		2-fluorobiphenyl SUR			62	%			43	116		
		p-terphenyl-D14 SUR			84	%			33	141		
SW3550C8100	BLK7358	TPH C10-C36		<	200	ug/L						
		2-fluorobiphenyl SUR			96	%			40	140		
		o-terphenyl SUR			99	%			40	140		
SW3550C8100	DUP7358	TPH C10-C36	31473-005	<	220	ug/g						20
		2-fluorobiphenyl SUR	31473-005		108	%			40	140		
		o-terphenyl SUR	31473-005		112	%			40	140		
SW3550C8100	LCS7358	TPH C10-C36			2100	ug/L	2500	85	40	140		
		2-fluorobiphenyl SUR			104	%			40	140		
		o-terphenyl SUR			90	%			40	140		
SW3550C8100	MS7358	TPH C10-C36	31473-005		2600	ug/g	2787	94	40	140		
		2-fluorobiphenyl SUR	31473-005		111	%			40	140		
		o-terphenyl SUR	31473-005		112	%			40	140		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD		RPD Limit
SW3051A6010C	BLK7335	Silver		<	0.25	ug/g							
		Arsenic		<	0.50	ug/g							
		Barium		<	2.5	ug/g							
		Beryllium		<	0.20	ug/g							
		Cadmium		<	0.20	ug/g							
		Chromium		<	2.5	ug/g							
		Nickel		<	2.5	ug/g							
		Lead		<	0.50	ug/g							
		Antimony		<	0.30	ug/g							
		Selenium		<	2.5	ug/g							
		Thallium		<	0.10	ug/g							
		Vanadium		<	2.5	ug/g							
		Zinc		<	2.5	ug/g							
SW3051A6010C	CRM7335	Silver			46	ug/g	38		25.1	51.9			
		Arsenic			420	ug/g	400		292	508			
		Barium			24	ug/g	25		0	51.3			
		Cadmium			16	ug/g	15		8.71	22			
		Chromium			14	ug/g	14		2.45	24.7			
		Nickel			20	ug/g	17		6.2	27.5			
		Lead			5900	ug/g	5100		3750	6470			
		Antimony			2.9	ug/g	8.4		0	21.4			
		Selenium			7.3	ug/g	6.6		0	18.4			
		Thallium			5.9	ug/g	5.9		0	13.6			
		Vanadium			12	ug/g	6.5		0	17.1			
		Zinc			2800	ug/g	3000		2450	3580			
SW3051A6010C	CRMD7335	Silver			49	ug/g	38		25.1	51.9	5		35
		Arsenic			430	ug/g	400		292	508	1		35
		Barium			24	ug/g	25		0	51.3	1		35
		Cadmium			16	ug/g	15		8.71	22	2		35
		Chromium			15	ug/g	14		2.45	24.7	9		35
		Nickel			19	ug/g	17		6.2	27.5	4		35
		Lead			5800	ug/g	5100		3750	6470	1		35
		Antimony			4.4	ug/g	8.4		0	21.4	40	*	35
		Selenium			7.6	ug/g	6.6		0	18.4	3		35
		Thallium			5.9	ug/g	5.9		0	13.6	0		35
		Vanadium			12	ug/g	6.5		0	17.1	6		35
		Zinc			2500	ug/g	3000		2450	3580	10		35
SW3051A6010C	MS7335	Silver	31419-003		11	ug/g	13	94	75	125			
		Arsenic	31419-003		32	ug/g	27	95	75	125			
		Barium	31419-003		94	ug/g	27	93	75	125			
		Cadmium	31419-003		26	ug/g	27	93	75	125			
		Chromium	31419-003		37	ug/g	27	102	75	125			
		Lead	31419-003		160	ug/g	27.8	77	75	125			
		Selenium	31419-003		25	ug/g	27	87	75	125			

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	MSD7335	Silver	31419-003	12	ug/g	13	100	75	125		7
		Arsenic	31419-003	33	ug/g	27	101	75	125		5
		Barium	31419-003	96	ug/g	27	101	75	125		2
		Cadmium	31419-003	27	ug/g	27	98	75	125		5
		Chromium	31419-003	38	ug/g	27	108	75	125		4
		Lead	31419-003	160	ug/g	27.8	77	75	125		0
		Selenium	31419-003	26	ug/g	27	90	75	125		4

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK7351	Silver		<	0.25	ug/g						
		Arsenic		<	0.50	ug/g						
		Barium		<	2.5	ug/g						
		Beryllium		<	0.20	ug/g						
		Cadmium		<	0.20	ug/g						
		Chromium		<	2.5	ug/g						
		Nickel		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
		Antimony		<	0.30	ug/g						
		Selenium		<	2.5	ug/g						
		Thallium		<	0.10	ug/g						
		Vanadium		<	2.5	ug/g						
		Zinc		<	2.5	ug/g						
SW3051A6010C	CRM7351	Silver			46	ug/g	38		25.1	51.9		
		Arsenic			430	ug/g	400		292	508		
		Barium			22	ug/g	25		0	51.3		
		Cadmium			16	ug/g	15		8.71	22		
		Chromium			14	ug/g	14		2.45	24.7		
		Nickel			20	ug/g	17		6.2	27.5		
		Lead			4800	ug/g	5100		3750	6470		
		Antimony			3.8	ug/g	8.4		0	21.4		
		Selenium			8.5	ug/g	6.6		0	18.4		
		Thallium			5.5	ug/g	5.9		0	13.6		
		Vanadium			11	ug/g	6.5		0	17.1		
		Zinc			2800	ug/g	3000		2450	3580		
SW3051A6010C	CRMD7351	Silver			46	ug/g	38		25.1	51.9	1	35
		Arsenic			430	ug/g	400		292	508	0	35
		Barium			22	ug/g	25		0	51.3	2	35
		Cadmium			16	ug/g	15		8.71	22	0	35
		Chromium			15	ug/g	14		2.45	24.7	5	35
		Nickel			19	ug/g	17		6.2	27.5	2	35
		Lead			5200	ug/g	5100		3750	6470	7	35
		Antimony			4.4	ug/g	8.4		0	21.4	15	35
		Selenium			7.7	ug/g	6.6		0	18.4	9	35
		Thallium			6.3	ug/g	5.9		0	13.6	15	35
		Vanadium			12	ug/g	6.5		0	17.1	4	35
		Zinc			2600	ug/g	3000		2450	3580	7	35

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW3051A6010C	MS7351	Silver	31420-023		11	ug/g	13	81		75	125		
		Arsenic	31420-023		77	ug/g	27	109		75	125		
		Barium	31420-023		55	ug/g	27	94		75	125		
		Beryllium	31420-023		25	ug/g	27	93		75	125		
		Cadmium	31420-023		26	ug/g	27	95		75	125		
		Chromium	31420-023		180	ug/g	27.1	122		75	125		
		Nickel	31420-023		180	ug/g	27.1	149	*	75	125		
		Lead	31420-023		66	ug/g	27	88		75	125		
		Antimony	31420-023		36	ug/g	27	92		75	125		
		Selenium	31420-023		23	ug/g	27	85		75	125		
		Thallium	31420-023		15	ug/g	13	112		75	125		
		Vanadium	31420-023		60	ug/g	27	108		75	125		
		Zinc	31420-023		100	ug/g	27.1	15	*	75	125		
SW3051A6010C	MSD7351	Silver	31420-023		11	ug/g	13	80		75	125	1	
		Arsenic	31420-023		74	ug/g	27	95		75	125	4	
		Barium	31420-023		56	ug/g	27	99		75	125	3	
		Beryllium	31420-023		26	ug/g	27	92		75	125	0	
		Cadmium	31420-023		26	ug/g	27	94		75	125	1	
		Chromium	31420-023		170	ug/g	27.6	68	*	75	125	8	
		Nickel	31420-023		160	ug/g	27.6	81		75	125	10	
		Lead	31420-023		66	ug/g	27	84		75	125	1	
		Antimony	31420-023		35	ug/g	27	84		75	125	4	
		Selenium	31420-023		23	ug/g	27	84		75	125	1	
		Thallium	31420-023		15	ug/g	13	110		75	125	1	
		Vanadium	31420-023		59	ug/g	27	103		75	125	2	
		Zinc	31420-023		100	ug/g	27.6	6	*	75	125	2	
SW3051A6010C	BLK7400	Arsenic		<	0.50	ug/g							
		Chromium		<	2.5	ug/g							
		Antimony		<	0.30	ug/g							
SW3051A6010C	CRM7400	Arsenic			430	ug/g	400			292	508		
		Chromium			13	ug/g	14			2.45	24.7		
		Antimony			5.1	ug/g	8.4			0	21.4		
SW3051A6010C	CRMD7400	Arsenic			420	ug/g	400			292	508	1	35
		Chromium			13	ug/g	14			2.45	24.7	6	35
		Antimony			5.3	ug/g	8.4			0	21.4	4	35
SW3051A6010C	MS7400	Arsenic	31599-003		58	ug/g	35	94		75	125		
		Chromium	31599-003		65	ug/g	35	84		75	125		
		Antimony	31599-003		28	ug/g	35	79		75	125		
SW3051A6010C	MSD7400	Arsenic	31599-003		57	ug/g	35	92		75	125	1	35
		Chromium	31599-003		64	ug/g	35	82		75	125	1	35
		Antimony	31599-003		27	ug/g	35	77		75	125	3	35

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

31420

Company Name: Credere Associates, LLC
Company Address: 776 Main St, Westbrook, ME
Report To: Allison Drouin
Phone #: 207-749-1141
Invoice to Email: TPatten@credenellc.com
☐ Hard Copy Invoice Required

Project Name: Ferrari
Project #: 14001247
Project Location: (NH) MA ME VT NY Other
Protocol: RCRA SDWA NPDES MCP (NHDES) OTHER
Reporting Limits: (QAPP) GW-1 S-1 EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	Sampling: TIME	SAMPLER
31420-01	Trip Blank	1								X		—	
-02	DUP-1											—	
	DUP-2												
-03	CA-SB-1(0-2)	1		X							10/27/14	0840	
-04	CA-SS-6(0-2)	1		X								1151	
-05	CA-SS-7(0-2)	1		X								1205	
-06	CA-SS-5(0-2)	1		X								1230	
-07	CA-SS-4(0-2)	1		X								1245	
-08	CA-SS-1(0-2)	1		X								1300	
-09	CA-SS-2(0-2)	1		X								1310	
-10	DUP-CC	1		X								—	

| Lab Sample ID | VOC 8260 | VOC 8260 NHDES | VOC BTEX | MtBE, only | VOC 8021VT | VPH MADEP | MEGRO | GRO 8015 | 1,4-Dioxane | VOC 524.2 | VOC 524.2 NH List | Gases-List: | TPH | DRO 8015 | MEDRO | EPH MADEP | TPH Fingerprint | 8270PAH | 8270ABN | 625 | EDB | SVOC | 8082 PCB | 8081 Pesticides | 608 Pest/PCB | O&G 1664 | Mineral O&G SM5520F | pH | BOD | Conductivity | Turbidity | TSS | TDS | TVS | Alkalinity | RCRA Metals | Priority Pollutant Metals | TAL Metals | Hardness | Total Metals-list: | Pb | Dissolved Metals-list: | Ammonia | COD | TKN | TN | TON | TOC | T-Phosphorus | Phenols | Bacteria P/A | Bacteria MPN | Cyanide | Sulfide | Nitrate + Nitrite | Ortho P | Nitrate | Nitrite | Chloride | Sulfate | Bromide | Fluoride | Corrosivity | Reactive CN | Reactive S- | Ignitibility/FP | TCLP Metals | TCLP VOC | TCLP SVOC | TCLP Pesticide | Subcontract: | Grain Size | Herbicides | Formaldehyde | Grab (G) or Composite (C) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Company Name: Credere Associates, LLC
Company Address: 776 Main St, Westbrook, ME
Report To: Alison Drouin
Phone #: 207-749-1141
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Project Name: Ferrari
Project #: 14001247
Project Location: (NH) MA ME VT NY Other
Protocol: RCRA SDWA NPDES MCP (NHDES) OTHER
Reporting Limits: (QAPP) GW-1 S-1 EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	☒ VOC 8260	☐ VOC 624	☐ VPH MADEP	☐ VOC 524.2	☐ TPH	☐ DRO 8015	☐ 8270PAH	☐ 8270ABN	☐ 8082 PCB	☐ O&G 1664	☐ pH	☐ TSS	☒ RCRA Metals	☒ Total Metals-list: Pb	☐ Ammonia	☐ T-Phosphorus	☐ Cyanide	☐ Nitrate	☐ Nitrite	☐ Corrosivity	☐ TCLP Metals	Subcontract:	Grab (G) or Composite (C)
31420-11	CA-CC-3	1		X							10/27/14	1400	SM									X													
-12	CA-CC-1	1		X								1430	SM									X													
-13	CA-CC-2	1		X								1450	SM									X													
-14	CA-SB-2(0-2)	1		X							10/30/14	1000	AD								X	X				X									
-15 *	CA-SB-2(15-17/15.5)	2		X						X		1030	AD	X							X	X				X									
-16	CA-SB-3(16-18/17)	2		X						X		1140	AD	X				X			X					X									
-17	CA-SS-3(0-2)	1		X								1200	AD								X	X				X									
-18	CA-SB-6(0.5-10/2)	2		X						X		1255	AD	X							X	X				X									
-19	CA-SB-6(10.5-12.5/11)	2		X						X		1300	AD	X							X	X				X									
-20	CA-SB-4(14-16/15)	2		X						X		1400	AD	X							X														
-21	CA-SB-4(0-7/3)	2		X						X		1405	AD	X							X	X				X									

(Soxhlet) (HOLD)

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (5 Business Days) X
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS: *SB-2(15-17/15.5)
(Three concrete samples (CA-CC + DUP-CC) soxhlet extraction)

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) adrouin@credenellc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 4 °C

CUSTODY RECORD
QSD-01 Revision 08/05/14

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
Alison Drouin	10/31/14	1120	[signature]	10/31/14	1120
Relinquished by: [signature]	10/31/14	1305	Received by:	Date	Time
Relinquished by:	Date	Time	Received by Laboratory: Alison Patten	Date 10-31-14	Time 14:07

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Company Name: Credere Associates, LLC
Company Address: 776 Main St. Westbrook, ME
Report To: Allison Drown
Phone #: 207-749-1141
Invoice to Email: TPatten@crederellc.com
☐ Hard Copy Invoice Required

Project Name:
Project #: 14001247
Project Location: (NH) MA ME VT NY Other
Protocol: RCRA SDWA NPDES MCP (NHDES) OTHER
Reporting Limits: (QAPP) GW-1 S-1 EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	SAMPLER	☒ VOC 8260	8270PAH	8082 PCB	Total Metals-list: Pb	T-Phosphorus (Hold)	Nitrate (MS/MSD)	Ortho P (Hold)
31420-22	CA-SB-4(7-9/5)	2		X			-			X	10/30/14	1410		X	X	X	X			
-23	CA-SB-5(0-4/1)	4		↓								1500		X	X	X	X			
-24	CA-SB-5(4-6/5)	2										1505		X	X	X	X			
-25	CA-SB-5(20-22/20)	2		↓								1515		X	X					

Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde
Grab (G) or Composite (C)

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (5 Business Days) ☒
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS MS/MSD volume for metals at CA-SB-5(0-4/1)
~~VPH 5ml to Spectrum~~

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) adrown@crederellc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO #
TEMPERATURE °C

CUSTODY RECORD
QSD-01 Revision 08/05/14

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
Allison Drown	10/31/14	1120		10/31/14	1120
Relinquished by:	Date	Time	Received by:	Date	Time
	10/31/14	1310			
Relinquished by:	Date	Time	Received by Laboratory:	Date	Time
				10-31-14	14:30

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Allison Drouin
CREDERE Associates
776 Main Street
Westbrook, ME 04092

PO Number: None
Job ID: 31599
Date Received: 11/14/14

Project: Ferrari 14001247

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 12/12/2014
Total number of pages: 116

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Ferrari 14001247
Lab ID: 31599

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
Trip Blank	Water	11/12/2014 0:00	31599-001	
				VOCs in water by 8260 Petro & Haz Waste
CA-MW-1	Water	11/12/2014 8:45	31599-002	
				Acid & Base/Neutral Extractables in water by 8270
				Dissolved Metals Prep for ICP Analysis
				Silver in water by 6010
				Arsenic in water by 6010
				Beryllium in water by 6010
				Cadmium in water by 6010
				Chromium in water by 6010
				Copper in water by 6010
				Mercury in water by 7470
				Nickel in water by 6010
				Lead in water by 6010
				Antimony in water by 6010
				Selenium in water by 6010
				Thallium in water by 6010
				Zinc in water by 6010
				VOCs in water by 8260 Petro & Haz Waste
CA-TP-3 (3.5-8/4)	Solid	11/12/2014 10:00	31599-003	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Copper in solids by 6010
				Mercury in solids by 7471
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-TP-2 (0-3.5/1.5)	Solid	11/12/2014 11:00	31599-004	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Copper in solids by 6010
				Mercury in solids by 7471
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010

Absolute Resource associates

Project ID: Ferrari 14001247

Lab ID: 31599

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-TP-2 (0-3.5/1.5)	Solid	11/12/2014 11:00	31599-004	
				Selenium in solids by 6010
				Thallium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-TP-2 (3.5-5.5/4)	Solid	11/12/2014 11:10	31599-005	
				Acid & Base/Neutral Extractables in solid by 8270
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-TP-1 (0-6/2)	Solid	11/12/2014 13:00	31599-006	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Copper in solids by 6010
				Mercury in solids by 7471
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-MW-2	Water	11/13/2014 9:10	31599-007	
				Acid & Base/Neutral Extractables in water by 8270
				Dissolved Metals Prep for ICP Analysis
				Silver in water by 6010
				Arsenic in water by 6010
				Beryllium in water by 6010
				Cadmium in water by 6010
				Chromium in water by 6010
				Copper in water by 6010
				Mercury in water by 7470
				Nickel in water by 6010
				Lead in water by 6010
				Antimony in water by 6010
				Selenium in water by 6010
				Thallium in water by 6010
				Zinc in water by 6010
				VOCs in water by 8260 Petro & Haz Waste
CA-MW-3	Water	11/13/2014 11:00	31599-008	
				Acid & Base/Neutral Extractables in water by 8270
				Dissolved Metals Prep for ICP Analysis
				Silver in water by 6010
				Arsenic in water by 6010
				Beryllium in water by 6010

Project ID: Ferrari 14001247

Lab ID: 31599

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-MW-3	Water	11/13/2014 11:00	31599-008	
				Cadmium in water by 6010
				Chromium in water by 6010
				Copper in water by 6010
				Mercury in water by 7470
				Nickel in water by 6010
				Lead in water by 6010
				Antimony in water by 6010
				Selenium in water by 6010
				Thallium in water by 6010
				Zinc in water by 6010
				VOCs in water by 8260 Petro & Haz Waste
CA-MW-4	Water	11/13/2014 12:40	31599-009	
				Acid & Base/Neutral Extractables in water by 8270
				Dissolved Metals Prep for ICP Analysis
				Silver in water by 6010
				Arsenic in water by 6010
				Beryllium in water by 6010
				Cadmium in water by 6010
				Chromium in water by 6010
				Copper in water by 6010
				Mercury in water by 7470
				Nickel in water by 6010
				Lead in water by 6010
				Antimony in water by 6010
				Selenium in water by 6010
				Thallium in water by 6010
				Zinc in water by 6010
				VOCs in water by 8260 Petro & Haz Waste
CA-MW-5	Water	11/13/2014 13:35	31599-010	
				Acid & Base/Neutral Extractables in water by 8270
				Dissolved Metals Prep for ICP Analysis
				Silver in water by 6010
				Arsenic in water by 6010
				Beryllium in water by 6010
				Cadmium in water by 6010
				Chromium in water by 6010
				Copper in water by 6010
				Mercury in water by 7470
				Nickel in water by 6010
				Lead in water by 6010
				Antimony in water by 6010
				Selenium in water by 6010
				Thallium in water by 6010
				Zinc in water by 6010
				VOCs in water by 8260 Petro & Haz Waste
CA-MW-6	Water	11/13/2014 14:10	31599-011	
				Acid & Base/Neutral Extractables in water by 8270
				Dissolved Metals Prep for ICP Analysis
				Silver in water by 6010
				Arsenic in water by 6010
				Beryllium in water by 6010

Project ID: Ferrari 14001247

Lab ID: 31599

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-MW-6	Water	11/13/2014 14:10	31599-011	
				Cadmium in water by 6010
				Chromium in water by 6010
				Copper in water by 6010
				Mercury in water by 7470
				Nickel in water by 6010
				Lead in water by 6010
				Antimony in water by 6010
				Selenium in water by 6010
				Thallium in water by 6010
				Zinc in water by 6010
				VOCs in water by 8260 Petro & Haz Waste
DUP-GW-1	Water	11/13/2014 0:00	31599-012	
				Acid & Base/Neutral Extractables in water by 8270
				Dissolved Metals Prep for ICP Analysis
				Silver in water by 6010
				Arsenic in water by 6010
				Beryllium in water by 6010
				Cadmium in water by 6010
				Chromium in water by 6010
				Copper in water by 6010
				Mercury in water by 7470
				Nickel in water by 6010
				Lead in water by 6010
				Antimony in water by 6010
				Selenium in water by 6010
				Thallium in water by 6010
				Zinc in water by 6010
				VOCs in water by 8260 Petro & Haz Waste
DUP-2	Solid	11/12/2014 0:00	31599-013	
				PCBs in soil by 8082
				Acid & Base/Neutral Extractables in solid by 8270
				Soil Digestion for ICP Analysis
				Silver in solids by 6010
				Arsenic in solids by 6010
				Beryllium in solids by 6010
				Cadmium in solids by 6010
				Chromium in solids by 6010
				Copper in solids by 6010
				Mercury in solids by 7471
				Nickel in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Selenium in solids by 6010
				Thallium in solids by 6010
				Zinc in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-TP-A3	Solid	11/12/2014 12:30	31599-014	
				PAHs in solid by 8270
				Solid Digestion for ICP Analysis
				Arsenic in solids by 6010

Project ID: Ferrari 14001247
Lab ID: 31599

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-TP-A3	Solid	11/12/2014 12:30	31599-014	
				Chromium in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-001
Sample ID: Trip Blank
Matrix: Water
Sampled: 11/12/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-001
Sample ID: Trip Blank
Matrix: Water
Sampled: 11/12/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**101**	78-114	%	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
toluene-D8 SUR	**104**	88-110	%	1	LMM		1403166	11/20/14	20:49	SW5030C8260C
4-bromofluorobenzene SUR	**103**	86-115	%	1	LMM		1403166	11/20/14	20:49	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-002
Sample ID: CA-MW-1
Matrix: Water
Sampled: 11/12/14 8:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-002
Sample ID: CA-MW-1
Matrix: Water
Sampled: 11/12/14 8:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**100**	78-114	%	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
toluene-D8 SUR	**102**	88-110	%	1	LMM		1403133	11/19/14	22:33	SW5030C8260C
4-bromofluorobenzene SUR	**97**	86-115	%	1	LMM		1403133	11/19/14	22:33	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-003
Sample ID: CA-TP-3 (3.5-8/4)
Matrix: Solid Percent Dry: 69.8% Results expressed on a dry weight basis.
Sampled: 11/12/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
chloromethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
vinyl chloride	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
bromomethane	< 0.8	0.8	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
chloroethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
trichlorofluoromethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
diethyl ether	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
acetone	< 8	8	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,1-dichloroethene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
methylene chloride	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
carbon disulfide	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
trans-1,2-dichloroethene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
isopropyl ether (DIPE)	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,1-dichloroethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
t-butanol (TBA)	< 8	8	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
2-butanone (MEK)	< 1.0	1.0	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
2,2-dichloropropane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
cis-1,2-dichloroethene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
chloroform	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
bromochloromethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
tetrahydrofuran (THF)	< 1.6	1.6	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,1,1-trichloroethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,1-dichloropropene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
carbon tetrachloride	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,2-dichloroethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
benzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
trichloroethene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,2-dichloropropane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
bromodichloromethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,4-dioxane	< 8	8	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
dibromomethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 1.4	1.4	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
cis-1,3-dichloropropene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
toluene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
trans-1,3-dichloropropene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
2-hexanone	< 1.6	1.6	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,1,2-trichloroethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,3-dichloropropane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
tetrachloroethene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
dibromochloromethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-003
Sample ID: CA-TP-3 (3.5-8/4)
Matrix: Solid Percent Dry: 69.8% Results expressed on a dry weight basis.
Sampled: 11/12/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
chlorobenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
ethylbenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
m&p-xylenes	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
o-xylene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
styrene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
bromoform	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
isopropylbenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,2,3-trichloropropane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
n-propylbenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
bromobenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,3,5-trimethylbenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
2-chlorotoluene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
4-chlorotoluene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
tert-butylbenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,2,4-trimethylbenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
sec-butylbenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,3-dichlorobenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
4-isopropyltoluene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,4-dichlorobenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,2-dichlorobenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
n-butylbenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,2,4-trichlorobenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,3,5-trichlorobenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
hexachlorobutadiene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
naphthalene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
1,2,3-trichlorobenzene	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**97**	78-114	%	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
toluene-D8 SUR	**104**	88-110	%	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C
a,a,a-trifluorotoluene SUR	**103**	70-130	%	1	LMM	11/17/14	7396	11/19/14	23:03	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-004
Sample ID: CA-TP-2 (0-3.5/1.5)
Matrix: Solid Percent Dry: 83.1% Results expressed on a dry weight basis.
Sampled: 11/12/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
tetrahydrofuran (THF)	< 0.7	0.7	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.6	0.6	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
2-hexanone	< 0.7	0.7	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
tetrachloroethene	**5.4**	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-004
Sample ID: CA-TP-2 (0-3.5/1.5)
Matrix: Solid Percent Dry: 83.1% Results expressed on a dry weight basis.
Sampled: 11/12/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
4-bromofluorobenzene SUR	**103**	86-115	%	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C
a,a,a-trifluorotoluene SUR	**103**	70-130	%	1	LMM	11/17/14	7396	11/19/14	23:33	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-005
Sample ID: CA-TP-2 (3.5-5.5/4)
Matrix: Solid Percent Dry: 79.8% Results expressed on a dry weight basis.
Sampled: 11/12/14 11:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
tetrahydrofuran (THF)	< 0.6	0.6	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.5	0.5	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
2-hexanone	< 0.6	0.6	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
tetrachloroethene	**0.2**	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-005
Sample ID: CA-TP-2 (3.5-5.5/4)
Matrix: Solid Percent Dry: 79.8% Results expressed on a dry weight basis.
Sampled: 11/12/14 11:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**99**	78-114	%	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
toluene-D8 SUR	**106**	88-110	%	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
4-bromofluorobenzene SUR	**105**	86-115	%	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C
a,a,a-trifluorotoluene SUR	**107**	70-130	%	1	LMM	11/24/14	7415	11/24/14	19:28	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-006
Sample ID: CA-TP-1 (0-6/2)
Matrix: Solid Percent Dry: 83.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
chloromethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
vinyl chloride	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
bromomethane	< 0.6	0.6	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
chloroethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
trichlorofluoromethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
diethyl ether	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
acetone	< 6	6	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,1-dichloroethene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
carbon disulfide	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
trans-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
isopropyl ether (DIPE)	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,1-dichloroethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
t-butanol (TBA)	< 6	6	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
2-butanone (MEK)	< 0.7	0.7	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
2,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
cis-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
chloroform	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
bromochloromethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
tetrahydrofuran (THF)	< 1.2	1.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,1,1-trichloroethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,1-dichloropropene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
carbon tetrachloride	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,2-dichloroethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
benzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
trichloroethene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
bromodichloromethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,4-dioxane	< 6	6	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
dibromomethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 1.1	1.1	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
cis-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
toluene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
trans-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
2-hexanone	< 1.2	1.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,1,2-trichloroethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,3-dichloropropane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
tetrachloroethene	**2.8**	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
dibromochloromethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-006
Sample ID: CA-TP-1 (0-6/2)
Matrix: Solid Percent Dry: 83.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
chlorobenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
ethylbenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
m&p-xylenes	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
o-xylene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
styrene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
bromoform	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
isopropylbenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,2,3-trichloropropane	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
n-propylbenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
bromobenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,3,5-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
2-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
4-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
tert-butylbenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,2,4-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
sec-butylbenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
4-isopropyltoluene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
n-butylbenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,2,4-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,3,5-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
hexachlorobutadiene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
1,2,3-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**94**	78-114	%	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
toluene-D8 SUR	**104**	88-110	%	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C
a,a,a-trifluorotoluene SUR	**99**	70-130	%	1	LMM	11/17/14	7396	11/20/14	0:03	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-007
Sample ID: CA-MW-2
Matrix: Water
Sampled: 11/13/14 9:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-007
Sample ID: CA-MW-2
Matrix: Water
Sampled: 11/13/14 9:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**98**	78-114	%	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
toluene-D8 SUR	**102**	88-110	%	1	LMM		1403133	11/20/14	0:33	SW5030C8260C
4-bromofluorobenzene SUR	**103**	86-115	%	1	LMM		1403133	11/20/14	0:33	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-008
Sample ID: CA-MW-3
Matrix: Water
Sampled: 11/13/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-008
Sample ID: CA-MW-3
Matrix: Water
Sampled: 11/13/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**99**	78-114	%	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM		1403133	11/20/14	1:03	SW5030C8260C
4-bromofluorobenzene SUR	**100**	86-115	%	1	LMM		1403133	11/20/14	1:03	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-009
Sample ID: CA-MW-4
Matrix: Water
Sampled: 11/13/14 12:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-009
Sample ID: CA-MW-4
Matrix: Water
Sampled: 11/13/14 12:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**107**	78-114	%	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
toluene-D8 SUR	**103**	88-110	%	1	LMM		1403150	11/20/14	12:03	SW5030C8260C
4-bromofluorobenzene SUR	**103**	86-115	%	1	LMM		1403150	11/20/14	12:03	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-010
Sample ID: CA-MW-5
Matrix: Water
Sampled: 11/13/14 13:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
vinyl chloride	**3**	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
cis-1,2-dichloroethene	**44**	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
trichloroethene	**25**	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
tetrachloroethene	**65**	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-010
Sample ID: CA-MW-5
Matrix: Water
Sampled: 11/13/14 13:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**102**	78-114	%	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
toluene-D8 SUR	**102**	88-110	%	1	LMM		1403150	11/20/14	12:33	SW5030C8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM		1403150	11/20/14	12:33	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-011
Sample ID: CA-MW-6
Matrix: Water
Sampled: 11/13/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
cis-1,2-dichloroethene	**5**	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
trichloroethene	**3**	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
tetrachloroethene	**18**	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-011
Sample ID: CA-MW-6
Matrix: Water
Sampled: 11/13/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**103**	78-114	%	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
toluene-D8 SUR	**104**	88-110	%	1	LMM		1403150	11/20/14	13:03	SW5030C8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM		1403150	11/20/14	13:03	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-012
Sample ID: DUP-GW-1
Matrix: Water
Sampled: 11/13/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
chloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
vinyl chloride	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
bromomethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
chloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
trichlorofluoromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
diethyl ether	< 5	5	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
acetone	< 50	50	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,1-dichloroethene	< 1	1	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
methylene chloride	< 5	5	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
carbon disulfide	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
trans-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
isopropyl ether (DIPE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
ethyl t-butyl ether (ETBE)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,1-dichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
t-butanol (TBA)	< 30	30	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
2-butanone (MEK)	< 10	10	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
2,2-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
cis-1,2-dichloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
chloroform	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
bromochloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
tetrahydrofuran (THF)	< 10	10	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,1,1-trichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,1-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
t-amyl-methyl ether (TAME)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
carbon tetrachloride	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,2-dichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
benzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
trichloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,2-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
bromodichloromethane	< 0.6	0.6	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,4-dioxane	< 50	50	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
dibromomethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
4-methyl-2-pentanone (MIBK)	< 10	10	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
cis-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
toluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
trans-1,3-dichloropropene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
2-hexanone	< 10	10	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,1,2-trichloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,3-dichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
tetrachloroethene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
dibromochloromethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-012
Sample ID: DUP-GW-1
Matrix: Water
Sampled: 11/13/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
chlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,1,1,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
ethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
m&p-xylenes	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
o-xylene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
styrene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
bromoform	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
isopropylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,1,2,2-tetrachloroethane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,2,3-trichloropropane	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
n-propylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
bromobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
2-chlorotoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
4-chlorotoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
tert-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
sec-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,3-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
4-isopropyltoluene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,4-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,2-dichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
n-butylbenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,2-dibromo-3-chloropropane (DBCP)	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,2,4-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,3,5-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
hexachlorobutadiene	< 0.5	0.5	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
naphthalene	< 5	5	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
1,2,3-trichlorobenzene	< 2	2	ug/L	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**104**	78-114	%	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
toluene-D8 SUR	**102**	88-110	%	1	LMM		1403150	11/20/14	13:33	SW5030C8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM		1403150	11/20/14	13:33	SW5030C8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-013
Sample ID: DUP-2
Matrix: Solid Percent Dry: 84.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
tetrahydrofuran (THF)	< 0.6	0.6	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.6	0.6	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
2-hexanone	< 0.6	0.6	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
tetrachloroethene	**3.5**	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-013
Sample ID: DUP-2
Matrix: Solid Percent Dry: 84.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
4-bromofluorobenzene SUR	**102**	86-115	%	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C
a,a,a-trifluorotoluene SUR	**101**	70-130	%	1	LMM	11/17/14	7396	11/20/14	14:02	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-014
Sample ID: CA-TP-A3
Matrix: Solid Percent Dry: 86.2% Results expressed on a dry weight basis.
Sampled: 11/12/14 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.5	0.5	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-014
Sample ID: CA-TP-A3 (0-4/2)
Matrix: Solid Percent Dry: 86.2% Results expressed on a dry weight basis.
Sampled: 11/12/14 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**97**	78-114	%	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
4-bromofluorobenzene SUR	**102**	86-115	%	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C
a,a,a-trifluorotoluene SUR	**96**	70-130	%	1	LMM	12/2/14	7441	12/5/14	17:29	SW5035A8260C

Note: Sample analysis was requested by customer beyond the method holding time.

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-002
Sample ID: CA-MW-1
Matrix: Water
Sampled: 11/12/14 8:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
aniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
phenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
2-chlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
bis(2-chloroethyl)ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
1,3-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
1,4-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
1,2-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
benzyl alcohol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
2-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
bis(2-chloroisopropyl) ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
hexachloroethane	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
N-nitroso-di-N-propylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
4-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
nitrobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
isophorone	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
2-nitrophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
2,4-dimethylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
bis(2-chloroethoxy)methane	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
2,4-dichlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
1,2,4-trichlorobenzene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
naphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
benzoic acid	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
4-chloroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
hexachlorobutadiene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
4-chloro-3-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
hexachlorocyclopentadiene	< 9	9	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
2,4,6-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
2,4,5-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
2-chloronaphthalene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
2-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
dimethylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
2,6-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
2,4-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
acenaphthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
3-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
2,4-dinitrophenol	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
dibenzofuran	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
4-nitrophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
fluorene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
diethyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-002
Sample ID: CA-MW-1
Matrix: Water
Sampled: 11/12/14 8:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
4-nitroaniline	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
4,6-dinitro-2-methylphenol	< 19	19	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
azobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
N-nitrosodiphenylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
4-bromophenyl phenyl ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
hexachlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
pentachlorophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
phenanthrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
carbazole	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
di-n-butylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
benzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
butyl benzyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
chrysene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
3,3'-dichlorobenzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
bis(2-ethylhexyl)phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
di-n-octyl phthalate	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**25**	21-100	%	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
phenol-D5 SUR	**15**	10-102	%	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
2,4,6-tribromophenol SUR	**74**	10-123	%	1	AJD	11/18/14	7395	11/18/14	16:42	SW3510C8270D
nitrobenzene-D5 SUR	**66**	35-114	%	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
2-fluorobiphenyl SUR	**57**	43-116	%	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D
p-terphenyl-D14 SUR	**84**	33-141	%	1	AJD	11/18/14	7395	11/19/14	8:03	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-003
Sample ID: CA-TP-3 (3.5-8/4)
Matrix: Solid Percent Dry: 69.8% Results expressed on a dry weight basis.
Sampled: 11/12/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
aniline	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
phenol	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2-chlorophenol	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
bis(2-chloroethyl)ether	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
1,3-dichlorobenzene	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
1,4-dichlorobenzene	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
1,2-dichlorobenzene	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
benzyl alcohol	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2-methylphenol	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
bis(2-chloroisopropyl) ether	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
hexachloroethane	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
N-nitroso-di-N-propylamine	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
4-methylphenol	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
nitrobenzene	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
isophorone	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2-nitrophenol	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2,4-dimethylphenol	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
bis(2-chloroethoxy)methane	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2,4-dichlorophenol	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
1,2,4-trichlorobenzene	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
naphthalene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
benzoic acid	< 140	140	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
4-chloroaniline	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
hexachlorobutadiene	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
4-chloro-3-methylphenol	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2-methylnaphthalene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
hexachlorocyclopentadiene	< 28	28	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2,4,6-trichlorophenol	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2,4,5-trichlorophenol	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2-chloronaphthalene	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2-nitroaniline	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
acenaphthylene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
dimethylphthalate	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2,6-dinitrotoluene	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2,4-dinitrotoluene	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
acenaphthene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
3-nitroaniline	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2,4-dinitrophenol	< 140	140	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
dibenzofuran	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
4-nitrophenol	< 57	57	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
fluorene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
diethyl phthalate	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-003
Sample ID: CA-TP-3 (3.5-8/4)
Matrix: Solid Percent Dry: 69.8% Results expressed on a dry weight basis.
Sampled: 11/12/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
4-nitroaniline	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
4,6-dinitro-2-methylphenol	< 57	57	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
azobenzene	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
N-nitrosodiphenylamine	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
4-bromophenyl phenyl ether	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
hexachlorobenzene	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
pentachlorophenol	< 28	28	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
phenanthrene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
anthracene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
carbazole	< 5.7	5.7	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
di-n-butylphthalate	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
fluoranthene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
benzidine	< 85	85	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
pyrene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
butyl benzyl phthalate	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
benzo(a)anthracene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
chrysene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
3,3'-dichlorobenzidine	< 85	85	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
di-n-octyl phthalate	< 14	14	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
benzo(b)fluoranthene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
benzo(k)fluoranthene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
benzo(a)pyrene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
dibenzo(a,h)anthracene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
benzo(g,h,i)perylene	< 1.4	1.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**38**	21-100	%	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
phenol-D5 SUR	**36**	10-102	%	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2,4,6-tribromophenol SUR	**39**	10-123	%	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
nitrobenzene-D5 SUR	**38**	35-114	%	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
2-fluorobiphenyl SUR	**38 #**	43-116	%	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D
p-terphenyl-D14 SUR	**49**	33-141	%	20	AJD	11/19/14	7404	11/21/14	23:40	SW3546/8270D

Note: Dilution was required due to the presence of hydrocarbons in the sample.
 # The surrogate showed recovery outside the acceptance limits as a result of hydrocarbons present in the sample.

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-004
Sample ID: CA-TP-2 (0-3.5/1.5)
Matrix: Solid Percent Dry: 83.1% Results expressed on a dry weight basis.
Sampled: 11/12/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
aniline	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
phenol	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2-chlorophenol	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
bis(2-chloroethyl)ether	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
1,3-dichlorobenzene	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
1,4-dichlorobenzene	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
1,2-dichlorobenzene	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
benzyl alcohol	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2-methylphenol	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
bis(2-chloroisopropyl) ether	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
hexachloroethane	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
N-nitroso-di-N-propylamine	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
4-methylphenol	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
nitrobenzene	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
isophorone	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2-nitrophenol	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2,4-dimethylphenol	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
bis(2-chloroethoxy)methane	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2,4-dichlorophenol	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
1,2,4-trichlorobenzene	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
naphthalene	< 0.30	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
benzoic acid	< 30	30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
4-chloroaniline	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
hexachlorobutadiene	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
4-chloro-3-methylphenol	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2-methylnaphthalene	< 0.30	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
hexachlorocyclopentadiene	< 6	6	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2,4,6-trichlorophenol	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2,4,5-trichlorophenol	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2-chloronaphthalene	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2-nitroaniline	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
acenaphthylene	< 0.30	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
dimethylphthalate	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2,6-dinitrotoluene	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2,4-dinitrotoluene	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
acenaphthene	< 0.30	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
3-nitroaniline	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2,4-dinitrophenol	< 30	30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
dibenzofuran	< 0.30	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
4-nitrophenol	< 12	12	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
fluorene	< 0.30	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
diethyl phthalate	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-004
Sample ID: CA-TP-2 (0-3.5/1.5)
Matrix: Solid Percent Dry: 83.1% Results expressed on a dry weight basis.
Sampled: 11/12/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
4-nitroaniline	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
4,6-dinitro-2-methylphenol	< 12	12	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
azobenzene	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
N-nitrosodiphenylamine	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
4-bromophenyl phenyl ether	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
hexachlorobenzene	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
pentachlorophenol	< 6	6	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
phenanthrene	**4.2**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
anthracene	**0.89**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
carbazole	< 1.2	1.2	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
di-n-butylphthalate	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
fluoranthene	**4.5**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
benzidine	< 18	18	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
pyrene	**4.3**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
butyl benzyl phthalate	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
benzo(a)anthracene	**2.1**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
chrysene	**2.2**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
3,3'-dichlorobenzidine	< 18	18	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
di-n-octyl phthalate	< 3.0	3.0	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
benzo(b)fluoranthene	**1.4**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
benzo(k)fluoranthene	**1.8**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
benzo(a)pyrene	**1.7**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
indeno(1,2,3-cd)pyrene	**0.89**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
dibenzo(a,h)anthracene	**0.40**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
benzo(g,h,i)perylene	**0.98**	0.30	ug/g	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**60**	21-100	%	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
phenol-D5 SUR	**62**	10-102	%	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2,4,6-tribromophenol SUR	**65**	10-123	%	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
nitrobenzene-D5 SUR	**58**	35-114	%	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
2-fluorobiphenyl SUR	**56**	43-116	%	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D
p-terphenyl-D14 SUR	**68**	33-141	%	5	AJD	11/19/14	7404	11/21/14	21:50	SW3546/8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-005
Sample ID: CA-TP-2 (3.5-5.5/4)
Matrix: Solid Percent Dry: 79.8% Results expressed on a dry weight basis.
Sampled: 11/12/14 11:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2-chlorophenol	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
isophorone	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2,4-dichlorophenol	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
1,2,4-trichlorobenzene	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
naphthalene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
benzoic acid	< 6	6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2-methylnaphthalene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2-chloronaphthalene	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
acenaphthylene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
dimethylphthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
acenaphthene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2,4-dinitrophenol	< 6	6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
dibenzofuran	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
fluorene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
diethyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-005
Sample ID: CA-TP-2 (3.5-5.5/4)
Matrix: Solid Percent Dry: 79.8% Results expressed on a dry weight basis.
Sampled: 11/12/14 11:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
4-nitroaniline	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
phenanthrene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
anthracene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
carbazole	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
di-n-butylphthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
benzidine	< 4	4	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
pyrene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
butyl benzyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
benzo(a)anthracene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
chrysene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
3,3'-dichlorobenzidine	< 4	4	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
di-n-octyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
benzo(b)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
benzo(k)fluoranthene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
benzo(a)pyrene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
dibenzo(a,h)anthracene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
benzo(g,h,i)perylene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**76**	21-100	%	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
phenol-D5 SUR	**78**	10-102	%	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2,4,6-tribromophenol SUR	**71**	10-123	%	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
nitrobenzene-D5 SUR	**62**	35-114	%	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
2-fluorobiphenyl SUR	**60**	43-116	%	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D
p-terphenyl-D14 SUR	**83**	33-141	%	1	AJD	11/19/14	7404	12/2/14	16:44	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-006
Sample ID: CA-TP-1 (0-6/2)
Matrix: Solid Percent Dry: 83.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
aniline	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
phenol	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2-chlorophenol	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
bis(2-chloroethyl)ether	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
1,3-dichlorobenzene	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
1,4-dichlorobenzene	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
1,2-dichlorobenzene	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
benzyl alcohol	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2-methylphenol	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
bis(2-chloroisopropyl) ether	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
hexachloroethane	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
N-nitroso-di-N-propylamine	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
4-methylphenol	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
nitrobenzene	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
isophorone	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2-nitrophenol	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2,4-dimethylphenol	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
bis(2-chloroethoxy)methane	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2,4-dichlorophenol	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
1,2,4-trichlorobenzene	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
naphthalene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
benzoic acid	< 110	110	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
4-chloroaniline	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
hexachlorobutadiene	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
4-chloro-3-methylphenol	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2-methylnaphthalene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
hexachlorocyclopentadiene	< 22	22	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2,4,6-trichlorophenol	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2,4,5-trichlorophenol	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2-chloronaphthalene	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2-nitroaniline	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
acenaphthylene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
dimethylphthalate	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2,6-dinitrotoluene	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2,4-dinitrotoluene	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
acenaphthene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
3-nitroaniline	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2,4-dinitrophenol	< 110	110	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
dibenzofuran	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
4-nitrophenol	< 44	44	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
fluorene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
diethyl phthalate	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-006
Sample ID: CA-TP-1 (0-6/2)
Matrix: Solid Percent Dry: 83.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
4-nitroaniline	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
4,6-dinitro-2-methylphenol	< 44	44	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
azobenzene	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
N-nitrosodiphenylamine	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
4-bromophenyl phenyl ether	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
hexachlorobenzene	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
pentachlorophenol	< 22	22	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
phenanthrene	**2.7**	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
anthracene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
carbazole	< 4.4	4.4	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
di-n-butylphthalate	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
fluoranthene	**3.2**	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
benzidine	< 66	66	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
pyrene	**4.1**	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
butyl benzyl phthalate	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
benzo(a)anthracene	**1.6**	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
chrysene	**2.9**	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
3,3'-dichlorobenzidine	< 66	66	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
di-n-octyl phthalate	< 11	11	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
benzo(b)fluoranthene	**1.2**	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
benzo(k)fluoranthene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
benzo(a)pyrene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
indeno(1,2,3-cd)pyrene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
dibenzo(a,h)anthracene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
benzo(g,h,i)perylene	< 1.1	1.1	ug/g	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**34**	21-100	%	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
phenol-D5 SUR	**31**	10-102	%	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2,4,6-tribromophenol SUR	**31**	10-123	%	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
nitrobenzene-D5 SUR	**27 #**	35-114	%	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
2-fluorobiphenyl SUR	**35 #**	43-116	%	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D
p-terphenyl-D14 SUR	**47**	33-141	%	20	AJD	11/19/14	7404	11/21/14	23:03	SW3546/8270D

Note: Dilution was required due to the presence of hydrocarbons in the sample.
 # The surrogate showed recovery outside the acceptance limits as a result of hydrocarbons present in the sample.

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-007
Sample ID: CA-MW-2
Matrix: Water
Sampled: 11/13/14 9:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
aniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
phenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
2-chlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
bis(2-chloroethyl)ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
1,3-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
1,4-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
1,2-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
benzyl alcohol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
2-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
bis(2-chloroisopropyl) ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
hexachloroethane	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
N-nitroso-di-N-propylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
4-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
nitrobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
isophorone	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
2-nitrophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
2,4-dimethylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
bis(2-chloroethoxy)methane	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
2,4-dichlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
1,2,4-trichlorobenzene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
naphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
benzoic acid	< 46	46	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
4-chloroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
hexachlorobutadiene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
4-chloro-3-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
hexachlorocyclopentadiene	< 9	9	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
2,4,6-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
2,4,5-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
2-chloronaphthalene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
2-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
dimethylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
2,6-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
2,4-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
acenaphthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
3-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
2,4-dinitrophenol	< 46	46	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
dibenzofuran	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
4-nitrophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
fluorene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
diethyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-007
Sample ID: CA-MW-2
Matrix: Water
Sampled: 11/13/14 9:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
4-nitroaniline	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
4,6-dinitro-2-methylphenol	< 19	19	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
azobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
N-nitrosodiphenylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
4-bromophenyl phenyl ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
hexachlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
pentachlorophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
phenanthrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
carbazole	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
di-n-butylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
benzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
butyl benzyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
chrysene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
3,3'-dichlorobenzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
bis(2-ethylhexyl)phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
di-n-octyl phthalate	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**26**	21-100	%	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
phenol-D5 SUR	**15**	10-102	%	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
2,4,6-tribromophenol SUR	**80**	10-123	%	1	AJD	11/18/14	7395	11/18/14	17:19	SW3510C8270D
nitrobenzene-D5 SUR	**67**	35-114	%	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
2-fluorobiphenyl SUR	**57**	43-116	%	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D
p-terphenyl-D14 SUR	**90**	33-141	%	1	AJD	11/18/14	7395	11/19/14	1:18	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-008
Sample ID: CA-MW-3
Matrix: Water
Sampled: 11/13/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
aniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
phenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
2-chlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
bis(2-chloroethyl)ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
1,3-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
1,4-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
1,2-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
benzyl alcohol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
2-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
bis(2-chloroisopropyl) ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
hexachloroethane	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
N-nitroso-di-N-propylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
4-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
nitrobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
isophorone	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
2-nitrophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
2,4-dimethylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
bis(2-chloroethoxy)methane	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
2,4-dichlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
1,2,4-trichlorobenzene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
naphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
benzoic acid	< 46	46	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
4-chloroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
hexachlorobutadiene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
4-chloro-3-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
hexachlorocyclopentadiene	< 9	9	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
2,4,6-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
2,4,5-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
2-chloronaphthalene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
2-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
dimethylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
2,6-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
2,4-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
acenaphthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
3-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
2,4-dinitrophenol	< 46	46	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
dibenzofuran	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
4-nitrophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
fluorene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
diethyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-008
Sample ID: CA-MW-3
Matrix: Water
Sampled: 11/13/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
4-nitroaniline	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
4,6-dinitro-2-methylphenol	< 19	19	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
azobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
N-nitrosodiphenylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
4-bromophenyl phenyl ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
hexachlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
pentachlorophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
phenanthrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
carbazole	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
di-n-butylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
benzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
butyl benzyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
chrysene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
3,3'-dichlorobenzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
bis(2-ethylhexyl)phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
di-n-octyl phthalate	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**20** *	21-100	%	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
phenol-D5 SUR	**12**	10-102	%	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
2,4,6-tribromophenol SUR	**75**	10-123	%	1	AJD	11/18/14	7395	11/18/14	17:56	SW3510C8270D
nitrobenzene-D5 SUR	**66**	35-114	%	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
2-fluorobiphenyl SUR	**58**	43-116	%	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D
p-terphenyl-D14 SUR	**92**	33-141	%	1	AJD	11/18/14	7395	11/19/14	1:55	SW3510C8270D

**** The surrogate showed recovery outside the acceptance limits. Matrix interference suspected.***

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-009
Sample ID: CA-MW-4
Matrix: Water
Sampled: 11/13/14 12:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
aniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
phenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
2-chlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
bis(2-chloroethyl)ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
1,3-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
1,4-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
1,2-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
benzyl alcohol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
2-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
bis(2-chloroisopropyl) ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
hexachloroethane	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
N-nitroso-di-N-propylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
4-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
nitrobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
isophorone	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
2-nitrophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
2,4-dimethylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
bis(2-chloroethoxy)methane	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
2,4-dichlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
1,2,4-trichlorobenzene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
naphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
benzoic acid	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
4-chloroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
hexachlorobutadiene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
4-chloro-3-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
hexachlorocyclopentadiene	< 9	9	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
2,4,6-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
2,4,5-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
2-chloronaphthalene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
2-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
dimethylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
2,6-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
2,4-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
acenaphthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
3-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
2,4-dinitrophenol	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
dibenzofuran	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
4-nitrophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
fluorene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
diethyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-009
Sample ID: CA-MW-4
Matrix: Water
Sampled: 11/13/14 12:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
4-nitroaniline	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
4,6-dinitro-2-methylphenol	< 19	19	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
azobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
N-nitrosodiphenylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
4-bromophenyl phenyl ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
hexachlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
pentachlorophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
phenanthrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
carbazole	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
di-n-butylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
benzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
butyl benzyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
chrysene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
3,3'-dichlorobenzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
bis(2-ethylhexyl)phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
di-n-octyl phthalate	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**28**	21-100	%	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
phenol-D5 SUR	**16**	10-102	%	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
2,4,6-tribromophenol SUR	**88**	10-123	%	1	AJD	11/18/14	7395	11/18/14	18:33	SW3510C8270D
nitrobenzene-D5 SUR	**59**	35-114	%	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
2-fluorobiphenyl SUR	**54**	43-116	%	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D
p-terphenyl-D14 SUR	**84**	33-141	%	1	AJD	11/18/14	7395	11/19/14	7:26	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-010
Sample ID: CA-MW-5
Matrix: Water
Sampled: 11/13/14 13:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
aniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
phenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
2-chlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
bis(2-chloroethyl)ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
1,3-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
1,4-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
1,2-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
benzyl alcohol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
2-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
bis(2-chloroisopropyl) ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
hexachloroethane	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
N-nitroso-di-N-propylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
4-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
nitrobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
isophorone	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
2-nitrophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
2,4-dimethylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
bis(2-chloroethoxy)methane	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
2,4-dichlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
1,2,4-trichlorobenzene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
naphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
benzoic acid	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
4-chloroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
hexachlorobutadiene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
4-chloro-3-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
hexachlorocyclopentadiene	< 9	9	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
2,4,6-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
2,4,5-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
2-chloronaphthalene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
2-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
dimethylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
2,6-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
2,4-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
acenaphthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
3-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
2,4-dinitrophenol	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
dibenzofuran	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
4-nitrophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
fluorene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
diethyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-010
Sample ID: CA-MW-5
Matrix: Water
Sampled: 11/13/14 13:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
4-nitroaniline	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
4,6-dinitro-2-methylphenol	< 19	19	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
azobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
N-nitrosodiphenylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
4-bromophenyl phenyl ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
hexachlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
pentachlorophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
phenanthrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
carbazole	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
di-n-butylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
benzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
butyl benzyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
chrysene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
3,3'-dichlorobenzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
bis(2-ethylhexyl)phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
di-n-octyl phthalate	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**24**	21-100	%	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
phenol-D5 SUR	**15**	10-102	%	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
2,4,6-tribromophenol SUR	**87**	10-123	%	1	AJD	11/18/14	7395	11/18/14	19:10	SW3510C8270D
nitrobenzene-D5 SUR	**67**	35-114	%	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
2-fluorobiphenyl SUR	**59**	43-116	%	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D
p-terphenyl-D14 SUR	**89**	33-141	%	1	AJD	11/18/14	7395	11/19/14	2:32	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-011
Sample ID: CA-MW-6
Matrix: Water
Sampled: 11/13/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
aniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
phenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
2-chlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
bis(2-chloroethyl)ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
1,3-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
1,4-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
1,2-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
benzyl alcohol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
2-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
bis(2-chloroisopropyl) ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
hexachloroethane	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
N-nitroso-di-N-propylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
4-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
nitrobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
isophorone	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
2-nitrophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
2,4-dimethylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
bis(2-chloroethoxy)methane	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
2,4-dichlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
1,2,4-trichlorobenzene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
naphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
benzoic acid	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
4-chloroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
hexachlorobutadiene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
4-chloro-3-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
hexachlorocyclopentadiene	< 9	9	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
2,4,6-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
2,4,5-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
2-chloronaphthalene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
2-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
dimethylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
2,6-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
2,4-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
acenaphthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
3-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
2,4-dinitrophenol	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
dibenzofuran	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
4-nitrophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
fluorene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
diethyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-011
Sample ID: CA-MW-6
Matrix: Water
Sampled: 11/13/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
4-chlorophenyl phenyl ether	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
4-nitroaniline	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
4,6-dinitro-2-methylphenol	< 19	19	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
azobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
N-nitrosodiphenylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
4-bromophenyl phenyl ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
hexachlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
pentachlorophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
phenanthrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
carbazole	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
di-n-butylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
benzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
butyl benzyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
chrysene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
3,3'-dichlorobenzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
bis(2-ethylhexyl)phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
di-n-octyl phthalate	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**26**	21-100	%	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
phenol-D5 SUR	**15**	10-102	%	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
2,4,6-tribromophenol SUR	**85**	10-123	%	1	AJD	11/18/14	7395	11/18/14	19:47	SW3510C8270D
nitrobenzene-D5 SUR	**66**	35-114	%	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
2-fluorobiphenyl SUR	**57**	43-116	%	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D
p-terphenyl-D14 SUR	**81**	33-141	%	1	AJD	11/18/14	7395	11/19/14	3:09	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-012
Sample ID: DUP-GW-1
Matrix: Water
Sampled: 11/13/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
aniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
phenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
2-chlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
bis(2-chloroethyl)ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
1,3-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
1,4-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
1,2-dichlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
benzyl alcohol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
2-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
bis(2-chloroisopropyl) ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
hexachloroethane	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
N-nitroso-di-N-propylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
4-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
nitrobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
isophorone	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
2-nitrophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
2,4-dimethylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
bis(2-chloroethoxy)methane	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
2,4-dichlorophenol	< 5	5	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
1,2,4-trichlorobenzene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
naphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
benzoic acid	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
4-chloroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
hexachlorobutadiene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
4-chloro-3-methylphenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
2-methylnaphthalene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
hexachlorocyclopentadiene	< 9	9	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
2,4,6-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
2,4,5-trichlorophenol	< 2	2	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
2-chloronaphthalene	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
2-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
acenaphthylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
dimethylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
2,6-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
2,4-dinitrotoluene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
acenaphthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
3-nitroaniline	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
2,4-dinitrophenol	< 47	47	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
dibenzofuran	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
4-nitrophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
fluorene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
diethyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-012
Sample ID: DUP-GW-1
Matrix: Water
Sampled: 11/13/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
4-nitroaniline	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
4,6-dinitro-2-methylphenol	< 19	19	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
azobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
N-nitrosodiphenylamine	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
4-bromophenyl phenyl ether	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
hexachlorobenzene	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
pentachlorophenol	< 9	9	ug/L	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
phenanthrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
carbazole	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
di-n-butylphthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
benzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
butyl benzyl phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
benzo(a)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
chrysene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
3,3'-dichlorobenzidine	< 28	28	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
bis(2-ethylhexyl)phthalate	< 5	5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
di-n-octyl phthalate	< 2	2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
benzo(b)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
benzo(a)pyrene	< 0.2	0.2	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
indeno(1,2,3-cd)pyrene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
dibenzo(a,h)anthracene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**27**	21-100	%	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
phenol-D5 SUR	**16**	10-102	%	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
2,4,6-tribromophenol SUR	**86**	10-123	%	1	AJD	11/18/14	7395	11/18/14	20:24	SW3510C8270D
nitrobenzene-D5 SUR	**64**	35-114	%	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
2-fluorobiphenyl SUR	**57**	43-116	%	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D
p-terphenyl-D14 SUR	**85**	33-141	%	1	AJD	11/18/14	7395	11/19/14	6:50	SW3510C8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-013
Sample ID: DUP-2
Matrix: Solid Percent Dry: 84.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
N-nitrosodimethylamine	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
aniline	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
phenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2-chlorophenol	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
bis(2-chloroethyl)ether	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
benzyl alcohol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
bis(2-chloroisopropyl) ether	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
hexachloroethane	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
N-nitroso-di-N-propylamine	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
4-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
nitrobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
isophorone	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2-nitrophenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2,4-dimethylphenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
bis(2-chloroethoxy)methane	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2,4-dichlorophenol	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
1,2,4-trichlorobenzene	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
naphthalene	**0.08**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
benzoic acid	< 6	6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
4-chloroaniline	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
hexachlorobutadiene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
4-chloro-3-methylphenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2-methylnaphthalene	< 0.06	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
hexachlorocyclopentadiene	< 1	1	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2,4,6-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2,4,5-trichlorophenol	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2-chloronaphthalene	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
acenaphthylene	**0.07**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
dimethylphthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2,6-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2,4-dinitrotoluene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
acenaphthene	**0.36**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
3-nitroaniline	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2,4-dinitrophenol	< 6	6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
dibenzofuran	**0.21**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
4-nitrophenol	< 2	2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
fluorene	**0.38**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
diethyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-013
Sample ID: DUP-2
Matrix: Solid Percent Dry: 84.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
4-chlorophenyl phenyl ether	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
4-nitroaniline	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
4,6-dinitro-2-methylphenol	< 2	2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
azobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
N-nitrosodiphenylamine	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
4-bromophenyl phenyl ether	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
hexachlorobenzene	< 0.2	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
pentachlorophenol	< 1	1	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
phenanthrene	**6.1**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
anthracene	**1.00**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
carbazole	**0.5**	0.2	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
di-n-butylphthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
fluoranthene	**7.5**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
benzidine	< 4	4	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
pyrene	**6.5**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
butyl benzyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
benzo(a)anthracene	**2.6**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
chrysene	**2.5**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
3,3'-dichlorobenzidine	< 4	4	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
bis(2-ethylhexyl)phthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
di-n-octyl phthalate	< 0.6	0.6	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
benzo(b)fluoranthene	**2.3**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
benzo(k)fluoranthene	**2.8**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
benzo(a)pyrene	**2.4**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
indeno(1,2,3-cd)pyrene	**0.66**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
dibenzo(a,h)anthracene	**0.30**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
benzo(g,h,i)perylene	**0.63**	0.06	ug/g	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
Surrogate Recovery		**Limits**								
2-fluorophenol SUR	**59**	21-100	%	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
phenol-D5 SUR	**61**	10-102	%	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2,4,6-tribromophenol SUR	**66**	10-123	%	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
nitrobenzene-D5 SUR	**49**	35-114	%	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
2-fluorobiphenyl SUR	**51**	43-116	%	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D
p-terphenyl-D14 SUR	**68**	33-141	%	1	AJD	11/19/14	7404	11/22/14	0:16	SW3546/8270D

Project ID: Ferrari 14001247
Job ID: 31599
Sample#: 31599-014
Sample ID: CA-TP-A3
Matrix: Solid Percent Dry: 86.2% Results expressed on a dry weight basis.
Sampled: 11/12/14 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	**10.0**	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
2-methylnaphthalene	**6.3**	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
acenaphthylene	**0.9**	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
acenaphthene	< 0.6	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
dibenzofuran	< 0.6	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
fluorene	**1.5**	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
phenanthrene	**3.3**	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
anthracene	< 0.6	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
fluoranthene	**1.0**	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
pyrene	**1.8**	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
benzo(a)anthracene	**0.6**	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
chrysene	**3.0**	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
benzo(b)fluoranthene	< 0.6	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
benzo(k)fluoranthene	< 0.6	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
benzo(a)pyrene	< 0.6	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
indeno(1,2,3-cd)pyrene	< 0.6	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
dibenzo(a,h)anthracene	< 0.6	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
benzo(g,h,i)perylene	< 0.6	0.6	ug/g	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**53**	43-116	%	10	AJD	11/19/14	7404	12/2/14	17:57	SW3550C8270D

Note: Dilution was required due to the presence of hydrocarbons in the sample.

Project ID: Ferrari 14001247

Job ID: 31599

Sample#: 31599-003

Sample ID: CA-TP-3 (3.5-8/4)

Matrix: Solid Percent Dry: 69.8% Results expressed on a dry weight basis.

Sampled: 11/12/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 1.1	1.1	ug/g	5	JZ	11/19/14	7403	11/20/14	14:57	SW3546/8082A
PCB-1221	< 1.1	1.1	ug/g	5	JZ	11/19/14	7403	11/20/14	14:57	SW3546/8082A
PCB-1232	< 1.1	1.1	ug/g	5	JZ	11/19/14	7403	11/20/14	14:57	SW3546/8082A
PCB-1242	< 1.1	1.1	ug/g	5	JZ	11/19/14	7403	11/20/14	14:57	SW3546/8082A
PCB-1248	< 1.1	1.1	ug/g	5	JZ	11/19/14	7403	11/20/14	14:57	SW3546/8082A
PCB-1254	< 1.1	1.1	ug/g	5	JZ	11/19/14	7403	11/20/14	14:57	SW3546/8082A
PCB-1260	< 1.1	1.1	ug/g	5	JZ	11/19/14	7403	11/20/14	14:57	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**62**	30-150	%	5	JZ	11/19/14	7403	11/20/14	14:57	SW3546/8082A
decachlorobiphenyl SUR	**43**	30-150	%	5	JZ	11/19/14	7403	11/20/14	14:57	SW3546/8082A

Note: Dilution was required due to sample matrix interference.

Sample#: 31599-004

Sample ID: CA-TP-2 (0-3.5/1.5)

Matrix: Solid Percent Dry: 83.1% Results expressed on a dry weight basis.

Sampled: 11/12/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	14:02	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	14:02	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	14:02	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	14:02	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	14:02	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	14:02	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	14:02	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**111**	30-150	%	1	JZ	11/19/14	7403	11/19/14	14:02	SW3546/8082A
decachlorobiphenyl SUR	**90**	30-150	%	1	JZ	11/19/14	7403	11/19/14	14:02	SW3546/8082A

Project ID: Ferrari 14001247
Job ID: 31599

Sample#: 31599-006
Sample ID: CA-TP-1 (0-6/2)
Matrix: Solid Percent Dry: 83.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.8	0.8	ug/g	5	JZ	11/19/14	7403	11/20/14	15:28	SW3546/8082A
PCB-1221	< 0.8	0.8	ug/g	5	JZ	11/19/14	7403	11/20/14	15:28	SW3546/8082A
PCB-1232	< 0.8	0.8	ug/g	5	JZ	11/19/14	7403	11/20/14	15:28	SW3546/8082A
PCB-1242	< 0.8	0.8	ug/g	5	JZ	11/19/14	7403	11/20/14	15:28	SW3546/8082A
PCB-1248	< 0.8	0.8	ug/g	5	JZ	11/19/14	7403	11/20/14	15:28	SW3546/8082A
PCB-1254	< 0.8	0.8	ug/g	5	JZ	11/19/14	7403	11/20/14	15:28	SW3546/8082A
PCB-1260	< 0.8	0.8	ug/g	5	JZ	11/19/14	7403	11/20/14	15:28	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**76**	30-150	%	5	JZ	11/19/14	7403	11/20/14	15:28	SW3546/8082A
decachlorobiphenyl SUR	**54**	30-150	%	5	JZ	11/19/14	7403	11/20/14	15:28	SW3546/8082A

Note: Dilution was required due to sample matrix interference.

Sample#: 31599-013
Sample ID: DUP-2
Matrix: Solid Percent Dry: 84.7% Results expressed on a dry weight basis.
Sampled: 11/12/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	15:34	SW3546/8082A
PCB-1221	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	15:34	SW3546/8082A
PCB-1232	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	15:34	SW3546/8082A
PCB-1242	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	15:34	SW3546/8082A
PCB-1248	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	15:34	SW3546/8082A
PCB-1254	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	15:34	SW3546/8082A
PCB-1260	< 0.2	0.2	ug/g	1	JZ	11/19/14	7403	11/19/14	15:34	SW3546/8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**109**	30-150	%	1	JZ	11/19/14	7403	11/19/14	15:34	SW3546/8082A
decachlorobiphenyl SUR	**51**	30-150	%	1	JZ	11/19/14	7403	11/19/14	15:34	SW3546/8082A

Project ID: Ferrari 14001247
Job ID: 31599

Sample#: 31599-002
Sample ID: CA-MW-1
Matrix: Water
Sampled: 11/12/14 8:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Arsenic	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Beryllium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Cadmium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Chromium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Copper	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Lead	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Mercury	< 0.0002	0.0002	mg/L	1	AC	11/19/14	7402	11/19/14	16:16	SW7470A
Nickel	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Selenium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Silver	< 0.007	0.007	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Thallium	< 0.002	0.002	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C
Zinc	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:34	SW3005A6010C

Sample#: 31599-003
Sample ID: CA-TP-3 (3.5-8/4)
Matrix: Solid Percent Dry: 69.8% Results expressed on a dry weight basis.
Sampled: 11/12/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Arsenic	**24**	0.7	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Beryllium	< 0.3	0.3	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Cadmium	**0.5**	0.3	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Chromium	**35**	4	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Copper	**140**	4	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Lead	**95**	0.7	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Mercury	< 0.26	0.26	ug/g	1	AC	11/17/14	7394	11/17/14	15:23	SW7471B
Nickel	**40**	4	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Selenium	< 4	4	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Silver	< 0.5	0.5	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Thallium	< 0.3	0.3	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C
Zinc	**360**	4	ug/g	1	AB	11/18/14	7400	11/18/14	15:48	SW3051A6010C

Project ID: Ferrari 14001247

Job ID: 31599

Sample#: 31599-004

Sample ID: CA-TP-2 (0-3.5/1.5)

Matrix: Solid Percent Dry: 83.1% Results expressed on a dry weight basis.

Sampled: 11/12/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.3	0.3	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Arsenic	**11**	0.6	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Beryllium	**0.3**	0.2	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Cadmium	**0.4**	0.2	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Chromium	**38**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Copper	**48**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Lead	**90**	0.6	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Mercury	< 0.21	0.21	ug/g	1	AC	11/17/14	7394	11/17/14	15:14	SW7471B
Nickel	**35**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C
Zinc	**130**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:22	SW3051A6010C

Sample#: 31599-006

Sample ID: CA-TP-1 (0-6/2)

Matrix: Solid Percent Dry: 83.7% Results expressed on a dry weight basis.

Sampled: 11/12/14 13:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Arsenic	**19**	0.6	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Beryllium	< 0.3	0.3	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Cadmium	< 0.3	0.3	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Chromium	**110**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Copper	**130**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Lead	**870**	0.6	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Mercury	< 0.22	0.22	ug/g	1	AC	11/17/14	7394	11/17/14	15:16	SW7471B
Nickel	**110**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Thallium	< 0.3	0.3	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C
Zinc	**370**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:29	SW3051A6010C

Project ID: Ferrari 14001247
Job ID: 31599

Sample#: 31599-007
Sample ID: CA-MW-2
Matrix: Water
Sampled: 11/13/14 9:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Arsenic	**0.015**	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Beryllium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Cadmium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Chromium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Copper	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Lead	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Mercury	< 0.0002	0.0002	mg/L	1	AC	11/19/14	7402	11/19/14	16:27	SW7470A
Nickel	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Selenium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Silver	< 0.007	0.007	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Thallium	< 0.002	0.002	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C
Zinc	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:41	SW3005A6010C

Sample#: 31599-008
Sample ID: CA-MW-3
Matrix: Water
Sampled: 11/13/14 11:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Arsenic	**0.010**	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Beryllium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Cadmium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Chromium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Copper	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Lead	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Mercury	< 0.0002	0.0002	mg/L	1	AC	11/19/14	7402	11/19/14	16:29	SW7470A
Nickel	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Selenium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Silver	< 0.007	0.007	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Thallium	< 0.002	0.002	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C
Zinc	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	17:48	SW3005A6010C

Project ID: Ferrari 14001247
Job ID: 31599

Sample#: 31599-009
Sample ID: CA-MW-4
Matrix: Water
Sampled: 11/13/14 12:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Arsenic	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Beryllium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Cadmium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Chromium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Copper	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Lead	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Mercury	< 0.0002	0.0002	mg/L	1	AC	11/19/14	7402	11/19/14	16:30	SW7470A
Nickel	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Selenium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Silver	< 0.007	0.007	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Thallium	< 0.002	0.002	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C
Zinc	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:17	SW3005A6010C

Sample#: 31599-010
Sample ID: CA-MW-5
Matrix: Water
Sampled: 11/13/14 13:35

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Arsenic	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Beryllium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Cadmium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Chromium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Copper	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Lead	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Mercury	< 0.0002	0.0002	mg/L	1	AC	11/19/14	7402	11/19/14	16:18	SW7470A
Nickel	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Selenium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Silver	< 0.007	0.007	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Thallium	< 0.002	0.002	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C
Zinc	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:24	SW3005A6010C

Project ID: Ferrari 14001247
Job ID: 31599

Sample#: 31599-011
Sample ID: CA-MW-6
Matrix: Water
Sampled: 11/13/14 14:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Arsenic	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Beryllium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Cadmium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Chromium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Copper	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Lead	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Mercury	< 0.0002	0.0002	mg/L	1	AC	11/19/14	7402	11/19/14	16:32	SW7470A
Nickel	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Selenium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Silver	< 0.007	0.007	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Thallium	< 0.002	0.002	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C
Zinc	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:45	SW3005A6010C

Sample#: 31599-012
Sample ID: DUP-GW-1
Matrix: Water
Sampled: 11/13/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.006	0.006	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Arsenic	**0.008**	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Beryllium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Cadmium	< 0.004	0.004	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Chromium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Copper	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Lead	< 0.008	0.008	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Mercury	< 0.0002	0.0002	mg/L	1	AC	11/19/14	7402	11/19/14	16:34	SW7470A
Nickel	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Selenium	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Silver	< 0.007	0.007	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Thallium	< 0.002	0.002	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C
Zinc	< 0.05	0.05	mg/L	1	AB	11/20/14	7411	11/20/14	18:53	SW3005A6010C

Project ID: Ferrari 14001247

Job ID: 31599

Sample#: 31599-013

Sample ID: DUP-2

Matrix: Solid Percent Dry: 84.7% Results expressed on a dry weight basis.

Sampled: 11/12/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Antimony	< 0.3	0.3	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Arsenic	**10**	0.6	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Beryllium	**0.3**	0.2	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Cadmium	**0.2**	0.2	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Chromium	**41**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Copper	**52**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Lead	**74**	0.6	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Mercury	< 0.18	0.18	ug/g	1	AC	11/17/14	7394	11/17/14	15:18	SW7471B
Nickel	**21**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Selenium	< 3	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Silver	< 0.4	0.4	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Thallium	< 0.2	0.2	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C
Zinc	**94**	3	ug/g	1	AB	11/18/14	7400	11/19/14	0:36	SW3051A6010C

Sample#: 31599-014

Sample ID: CA-TP-A3

Matrix: Solid Percent Dry: 86.2% Results expressed on a dry weight basis.

Sampled: 11/12/14 12:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AB	12/3/14	7446	12/9/14	16:42	SW3051A6010C
Arsenic	**92**	0.6	ug/g	1	AB	12/3/14	7446	12/9/14	16:42	SW3051A6010C
Chromium	**460**	3	ug/g	1	AB	12/3/14	7446	12/9/14	16:42	SW3051A6010C
Lead	**380**	0.6	ug/g	1	AB	12/3/14	7446	12/9/14	16:42	SW3051A6010C

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Case Narrative
Lab # 31599

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 4 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
VOC analysis for sample 31599-014 (CA-TP-A3) was requested beyond the recommended holding time. The results have been qualified accordingly.

Calibration

No exceptions noted.

Method Blank

VOC: The compound, hexachlorobutadiene, was detected in the BLK1403133, BLK1403150, and BLK1403166 between 0.8 and 0.9ug/L. There is no impact to the data as this analyte was not detected in the associated field samples.

Surrogate Recoveries

SVOC: The surrogate, 2-fluorobiphenyl, for sample 31599-003 was outside the acceptance limits as a result of interferences caused by hydrocarbons present in the sample.
SVOC: The surrogates, nitrobenzene-D5 and 2-fluorobiphenyl, for sample 31599-006 were outside the acceptance limits as a result of interferences caused by hydrocarbons present in the sample.
SVOC: The surrogate, 2-fluorophenol, for sample 31599-008 was outside the acceptance limits. No additional sample remains for re-analysis. Matrix interference suspected.

Laboratory Control Sample Results

VOC: The MLCS/D7415 did not meet the acceptance criteria for dichlorodifluoromethane, carbon disulfide, and 1,2-dibromo-3-chloropropane (DBCP). Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.
VOC: The MLCS/D7441 did not meet the acceptance criteria for bromomethane, carbon disulfide, and 1,2-dibromo-3-chloropropane (DBCP). Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.
VOC: The LCS/D1403133, LCS/D1403150, and LCSD1403166 did not meet the acceptance criteria for bromomethane. This compound showed high recovery. There is no impact to the data as this analyte was not detected in the associated samples.
SVOC: The LCS/D7395 did not meet the acceptance criteria for phenol and hexachloroethane. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

SVOC: The following samples required a re-analysis at a dilution due to internal standard interferences caused by matrix effect: 31599-004.
Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MB7415	dichlorodifluoromethane		<	0.1	ug/g					
		chloromethane		<	0.1	ug/g					
		vinyl chloride		<	0.1	ug/g					
		bromomethane		<	0.2	ug/g					
		chloroethane		<	0.1	ug/g					
		trichlorofluoromethane		<	0.1	ug/g					
		diethyl ether		<	0.5	ug/g					
		acetone		<	2.5	ug/g					
		1,1-dichloroethene		<	0.1	ug/g					
		methylene chloride		<	0.2	ug/g					
		carbon disulfide		<	0.1	ug/g					
		methyl t-butyl ether (MTBE)		<	0.1	ug/g					
		trans-1,2-dichloroethene		<	0.1	ug/g					
		isopropyl ether (DIPE)		<	0.1	ug/g					
		ethyl t-butyl ether (ETBE)		<	0.1	ug/g					
		1,1-dichloroethane		<	0.1	ug/g					
		t-butanol (TBA)		<	2.5	ug/g					
		2-butanone (MEK)		<	0.5	ug/g					
		2,2-dichloropropane		<	0.1	ug/g					
		cis-1,2-dichloroethene		<	0.1	ug/g					
		chloroform		<	0.1	ug/g					
		bromochloromethane		<	0.1	ug/g					
		tetrahydrofuran (THF)		<	0.5	ug/g					
		1,1,1-trichloroethane		<	0.1	ug/g					
		1,1-dichloropropene		<	0.1	ug/g					
		t-amyl-methyl ether (TAME)		<	0.1	ug/g					
		carbon tetrachloride		<	0.1	ug/g					
		1,2-dichloroethane		<	0.1	ug/g					
		benzene		<	0.1	ug/g					
		trichloroethene		<	0.1	ug/g					
		1,2-dichloropropane		<	0.1	ug/g					
		bromodichloromethane		<	0.1	ug/g					
		1,4-dioxane		<	2.5	ug/g					
		dibromomethane		<	0.1	ug/g					
		4-methyl-2-pentanone (MIBK)		<	0.5	ug/g					
		cis-1,3-dichloropropene		<	0.1	ug/g					
		toluene		<	0.1	ug/g					
		trans-1,3-dichloropropene		<	0.1	ug/g					
		2-hexanone		<	0.5	ug/g					
		1,1,2-trichloroethane		<	0.1	ug/g					
		1,3-dichloropropane		<	0.1	ug/g					
		tetrachloroethene		<	0.1	ug/g					
		dibromochloromethane		<	0.1	ug/g					
		1,2-dibromoethane (EDB)		<	0.1	ug/g					
		chlorobenzene		<	0.1	ug/g					
		1,1,1,2-tetrachloroethane		<	0.1	ug/g					
		ethylbenzene		<	0.1	ug/g					
		m&p-xylenes		<	0.1	ug/g					
		o-xylene		<	0.1	ug/g					
		styrene		<	0.1	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MB7415	bromoform		<	0.1	ug/g						
		isopropylbenzene		<	0.1	ug/g						
		1,1,2,2-tetrachloroethane		<	0.1	ug/g						
		1,2,3-trichloropropane		<	0.1	ug/g						
		n-propylbenzene		<	0.1	ug/g						
		bromobenzene		<	0.1	ug/g						
		1,3,5-trimethylbenzene		<	0.1	ug/g						
		2-chlorotoluene		<	0.1	ug/g						
		4-chlorotoluene		<	0.1	ug/g						
		tert-butylbenzene		<	0.1	ug/g						
		1,2,4-trimethylbenzene		<	0.1	ug/g						
		sec-butylbenzene		<	0.1	ug/g						
		1,3-dichlorobenzene		<	0.1	ug/g						
		4-isopropyltoluene		<	0.1	ug/g						
		1,4-dichlorobenzene		<	0.1	ug/g						
		1,2-dichlorobenzene		<	0.1	ug/g						
		n-butylbenzene		<	0.1	ug/g						
		1,2-dibromo-3-chloropropane (DBCP)		<	0.1	ug/g						
		1,2,4-trichlorobenzene		<	0.1	ug/g						
		hexachlorobutadiene		<	0.1	ug/g						
		naphthalene		<	0.2	ug/g						
		1,2,3-trichlorobenzene		<	0.1	ug/g						
		dibromofluoromethane SUR			95	%			78	114		
		toluene-D8 SUR			101	%			88	110		
		4-bromofluorobenzene SUR			106	%			86	115		
		a,a,a-trifluorotoluene SUR			100	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS7415	dichlorodifluoromethane			0.6	ug/g	1	60	*	70	130		
		chloromethane			0.8	ug/g	1	79		70	130		
		vinyl chloride			0.8	ug/g	1	77		70	130		
		bromomethane			1.0	ug/g	1	103		70	130		
		chloroethane			0.9	ug/g	1	88		70	130		
		trichlorofluoromethane			0.8	ug/g	1	85		70	130		
		diethyl ether			1.1	ug/g	1	107		70	130		
		acetone		<	2.5	ug/g	1	99					
		1,1-dichloroethene			0.9	ug/g	1	87		70	130		
		methylene chloride			1.0	ug/g	1	104		70	130		
		carbon disulfide			0.6	ug/g	1	60	*	70	130		
		methyl t-butyl ether (MTBE)			0.9	ug/g	1	95		70	130		
		trans-1,2-dichloroethene			1.0	ug/g	1	96		70	130		
		isopropyl ether (DIPE)			1.0	ug/g	1	103		70	130		
		ethyl t-butyl ether (ETBE)			1.0	ug/g	1	95		70	130		
		1,1-dichloroethane			0.9	ug/g	1	90		70	130		
		t-butanol (TBA)			4.2	ug/g	5	84		70	130		
		2-butanone (MEK)			0.9	ug/g	1	88		70	130		
		2,2-dichloropropane			0.8	ug/g	1	83		70	130		
		cis-1,2-dichloroethene			1.0	ug/g	1	98		70	130		
		chloroform			1.0	ug/g	1	98		70	130		
		bromochloromethane			0.9	ug/g	1	93		70	130		
		tetrahydrofuran (THF)			0.9	ug/g	1	86		70	130		
		1,1,1-trichloroethane			0.9	ug/g	1	92		70	130		
		1,1-dichloropropene			0.9	ug/g	1	91		70	130		
		t-amyl-methyl ether (TAME)			0.9	ug/g	1	88		70	130		
		carbon tetrachloride			0.8	ug/g	1	84		70	130		
		1,2-dichloroethane			1.0	ug/g	1	103		70	130		
		benzene			0.9	ug/g	1	95		70	130		
		trichloroethene			1.0	ug/g	1	101		70	130		
		1,2-dichloropropane			0.9	ug/g	1	95		70	130		
		bromodichloromethane			1.0	ug/g	1	98		70	130		
		1,4-dioxane		<	2.5	ug/g	2	97		70	130		
		dibromomethane			1.0	ug/g	1	96		70	130		
		4-methyl-2-pentanone (MIBK)			0.8	ug/g	1	81		70	130		
		cis-1,3-dichloropropene			0.9	ug/g	1	87		70	130		
		toluene			1.0	ug/g	1	97		70	130		
		trans-1,3-dichloropropene			0.9	ug/g	1	85		70	130		
		2-hexanone			0.8	ug/g	1	79		70	130		
		1,1,2-trichloroethane			1.0	ug/g	1	97		70	130		
		1,3-dichloropropane			0.9	ug/g	1	95		70	130		
		tetrachloroethene			0.9	ug/g	1	92		70	130		
		dibromochloromethane			0.9	ug/g	1	88		70	130		
		1,2-dibromoethane (EDB)			1.0	ug/g	1	101		70	130		
		chlorobenzene			1.0	ug/g	1	102		70	130		
		1,1,1,2-tetrachloroethane			0.9	ug/g	1	86		70	130		
		ethylbenzene			0.9	ug/g	1	92		70	130		
		m&p-xylenes			1.9	ug/g	2	93		70	130		
		o-xylene			1.0	ug/g	1	96		70	130		
		styrene			0.9	ug/g	1	93		70	130		
		bromoform			0.8	ug/g	1	83		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS7415	isopropylbenzene		0.9	ug/g	1	95		70	130		
		1,1,2,2-tetrachloroethane		0.9	ug/g	1	86		70	130		
		1,2,3-trichloropropane		0.9	ug/g	1	87		70	130		
		n-propylbenzene		0.9	ug/g	1	95		70	130		
		bromobenzene		1.0	ug/g	1	101		70	130		
		1,3,5-trimethylbenzene		1.0	ug/g	1	99		70	130		
		2-chlorotoluene		1.0	ug/g	1	97		70	130		
		4-chlorotoluene		0.9	ug/g	1	89		70	130		
		tert-butylbenzene		1.0	ug/g	1	100		70	130		
		1,2,4-trimethylbenzene		1.0	ug/g	1	98		70	130		
		sec-butylbenzene		1.0	ug/g	1	99		70	130		
		1,3-dichlorobenzene		1.0	ug/g	1	100		70	130		
		4-isopropyltoluene		1.0	ug/g	1	99		70	130		
		1,4-dichlorobenzene		1.0	ug/g	1	101		70	130		
		1,2-dichlorobenzene		1.0	ug/g	1	101		70	130		
		n-butylbenzene		1.0	ug/g	1	100		70	130		
		1,2-dibromo-3-chloropropane (DBCP)		0.6	ug/g	1	64	*	70	130		
		1,2,4-trichlorobenzene		1.0	ug/g	1	101		70	130		
		hexachlorobutadiene		1.0	ug/g	1	105		70	130		
		naphthalene		0.9	ug/g	1	87		70	130		
		1,2,3-trichlorobenzene		0.9	ug/g	1	93		70	130		
		dibromofluoromethane SUR		102	%				78	114		
		toluene-D8 SUR		101	%				88	110		
		4-bromofluorobenzene SUR		107	%				86	115		
		a,a,a-trifluorotoluene SUR		102	%				70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCSD7415	dichlorodifluoromethane			0.6	ug/g	1	63	*	70	130	5	30
		chloromethane			0.8	ug/g	1	83		70	130	4	30
		vinyl chloride			0.8	ug/g	1	80		70	130	3	30
		bromomethane			1.1	ug/g	1	113		70	130	9	30
		chloroethane			0.9	ug/g	1	89		70	130	1	30
		trichlorofluoromethane			0.9	ug/g	1	87		70	130	2	30
		diethyl ether			1.0	ug/g	1	105		70	130	2	30
		acetone		<	2.5	ug/g	1	128				26	30
		1,1-dichloroethene			0.9	ug/g	1	86		70	130	1	30
		methylene chloride			1.0	ug/g	1	97		70	130	7	30
		carbon disulfide			0.6	ug/g	1	63	*	70	130	5	30
		methyl t-butyl ether (MTBE)			1.0	ug/g	1	96		70	130	2	30
		trans-1,2-dichloroethene			0.9	ug/g	1	93		70	130	4	30
		isopropyl ether (DIPE)			1.0	ug/g	1	95		70	130	8	30
		ethyl t-butyl ether (ETBE)			1.0	ug/g	1	95		70	130	0	30
		1,1-dichloroethane			0.9	ug/g	1	88		70	130	2	30
		t-butanol (TBA)			5.0	ug/g	5	100		70	130	18	30
		2-butanone (MEK)			1.1	ug/g	1	107		70	130	20	30
		2,2-dichloropropane			0.8	ug/g	1	80		70	130	3	30
		cis-1,2-dichloroethene			1.0	ug/g	1	95		70	130	3	30
		chloroform			0.9	ug/g	1	95		70	130	4	30
		bromochloromethane			0.9	ug/g	1	93		70	130	1	30
		tetrahydrofuran (THF)			1.0	ug/g	1	98		70	130	13	30
		1,1,1-trichloroethane			0.9	ug/g	1	89		70	130	3	30
		1,1-dichloropropene			0.9	ug/g	1	89		70	130	3	30
		t-amyl-methyl ether (TAME)			0.9	ug/g	1	90		70	130	2	30
		carbon tetrachloride			0.8	ug/g	1	82		70	130	3	30
		1,2-dichloroethane			1.0	ug/g	1	100		70	130	4	30
		benzene			0.9	ug/g	1	92		70	130	3	30
		trichloroethene			1.0	ug/g	1	104		70	130	3	30
		1,2-dichloropropane			0.9	ug/g	1	92		70	130	3	30
		bromodichloromethane			0.9	ug/g	1	94		70	130	4	30
		1,4-dioxane		<	2.5	ug/g	2	107		70	130	10	30
		dibromomethane			1.0	ug/g	1	98		70	130	3	30
		4-methyl-2-pentanone (MIBK)			0.9	ug/g	1	91		70	130	11	30
		cis-1,3-dichloropropene			0.8	ug/g	1	84		70	130	3	30
		toluene			0.9	ug/g	1	94		70	130	3	30
		trans-1,3-dichloropropene			0.8	ug/g	1	83		70	130	2	30
		2-hexanone			1.0	ug/g	1	96		70	130	20	30
		1,1,2-trichloroethane			1.0	ug/g	1	96		70	130	2	30
		1,3-dichloropropane			0.9	ug/g	1	92		70	130	2	30
		tetrachloroethene			0.9	ug/g	1	88		70	130	4	30
		dibromochloromethane			0.8	ug/g	1	83		70	130	5	30
		1,2-dibromoethane (EDB)			1.0	ug/g	1	98		70	130	3	30
		chlorobenzene			1.0	ug/g	1	96		70	130	5	30
		1,1,1,2-tetrachloroethane			0.8	ug/g	1	83		70	130	4	30
		ethylbenzene			0.9	ug/g	1	87		70	130	6	30
		m&p-xylenes			1.8	ug/g	2	88		70	130	5	30
		o-xylene			0.9	ug/g	1	92		70	130	5	30
		styrene			0.9	ug/g	1	88		70	130	6	30
		bromoform			0.8	ug/g	1	82		70	130	1	30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MLCSD7415	isopropylbenzene		0.9	ug/g	1	89	70	130	6	30
		1,1,2,2-tetrachloroethane		0.8	ug/g	1	83	70	130	4	30
		1,2,3-trichloropropane		0.9	ug/g	1	91	70	130	4	30
		n-propylbenzene		0.9	ug/g	1	93	70	130	2	30
		bromobenzene		1.0	ug/g	1	98	70	130	3	30
		1,3,5-trimethylbenzene		1.0	ug/g	1	97	70	130	1	30
		2-chlorotoluene		1.0	ug/g	1	95	70	130	2	30
		4-chlorotoluene		0.9	ug/g	1	87	70	130	2	30
		tert-butylbenzene		1.0	ug/g	1	98	70	130	2	30
		1,2,4-trimethylbenzene		1.0	ug/g	1	96	70	130	2	30
		sec-butylbenzene		1.0	ug/g	1	98	70	130	2	30
		1,3-dichlorobenzene		1.0	ug/g	1	100	70	130	0	30
		4-isopropyltoluene		1.0	ug/g	1	98	70	130	1	30
		1,4-dichlorobenzene		1.0	ug/g	1	100	70	130	1	30
		1,2-dichlorobenzene		1.0	ug/g	1	100	70	130	1	30
		n-butylbenzene		1.0	ug/g	1	98	70	130	2	30
		1,2-dibromo-3-chloropropane (DBCP)		0.7	ug/g	1	70	70	130	8	30
		1,2,4-trichlorobenzene		1.0	ug/g	1	104	70	130	3	30
		hexachlorobutadiene		1.0	ug/g	1	102	70	130	2	30
		naphthalene		1.0	ug/g	1	96	70	130	10	30
		1,2,3-trichlorobenzene		1.0	ug/g	1	102	70	130	9	30
		dibromofluoromethane SUR		98	%			78	114		
		toluene-D8 SUR		101	%			88	110		
		4-bromofluorobenzene SUR		106	%			86	115		
		a,a,a-trifluorotoluene SUR		98	%			70	130		

- QC Report -

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MB7441	dichlorodifluoromethane		< 0.1	ug/g					
		chloromethane		< 0.1	ug/g					
		vinyl chloride		< 0.1	ug/g					
		bromomethane		< 0.2	ug/g					
		chloroethane		< 0.1	ug/g					
		trichlorofluoromethane		< 0.1	ug/g					
		diethyl ether		< 0.5	ug/g					
		acetone		< 2.5	ug/g					
		1,1-dichloroethene		< 0.1	ug/g					
		methylene chloride		< 0.2	ug/g					
		carbon disulfide		< 0.1	ug/g					
		methyl t-butyl ether (MTBE)		< 0.1	ug/g					
		trans-1,2-dichloroethene		< 0.1	ug/g					
		1,1-dichloroethane		< 0.1	ug/g					
		2-butanone (MEK)		< 0.5	ug/g					
		2,2-dichloropropane		< 0.1	ug/g					
		cis-1,2-dichloroethene		< 0.1	ug/g					
		chloroform		< 0.1	ug/g					
		bromochloromethane		< 0.1	ug/g					
		tetrahydrofuran (THF)		< 0.5	ug/g					
		1,1,1-trichloroethane		< 0.1	ug/g					
		1,1-dichloropropene		< 0.1	ug/g					
		carbon tetrachloride		< 0.1	ug/g					
		1,2-dichloroethane		< 0.1	ug/g					
		benzene		< 0.1	ug/g					
		trichloroethene		< 0.1	ug/g					
		1,2-dichloropropane		< 0.1	ug/g					
		bromodichloromethane		< 0.1	ug/g					
		dibromomethane		< 0.1	ug/g					
		4-methyl-2-pentanone (MIBK)		< 0.5	ug/g					
		cis-1,3-dichloropropene		< 0.1	ug/g					
		toluene		< 0.1	ug/g					
		trans-1,3-dichloropropene		< 0.1	ug/g					
		2-hexanone		< 0.5	ug/g					
		1,1,2-trichloroethane		< 0.1	ug/g					
		1,3-dichloropropane		< 0.1	ug/g					
		tetrachloroethene		< 0.1	ug/g					
		dibromochloromethane		< 0.1	ug/g					
		1,2-dibromoethane (EDB)		< 0.1	ug/g					
		chlorobenzene		< 0.1	ug/g					
		1,1,1,2-tetrachloroethane		< 0.1	ug/g					
		ethylbenzene		< 0.1	ug/g					
		m&p-xylenes		< 0.1	ug/g					
		o-xylene		< 0.1	ug/g					
		styrene		< 0.1	ug/g					
		bromoform		< 0.1	ug/g					
		isopropylbenzene		< 0.1	ug/g					
		1,1,2,2-tetrachloroethane		< 0.1	ug/g					
		1,2,3-trichloropropane		< 0.1	ug/g					
		n-propylbenzene		< 0.1	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MB7441	bromobenzene		<	0.1	ug/g						
		1,3,5-trimethylbenzene		<	0.1	ug/g						
		2-chlorotoluene		<	0.1	ug/g						
		4-chlorotoluene		<	0.1	ug/g						
		tert-butylbenzene		<	0.1	ug/g						
		1,2,4-trimethylbenzene		<	0.1	ug/g						
		sec-butylbenzene		<	0.1	ug/g						
		1,3-dichlorobenzene		<	0.1	ug/g						
		4-isopropyltoluene		<	0.1	ug/g						
		1,4-dichlorobenzene		<	0.1	ug/g						
		1,2-dichlorobenzene		<	0.1	ug/g						
		n-butylbenzene		<	0.1	ug/g						
		1,2-dibromo-3-chloropropane (DBCP)		<	0.1	ug/g						
		1,2,4-trichlorobenzene		<	0.1	ug/g						
		hexachlorobutadiene		<	0.1	ug/g						
		naphthalene		<	0.2	ug/g						
		1,2,3-trichlorobenzene		<	0.1	ug/g						
		dibromofluoromethane SUR			97	%			78	114		
		toluene-D8 SUR			103	%			88	110		
		4-bromofluorobenzene SUR			108	%			86	115		
		a,a,a-trifluorotoluene SUR			95	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS7441	dichlorodifluoromethane			0.7	ug/g	1	74		70	130		
		chloromethane			0.9	ug/g	1	93		70	130		
		vinyl chloride			0.8	ug/g	1	83		70	130		
		bromomethane			1.2	ug/g	1	122		70	130		
		chloroethane			0.9	ug/g	1	88		70	130		
		trichlorofluoromethane			0.9	ug/g	1	86		70	130		
		diethyl ether			1.0	ug/g	1	96		70	130		
		acetone		<	2.5	ug/g	1	86					
		1,1-dichloroethene			0.8	ug/g	1	82		70	130		
		methylene chloride			0.9	ug/g	1	93		70	130		
		carbon disulfide			0.6	ug/g	1	59	*	70	130		
		methyl t-butyl ether (MTBE)			0.9	ug/g	1	93		70	130		
		trans-1,2-dichloroethene			0.9	ug/g	1	90		70	130		
		1,1-dichloroethane			0.8	ug/g	1	83		70	130		
		2-butanone (MEK)			0.8	ug/g	1	77		70	130		
		2,2-dichloropropane			0.8	ug/g	1	75		70	130		
		cis-1,2-dichloroethene			0.9	ug/g	1	92		70	130		
		chloroform			0.9	ug/g	1	90		70	130		
		bromochloromethane			0.9	ug/g	1	87		70	130		
		tetrahydrofuran (THF)			0.8	ug/g	1	78		70	130		
		1,1,1-trichloroethane			0.9	ug/g	1	86		70	130		
		1,1-dichloropropene			0.9	ug/g	1	86		70	130		
		carbon tetrachloride			0.8	ug/g	1	80		70	130		
		1,2-dichloroethane			1.0	ug/g	1	96		70	130		
		benzene			0.9	ug/g	1	88		70	130		
		trichloroethene			0.9	ug/g	1	94		70	130		
		1,2-dichloropropane			0.9	ug/g	1	87		70	130		
		bromodichloromethane			0.9	ug/g	1	90		70	130		
		dibromomethane			0.9	ug/g	1	86		70	130		
		4-methyl-2-pentanone (MIBK)			0.8	ug/g	1	77		70	130		
		cis-1,3-dichloropropene			0.8	ug/g	1	80		70	130		
		toluene			0.9	ug/g	1	92		70	130		
		trans-1,3-dichloropropene			0.8	ug/g	1	79		70	130		
		2-hexanone			0.7	ug/g	1	73		70	130		
		1,1,2-trichloroethane			0.9	ug/g	1	89		70	130		
		1,3-dichloropropane			0.8	ug/g	1	83		70	130		
		tetrachloroethene			0.9	ug/g	1	89		70	130		
		dibromochloromethane			0.8	ug/g	1	76		70	130		
		1,2-dibromoethane (EDB)			0.9	ug/g	1	89		70	130		
		chlorobenzene			0.9	ug/g	1	90		70	130		
		1,1,1,2-tetrachloroethane			0.8	ug/g	1	77		70	130		
		ethylbenzene			0.8	ug/g	1	82		70	130		
		m&p-xylenes			1.7	ug/g	2	84		70	130		
		o-xylene			0.9	ug/g	1	88		70	130		
		styrene			0.8	ug/g	1	83		70	130		
		bromoform			0.7	ug/g	1	72		70	130		
		isopropylbenzene			0.8	ug/g	1	84		70	130		
		1,1,2,2-tetrachloroethane			0.8	ug/g	1	78		70	130		
		1,2,3-trichloropropane			0.8	ug/g	1	81		70	130		
		n-propylbenzene			0.9	ug/g	1	90		70	130		
		bromobenzene			0.9	ug/g	1	95		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS7441	1,3,5-trimethylbenzene		0.9	ug/g	1	92		70	130		
		2-chlorotoluene		0.9	ug/g	1	93		70	130		
		4-chlorotoluene		0.8	ug/g	1	82		70	130		
		tert-butylbenzene		0.9	ug/g	1	90		70	130		
		1,2,4-trimethylbenzene		0.9	ug/g	1	94		70	130		
		sec-butylbenzene		0.9	ug/g	1	93		70	130		
		1,3-dichlorobenzene		0.9	ug/g	1	93		70	130		
		4-isopropyltoluene		0.9	ug/g	1	92		70	130		
		1,4-dichlorobenzene		0.9	ug/g	1	94		70	130		
		1,2-dichlorobenzene		0.9	ug/g	1	91		70	130		
		n-butylbenzene		0.9	ug/g	1	93		70	130		
		1,2-dibromo-3-chloropropane (DBCP)		0.6	ug/g	1	59	*	70	130		
		1,2,4-trichlorobenzene		0.9	ug/g	1	89		70	130		
		hexachlorobutadiene		0.9	ug/g	1	92		70	130		
		naphthalene		0.8	ug/g	1	78		70	130		
		1,2,3-trichlorobenzene		0.8	ug/g	1	82		70	130		
		dibromofluoromethane SUR		100	%				78	114		
		toluene-D8 SUR		102	%				88	110		
		4-bromofluorobenzene SUR		108	%				86	115		
		a,a,a-trifluorotoluene SUR		100	%				70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCSD7441	dichlorodifluoromethane			0.7	ug/g	1	74		70	130	0	30
		chloromethane			0.9	ug/g	1	94		70	130	0	30
		vinyl chloride			0.8	ug/g	1	85		70	130	2	30
		bromomethane			1.3	ug/g	1	131	*	70	130	7	30
		chloroethane			0.9	ug/g	1	90		70	130	3	30
		trichlorofluoromethane			0.9	ug/g	1	88		70	130	2	30
		diethyl ether			1.0	ug/g	1	97		70	130	0	30
		acetone		<	2.5	ug/g	1	91				5	30
		1,1-dichloroethene			0.8	ug/g	1	84		70	130	2	30
		methylene chloride			1.0	ug/g	1	99		70	130	6	30
		carbon disulfide			0.6	ug/g	1	60	*	70	130	1	30
		methyl t-butyl ether (MTBE)			0.9	ug/g	1	90		70	130	4	30
		trans-1,2-dichloroethene			0.9	ug/g	1	92		70	130	1	30
		1,1-dichloroethane			0.9	ug/g	1	86		70	130	3	30
		2-butanone (MEK)			0.8	ug/g	1	82		70	130	6	30
		2,2-dichloropropane			0.8	ug/g	1	76		70	130	1	30
		cis-1,2-dichloroethene			0.9	ug/g	1	94		70	130	1	30
		chloroform			0.9	ug/g	1	93		70	130	3	30
		bromochloromethane			0.9	ug/g	1	90		70	130	3	30
		tetrahydrofuran (THF)			0.8	ug/g	1	80		70	130	2	30
		1,1,1-trichloroethane			0.9	ug/g	1	88		70	130	3	30
		1,1-dichloropropene			0.9	ug/g	1	88		70	130	3	30
		carbon tetrachloride			0.8	ug/g	1	81		70	130	1	30
		1,2-dichloroethane			1.0	ug/g	1	99		70	130	3	30
		benzene			0.9	ug/g	1	91		70	130	3	30
		trichloroethene			1.0	ug/g	1	97		70	130	3	30
		1,2-dichloropropane			0.9	ug/g	1	90		70	130	4	30
		bromodichloromethane			0.9	ug/g	1	93		70	130	3	30
		dibromomethane			0.9	ug/g	1	91		70	130	6	30
		4-methyl-2-pentanone (MIBK)			0.8	ug/g	1	77		70	130	1	30
		cis-1,3-dichloropropene			0.8	ug/g	1	83		70	130	3	30
		toluene			0.9	ug/g	1	95		70	130	3	30
		trans-1,3-dichloropropene			0.8	ug/g	1	81		70	130	3	30
		2-hexanone			0.8	ug/g	1	75		70	130	3	30
		1,1,2-trichloroethane			0.9	ug/g	1	92		70	130	3	30
		1,3-dichloropropane			0.9	ug/g	1	86		70	130	4	30
		tetrachloroethene			0.9	ug/g	1	91		70	130	2	30
		dibromochloromethane			0.8	ug/g	1	78		70	130	3	30
		1,2-dibromoethane (EDB)			0.9	ug/g	1	93		70	130	5	30
		chlorobenzene			0.9	ug/g	1	94		70	130	4	30
		1,1,1,2-tetrachloroethane			0.8	ug/g	1	80		70	130	3	30
		ethylbenzene			0.9	ug/g	1	85		70	130	4	30
		m&p-xylenes			1.7	ug/g	2	87		70	130	4	30
		o-xylene			0.9	ug/g	1	90		70	130	1	30
		styrene			0.9	ug/g	1	85		70	130	3	30
		bromoform			0.7	ug/g	1	75		70	130	4	30
		isopropylbenzene			0.9	ug/g	1	87		70	130	4	30
		1,1,2,2-tetrachloroethane			0.8	ug/g	1	83		70	130	6	30
		1,2,3-trichloropropane			0.8	ug/g	1	84		70	130	3	30
		n-propylbenzene			0.9	ug/g	1	94		70	130	4	30
		bromobenzene			1.0	ug/g	1	98		70	130	3	30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCSD7441	1,3,5-trimethylbenzene		1.0	ug/g	1	97		70	130	4	30
		2-chlorotoluene		0.9	ug/g	1	91		70	130	2	30
		4-chlorotoluene		0.9	ug/g	1	91		70	130	11	30
		tert-butylbenzene		1.0	ug/g	1	96		70	130	6	30
		1,2,4-trimethylbenzene		1.0	ug/g	1	97		70	130	3	30
		sec-butylbenzene		1.0	ug/g	1	98		70	130	5	30
		1,3-dichlorobenzene		1.0	ug/g	1	97		70	130	5	30
		4-isopropyltoluene		1.0	ug/g	1	96		70	130	5	30
		1,4-dichlorobenzene		1.0	ug/g	1	98		70	130	5	30
		1,2-dichlorobenzene		1.0	ug/g	1	95		70	130	4	30
		n-butylbenzene		1.0	ug/g	1	96		70	130	2	30
		1,2-dibromo-3-chloropropane (DBCP)		0.6	ug/g	1	63	*	70	130	6	30
		1,2,4-trichlorobenzene		0.9	ug/g	1	94		70	130	6	30
		hexachlorobutadiene		1.0	ug/g	1	97		70	130	5	30
		naphthalene		0.8	ug/g	1	80		70	130	3	30
		1,2,3-trichlorobenzene		0.8	ug/g	1	84		70	130	2	30
		dibromofluoromethane SUR		99	%				78	114		
		toluene-D8 SUR		100	%				88	110		
		4-bromofluorobenzene SUR		107	%				86	115		
		a,a,a-trifluorotoluene SUR		81	%				70	130		

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1403133	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1403133	bromoform		<	2	ug/L						
		isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		1,3,5-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene			0.8	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		dibromofluoromethane SUR			105	%			78	114		
		toluene-D8 SUR			104	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1403133	dichlorodifluoromethane			19	ug/L	20	96		70	130		
		chloromethane			23	ug/L	20	114		70	130		
		vinyl chloride			22	ug/L	20	110		70	130		
		bromomethane			39	ug/L	20	196	*	70	130		
		chloroethane			21	ug/L	20	107		70	130		
		trichlorofluoromethane			22	ug/L	20	109		70	130		
		diethyl ether			24	ug/L	20	118		70	130		
		acetone		<	50	ug/L	20	111					
		1,1-dichloroethene			21	ug/L	20	104		70	130		
		methylene chloride			22	ug/L	20	110		70	130		
		carbon disulfide			20	ug/L	20	102		70	130		
		methyl t-butyl ether (MTBE)			21	ug/L	20	107		70	130		
		trans-1,2-dichloroethene			23	ug/L	20	115		70	130		
		isopropyl ether (DIPE)			22	ug/L	20	108		70	130		
		ethyl t-butyl ether (ETBE)			22	ug/L	20	108		70	130		
		1,1-dichloroethane			20	ug/L	20	101		70	130		
		t-butanol (TBA)			93	ug/L	100	93		70	130		
		2-butanone (MEK)			20	ug/L	20	101		70	130		
		2,2-dichloropropane			18	ug/L	20	90		70	130		
		cis-1,2-dichloroethene			22	ug/L	20	112		70	130		
		chloroform			22	ug/L	20	110		70	130		
		bromochloromethane			23	ug/L	20	115		70	130		
		tetrahydrofuran (THF)			20	ug/L	20	99		70	130		
		1,1,1-trichloroethane			21	ug/L	20	105		70	130		
		1,1-dichloropropene			21	ug/L	20	105		70	130		
		t-amyl-methyl ether (TAME)			20	ug/L	20	102		70	130		
		carbon tetrachloride			20	ug/L	20	98		70	130		
		1,2-dichloroethane			23	ug/L	20	113		70	130		
		benzene			21	ug/L	20	107		70	130		
		trichloroethene			23	ug/L	20	117		70	130		
		1,2-dichloropropane			20	ug/L	20	102		70	130		
		bromodichloromethane			22	ug/L	20	110		70	130		
		1,4-dioxane		<	50	ug/L	40	103		70	130		
		dibromomethane			22	ug/L	20	109		70	130		
		4-methyl-2-pentanone (MIBK)			20	ug/L	20	101		70	130		
		cis-1,3-dichloropropene			19	ug/L	20	97		70	130		
		toluene			22	ug/L	20	109		70	130		
		trans-1,3-dichloropropene			19	ug/L	20	94		70	130		
		2-hexanone			20	ug/L	20	99		70	130		
		1,1,2-trichloroethane			21	ug/L	20	106		70	130		
		1,3-dichloropropane			20	ug/L	20	100		70	130		
		tetrachloroethene			20	ug/L	20	99		70	130		
		dibromochloromethane			18	ug/L	20	91		70	130		
		1,2-dibromoethane (EDB)			21	ug/L	20	106		70	130		
		chlorobenzene			21	ug/L	20	105		70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	90		70	130		
		ethylbenzene			19	ug/L	20	96		70	130		
		m&p-xylenes			38	ug/L	40	96		70	130		
		o-xylene			20	ug/L	20	100		70	130		
		styrene			19	ug/L	20	96		70	130		
		bromoform			18	ug/L	20	90		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1403133	isopropylbenzene		19	ug/L	20	96	70	130		
		1,1,2,2-tetrachloroethane		19	ug/L	20	93	70	130		
		1,2,3-trichloropropane		19	ug/L	20	96	70	130		
		n-propylbenzene		21	ug/L	20	103	70	130		
		bromobenzene		21	ug/L	20	107	70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	105	70	130		
		2-chlorotoluene		21	ug/L	20	103	70	130		
		4-chlorotoluene		19	ug/L	20	96	70	130		
		tert-butylbenzene		21	ug/L	20	106	70	130		
		1,2,4-trimethylbenzene		21	ug/L	20	105	70	130		
		sec-butylbenzene		21	ug/L	20	105	70	130		
		1,3-dichlorobenzene		21	ug/L	20	105	70	130		
		4-isopropyltoluene		21	ug/L	20	104	70	130		
		1,4-dichlorobenzene		21	ug/L	20	105	70	130		
		1,2-dichlorobenzene		20	ug/L	20	102	70	130		
		n-butylbenzene		20	ug/L	20	102	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		15	ug/L	20	76	70	130		
		1,2,4-trichlorobenzene		20	ug/L	20	98	70	130		
		1,3,5-trichlorobenzene		21	ug/L	20	105	70	130		
		hexachlorobutadiene		19	ug/L	20	96	70	130		
		naphthalene		18	ug/L	20	90	70	130		
		1,2,3-trichlorobenzene		18	ug/L	20	89	70	130		
		dibromofluoromethane SUR		103	%			78	114		
		toluene-D8 SUR		102	%			88	110		
		4-bromofluorobenzene SUR		106	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1403133	dichlorodifluoromethane			18	ug/L	20	91		70	130	6	20
		chloromethane			22	ug/L	20	109		70	130	4	20
		vinyl chloride			21	ug/L	20	103		70	130	6	20
		bromomethane			38	ug/L	20	188	*	70	130	4	20
		chloroethane			20	ug/L	20	99		70	130	8	20
		trichlorofluoromethane			21	ug/L	20	103		70	130	6	20
		diethyl ether			22	ug/L	20	108		70	130	9	20
		acetone		<	50	ug/L	20	112				1	20
		1,1-dichloroethene			18	ug/L	20	92		70	130	12	20
		methylene chloride			20	ug/L	20	101		70	130	9	20
		carbon disulfide			19	ug/L	20	94		70	130	8	20
		methyl t-butyl ether (MTBE)			20	ug/L	20	99		70	130	8	20
		trans-1,2-dichloroethene			21	ug/L	20	106		70	130	8	20
		isopropyl ether (DIPE)			20	ug/L	20	99		70	130	9	20
		ethyl t-butyl ether (ETBE)			20	ug/L	20	100		70	130	8	20
		1,1-dichloroethane			19	ug/L	20	94		70	130	7	20
		t-butanol (TBA)			84	ug/L	100	84		70	130	9	20
		2-butanone (MEK)			19	ug/L	20	97		70	130	4	20
		2,2-dichloropropane			16	ug/L	20	80		70	130	12	20
		cis-1,2-dichloroethene			21	ug/L	20	104		70	130	7	20
		chloroform			20	ug/L	20	102		70	130	7	20
		bromochloromethane			20	ug/L	20	102		70	130	12	20
		tetrahydrofuran (THF)			18	ug/L	20	91		70	130	8	20
		1,1,1-trichloroethane			19	ug/L	20	95		70	130	10	20
		1,1-dichloropropene			19	ug/L	20	95		70	130	10	20
		t-amyl-methyl ether (TAME)			19	ug/L	20	94		70	130	8	20
		carbon tetrachloride			18	ug/L	20	89		70	130	10	20
		1,2-dichloroethane			21	ug/L	20	105		70	130	8	20
		benzene			20	ug/L	20	99		70	130	8	20
		trichloroethene			21	ug/L	20	105		70	130	11	20
		1,2-dichloropropane			19	ug/L	20	96		70	130	6	20
		bromodichloromethane			21	ug/L	20	103		70	130	7	20
		1,4-dioxane		<	50	ug/L	40	101		70	130	3	20
		dibromomethane			20	ug/L	20	99		70	130	10	20
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	88		70	130	13	20
		cis-1,3-dichloropropene			18	ug/L	20	89		70	130	8	20
		toluene			20	ug/L	20	101		70	130	8	20
		trans-1,3-dichloropropene			17	ug/L	20	87		70	130	7	20
		2-hexanone			18	ug/L	20	92		70	130	8	20
		1,1,2-trichloroethane			20	ug/L	20	99		70	130	8	20
		1,3-dichloropropane			18	ug/L	20	92		70	130	8	20
		tetrachloroethene			18	ug/L	20	92		70	130	7	20
		dibromochloromethane			18	ug/L	20	89		70	130	2	20
		1,2-dibromoethane (EDB)			20	ug/L	20	102		70	130	5	20
		chlorobenzene			20	ug/L	20	99		70	130	6	20
		1,1,1,2-tetrachloroethane			17	ug/L	20	86		70	130	4	20
		ethylbenzene			18	ug/L	20	89		70	130	7	20
		m&p-xylenes			36	ug/L	40	90		70	130	6	20
		o-xylene			19	ug/L	20	94		70	130	6	20
		styrene			18	ug/L	20	90		70	130	6	20
		bromoform			17	ug/L	20	85		70	130	6	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1403133	isopropylbenzene		18	ug/L	20	90	70	130	7	20
		1,1,2,2-tetrachloroethane		18	ug/L	20	90	70	130	3	20
		1,2,3-trichloropropane		18	ug/L	20	91	70	130	5	20
		n-propylbenzene		19	ug/L	20	97	70	130	6	20
		bromobenzene		20	ug/L	20	101	70	130	6	20
		1,3,5-trimethylbenzene		20	ug/L	20	100	70	130	5	20
		2-chlorotoluene		20	ug/L	20	98	70	130	5	20
		4-chlorotoluene		18	ug/L	20	90	70	130	6	20
		tert-butylbenzene		19	ug/L	20	96	70	130	10	20
		1,2,4-trimethylbenzene		20	ug/L	20	99	70	130	6	20
		sec-butylbenzene		20	ug/L	20	98	70	130	7	20
		1,3-dichlorobenzene		20	ug/L	20	98	70	130	7	20
		4-isopropyltoluene		19	ug/L	20	97	70	130	7	20
		1,4-dichlorobenzene		20	ug/L	20	98	70	130	7	20
		1,2-dichlorobenzene		19	ug/L	20	97	70	130	5	20
		n-butylbenzene		19	ug/L	20	97	70	130	5	20
		1,2-dibromo-3-chloropropane (DBCP)		15	ug/L	20	74	70	130	2	20
		1,2,4-trichlorobenzene		19	ug/L	20	95	70	130	3	20
		1,3,5-trichlorobenzene		20	ug/L	20	100	70	130	5	20
		hexachlorobutadiene		19	ug/L	20	94	70	130	2	20
		naphthalene		17	ug/L	20	86	70	130	4	20
		1,2,3-trichlorobenzene		17	ug/L	20	85	70	130	4	20
		dibromofluoromethane SUR		103	%			78	114		
		toluene-D8 SUR		103	%			88	110		
		4-bromofluorobenzene SUR		106	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1403150	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1403150	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		1,3,5-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene			0.8	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		dibromofluoromethane SUR			102	%			78	114		
		toluene-D8 SUR			103	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1403150	dichlorodifluoromethane			19	ug/L	20	94		70	130		
		chloromethane			22	ug/L	20	111		70	130		
		vinyl chloride			21	ug/L	20	106		70	130		
		bromomethane			39	ug/L	20	197	*	70	130		
		chloroethane			21	ug/L	20	103		70	130		
		trichlorofluoromethane			21	ug/L	20	106		70	130		
		diethyl ether			24	ug/L	20	119		70	130		
		acetone		<	50	ug/L	20	115					
		1,1-dichloroethene			20	ug/L	20	100		70	130		
		methylene chloride			21	ug/L	20	107		70	130		
		carbon disulfide			20	ug/L	20	99		70	130		
		methyl t-butyl ether (MTBE)			22	ug/L	20	108		70	130		
		trans-1,2-dichloroethene			22	ug/L	20	111		70	130		
		isopropyl ether (DIPE)			22	ug/L	20	108		70	130		
		ethyl t-butyl ether (ETBE)			22	ug/L	20	109		70	130		
		1,1-dichloroethane			20	ug/L	20	99		70	130		
		t-butanol (TBA)			99	ug/L	100	99		70	130		
		2-butanone (MEK)			21	ug/L	20	104		70	130		
		2,2-dichloropropane			20	ug/L	20	100		70	130		
		cis-1,2-dichloroethene			22	ug/L	20	108		70	130		
		chloroform			21	ug/L	20	107		70	130		
		bromochloromethane			22	ug/L	20	110		70	130		
		tetrahydrofuran (THF)			21	ug/L	20	105		70	130		
		1,1,1-trichloroethane			20	ug/L	20	101		70	130		
		1,1-dichloropropene			21	ug/L	20	103		70	130		
		t-amyl-methyl ether (TAME)			21	ug/L	20	103		70	130		
		carbon tetrachloride			19	ug/L	20	95		70	130		
		1,2-dichloroethane			23	ug/L	20	114		70	130		
		benzene			21	ug/L	20	104		70	130		
		trichloroethene			22	ug/L	20	112		70	130		
		1,2-dichloropropane			20	ug/L	20	101		70	130		
		bromodichloromethane			21	ug/L	20	107		70	130		
		1,4-dioxane		<	50	ug/L	40	106		70	130		
		dibromomethane			22	ug/L	20	108		70	130		
		4-methyl-2-pentanone (MIBK)			21	ug/L	20	103		70	130		
		cis-1,3-dichloropropene			19	ug/L	20	97		70	130		
		toluene			21	ug/L	20	106		70	130		
		trans-1,3-dichloropropene			19	ug/L	20	95		70	130		
		2-hexanone			20	ug/L	20	100		70	130		
		1,1,2-trichloroethane			21	ug/L	20	106		70	130		
		1,3-dichloropropane			20	ug/L	20	99		70	130		
		tetrachloroethene			19	ug/L	20	96		70	130		
		dibromochloromethane			18	ug/L	20	92		70	130		
		1,2-dibromoethane (EDB)			21	ug/L	20	106		70	130		
		chlorobenzene			20	ug/L	20	102		70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	88		70	130		
		ethylbenzene			18	ug/L	20	92		70	130		
		m&p-xylenes			37	ug/L	40	93		70	130		
		o-xylene			19	ug/L	20	96		70	130		
		styrene			19	ug/L	20	93		70	130		
		bromoform			18	ug/L	20	90		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1403150	isopropylbenzene		19	ug/L	20	93	70	130		
		1,1,2,2-tetrachloroethane		19	ug/L	20	97	70	130		
		1,2,3-trichloropropane		20	ug/L	20	99	70	130		
		n-propylbenzene		20	ug/L	20	102	70	130		
		bromobenzene		21	ug/L	20	107	70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	105	70	130		
		2-chlorotoluene		21	ug/L	20	103	70	130		
		4-chlorotoluene		19	ug/L	20	94	70	130		
		tert-butylbenzene		21	ug/L	20	105	70	130		
		1,2,4-trimethylbenzene		21	ug/L	20	104	70	130		
		sec-butylbenzene		21	ug/L	20	104	70	130		
		1,3-dichlorobenzene		21	ug/L	20	104	70	130		
		4-isopropyltoluene		21	ug/L	20	103	70	130		
		1,4-dichlorobenzene		21	ug/L	20	105	70	130		
		1,2-dichlorobenzene		20	ug/L	20	102	70	130		
		n-butylbenzene		21	ug/L	20	103	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		16	ug/L	20	78	70	130		
		1,2,4-trichlorobenzene		20	ug/L	20	102	70	130		
		1,3,5-trichlorobenzene		21	ug/L	20	106	70	130		
		hexachlorobutadiene		20	ug/L	20	99	70	130		
		naphthalene		18	ug/L	20	92	70	130		
		1,2,3-trichlorobenzene		19	ug/L	20	94	70	130		
		dibromofluoromethane SUR		103	%			78	114		
		toluene-D8 SUR		102	%			88	110		
		4-bromofluorobenzene SUR		105	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCSD1403150	dichlorodifluoromethane			18	ug/L	20	89		70	130	5	20
		chloromethane			22	ug/L	20	111		70	130	0	20
		vinyl chloride			20	ug/L	20	102		70	130	4	20
		bromomethane			39	ug/L	20	194	*	70	130	1	20
		chloroethane			20	ug/L	20	100		70	130	3	20
		trichlorofluoromethane			21	ug/L	20	103		70	130	3	20
		diethyl ether			24	ug/L	20	117		70	130	1	20
		acetone		<	50	ug/L	20	120				4	20
		1,1-dichloroethene			21	ug/L	20	103		70	130	3	20
		methylene chloride			21	ug/L	20	107		70	130	0	20
		carbon disulfide			21	ug/L	20	105		70	130	6	20
		methyl t-butyl ether (MTBE)			21	ug/L	20	106		70	130	2	20
		trans-1,2-dichloroethene			22	ug/L	20	112		70	130	1	20
		isopropyl ether (DIPE)			21	ug/L	20	106		70	130	2	20
		ethyl t-butyl ether (ETBE)			21	ug/L	20	106		70	130	3	20
		1,1-dichloroethane			20	ug/L	20	101		70	130	1	20
		t-butanol (TBA)			99	ug/L	100	99		70	130	0	20
		2-butanone (MEK)			21	ug/L	20	106		70	130	2	20
		2,2-dichloropropane			21	ug/L	20	104		70	130	4	20
		cis-1,2-dichloroethene			22	ug/L	20	111		70	130	2	20
		chloroform			22	ug/L	20	108		70	130	1	20
		bromochloromethane			22	ug/L	20	110		70	130	0	20
		tetrahydrofuran (THF)			21	ug/L	20	104		70	130	1	20
		1,1,1-trichloroethane			21	ug/L	20	105		70	130	4	20
		1,1-dichloropropene			21	ug/L	20	107		70	130	4	20
		t-amyl-methyl ether (TAME)			20	ug/L	20	100		70	130	3	20
		carbon tetrachloride			20	ug/L	20	99		70	130	5	20
		1,2-dichloroethane			22	ug/L	20	112		70	130	2	20
		benzene			21	ug/L	20	105		70	130	1	20
		trichloroethene			23	ug/L	20	115		70	130	3	20
		1,2-dichloropropane			20	ug/L	20	101		70	130	1	20
		bromodichloromethane			22	ug/L	20	109		70	130	2	20
		1,4-dioxane		<	50	ug/L	40	102		70	130	4	20
		dibromomethane			21	ug/L	20	107		70	130	1	20
		4-methyl-2-pentanone (MIBK)			20	ug/L	20	101		70	130	1	20
		cis-1,3-dichloropropene			19	ug/L	20	97		70	130	0	20
		toluene			22	ug/L	20	108		70	130	1	20
		trans-1,3-dichloropropene			19	ug/L	20	94		70	130	1	20
		2-hexanone			20	ug/L	20	101		70	130	1	20
		1,1,2-trichloroethane			21	ug/L	20	106		70	130	0	20
		1,3-dichloropropane			20	ug/L	20	101		70	130	2	20
		tetrachloroethene			20	ug/L	20	102		70	130	6	20
		dibromochloromethane			19	ug/L	20	94		70	130	3	20
		1,2-dibromoethane (EDB)			22	ug/L	20	109		70	130	3	20
		chlorobenzene			21	ug/L	20	107		70	130	5	20
		1,1,1,2-tetrachloroethane			18	ug/L	20	92		70	130	4	20
		ethylbenzene			19	ug/L	20	95		70	130	4	20
		m&p-xylenes			39	ug/L	40	97		70	130	4	20
		o-xylene			20	ug/L	20	99		70	130	3	20
		styrene			19	ug/L	20	95		70	130	3	20
		bromoform			19	ug/L	20	93		70	130	4	20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1403150	isopropylbenzene		20	ug/L	20	99	70	130	6	20
		1,1,2,2-tetrachloroethane		19	ug/L	20	96	70	130	1	20
		1,2,3-trichloropropane		20	ug/L	20	99	70	130	0	20
		n-propylbenzene		21	ug/L	20	104	70	130	2	20
		bromobenzene		21	ug/L	20	106	70	130	2	20
		1,3,5-trimethylbenzene		21	ug/L	20	106	70	130	1	20
		2-chlorotoluene		21	ug/L	20	104	70	130	0	20
		4-chlorotoluene		19	ug/L	20	94	70	130	0	20
		tert-butylbenzene		21	ug/L	20	107	70	130	2	20
		1,2,4-trimethylbenzene		21	ug/L	20	105	70	130	1	20
		sec-butylbenzene		21	ug/L	20	107	70	130	3	20
		1,3-dichlorobenzene		21	ug/L	20	105	70	130	1	20
		4-isopropyltoluene		21	ug/L	20	106	70	130	3	20
		1,4-dichlorobenzene		21	ug/L	20	106	70	130	1	20
		1,2-dichlorobenzene		21	ug/L	20	104	70	130	2	20
		n-butylbenzene		21	ug/L	20	107	70	130	3	20
		1,2-dibromo-3-chloropropane (DBCP)		15	ug/L	20	77	70	130	1	20
		1,2,4-trichlorobenzene		21	ug/L	20	104	70	130	2	20
		1,3,5-trichlorobenzene		22	ug/L	20	109	70	130	2	20
		hexachlorobutadiene		21	ug/L	20	104	70	130	5	20
		naphthalene		19	ug/L	20	94	70	130	2	20
		1,2,3-trichlorobenzene		19	ug/L	20	96	70	130	2	20
		dibromofluoromethane SUR		103	%			78	114		
		toluene-D8 SUR		103	%			88	110		
		4-bromofluorobenzene SUR		106	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5030C8260C	BLK1403166	dichlorodifluoromethane		<	2	ug/L					
		chloromethane		<	2	ug/L					
		vinyl chloride		<	2	ug/L					
		bromomethane		<	2	ug/L					
		chloroethane		<	2	ug/L					
		trichlorofluoromethane		<	2	ug/L					
		diethyl ether		<	10	ug/L					
		acetone		<	50	ug/L					
		1,1-dichloroethene		<	1	ug/L					
		methylene chloride		<	5	ug/L					
		carbon disulfide		<	2	ug/L					
		methyl t-butyl ether (MTBE)		<	2	ug/L					
		trans-1,2-dichloroethene		<	2	ug/L					
		isopropyl ether (DIPE)		<	2	ug/L					
		ethyl t-butyl ether (ETBE)		<	2	ug/L					
		1,1-dichloroethane		<	2	ug/L					
		t-butanol (TBA)		<	30	ug/L					
		2-butanone (MEK)		<	10	ug/L					
		2,2-dichloropropane		<	2	ug/L					
		cis-1,2-dichloroethene		<	2	ug/L					
		chloroform		<	2	ug/L					
		bromochloromethane		<	2	ug/L					
		tetrahydrofuran (THF)		<	10	ug/L					
		1,1,1-trichloroethane		<	2	ug/L					
		1,1-dichloropropene		<	2	ug/L					
		t-amyl-methyl ether (TAME)		<	2	ug/L					
		carbon tetrachloride		<	2	ug/L					
		1,2-dichloroethane		<	2	ug/L					
		benzene		<	2	ug/L					
		trichloroethene		<	2	ug/L					
		1,2-dichloropropane		<	2	ug/L					
		bromodichloromethane		<	0.6	ug/L					
		1,4-dioxane		<	50	ug/L					
		dibromomethane		<	2	ug/L					
		4-methyl-2-pentanone (MIBK)		<	10	ug/L					
		cis-1,3-dichloropropene		<	2	ug/L					
		toluene		<	2	ug/L					
		trans-1,3-dichloropropene		<	2	ug/L					
		2-hexanone		<	10	ug/L					
		1,1,2-trichloroethane		<	2	ug/L					
		1,3-dichloropropane		<	2	ug/L					
		tetrachloroethene		<	2	ug/L					
		dibromochloromethane		<	2	ug/L					
		1,2-dibromoethane (EDB)		<	2	ug/L					
		chlorobenzene		<	2	ug/L					
		1,1,1,2-tetrachloroethane		<	2	ug/L					
		ethylbenzene		<	2	ug/L					
		m&p-xylenes		<	2	ug/L					
		o-xylene		<	2	ug/L					
		styrene		<	2	ug/L					
		bromoform		<	2	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	BLK1403166	isopropylbenzene		<	2	ug/L						
		1,1,2,2-tetrachloroethane		<	2	ug/L						
		1,2,3-trichloropropane		<	2	ug/L						
		n-propylbenzene		<	2	ug/L						
		bromobenzene		<	2	ug/L						
		1,3,5-trimethylbenzene		<	2	ug/L						
		2-chlorotoluene		<	2	ug/L						
		4-chlorotoluene		<	2	ug/L						
		tert-butylbenzene		<	2	ug/L						
		1,2,4-trimethylbenzene		<	2	ug/L						
		sec-butylbenzene		<	2	ug/L						
		1,3-dichlorobenzene		<	2	ug/L						
		4-isopropyltoluene		<	2	ug/L						
		1,4-dichlorobenzene		<	2	ug/L						
		1,2-dichlorobenzene		<	2	ug/L						
		n-butylbenzene		<	2	ug/L						
		1,2-dibromo-3-chloropropane (DBCP)		<	2	ug/L						
		1,2,4-trichlorobenzene		<	2	ug/L						
		1,3,5-trichlorobenzene		<	2	ug/L						
		hexachlorobutadiene			0.9	ug/L						
		naphthalene		<	5	ug/L						
		1,2,3-trichlorobenzene		<	2	ug/L						
		dibromofluoromethane SUR			105	%			78	114		
		toluene-D8 SUR			105	%			88	110		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5030C8260C	LCS1403166	dichlorodifluoromethane			18	ug/L	20	91		70	130		
		chloromethane			23	ug/L	20	115		70	130		
		vinyl chloride			21	ug/L	20	103		70	130		
		bromomethane			35	ug/L	20	174	*	70	130		
		chloroethane			20	ug/L	20	101		70	130		
		trichlorofluoromethane			21	ug/L	20	104		70	130		
		diethyl ether			23	ug/L	20	116		70	130		
		acetone		<	50	ug/L	20	116					
		1,1-dichloroethene			20	ug/L	20	101		70	130		
		methylene chloride			21	ug/L	20	103		70	130		
		carbon disulfide			20	ug/L	20	99		70	130		
		methyl t-butyl ether (MTBE)			21	ug/L	20	106		70	130		
		trans-1,2-dichloroethene			22	ug/L	20	110		70	130		
		isopropyl ether (DIPE)			21	ug/L	20	105		70	130		
		ethyl t-butyl ether (ETBE)			21	ug/L	20	106		70	130		
		1,1-dichloroethane			20	ug/L	20	99		70	130		
		t-butanol (TBA)			94	ug/L	100	94		70	130		
		2-butanone (MEK)			20	ug/L	20	98		70	130		
		2,2-dichloropropane			16	ug/L	20	81		70	130		
		cis-1,2-dichloroethene			21	ug/L	20	107		70	130		
		chloroform			21	ug/L	20	106		70	130		
		bromochloromethane			22	ug/L	20	110		70	130		
		tetrahydrofuran (THF)			20	ug/L	20	99		70	130		
		1,1,1-trichloroethane			21	ug/L	20	105		70	130		
		1,1-dichloropropene			21	ug/L	20	104		70	130		
		t-amyl-methyl ether (TAME)			20	ug/L	20	99		70	130		
		carbon tetrachloride			20	ug/L	20	98		70	130		
		1,2-dichloroethane			22	ug/L	20	112		70	130		
		benzene			21	ug/L	20	104		70	130		
		trichloroethene			22	ug/L	20	111		70	130		
		1,2-dichloropropane			20	ug/L	20	101		70	130		
		bromodichloromethane			22	ug/L	20	108		70	130		
		1,4-dioxane		<	50	ug/L	40	102		70	130		
		dibromomethane			22	ug/L	20	108		70	130		
		4-methyl-2-pentanone (MIBK)			19	ug/L	20	96		70	130		
		cis-1,3-dichloropropene			19	ug/L	20	93		70	130		
		toluene			21	ug/L	20	104		70	130		
		trans-1,3-dichloropropene			18	ug/L	20	90		70	130		
		2-hexanone			19	ug/L	20	96		70	130		
		1,1,2-trichloroethane			21	ug/L	20	105		70	130		
		1,3-dichloropropane			20	ug/L	20	101		70	130		
		tetrachloroethene			20	ug/L	20	99		70	130		
		dibromochloromethane			19	ug/L	20	94		70	130		
		1,2-dibromoethane (EDB)			22	ug/L	20	108		70	130		
		chlorobenzene			21	ug/L	20	105		70	130		
		1,1,1,2-tetrachloroethane			18	ug/L	20	90		70	130		
		ethylbenzene			19	ug/L	20	94		70	130		
		m&p-xylenes			38	ug/L	40	94		70	130		
		o-xylene			20	ug/L	20	98		70	130		
		styrene			19	ug/L	20	94		70	130		
		bromoform			18	ug/L	20	90		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCS1403166	isopropylbenzene		19	ug/L	20	97	70	130		
		1,1,2,2-tetrachloroethane		19	ug/L	20	95	70	130		
		1,2,3-trichloropropane		19	ug/L	20	96	70	130		
		n-propylbenzene		20	ug/L	20	101	70	130		
		bromobenzene		21	ug/L	20	106	70	130		
		1,3,5-trimethylbenzene		21	ug/L	20	103	70	130		
		2-chlorotoluene		20	ug/L	20	102	70	130		
		4-chlorotoluene		19	ug/L	20	93	70	130		
		tert-butylbenzene		21	ug/L	20	105	70	130		
		1,2,4-trimethylbenzene		21	ug/L	20	103	70	130		
		sec-butylbenzene		21	ug/L	20	104	70	130		
		1,3-dichlorobenzene		21	ug/L	20	103	70	130		
		4-isopropyltoluene		21	ug/L	20	103	70	130		
		1,4-dichlorobenzene		21	ug/L	20	103	70	130		
		1,2-dichlorobenzene		20	ug/L	20	101	70	130		
		n-butylbenzene		20	ug/L	20	102	70	130		
		1,2-dibromo-3-chloropropane (DBCP)		15	ug/L	20	76	70	130		
		1,2,4-trichlorobenzene		20	ug/L	20	98	70	130		
		1,3,5-trichlorobenzene		20	ug/L	20	102	70	130		
		hexachlorobutadiene		19	ug/L	20	97	70	130		
		naphthalene		18	ug/L	20	89	70	130		
		1,2,3-trichlorobenzene		18	ug/L	20	88	70	130		
		dibromofluoromethane SUR		104	%			78	114		
		toluene-D8 SUR		104	%			88	110		
		4-bromofluorobenzene SUR		110	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD		RPD Limit
SW5030C8260C	LCSD1403166	dichlorodifluoromethane			19	ug/L	20	96		70	130	6		20
		chloromethane			24	ug/L	20	121		70	130	5		20
		vinyl chloride			22	ug/L	20	112		70	130	9		20
		bromomethane			39	ug/L	20	195	*	70	130	11		20
		chloroethane			22	ug/L	20	108		70	130	7		20
		trichlorofluoromethane			22	ug/L	20	110		70	130	6		20
		diethyl ether			23	ug/L	20	115		70	130	1		20
		acetone		<	50	ug/L	20	107				8		20
		1,1-dichloroethene			22	ug/L	20	109		70	130	7		20
		methylene chloride			22	ug/L	20	108		70	130	4		20
		carbon disulfide			22	ug/L	20	109		70	130	9		20
		methyl t-butyl ether (MTBE)			21	ug/L	20	106		70	130	0		20
		trans-1,2-dichloroethene			23	ug/L	20	115		70	130	5		20
		isopropyl ether (DIPE)			22	ug/L	20	110		70	130	4		20
		ethyl t-butyl ether (ETBE)			22	ug/L	20	108		70	130	1		20
		1,1-dichloroethane			21	ug/L	20	104		70	130	5		20
		t-butanol (TBA)			89	ug/L	100	89		70	130	6		20
		2-butanone (MEK)			20	ug/L	20	100		70	130	1		20
		2,2-dichloropropane			17	ug/L	20	85		70	130	5		20
		cis-1,2-dichloroethene			22	ug/L	20	111		70	130	4		20
		chloroform			22	ug/L	20	111		70	130	4		20
		bromochloromethane			22	ug/L	20	112		70	130	2		20
		tetrahydrofuran (THF)			19	ug/L	20	95		70	130	5		20
		1,1,1-trichloroethane			22	ug/L	20	110		70	130	5		20
		1,1-dichloropropene			22	ug/L	20	109		70	130	5		20
		t-amyl-methyl ether (TAME)			20	ug/L	20	99		70	130	0		20
		carbon tetrachloride			21	ug/L	20	105		70	130	7		20
		1,2-dichloroethane			23	ug/L	20	113		70	130	1		20
		benzene			22	ug/L	20	109		70	130	5		20
		trichloroethene			23	ug/L	20	116		70	130	4		20
		1,2-dichloropropane			21	ug/L	20	105		70	130	4		20
		bromodichloromethane			22	ug/L	20	112		70	130	4		20
		1,4-dioxane		<	50	ug/L	40	82		70	130	21	*	20
		dibromomethane			21	ug/L	20	106		70	130	1		20
		4-methyl-2-pentanone (MIBK)			18	ug/L	20	91		70	130	5		20
		cis-1,3-dichloropropene			19	ug/L	20	96		70	130	3		20
		toluene			22	ug/L	20	110		70	130	5		20
		trans-1,3-dichloropropene			18	ug/L	20	91		70	130	2		20
		2-hexanone			18	ug/L	20	91		70	130	6		20
		1,1,2-trichloroethane			21	ug/L	20	105		70	130	1		20
		1,3-dichloropropane			20	ug/L	20	99		70	130	2		20
		tetrachloroethene			20	ug/L	20	102		70	130	3		20
		dibromochloromethane			19	ug/L	20	93		70	130	1		20
		1,2-dibromoethane (EDB)			21	ug/L	20	105		70	130	3		20
		chlorobenzene			21	ug/L	20	106		70	130	0		20
		1,1,1,2-tetrachloroethane			18	ug/L	20	91		70	130	1		20
		ethylbenzene			19	ug/L	20	96		70	130	2		20
		m&p-xylenes			39	ug/L	40	96		70	130	2		20
		o-xylene			20	ug/L	20	100		70	130	2		20
		styrene			19	ug/L	20	95		70	130	1		20
		bromoform			18	ug/L	20	89		70	130	2		20

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5030C8260C	LCSD1403166	isopropylbenzene		19	ug/L	20	97	70	130	0	20
		1,1,2,2-tetrachloroethane		18	ug/L	20	92	70	130	4	20
		1,2,3-trichloropropane		19	ug/L	20	94	70	130	3	20
		n-propylbenzene		21	ug/L	20	105	70	130	4	20
		bromobenzene		22	ug/L	20	109	70	130	3	20
		1,3,5-trimethylbenzene		21	ug/L	20	107	70	130	4	20
		2-chlorotoluene		21	ug/L	20	105	70	130	3	20
		4-chlorotoluene		19	ug/L	20	96	70	130	3	20
		tert-butylbenzene		22	ug/L	20	109	70	130	4	20
		1,2,4-trimethylbenzene		21	ug/L	20	105	70	130	2	20
		sec-butylbenzene		22	ug/L	20	108	70	130	4	20
		1,3-dichlorobenzene		21	ug/L	20	105	70	130	2	20
		4-isopropyltoluene		21	ug/L	20	106	70	130	3	20
		1,4-dichlorobenzene		21	ug/L	20	105	70	130	2	20
		1,2-dichlorobenzene		21	ug/L	20	103	70	130	1	20
		n-butylbenzene		21	ug/L	20	103	70	130	1	20
		1,2-dibromo-3-chloropropane (DBCP)		14	ug/L	20	70	70	130	8	20
		1,2,4-trichlorobenzene		19	ug/L	20	97	70	130	0	20
		1,3,5-trichlorobenzene		21	ug/L	20	104	70	130	2	20
		hexachlorobutadiene		20	ug/L	20	102	70	130	5	20
		naphthalene		17	ug/L	20	85	70	130	4	20
		1,2,3-trichlorobenzene		17	ug/L	20	87	70	130	1	20
		dibromofluoromethane SUR		102	%			78	114		
		toluene-D8 SUR		103	%			88	110		
		4-bromofluorobenzene SUR		104	%			86	115		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3510C8270D	BLK7395	N-nitrosodimethylamine		<	2	ug/L					
		aniline		<	2	ug/L					
		phenol		<	2	ug/L					
		2-chlorophenol		<	5	ug/L					
		bis(2-chloroethyl)ether		<	2	ug/L					
		1,3-dichlorobenzene		<	2	ug/L					
		1,4-dichlorobenzene		<	2	ug/L					
		1,2-dichlorobenzene		<	2	ug/L					
		benzyl alcohol		<	2	ug/L					
		2-methylphenol		<	2	ug/L					
		bis(2-chloroisopropyl) ether		<	2	ug/L					
		hexachloroethane		<	2	ug/L					
		N-nitroso-di-N-propylamine		<	2	ug/L					
		4-methylphenol		<	2	ug/L					
		nitrobenzene		<	2	ug/L					
		isophorone		<	5	ug/L					
		2-nitrophenol		<	2	ug/L					
		2,4-dimethylphenol		<	2	ug/L					
		bis(2-chloroethoxy)methane		<	5	ug/L					
		2,4-dichlorophenol		<	5	ug/L					
		1,2,4-trichlorobenzene		<	5	ug/L					
		naphthalene		<	0.5	ug/L					
		benzoic acid		<	50	ug/L					
		4-chloroaniline		<	2	ug/L					
		hexachlorobutadiene		<	2	ug/L					
		4-chloro-3-methylphenol		<	2	ug/L					
		2-methylnaphthalene		<	0.5	ug/L					
		hexachlorocyclopentadiene		<	10	ug/L					
		2,4,6-trichlorophenol		<	2	ug/L					
		2,4,5-trichlorophenol		<	2	ug/L					
		2-chloronaphthalene		<	5	ug/L					
		2-nitroaniline		<	2	ug/L					
		acenaphthylene		<	0.5	ug/L					
		dimethylphthalate		<	5	ug/L					
		2,6-dinitrotoluene		<	2	ug/L					
		2,4-dinitrotoluene		<	2	ug/L					
		acenaphthene		<	0.5	ug/L					
		3-nitroaniline		<	2	ug/L					
		2,4-dinitrophenol		<	50	ug/L					
		dibenzofuran		<	0.5	ug/L					
		4-nitrophenol		<	10	ug/L					
		fluorene		<	0.5	ug/L					
		diethyl phthalate		<	5	ug/L					
		4-chlorophenyl phenyl ether		<	5	ug/L					
		4-nitroaniline		<	5	ug/L					
		4,6-dinitro-2-methylphenol		<	20	ug/L					
		azobenzene		<	2	ug/L					
		N-nitrosodiphenylamine		<	2	ug/L					
		4-bromophenyl phenyl ether		<	2	ug/L					
		hexachlorobenzene		<	2	ug/L					
		pentachlorophenol		<	10	ug/L					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3510C8270D	BLK7395	phenanthrene		<	0.5	ug/L						
		anthracene		<	0.5	ug/L						
		carbazole		<	2	ug/L						
		di-n-butylphthalate		<	5	ug/L						
		fluoranthene		<	0.5	ug/L						
		benzidine		<	30	ug/L						
		pyrene		<	0.5	ug/L						
		butyl benzyl phthalate		<	5	ug/L						
		benzo(a)anthracene		<	0.5	ug/L						
		chrysene		<	0.5	ug/L						
		3,3'-dichlorobenzidine		<	30	ug/L						
		bis(2-ethylhexyl)phthalate		<	5	ug/L						
		di-n-octyl phthalate		<	2	ug/L						
		benzo(b)fluoranthene		<	0.5	ug/L						
		benzo(k)fluoranthene		<	0.5	ug/L						
		benzo(a)pyrene		<	0.2	ug/L						
		indeno(1,2,3-cd)pyrene		<	0.5	ug/L						
		dibenzo(a,h)anthracene		<	0.5	ug/L						
		benzo(g,h,i)perylene		<	0.5	ug/L						
		2-fluorophenol SUR			41	%			21	100		
		phenol-D5 SUR			28	%			10	102		
		2,4,6-tribromophenol SUR			83	%			10	123		
		nitrobenzene-D5 SUR			72	%			35	114		
		2-fluorobiphenyl SUR			60	%			43	116		
		p-terphenyl-D14 SUR			113	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW3510C8270D	LCS7395	N-nitrosodimethylamine			16	ug/L	40	40		40	140		
		aniline			25	ug/L	40	62		40	140		
		phenol			12	ug/L	40	30		30	130		
		2-chlorophenol			25	ug/L	40	62		30	130		
		bis(2-chloroethyl)ether			26	ug/L	40	65		40	140		
		1,3-dichlorobenzene			17	ug/L	40	43		40	140		
		1,4-dichlorobenzene			18	ug/L	40	46		40	140		
		1,2-dichlorobenzene			19	ug/L	40	47		40	140		
		benzyl alcohol			22	ug/L	40	55		30	130		
		2-methylphenol			23	ug/L	40	57		30	130		
		bis(2-chloroisopropyl) ether			25	ug/L	40	62		40	140		
		hexachloroethane			16	ug/L	40	39	*	40	140		
		N-nitroso-di-N-propylamine			26	ug/L	40	65		40	140		
		4-methylphenol			23	ug/L	40	56		30	130		
		nitrobenzene			27	ug/L	40	67		40	140		
		isophorone			31	ug/L	40	76		40	140		
		2-nitrophenol			26	ug/L	40	64		30	130		
		2,4-dimethylphenol			17	ug/L	40	41		30	130		
		bis(2-chloroethoxy)methane			28	ug/L	40	69		40	140		
		2,4-dichlorophenol			29	ug/L	40	71		30	130		
		1,2,4-trichlorobenzene			22	ug/L	40	54		40	140		
		naphthalene			22	ug/L	40	56		40	140		
		benzoic acid		<	50	ug/L							
		4-chloroaniline			32	ug/L	40	81		40	140		
		hexachlorobutadiene			20	ug/L	40	50		40	140		
		4-chloro-3-methylphenol			30	ug/L	40	74		30	130		
		2-methylnaphthalene			24	ug/L	40	59		40	140		
		hexachlorocyclopentadiene			17	ug/L	40	43		40	140		
		2,4,6-trichlorophenol			32	ug/L	40	81		30	130		
		2,4,5-trichlorophenol			31	ug/L	40	77		30	130		
		2-chloronaphthalene			25	ug/L	40	63		40	140		
		2-nitroaniline			27	ug/L	40	66		40	140		
		acenaphthylene			26	ug/L	40	64		40	140		
		dimethylphthalate			20	ug/L	40	51		40	140		
		2,6-dinitrotoluene			29	ug/L	40	73		40	140		
		2,4-dinitrotoluene			29	ug/L	40	74		40	140		
		acenaphthene			25	ug/L	40	63		40	140		
		3-nitroaniline			31	ug/L	40	77		40	140		
		2,4-dinitrophenol		<	50	ug/L							
		dibenzofuran			29	ug/L	40	72		40	140		
		4-nitrophenol			12	ug/L	40	30		30	130		
		fluorene			28	ug/L	40	69		40	140		
		diethyl phthalate			27	ug/L	40	68		40	140		
		4-chlorophenyl phenyl ether			29	ug/L	40	72		40	140		
		4-nitroaniline			27	ug/L	40	68		40	140		
		4,6-dinitro-2-methylphenol			30	ug/L							
		azobenzene			30	ug/L	40	74		40	140		
		N-nitrosodiphenylamine			30	ug/L	40	76		40	140		
		4-bromophenyl phenyl ether			28	ug/L	40	69		40	140		
		hexachlorobenzene			30	ug/L	40	75		40	140		
		pentachlorophenol			30	ug/L	40	75		30	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3510C8270D	LCS7395	phenanthrene			29	ug/L	40	72	40	140		
		anthracene			28	ug/L	40	69	40	140		
		carbazole			27	ug/L	40	68	40	140		
		di-n-butylphthalate			29	ug/L	40	74	40	140		
		fluoranthene			28	ug/L	40	70	40	140		
		benzidine		<	30	ug/L						
		pyrene			32	ug/L	40	80	40	140		
		butyl benzyl phthalate			38	ug/L	40	95	40	140		
		benzo(a)anthracene			31	ug/L	40	77	40	140		
		chrysene			30	ug/L	40	75	40	140		
		3,3'-dichlorobenzidine		<	30	ug/L						
		bis(2-ethylhexyl)phthalate			32	ug/L	40	79	40	140		
		di-n-octyl phthalate			33	ug/L	40	81	40	140		
		benzo(b)fluoranthene			27	ug/L	40	68	40	140		
		benzo(k)fluoranthene			30	ug/L	40	75	40	140		
		benzo(a)pyrene			30	ug/L	40	76	40	140		
		indeno(1,2,3-cd)pyrene			33	ug/L	40	82	40	140		
		dibenzo(a,h)anthracene			33	ug/L	40	83	40	140		
		benzo(g,h,i)perylene			33	ug/L	40	83	40	140		
		2-fluorophenol SUR			49	%			21	100		
		phenol-D5 SUR			35	%			10	102		
		2,4,6-tribromophenol SUR			95	%			10	123		
		nitrobenzene-D5 SUR			76	%			35	114		
		2-fluorobiphenyl SUR			71	%			43	116		
		p-terphenyl-D14 SUR			102	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW3510C8270D	LCSD7395	N-nitrosodimethylamine			16	ug/L	40	41		40	140	1	20
		aniline			23	ug/L	40	59		40	140	5	20
		phenol			11	ug/L	40	29	*	30	130	5	20
		2-chlorophenol			23	ug/L	40	58		30	130	6	20
		bis(2-chloroethyl)ether			28	ug/L	40	70		40	140	7	20
		1,3-dichlorobenzene			16	ug/L	40	41		40	140	5	20
		1,4-dichlorobenzene			17	ug/L	40	44		40	140	5	20
		1,2-dichlorobenzene			17	ug/L	40	44		40	140	6	20
		benzyl alcohol			22	ug/L	40	55		30	130	1	20
		2-methylphenol			21	ug/L	40	53		30	130	7	20
		bis(2-chloroisopropyl) ether			25	ug/L	40	62		40	140	0	20
		hexachloroethane			14	ug/L	40	36	*	40	140	9	20
		N-nitroso-di-N-propylamine			26	ug/L	40	64		40	140	2	20
		4-methylphenol			21	ug/L	40	53		30	130	7	20
		nitrobenzene			27	ug/L	40	69		40	140	3	20
		isophorone			30	ug/L	40	75		40	140	1	20
		2-nitrophenol			23	ug/L	40	58		30	130	10	20
		2,4-dimethylphenol			13	ug/L	40	33		30	130	24 *	20
		bis(2-chloroethoxy)methane			27	ug/L	40	68		40	140	2	20
		2,4-dichlorophenol			27	ug/L	40	67		30	130	6	20
		1,2,4-trichlorobenzene			21	ug/L	40	54		40	140	1	20
		naphthalene			22	ug/L	40	56		40	140	0	20
		benzoic acid		<	50	ug/L							20
		4-chloroaniline			32	ug/L	40	79		40	140	2	20
		hexachlorobutadiene			19	ug/L	40	48		40	140	3	20
		4-chloro-3-methylphenol			29	ug/L	40	72		30	130	3	20
		2-methylnaphthalene			23	ug/L	40	57		40	140	2	20
		hexachlorocyclopentadiene			16	ug/L	40	41		40	140	4	20
		2,4,6-trichlorophenol			32	ug/L	40	79		30	130	2	20
		2,4,5-trichlorophenol			30	ug/L	40	75		30	130	3	20
		2-chloronaphthalene			24	ug/L	40	61		40	140	4	20
		2-nitroaniline			26	ug/L	40	65		40	140	2	20
		acenaphthylene			25	ug/L	40	62		40	140	3	20
		dimethylphthalate			19	ug/L	40	48		40	140	7	20
		2,6-dinitrotoluene			28	ug/L	40	69		40	140	5	20
		2,4-dinitrotoluene			28	ug/L	40	70		40	140	4	20
		acenaphthene			24	ug/L	40	59		40	140	6	20
		3-nitroaniline			30	ug/L	40	75		40	140	3	20
		2,4-dinitrophenol		<	50	ug/L							20
		dibenzofuran			28	ug/L	40	69		40	140	4	20
		4-nitrophenol			13	ug/L	40	32		30	130	7	20
		fluorene			27	ug/L	40	67		40	140	3	20
		diethyl phthalate			27	ug/L	40	66		40	140	3	20
		4-chlorophenyl phenyl ether			28	ug/L	40	69		40	140	3	20
		4-nitroaniline			26	ug/L	40	65		40	140	3	20
		4,6-dinitro-2-methylphenol			29	ug/L							20
		azobenzene			29	ug/L	40	73		40	140	2	20
		N-nitrosodiphenylamine			30	ug/L	40	74		40	140	2	20
		4-bromophenyl phenyl ether			27	ug/L	40	67		40	140	2	20
		hexachlorobenzene			29	ug/L	40	73		40	140	3	20
		pentachlorophenol			30	ug/L	40	74		30	130	1	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3510C8270D	LCSD7395	phenanthrene			28	ug/L	40	70	40	140	3	20
		anthracene			27	ug/L	40	67	40	140	3	20
		carbazole			27	ug/L	40	66	40	140	3	20
		di-n-butylphthalate			28	ug/L	40	71	40	140	4	20
		fluoranthene			27	ug/L	40	69	40	140	2	20
		benzidine		<	30	ug/L						20
		pyrene			32	ug/L	40	79	40	140	2	20
		butyl benzyl phthalate			37	ug/L	40	93	40	140	2	20
		benzo(a)anthracene			30	ug/L	40	74	40	140	3	20
		chrysene			30	ug/L	40	75	40	140	0	20
		3,3'-dichlorobenzidine		<	30	ug/L						20
		bis(2-ethylhexyl)phthalate			31	ug/L	40	78	40	140	2	20
		di-n-octyl phthalate			32	ug/L	40	80	40	140	2	20
		benzo(b)fluoranthene			30	ug/L	40	75	40	140	9	20
		benzo(k)fluoranthene			31	ug/L	40	78	40	140	4	20
		benzo(a)pyrene			30	ug/L	40	75	40	140	1	20
		indeno(1,2,3-cd)pyrene			33	ug/L	40	82	40	140	0	20
		dibenzo(a,h)anthracene			33	ug/L	40	82	40	140	1	20
		benzo(g,h,i)perylene			33	ug/L	40	83	40	140	1	20
		2-fluorophenol SUR			46	%			21	100		
		phenol-D5 SUR			33	%			10	102		
		2,4,6-tribromophenol SUR			94	%			10	123		
		nitrobenzene-D5 SUR			76	%			35	114		
		2-fluorobiphenyl SUR			68	%			43	116		
		p-terphenyl-D14 SUR			98	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8082A	BLK7403	PCB-1016		<	0.1	ug/g						
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260		<	0.1	ug/g						
		tetrachloro-m-xylene SUR			94	%			30	150		
		decachlorobiphenyl SUR			52	%			30	150		
SW3546/8082A	LCS7403	PCB-1016			2.2	ug/g	2	109	40	140		
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			1.9	ug/g	2	94	40	140		
		tetrachloro-m-xylene SUR			99	%			30	150		
		decachlorobiphenyl SUR			65	%			30	150		
SW3546/8082A	LCSD7403	PCB-1016			2.4	ug/g	2	119	40	140	9	30
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			2.1	ug/g	2	104	40	140	10	30
		tetrachloro-m-xylene SUR			100	%			30	150		
		decachlorobiphenyl SUR			60	%			30	150		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW3546/8270D	BLK7404	N-nitrosodimethylamine		<	0.2	ug/g					
		aniline		<	0.2	ug/g					
		phenol		<	0.2	ug/g					
		2-chlorophenol		<	0.5	ug/g					
		bis(2-chloroethyl)ether		<	0.2	ug/g					
		1,3-dichlorobenzene		<	0.2	ug/g					
		1,4-dichlorobenzene		<	0.2	ug/g					
		1,2-dichlorobenzene		<	0.2	ug/g					
		benzyl alcohol		<	0.2	ug/g					
		2-methylphenol		<	0.2	ug/g					
		bis(2-chloroisopropyl) ether		<	0.2	ug/g					
		hexachloroethane		<	0.2	ug/g					
		N-nitroso-di-N-propylamine		<	0.2	ug/g					
		4-methylphenol		<	0.2	ug/g					
		nitrobenzene		<	0.2	ug/g					
		isophorone		<	0.5	ug/g					
		2-nitrophenol		<	0.2	ug/g					
		2,4-dimethylphenol		<	0.2	ug/g					
		bis(2-chloroethoxy)methane		<	0.5	ug/g					
		2,4-dichlorophenol		<	0.5	ug/g					
		1,2,4-trichlorobenzene		<	0.5	ug/g					
		naphthalene		<	0.05	ug/g					
		benzoic acid		<	5.0	ug/g					
		4-chloroaniline		<	0.2	ug/g					
		hexachlorobutadiene		<	0.2	ug/g					
		4-chloro-3-methylphenol		<	0.2	ug/g					
		2-methylnaphthalene		<	0.05	ug/g					
		hexachlorocyclopentadiene		<	1.0	ug/g					
		2,4,6-trichlorophenol		<	0.2	ug/g					
		2,4,5-trichlorophenol		<	0.2	ug/g					
		2-chloronaphthalene		<	0.5	ug/g					
		2-nitroaniline		<	0.2	ug/g					
		acenaphthylene		<	0.05	ug/g					
		dimethylphthalate		<	0.5	ug/g					
		2,6-dinitrotoluene		<	0.2	ug/g					
		2,4-dinitrotoluene		<	0.2	ug/g					
		acenaphthene		<	0.05	ug/g					
		3-nitroaniline		<	0.2	ug/g					
		2,4-dinitrophenol		<	5.0	ug/g					
		dibenzofuran		<	0.05	ug/g					
		4-nitrophenol		<	1.0	ug/g					
		fluorene		<	0.05	ug/g					
		diethyl phthalate		<	0.5	ug/g					
		4-chlorophenyl phenyl ether		<	0.5	ug/g					
		4-nitroaniline		<	0.5	ug/g					
		4,6-dinitro-2-methylphenol		<	2.0	ug/g					
		azobenzene		<	0.2	ug/g					
		N-nitrosodiphenylamine		<	0.2	ug/g					
		4-bromophenyl phenyl ether		<	0.2	ug/g					
		hexachlorobenzene		<	0.2	ug/g					
		pentachlorophenol		<	1.0	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	BLK7404	phenanthrene		<	0.05	ug/g						
		anthracene		<	0.05	ug/g						
		carbazole		<	0.2	ug/g						
		di-n-butylphthalate		<	0.5	ug/g						
		fluoranthene		<	0.05	ug/g						
		benzidine		<	3.0	ug/g						
		pyrene		<	0.05	ug/g						
		butyl benzyl phthalate		<	0.5	ug/g						
		benzo(a)anthracene		<	0.05	ug/g						
		chrysene		<	0.05	ug/g						
		3,3'-dichlorobenzidine		<	3.0	ug/g						
		bis(2-ethylhexyl)phthalate		<	0.5	ug/g						
		di-n-octyl phthalate		<	0.2	ug/g						
		benzo(b)fluoranthene		<	0.05	ug/g						
		benzo(k)fluoranthene		<	0.05	ug/g						
		benzo(a)pyrene		<	0.02	ug/g						
		indeno(1,2,3-cd)pyrene		<	0.05	ug/g						
		dibenzo(a,h)anthracene		<	0.05	ug/g						
		benzo(g,h,i)perylene		<	0.05	ug/g						
		2-fluorophenol SUR			73	%			21	100		
		phenol-D5 SUR			75	%			10	102		
		2,4,6-tribromophenol SUR			68	%			10	123		
		nitrobenzene-D5 SUR			65	%			35	114		
		2-fluorobiphenyl SUR			61	%			43	116		
		p-terphenyl-D14 SUR			93	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCS7404	N-nitrosodimethylamine			2.1	ug/g	4	53	40	140		
		aniline			2.0	ug/g	4	50	40	140		
		phenol			2.7	ug/g	4	68	30	130		
		2-chlorophenol			2.4	ug/g	4	61	30	130		
		bis(2-chloroethyl)ether			2.5	ug/g	4	62	40	140		
		1,3-dichlorobenzene			2.2	ug/g	4	56	40	140		
		1,4-dichlorobenzene			2.3	ug/g	4	57	40	140		
		1,2-dichlorobenzene			2.3	ug/g	4	57	40	140		
		benzyl alcohol			2.5	ug/g	4	62	30	130		
		2-methylphenol			2.6	ug/g	4	66	30	130		
		bis(2-chloroisopropyl) ether			2.4	ug/g	4	59	40	140		
		hexachloroethane			2.4	ug/g	4	59	40	140		
		N-nitroso-di-N-propylamine			2.4	ug/g	4	60	40	140		
		4-methylphenol			2.6	ug/g	4	65	30	130		
		nitrobenzene			2.5	ug/g	4	63	40	140		
		isophorone			2.8	ug/g	4	69	40	140		
		2-nitrophenol			2.3	ug/g	4	57	30	130		
		2,4-dimethylphenol			2.5	ug/g	4	61	30	130		
		bis(2-chloroethoxy)methane			2.5	ug/g	4	63	40	140		
		2,4-dichlorophenol			2.6	ug/g	4	65	30	130		
		1,2,4-trichlorobenzene			2.3	ug/g	4	58	40	140		
		naphthalene			2.3	ug/g	4	56	40	140		
		benzoic acid		<	5.0	ug/g						
		4-chloroaniline			2.3	ug/g	4	58	40	140		
		hexachlorobutadiene			2.4	ug/g	4	61	40	140		
		4-chloro-3-methylphenol			2.8	ug/g	4	70	30	130		
		2-methylnaphthalene			2.26	ug/g	4	57	40	140		
		hexachlorocyclopentadiene			1.6	ug/g	4	41	40	140		
		2,4,6-trichlorophenol			2.6	ug/g	4	66	30	130		
		2,4,5-trichlorophenol			2.6	ug/g	4	66	30	130		
		2-chloronaphthalene			2.3	ug/g	4	57	40	140		
		2-nitroaniline			2.5	ug/g	4	62	40	140		
		acenaphthylene			2.4	ug/g	4	59	40	140		
		dimethylphthalate			2.7	ug/g	4	67	40	140		
		2,6-dinitrotoluene			2.7	ug/g	4	67	40	140		
		2,4-dinitrotoluene			2.8	ug/g	4	69	40	140		
		acenaphthene			2.3	ug/g	4	57	40	140		
		3-nitroaniline			2.5	ug/g	4	62	40	140		
		2,4-dinitrophenol		<	5.0	ug/g						
		dibenzofuran			2.6	ug/g	4	65	40	140		
		4-nitrophenol			2.1	ug/g	4	52	30	130		
		fluorene			2.5	ug/g	4	64	40	140		
		diethyl phthalate			2.8	ug/g	4	69	40	140		
		4-chlorophenyl phenyl ether			2.7	ug/g	4	67	40	140		
		4-nitroaniline			2.4	ug/g	4	60	40	140		
		4,6-dinitro-2-methylphenol			2.0	ug/g						
		azobenzene			2.7	ug/g	4	67	40	140		
		N-nitrosodiphenylamine			2.9	ug/g	4	74	40	140		
		4-bromophenyl phenyl ether			2.6	ug/g	4	64	40	140		
		hexachlorobenzene			2.8	ug/g	4	69	40	140		
		pentachlorophenol			2.0	ug/g	4	50	30	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3546/8270D	LCS7404	phenanthrene			2.7	ug/g	4	66	40	140		
		anthracene			2.5	ug/g	4	64	40	140		
		carbazole			2.5	ug/g	4	64	40	140		
		di-n-butylphthalate			2.7	ug/g	4	67	40	140		
		fluoranthene			2.6	ug/g	4	65	40	140		
		benzidine		<	3.0	ug/g						
		pyrene			3.0	ug/g	4	76	40	140		
		butyl benzyl phthalate			3.6	ug/g	4	89	40	140		
		benzo(a)anthracene			2.9	ug/g	4	72	40	140		
		chrysene			2.9	ug/g	4	71	40	140		
		3,3'-dichlorobenzidine		<	3.0	ug/g						
		bis(2-ethylhexyl)phthalate			3.0	ug/g	4	74	40	140		
		di-n-octyl phthalate			3.0	ug/g	4	75	40	140		
		benzo(b)fluoranthene			3.0	ug/g	4	74	40	140		
		benzo(k)fluoranthene			2.8	ug/g	4	69	40	140		
		benzo(a)pyrene			2.9	ug/g	4	73	40	140		
		indeno(1,2,3-cd)pyrene			3.1	ug/g	4	77	40	140		
		dibenzo(a,h)anthracene			3.0	ug/g	4	76	40	140		
		benzo(g,h,i)perylene			3.1	ug/g	4	79	40	140		
		2-fluorophenol SUR			74	%			21	100		
		phenol-D5 SUR			77	%			10	102		
		2,4,6-tribromophenol SUR			71	%			10	123		
		nitrobenzene-D5 SUR			66	%			35	114		
		2-fluorobiphenyl SUR			65	%			43	116		
		p-terphenyl-D14 SUR			85	%			33	141		

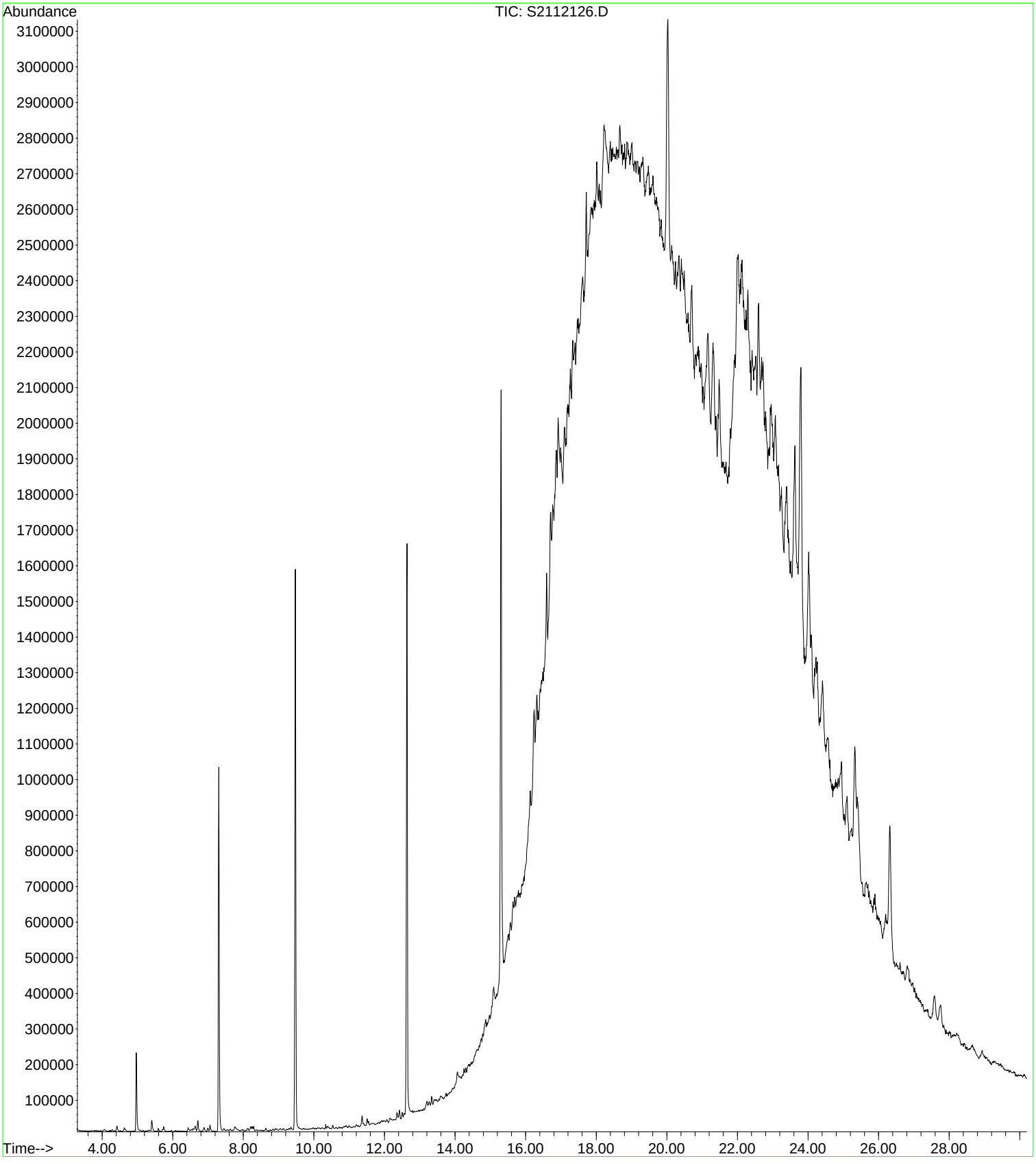
Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3005A6010C	BLK7411	Silver		<	0.005	mg/L						
		Arsenic		<	0.008	mg/L						
		Cadmium		<	0.004	mg/L						
		Chromium		<	0.05	mg/L						
		Copper		<	0.05	mg/L						
		Nickel		<	0.05	mg/L						
		Lead		<	0.01	mg/L						
		Antimony		<	0.006	mg/L						
		Selenium		<	0.05	mg/L						
		Thallium		<	0.002	mg/L						
		Zinc		<	0.05	mg/L						
SW3005A6010C	LCS7411	Silver			0.26	mg/L	0.25	102	80	120		
		Arsenic			0.51	mg/L	0.5	102	80	120		
		Beryllium			0.52	mg/L	0.5	105	80	120		
		Cadmium			0.51	mg/L	0.5	101	80	120		
		Chromium			0.52	mg/L	0.5	104	80	120		
		Copper			0.52	mg/L	0.5	104	80	120		
		Nickel			0.52	mg/L	0.5	105	80	120		
		Lead			0.52	mg/L	0.5	103	80	120		
		Antimony			0.51	mg/L	0.5	102	80	120		
		Selenium			0.51	mg/L	0.5	103	80	120		
		Thallium			0.26	mg/L	0.25	102	80	120		
		Zinc			0.51	mg/L	0.5	102	80	120		
SW3005A6010C	MS7411	Silver	31599-010		0.19	mg/L	0.25	75	75	125		
		Arsenic	31599-010		0.47	mg/L	0.5	93	75	125		
		Beryllium	31599-010		0.48	mg/L	0.5	96	75	125		
		Cadmium	31599-010		0.48	mg/L	0.5	95	75	125		
		Chromium	31599-010		0.48	mg/L	0.5	95	75	125		
		Copper	31599-010		0.51	mg/L	0.5	101	75	125		
		Nickel	31599-010		0.48	mg/L	0.5	96	75	125		
		Lead	31599-010		0.49	mg/L	0.5	98	75	125		
		Antimony	31599-010		0.42	mg/L	0.5	84	75	125		
		Selenium	31599-010		0.51	mg/L	0.5	101	75	125		
		Thallium	31599-010		0.29	mg/L	0.25	115	75	125		
		Zinc	31599-010		0.48	mg/L	0.5	96	75	125		
SW3005A6010C	MS7411	Silver	31611-005		0.19	mg/L	0.25	75	75	125		
		Arsenic	31611-005		0.49	mg/L	0.5	96	75	125		
		Cadmium	31611-005		0.48	mg/L	0.5	97	75	125		
		Chromium	31611-005		0.49	mg/L	0.5	98	75	125		
		Lead	31611-005		0.49	mg/L	0.5	98	75	125		
		Selenium	31611-005		0.52	mg/L	0.5	104	75	125		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3005A6010C	MSD7411	Silver	31599-010	0.19	mg/L	0.25	75	75	125	0	20
		Arsenic	31599-010	0.48	mg/L	0.5	94	75	125	2	20
		Beryllium	31599-010	0.48	mg/L	0.5	96	75	125	1	20
		Cadmium	31599-010	0.48	mg/L	0.5	97	75	125	2	20
		Chromium	31599-010	0.48	mg/L	0.5	97	75	125	1	20
		Copper	31599-010	0.51	mg/L	0.5	102	75	125	1	20
		Nickel	31599-010	0.49	mg/L	0.5	97	75	125	2	20
		Lead	31599-010	0.49	mg/L	0.5	99	75	125	1	20
		Antimony	31599-010	0.44	mg/L	0.5	87	75	125	4	20
		Selenium	31599-010	0.51	mg/L	0.5	102	75	125	1	20
		Thallium	31599-010	0.29	mg/L	0.25	116	75	125	1	20
		Zinc	31599-010	0.49	mg/L	0.5	97	75	125	1	20
SW3005A6010C	MSD7411	Silver	31611-005	0.19	mg/L	0.25	77	75	125	2	20
		Arsenic	31611-005	0.50	mg/L	0.5	98	75	125	2	20
		Cadmium	31611-005	0.50	mg/L	0.5	99	75	125	2	20
		Chromium	31611-005	0.50	mg/L	0.5	100	75	125	2	20
		Lead	31611-005	0.50	mg/L	0.5	101	75	125	2	20
		Selenium	31611-005	0.53	mg/L	0.5	106	75	125	2	20

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK7400	Silver		<	0.25	ug/g						
		Arsenic		<	0.50	ug/g						
		Beryllium		<	0.20	ug/g						
		Cadmium		<	0.20	ug/g						
		Chromium		<	2.5	ug/g						
		Copper		<	2.5	ug/g						
		Nickel		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
		Antimony		<	0.30	ug/g						
		Selenium		<	2.5	ug/g						
		Thallium		<	0.10	ug/g						
		Zinc		<	2.5	ug/g						
SW3051A6010C	CRM7400	Silver			50	ug/g	38		25.1	51.9		
		Arsenic			430	ug/g	400		292	508		
		Cadmium			18	ug/g	15		8.71	22		
		Chromium			13	ug/g	14		2.45	24.7		
		Copper			810	ug/g	730		592	866		
		Nickel			18	ug/g	17		6.2	27.5		
		Lead			6000	ug/g	5100		3750	6470		
		Antimony			5.1	ug/g	8.4		0	21.4		
		Selenium			9.0	ug/g	6.6		0	18.4		
		Thallium			5.5	ug/g	5.9		0	13.6		
		Zinc			2700	ug/g	3000		2450	3580		
SW3051A6010C	CRMD7400	Silver			51	ug/g	38		25.1	51.9	2	35
		Arsenic			420	ug/g	400		292	508	1	35
		Cadmium			18	ug/g	15		8.71	22	1	35
		Chromium			13	ug/g	14		2.45	24.7	6	35
		Copper			840	ug/g	730		592	866	3	35
		Nickel			19	ug/g	17		6.2	27.5	3	35
		Lead			6300	ug/g	5100		3750	6470	4	35
		Antimony			5.3	ug/g	8.4		0	21.4	4	35
		Selenium			9.6	ug/g	6.6		0	18.4	7	35
		Thallium			5.2	ug/g	5.9		0	13.6	4	35
		Zinc			2700	ug/g	3000		2450	3580	1	35
SW3051A6010C	MS7400	Silver	31599-003		19	ug/g	17	105	75	125		
		Arsenic	31599-003		58	ug/g	35	94	75	125		
		Beryllium	31599-003		37	ug/g	35	104	75	125		
		Cadmium	31599-003		39	ug/g	35	109	75	125		
		Chromium	31599-003		65	ug/g	35	84	75	125		
		Copper	31599-003		180	ug/g	35.8	131	75	125		
		Nickel	31599-003		77	ug/g	35	101	75	125		
		Lead	31599-003		140	ug/g	35.8	117	75	125		
		Antimony	31599-003		28	ug/g	35	79	75	125		
		Selenium	31599-003		35	ug/g	35	88	75	125		
		Thallium	31599-003		18	ug/g	17	101	75	125		
		Zinc	31599-003		400	ug/g	35.8	99	75	125		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	MSD7400	Silver	31599-003		19	ug/g	17	104	75	125	1	35
		Arsenic	31599-003		57	ug/g	35	92	75	125	1	35
		Beryllium	31599-003		38	ug/g	35	104	75	125	0	35
		Cadmium	31599-003		39	ug/g	35	108	75	125	1	35
		Chromium	31599-003		64	ug/g	35	82	75	125	1	35
		Copper	31599-003		150	ug/g	35.8	43	75	125	19	35
		Nickel	31599-003		78	ug/g	35	104	75	125	1	35
		Lead	31599-003		120	ug/g	35.8	82	75	125	10	35
		Antimony	31599-003		27	ug/g	35	77	75	125	3	35
		Selenium	31599-003		35	ug/g	35	90	75	125	1	35
		Thallium	31599-003		16	ug/g	17	90	75	125	11	35
		Zinc	31599-003		350	ug/g	35.8	-39	75	125	13	35
SW3051A6010C	BLK7446	Arsenic		<	0.50	ug/g						
		Chromium		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
		Antimony		<	0.30	ug/g						
SW3051A6010C	CRM7446	Arsenic			420	ug/g	400		292	508		
		Chromium			17	ug/g	14		2.45	24.7		
		Lead			6000	ug/g	5100		3750	6470		
		Antimony			17	ug/g	8.4		0	21.4		
SW3051A6010C	CRMD7446	Arsenic			420	ug/g	400		292	508	0	35
		Chromium			19	ug/g	14		2.45	24.7	13	35
		Lead			6100	ug/g	5100		3750	6470	2	35
		Antimony			15	ug/g	8.4		0	21.4	15	35
SW7470A	BLK7402	Mercury		<	0.0002	mg/L						
SW7470A	LCS7402	Mercury			0.0019	mg/L	0.002	94	80	120		
SW7470A	LCSD7402	Mercury			0.0018	mg/L	0.002	91	80	120	3	20
SW7470A	MS7402	Mercury	31599-010		0.0019	mg/L	0.002	95	75	125		
SW7470A	MS7402	Mercury	31611-005		0.0019	mg/L	0.002	96	75	125		
SW7470A	MSD7402	Mercury	31599-010		0.0019	mg/L	0.002	97	75	125	2	20
SW7470A	MSD7402	Mercury	31611-005		0.0019	mg/L	0.002	96	75	125	1	20
SW7471B	BLK7394	Mercury		<	0.02	ug/g						
SW7471B	CRM7394	Mercury			1.3	ug/g	1.1		0.49	1.76		
SW7471B	CRMD7394	Mercury			1.3	ug/g	1.1		0.49	1.76	3	35
SW7471B	MS7394	Mercury	31599-003		0.96	ug/g	0.573	126	75	125		
SW7471B	MSD7394	Mercury	31599-003		0.71	ug/g	0.573	83	75	125	29	

File : X:\SVOA02\2014\NOV14\112114\S2112126.D
Operator : ajd
Acquired : 21 Nov 2014 11:03 pm using AcqMethod S2061308
Instrument : SVOA02
Sample Name: 31599-06 abn x20
Misc Info :
Vial Number: 26



Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

31599

Company Name: Credere Associates, LLC
Company Address: 776 Main St, Westbrook, ME
Report To: Allison Draun
Phone #: 207-749-1141
Invoice to Email: TPatten@Credere llc.com
☐ Hard Copy Invoice Required

Project Name: Ferrari
Project #: 14001247
Project Location: (NH) MA ME VT NY Other
Protocol: RCRA SDWA NPDES MCP (NHDES) OTHER
Reporting Limits: (QAPP) GW-1 S-1 EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER
31599-01	Trip Blank		X			X					11/12/14	—	AO
02	CA-MW-1	4	X			X	X					0845	
03	CA-TP-3(3.5-3/4)			X						X		1000	
04	CA-TP-2(0-3.5/.5)			X						X		1100	
05	CA-TP-2(3.5-5.5/4)			X						X		1110	
06	CA-TP-1(0-6/2)			X						X		1300	
07	CA-MW-2	4	X			X	X				11/13/14	0910	
08	CA-MW-3	4	X			X	X					1100	
09	CA-MW-4	4	X			X	X					1240	
10	CA MW-5	6	X			X	X					1335	
11	CA-MW-6	4	X			X	X					1410	

ANALYSIS REQUEST

| Lab Sample ID | VOC 8260 | VOC 8260 NHDES | VOC 8260 MADEP | VOC 624 | VOC BTEX | MtBE, only | VOC 8021/VT | VPH MADEP | MEGRO | GRO 8015 | 1,4-Dioxane | VOC 524.2 | VOC 524.2 NH List | Gases-List: | TPH | DRO 8015 | MEDRO | EPH MADEP | TPH Fingerprint | 8270PAH | 8270ABN | 625 | EDB | 8082 PCB | 8081 Pesticides | 608 Pest/PCB | O&G 1664 | Mineral O&G SM5520F | pH | BOD | Conductivity | Turbidity | TSS | TDS | TVS | Alkalinity | RCRA Metals | Priority Pollutant Metals | TAL Metals | Hardness | Total Metals-list: | Dissolved Metals-list: | Ammonia | COD | TKN | TN | TON | TOC | T-Phosphorus | Phenols | Bacteria P/A | Bacteria MPN | Cyanide | Sulfide | Nitrate + Nitrite | Ortho P | Nitrate | Nitrite | Chloride | Sulfate | Bromide | Fluoride | Corrosivity | Reactive ON | Reactive S- | Ignitibility/FP | TCLP Metals | TCLP VOC | TCLP SVOC | TCLP Pesticide | Subcontract: | Grain Size | Herbicides | Formaldehyde | Grab (G) or Composite (C) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

31599

Company Name: Credere Associates, LLC
Company Address: 776 Main St, Westbrook, ME
Report To: Allison Brown
Phone #: 207-749-1141
Invoice to Email: TPatten@Crederellc.com
☐ Hard Copy Invoice Required

Project Name: Ferrari
Project #: 14001247
Project Location: (NH) MA ME VT NY Other
Protocol: RCRA SDWA NPDES MCP (NHDES) OTHER
Reporting Limits: ~~QAPP~~ GW-1 S-1 EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER
12	DUP-GW-1	4	X			X	X				11/13/14	—	AD
13	DUP-2	2		X						X	11/12/14	—	AD
14	CA-TP-A3	2		X						X	11/12/14	1230	AD

ANALYSIS REQUEST

| Lab Sample ID | ☒ VOC 8260 | ☐ VOC 8260 NHDES | ☐ VOC 8260 MADEP | ☐ VOC BTEX | ☐ MtBE, only | ☐ VOC 8021VT | ☐ VPH MADEP | ☐ MEGRO | ☐ GRO 8015 | ☐ 1,4-Dioxane | ☐ VOC 524.2 | ☐ VOC 524.2 NH List | ☐ Gases-List: | ☐ TPH | ☐ DRO 8015 | ☐ MEDRO | ☐ EPH MADEP | ☐ TPH Fingerprint | ☐ 8270PAH | ☒ 8270ABN | ☐ 625 | ☐ EDB | ☒ 8082 PCB | ☐ 8081 Pesticides | ☐ 608 Pest/PCB | ☐ O&G 1664 | ☐ Mineral O&G SM5520F | ☐ pH | ☐ BOD | ☐ Conductivity | ☐ Turbidity | ☐ TSS | ☐ TDS | ☐ TS | ☐ TVS | ☐ Alkalinity | ☐ RCRA Metals | ☒ Priority Pollutant Metals | ☐ TAL Metals | ☐ Hardness | ☐ Total Metals-list: | ☐ Dissolved Metals-list: | ☐ Ammonia | ☐ COD | ☐ TKN | ☐ TN | ☐ TON | ☐ TOC | ☐ T-Phosphorus | ☐ Phenols | ☐ Bacteria P/A | ☐ Bacteria MPN | ☐ Cyanide | ☐ Sulfide | ☐ Nitrate + Nitrite | ☐ Ortho P | ☐ Nitrate | ☐ Nitrite | ☐ Chloride | ☐ Sulfate | ☐ Bromide | ☐ Fluoride | ☐ Corrosivity | ☐ Reactive CN | ☐ Reactive S- | ☐ Ignitibility/FP | ☐ TCLP Metals | ☐ TCLP VOC | ☐ TCLP SVOC | ☐ TCLP Pesticide | Subcontract: ☐ Grain Size | ☐ Herbicides | ☐ Formaldehyde | Grab (G) or Composite (C) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Allison Drouin
CREDERE Associates
776 Main Street
Westbrook, ME 04092

PO Number: None
Job ID: 31961
Date Received: 12/19/14

Project: Ferrari 14001247

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 1/13/2015
Total number of pages: 43

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Ferrari 14001247

Lab ID: 31961

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
Trip Blank	Solid	12/18/2014 0:00	31961-001	
				VOCs in solid by 8260 Petro & Haz Waste
Dup-3	Solid	12/18/2014 0:00	31961-002	
				PAHs in solid by 8270
				Solid Digestion for ICP Analysis
				Arsenic in solids by 6010
				Chromium in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-TP-4 (1-4)	Solid	12/18/2014 9:20	31961-003	
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
CA-SS-2 (0-2)	Solid	12/18/2014 9:40	31961-004	
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
CA-SS-5 (0-2)	Solid	12/18/2014 9:50	31961-005	
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
CA-SS-7 (0-2)	Solid	12/18/2014 10:05	31961-006	
				Percent Dry Matter for Sample Calc by SM2540B,G
				Hexavalent Chromium in solids by SW3060A7196A
CA-SED-1	Solid	12/18/2014 10:10	31961-007	
				PAHs in solid by 8270
				Solid Digestion for ICP Analysis
				Arsenic in solids by 6010
				Chromium in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SED-2	Solid	12/18/2014 10:15	31961-008	
				PAHs in solid by 8270
				Solid Digestion for ICP Analysis
				Arsenic in solids by 6010
				Chromium in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SS-8 (0-2/0.5)	Solid	12/18/2014 10:30	31961-009	
				PAHs in solid by 8270
				Solid Digestion for ICP Analysis
				Arsenic in solids by 6010
				Chromium in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SS-9 (0-2/0.5)	Solid	12/18/2014 10:40	31961-010	
				PAHs in solid by 8270

Project ID: Ferrari 14001247
Lab ID: 31961

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-SS-9 (0-2/0.5)	Solid	12/18/2014 10:40	31961-010	
				Solid Digestion for ICP Analysis
				Arsenic in solids by 6010
				Chromium in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SS-10 (0-2/0.5)	Solid	12/18/2014 10:55	31961-011	
				PAHs in solid by 8270
				Solid Digestion for ICP Analysis
				Arsenic in solids by 6010
				Chromium in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste
CA-SS-11 (0-2/0.5)	Solid	12/18/2014 11:05	31961-012	
				PAHs in solid by 8270
				Solid Digestion for ICP Analysis
				Arsenic in solids by 6010
				Chromium in solids by 6010
				Lead in solids by 6010
				Antimony in solids by 6010
				Percent Dry Matter for Sample Calc by SM2540B,G
				VOCs in solid by 8260 Petro & Haz Waste

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-001
Sample ID: Trip Blank
Matrix: Solid
Sampled: 12/18/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
bromomethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
acetone	< 2	2	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
t-butanol (TBA)	< 2	2	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,4-dioxane	< 2	2	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.4	0.4	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-001
Sample ID: Trip Blank
Matrix: Solid
Sampled: 12/18/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**99**	78-114	%	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
4-bromofluorobenzene SUR	**106**	86-115	%	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C
a,a,a-trifluorotoluene SUR	**114**	70-130	%	1	LMM	12/22/14	7486	12/23/14	16:44	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-002
Sample ID: Dup-3
Matrix: Solid Percent Dry: 71.3% Results expressed on a dry weight basis.
Sampled: 12/18/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
chloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
vinyl chloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
bromomethane	< 0.5	0.5	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
chloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
trichlorofluoromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
diethyl ether	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
acetone	< 5	5	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,1-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
carbon disulfide	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
trans-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
isopropyl ether (DIPE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,1-dichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
t-butanol (TBA)	< 5	5	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
2-butanone (MEK)	< 0.6	0.6	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
2,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
cis-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
chloroform	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
bromochloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
tetrahydrofuran (THF)	< 1.0	1.0	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,1,1-trichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,1-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
carbon tetrachloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,2-dichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
benzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
trichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
bromodichloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,4-dioxane	< 5	5	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
dibromomethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.9	0.9	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
cis-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
toluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
trans-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
2-hexanone	< 1.0	1.0	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,1,2-trichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,3-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
tetrachloroethene	**1.1**	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
dibromochloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-002
Sample ID: Dup-3
Matrix: Solid Percent Dry: 71.3% Results expressed on a dry weight basis.
Sampled: 12/18/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
chlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
ethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
m&p-xylenes	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
o-xylene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
styrene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
bromoform	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
isopropylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,2,3-trichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
n-propylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
bromobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,3,5-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
2-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
4-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
tert-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,2,4-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
sec-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
4-isopropyltoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
n-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,2,4-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,3,5-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
hexachlorobutadiene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
1,2,3-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
toluene-D8 SUR	**99**	88-110	%	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C
a,a,a-trifluorotoluene SUR	**101**	70-130	%	1	LMM	12/22/14	7486	12/23/14	4:16	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-007
Sample ID: CA-SED-1
Matrix: Solid Percent Dry: 57% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
chloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
vinyl chloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
bromomethane	< 0.5	0.5	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
chloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
trichlorofluoromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
diethyl ether	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
acetone	< 5	5	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,1-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
carbon disulfide	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
trans-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
isopropyl ether (DIPE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,1-dichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
t-butanol (TBA)	< 5	5	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
2-butanone (MEK)	< 0.6	0.6	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
2,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
cis-1,2-dichloroethene	**0.2**	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
chloroform	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
bromochloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
tetrahydrofuran (THF)	< 0.9	0.9	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,1,1-trichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,1-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
carbon tetrachloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,2-dichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
benzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
trichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
bromodichloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,4-dioxane	< 5	5	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
dibromomethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.8	0.8	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
cis-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
toluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
trans-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
2-hexanone	< 0.9	0.9	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,1,2-trichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,3-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
tetrachloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
dibromochloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-007
Sample ID: CA-SED-1
Matrix: Solid Percent Dry: 57% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
chlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
ethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
m&p-xylenes	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
o-xylene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
styrene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
bromoform	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
isopropylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,2,3-trichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
n-propylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
bromobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,3,5-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
2-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
4-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
tert-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,2,4-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
sec-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
4-isopropyltoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
n-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,2,4-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,3,5-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
hexachlorobutadiene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
1,2,3-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**97**	78-114	%	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C
a,a,a-trifluorotoluene SUR	**119**	70-130	%	1	LMM	12/22/14	7486	12/24/14	14:35	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-008
Sample ID: CA-SED-2
Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
2-butanone (MEK)	< 0.3	0.3	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
tetrahydrofuran (THF)	< 0.5	0.5	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.5	0.5	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
2-hexanone	< 0.5	0.5	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-008
Sample ID: CA-SED-2
Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
4-bromofluorobenzene SUR	**99**	86-115	%	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C
a,a,a-trifluorotoluene SUR	**98**	70-130	%	1	LMM	12/22/14	7486	12/24/14	15:04	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-009
Sample ID: CA-SS-8 (0-2/0.5)
Matrix: Solid Percent Dry: 71.8% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
chloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
vinyl chloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
bromomethane	< 0.4	0.4	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
chloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
trichlorofluoromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
diethyl ether	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
acetone	< 4	4	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,1-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
carbon disulfide	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
trans-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
isopropyl ether (DIPE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,1-dichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
t-butanol (TBA)	< 4	4	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
2-butanone (MEK)	< 0.5	0.5	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
2,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
cis-1,2-dichloroethene	**0.5**	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
chloroform	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
bromochloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
tetrahydrofuran (THF)	< 0.9	0.9	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,1,1-trichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,1-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
carbon tetrachloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,2-dichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
benzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
trichloroethene	**0.6**	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
bromodichloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,4-dioxane	< 4	4	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
dibromomethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.8	0.8	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
cis-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
toluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
trans-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
2-hexanone	< 0.9	0.9	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,1,2-trichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,3-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
tetrachloroethene	**1.6**	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
dibromochloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-009
Sample ID: CA-SS-8 (0-2/0.5)
Matrix: Solid Percent Dry: 71.8% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
chlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
ethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
m&p-xylenes	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
o-xylene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
styrene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
bromoform	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
isopropylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,2,3-trichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
n-propylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
bromobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,3,5-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
2-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
4-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
tert-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,2,4-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
sec-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
4-isopropyltoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
n-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,2,4-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,3,5-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
hexachlorobutadiene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
1,2,3-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**97**	78-114	%	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
4-bromofluorobenzene SUR	**106**	86-115	%	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C
a,a,a-trifluorotoluene SUR	**113**	70-130	%	1	LMM	12/22/14	7486	12/24/14	1:11	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-010
Sample ID: CA-SS-9 (0-2/0.5)
Matrix: Solid Percent Dry: 79.1% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
bromomethane	< 0.4	0.4	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
acetone	< 4	4	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
t-butanol (TBA)	< 4	4	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
tetrahydrofuran (THF)	< 0.7	0.7	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,4-dioxane	< 4	4	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.7	0.7	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
2-hexanone	< 0.7	0.7	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-010
Sample ID: CA-SS-9 (0-2/0.5)
Matrix: Solid Percent Dry: 79.1% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
4-bromofluorobenzene SUR	**104**	86-115	%	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C
a,a,a-trifluorotoluene SUR	**107**	70-130	%	1	LMM	12/22/14	7486	12/24/14	1:40	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-011
Sample ID: CA-SS-10 (0-2/0.5)
Matrix: Solid Percent Dry: 70.8% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
chloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
vinyl chloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
bromomethane	< 0.5	0.5	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
chloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
trichlorofluoromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
diethyl ether	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
acetone	< 5	5	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,1-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
methylene chloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
carbon disulfide	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
trans-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
isopropyl ether (DIPE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,1-dichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
t-butanol (TBA)	< 5	5	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
2-butanone (MEK)	< 0.6	0.6	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
2,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
cis-1,2-dichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
chloroform	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
bromochloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
tetrahydrofuran (THF)	< 1.0	1.0	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,1,1-trichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,1-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
carbon tetrachloride	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,2-dichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
benzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
trichloroethene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,2-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
bromodichloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,4-dioxane	< 5	5	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
dibromomethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.9	0.9	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
cis-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
toluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
trans-1,3-dichloropropene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
2-hexanone	< 1.0	1.0	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,1,2-trichloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,3-dichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
tetrachloroethene	**0.9**	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
dibromochloromethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-011
Sample ID: CA-SS-10 (0-2/0.5)
Matrix: Solid Percent Dry: 70.8% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
chlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
ethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
m&p-xylenes	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
o-xylene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
styrene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
bromoform	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
isopropylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,2,3-trichloropropane	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
n-propylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
bromobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,3,5-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
2-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
4-chlorotoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
tert-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,2,4-trimethylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
sec-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,3-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
4-isopropyltoluene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,4-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,2-dichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
n-butylbenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,2,4-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,3,5-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
hexachlorobutadiene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
naphthalene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
1,2,3-trichlorobenzene	< 0.2	0.2	ug/g	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**96**	78-114	%	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
toluene-D8 SUR	**100**	88-110	%	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
4-bromofluorobenzene SUR	**100**	86-115	%	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C
a,a,a-trifluorotoluene SUR	**95**	70-130	%	1	LMM	12/22/14	7486	12/24/14	2:10	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-012
Sample ID: CA-SS-11 (0-2/0.5)
Matrix: Solid Percent Dry: 83.5% Results expressed on a dry weight basis.
Sampled: 12/18/14 11:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
dichlorodifluoromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
chloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
vinyl chloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
bromomethane	< 0.3	0.3	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
chloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
trichlorofluoromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
diethyl ether	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
acetone	< 3	3	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,1-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
methylene chloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
carbon disulfide	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
methyl t-butyl ether (MTBE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
trans-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
isopropyl ether (DIPE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
ethyl t-butyl ether (ETBE)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,1-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
t-butanol (TBA)	< 3	3	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
2-butanone (MEK)	< 0.4	0.4	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
2,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
cis-1,2-dichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
chloroform	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
bromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
tetrahydrofuran (THF)	< 0.6	0.6	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,1,1-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,1-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
t-amyl-methyl ether (TAME)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
carbon tetrachloride	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,2-dichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
benzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
trichloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,2-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
bromodichloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,4-dioxane	< 3	3	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
dibromomethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
4-methyl-2-pentanone (MIBK)	< 0.6	0.6	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
cis-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
toluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
trans-1,3-dichloropropene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
2-hexanone	< 0.6	0.6	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,1,2-trichloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,3-dichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
tetrachloroethene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
dibromochloromethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-012
Sample ID: CA-SS-11 (0-2/0.5)
Matrix: Solid Percent Dry: 83.5% Results expressed on a dry weight basis.
Sampled: 12/18/14 11:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
1,2-dibromoethane (EDB)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
chlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,1,1,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
ethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
m&p-xylenes	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
o-xylene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
styrene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
bromoform	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
isopropylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,1,2,2-tetrachloroethane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,2,3-trichloropropane	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
n-propylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
bromobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,3,5-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
2-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
4-chlorotoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
tert-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,2,4-trimethylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
sec-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,3-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
4-isopropyltoluene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,4-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,2-dichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
n-butylbenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,2-dibromo-3-chloropropane (DBCP)	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,2,4-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,3,5-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
hexachlorobutadiene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
naphthalene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
1,2,3-trichlorobenzene	< 0.1	0.1	ug/g	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
Surrogate Recovery		**Limits**								
dibromofluoromethane SUR	**95**	78-114	%	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
toluene-D8 SUR	**101**	88-110	%	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
4-bromofluorobenzene SUR	**100**	86-115	%	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C
a,a,a-trifluorotoluene SUR	**100**	70-130	%	1	LMM	12/22/14	7486	12/24/14	2:39	SW5035A8260C

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-002
Sample ID: Dup-3
Matrix: Solid Percent Dry: 71.3% Results expressed on a dry weight basis.
Sampled: 12/18/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
2-methylnaphthalene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
acenaphthylene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
acenaphthene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
dibenzofuran	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
fluorene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
phenanthrene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
anthracene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
fluoranthene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
pyrene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
benzo(a)anthracene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
chrysene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
benzo(b)fluoranthene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
benzo(k)fluoranthene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
benzo(a)pyrene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
indeno(1,2,3-cd)pyrene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
dibenzo(a,h)anthracene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
benzo(g,h,i)perylene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**142** *	43-116	%	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D
o-terphenyl SUR	**158** *	33-141	%	5	AJD	12/23/14	7496	1/7/15	19:39	SW3550C8270D

**** The surrogate showed recovery outside the acceptance limits. Matrix interference suspected.***
Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-007
Sample ID: CA-SED-1
Matrix: Solid Percent Dry: 57% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
2-methylnaphthalene	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
acenaphthylene	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
acenaphthene	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
dibenzofuran	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
fluorene	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
phenanthrene	**1.4**	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
anthracene	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
fluoranthene	**2.1**	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
pyrene	**2.1**	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
benzo(a)anthracene	**0.9**	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
chrysene	**1.3**	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
benzo(b)fluoranthene	**0.9**	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
benzo(k)fluoranthene	**0.9**	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
benzo(a)pyrene	**0.8**	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
indeno(1,2,3-cd)pyrene	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
dibenzo(a,h)anthracene	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
benzo(g,h,i)perylene	< 0.8	0.8	ug/g	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**32** *	43-116	%	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D
o-terphenyl SUR	**43**	33-141	%	1	AJD	12/23/14	7496	12/30/14	15:12	SW3550C8270D

**** The surrogate showed recovery outside the acceptance limits. Matrix interference suspected.***

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-008
Sample ID: CA-SED-2
Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
2-methylnaphthalene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
acenaphthylene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
acenaphthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
dibenzofuran	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
fluorene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
phenanthrene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
anthracene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
fluoranthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
pyrene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
benzo(a)anthracene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
chrysene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
benzo(b)fluoranthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
benzo(k)fluoranthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
benzo(a)pyrene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
indeno(1,2,3-cd)pyrene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
dibenzo(a,h)anthracene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
benzo(g,h,i)perylene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**54**	43-116	%	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D
o-terphenyl SUR	**66**	33-141	%	1	AJD	12/23/14	7496	12/23/14	19:02	SW3550C8270D

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-009
Sample ID: CA-SS-8 (0-2/0.5)
Matrix: Solid Percent Dry: 71.8% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
2-methylnaphthalene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
acenaphthylene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
acenaphthene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
dibenzofuran	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
fluorene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
phenanthrene	**0.8**	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
anthracene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
fluoranthene	**1.1**	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
pyrene	**1.1**	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
benzo(a)anthracene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
chrysene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
benzo(b)fluoranthene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
benzo(k)fluoranthene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
benzo(a)pyrene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
indeno(1,2,3-cd)pyrene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
dibenzo(a,h)anthracene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
benzo(g,h,i)perylene	< 0.7	0.7	ug/g	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**34** *	43-116	%	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D
o-terphenyl SUR	**43**	33-141	%	1	AJD	12/23/14	7496	12/23/14	19:39	SW3550C8270D

**** This surrogate showed recovery outside the acceptance limits. Re-analysis showed similar results. Matrix interference suspected.***

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-010
Sample ID: CA-SS-9 (0-2/0.5)
Matrix: Solid Percent Dry: 79.1% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
2-methylnaphthalene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
acenaphthylene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
acenaphthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
dibenzofuran	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
fluorene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
phenanthrene	**0.7**	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
anthracene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
fluoranthene	**1.1**	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
pyrene	**0.9**	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
benzo(a)anthracene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
chrysene	**0.7**	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
benzo(b)fluoranthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
benzo(k)fluoranthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
benzo(a)pyrene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
indeno(1,2,3-cd)pyrene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
dibenzo(a,h)anthracene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
benzo(g,h,i)perylene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**54**	43-116	%	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D
o-terphenyl SUR	**57**	33-141	%	1	AJD	12/23/14	7496	12/30/14	17:02	SW3550C8270D

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-011
Sample ID: CA-SS-10 (0-2/0.5)
Matrix: Solid Percent Dry: 70.8% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
2-methylnaphthalene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
acenaphthylene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
acenaphthene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
dibenzofuran	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
fluorene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
phenanthrene	**5.2**	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
anthracene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
fluoranthene	**4.9**	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
pyrene	**3.8**	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
benzo(a)anthracene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
chrysene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
benzo(b)fluoranthene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
benzo(k)fluoranthene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
benzo(a)pyrene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
indeno(1,2,3-cd)pyrene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
dibenzo(a,h)anthracene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
benzo(g,h,i)perylene	< 3.4	3.4	ug/g	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**77**	43-116	%	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D
o-terphenyl SUR	**75**	33-141	%	5	AJD	12/23/14	7496	1/7/15	20:16	SW3550C8270D

Note: Dilution was required due to matrix interference, causing internal standard suppression.

Project ID: Ferrari 14001247
Job ID: 31961
Sample#: 31961-012
Sample ID: CA-SS-11 (0-2/0.5)
Matrix: Solid Percent Dry: 83.5% Results expressed on a dry weight basis.
Sampled: 12/18/14 11:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
naphthalene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
2-methylnaphthalene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
acenaphthylene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
acenaphthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
dibenzofuran	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
fluorene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
phenanthrene	**1.1**	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
anthracene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
fluoranthene	**1.2**	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
pyrene	**1.2**	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
benzo(a)anthracene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
chrysene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
benzo(b)fluoranthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
benzo(k)fluoranthene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
benzo(a)pyrene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
indeno(1,2,3-cd)pyrene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
dibenzo(a,h)anthracene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
benzo(g,h,i)perylene	< 0.6	0.6	ug/g	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
Surrogate Recovery		**Limits**								
2-fluorobiphenyl SUR	**61**	43-116	%	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D
o-terphenyl SUR	**61**	33-141	%	1	AJD	12/23/14	7496	12/23/14	20:52	SW3550C8270D

Project ID: Ferrari 14001247

Job ID: 31961

Sample#: 31961-002

Sample ID: Dup-3

Matrix: Solid Percent Dry: 71.3% Results expressed on a dry weight basis.

Sampled: 12/18/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AC	12/23/14	7499	12/23/14	18:13	SW3051A6010C
Arsenic	**24**	0.7	ug/g	1	AC	12/23/14	7499	12/23/14	18:13	SW3051A6010C
Chromium	**610**	4	ug/g	1	AC	12/23/14	7499	12/23/14	18:13	SW3051A6010C
Lead	**270**	0.7	ug/g	1	AC	12/23/14	7499	12/23/14	18:13	SW3051A6010C

Sample#: 31961-007

Sample ID: CA-SED-1

Matrix: Solid Percent Dry: 57% Results expressed on a dry weight basis.

Sampled: 12/18/14 10:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Antimony	**2.2**	0.5	ug/g	1	AC	12/23/14	7499	12/23/14	18:42	SW3051A6010C
Arsenic	< 0.8	0.8	ug/g	1	AC	12/23/14	7499	12/23/14	18:42	SW3051A6010C
Chromium	**140**	4	ug/g	1	AC	12/23/14	7499	12/23/14	18:42	SW3051A6010C
Lead	**63**	0.8	ug/g	1	AC	12/23/14	7499	12/23/14	18:42	SW3051A6010C

Sample#: 31961-008

Sample ID: CA-SED-2

Matrix: Solid Percent Dry: 85.2% Results expressed on a dry weight basis.

Sampled: 12/18/14 10:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Antimony	**3.0**	0.3	ug/g	1	AC	12/23/14	7499	12/23/14	18:49	SW3051A6010C
Arsenic	**6.2**	0.6	ug/g	1	AC	12/23/14	7499	12/23/14	18:49	SW3051A6010C
Chromium	**11**	3	ug/g	1	AC	12/23/14	7499	12/23/14	18:49	SW3051A6010C
Lead	**68**	0.6	ug/g	1	AC	12/23/14	7499	12/23/14	18:49	SW3051A6010C

Sample#: 31961-009

Sample ID: CA-SS-8 (0-2/0.5)

Matrix: Solid Percent Dry: 71.8% Results expressed on a dry weight basis.

Sampled: 12/18/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Analysis Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AC	12/23/14	7499	12/23/14	18:57	SW3051A6010C
Arsenic	**4.2**	0.7	ug/g	1	AC	12/23/14	7499	12/23/14	18:57	SW3051A6010C
Chromium	**30**	3	ug/g	1	AC	12/23/14	7499	12/23/14	18:57	SW3051A6010C
Lead	**74**	0.7	ug/g	1	AC	12/23/14	7499	12/23/14	18:57	SW3051A6010C

Project ID: Ferrari 14001247

Job ID: 31961

Sample#: 31961-010

Sample ID: CA-SS-9 (0-2/0.5)

Matrix: Solid Percent Dry: 79.1% Results expressed on a dry weight basis.

Sampled: 12/18/14 10:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AC	12/23/14	7499	12/23/14	19:04	SW3051A6010C
Arsenic	**35**	0.7	ug/g	1	AC	12/23/14	7499	12/23/14	19:04	SW3051A6010C
Chromium	**200**	3	ug/g	1	AC	12/23/14	7499	12/23/14	19:04	SW3051A6010C
Lead	**140**	0.7	ug/g	1	AC	12/23/14	7499	12/23/14	19:04	SW3051A6010C

Sample#: 31961-011

Sample ID: CA-SS-10 (0-2/0.5)

Matrix: Solid Percent Dry: 70.8% Results expressed on a dry weight basis.

Sampled: 12/18/14 10:55

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	**14**	0.4	ug/g	1	AC	12/23/14	7499	12/23/14	19:26	SW3051A6010C
Arsenic	**55**	0.7	ug/g	1	AC	12/23/14	7499	12/23/14	19:26	SW3051A6010C
Chromium	**1300**	3	ug/g	1	AC	12/23/14	7499	12/23/14	19:26	SW3051A6010C
Lead	**220**	0.7	ug/g	1	AC	12/23/14	7499	12/23/14	19:26	SW3051A6010C

Sample#: 31961-012

Sample ID: CA-SS-11 (0-2/0.5)

Matrix: Solid Percent Dry: 83.5% Results expressed on a dry weight basis.

Sampled: 12/18/14 11:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Antimony	< 0.4	0.4	ug/g	1	AC	12/23/14	7499	12/23/14	19:34	SW3051A6010C
Arsenic	**5.0**	0.6	ug/g	1	AC	12/23/14	7499	12/23/14	19:34	SW3051A6010C
Chromium	**53**	3	ug/g	1	AC	12/23/14	7499	12/23/14	19:34	SW3051A6010C
Lead	**34**	0.6	ug/g	1	AC	12/23/14	7499	12/23/14	19:34	SW3051A6010C

Project ID: Ferrari 14001247
Job ID: 31961

Sample#: 31961-003
Sample ID: CA-TP-4 (1-4)
Matrix: Solid Percent Dry: 84.8% Results expressed on a dry weight basis.
Sampled: 12/18/14 9:20

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**5.7**	0.49	ug/g	1	AJD		1403562	1/8/15		SW3060A7196A

Sample#: 31961-004
Sample ID: CA-SS-2 (0-2)
Matrix: Solid Percent Dry: 82.1% Results expressed on a dry weight basis.
Sampled: 12/18/14 9:40

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	< 0.50	0.50	ug/g	1	AJD		1403562	1/8/15		SW3060A7196A

Sample#: 31961-005
Sample ID: CA-SS-5 (0-2)
Matrix: Solid Percent Dry: 66.1% Results expressed on a dry weight basis.
Sampled: 12/18/14 9:50

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	< 0.60	0.60	ug/g	1	AJD		1403562	1/8/15		SW3060A7196A

Sample#: 31961-006
Sample ID: CA-SS-7 (0-2)
Matrix: Solid Percent Dry: 73.1% Results expressed on a dry weight basis.
Sampled: 12/18/14 10:05

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
Chromium, Hexavalent	**4.4**	0.55	ug/g	1	AJD		1403562	1/8/15		SW3060A7196A

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Case Narrative
Lab # 31961

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 4 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

PAH: The surrogates for sample 31961-002 was outside the acceptance limits as a result of co-eluting hydrocarbons.
PAH: The surrogate, 2-fluorobiphenyl, for sample 31961-007 was outside the acceptance limits. Matrix interference suspected.
PAH: The surrogate, 2-fluorobiphenyl, for sample 31961-009 was outside the acceptance limits. The sample was re-extracted and produced similar results. Matrix interference suspected.

Laboratory Control Sample Results

VOC: The MLCS7486 did not meet the acceptance criteria for bromomethane. The MLCS/D7486 did not meet the acceptance criteria for naphthalene and 1,2,3-trichlorobenzene. Since <10% of the compounds were outside of the acceptance criteria, reanalysis is not required.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

PAH: Due to internal standard suppression caused by matrix interference, the PAH analysis required a dilution for samples: 31961-002 and -011.
Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits	RPD	RPD Limit
SW5035A8260C	MB7486	dichlorodifluoromethane		<	0.1	ug/g					
		chloromethane		<	0.1	ug/g					
		vinyl chloride		<	0.1	ug/g					
		bromomethane		<	0.2	ug/g					
		chloroethane		<	0.1	ug/g					
		trichlorofluoromethane		<	0.1	ug/g					
		diethyl ether		<	0.5	ug/g					
		acetone		<	2.5	ug/g					
		1,1-dichloroethene		<	0.1	ug/g					
		methylene chloride		<	0.2	ug/g					
		carbon disulfide		<	0.1	ug/g					
		methyl t-butyl ether (MTBE)		<	0.1	ug/g					
		trans-1,2-dichloroethene		<	0.1	ug/g					
		isopropyl ether (DIPE)		<	0.1	ug/g					
		ethyl t-butyl ether (ETBE)		<	0.1	ug/g					
		1,1-dichloroethane		<	0.1	ug/g					
		t-butanol (TBA)		<	2.5	ug/g					
		2-butanone (MEK)		<	0.5	ug/g					
		2,2-dichloropropane		<	0.1	ug/g					
		cis-1,2-dichloroethene		<	0.1	ug/g					
		chloroform		<	0.1	ug/g					
		bromochloromethane		<	0.1	ug/g					
		tetrahydrofuran (THF)		<	0.5	ug/g					
		1,1,1-trichloroethane		<	0.1	ug/g					
		1,1-dichloropropene		<	0.1	ug/g					
		t-amyl-methyl ether (TAME)		<	0.1	ug/g					
		carbon tetrachloride		<	0.1	ug/g					
		1,2-dichloroethane		<	0.1	ug/g					
		benzene		<	0.1	ug/g					
		trichloroethene		<	0.1	ug/g					
		1,2-dichloropropane		<	0.1	ug/g					
		bromodichloromethane		<	0.1	ug/g					
		1,4-dioxane		<	2.5	ug/g					
		dibromomethane		<	0.1	ug/g					
		4-methyl-2-pentanone (MIBK)		<	0.5	ug/g					
		cis-1,3-dichloropropene		<	0.1	ug/g					
		toluene		<	0.1	ug/g					
		trans-1,3-dichloropropene		<	0.1	ug/g					
		2-hexanone		<	0.5	ug/g					
		1,1,2-trichloroethane		<	0.1	ug/g					
		1,3-dichloropropane		<	0.1	ug/g					
		tetrachloroethene		<	0.1	ug/g					
		dibromochloromethane		<	0.1	ug/g					
		1,2-dibromoethane (EDB)		<	0.1	ug/g					
		chlorobenzene		<	0.1	ug/g					
		1,1,1,2-tetrachloroethane		<	0.1	ug/g					
		ethylbenzene		<	0.1	ug/g					
		m&p-xylenes		<	0.1	ug/g					
		o-xylene		<	0.1	ug/g					
		styrene		<	0.1	ug/g					

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW5035A8260C	MB7486	bromoform		<	0.1	ug/g						
		isopropylbenzene		<	0.1	ug/g						
		1,1,2,2-tetrachloroethane		<	0.1	ug/g						
		1,2,3-trichloropropane		<	0.1	ug/g						
		n-propylbenzene		<	0.1	ug/g						
		bromobenzene		<	0.1	ug/g						
		1,3,5-trimethylbenzene		<	0.1	ug/g						
		2-chlorotoluene		<	0.1	ug/g						
		4-chlorotoluene		<	0.1	ug/g						
		tert-butylbenzene		<	0.1	ug/g						
		1,2,4-trimethylbenzene		<	0.1	ug/g						
		sec-butylbenzene		<	0.1	ug/g						
		1,3-dichlorobenzene		<	0.1	ug/g						
		4-isopropyltoluene		<	0.1	ug/g						
		1,4-dichlorobenzene		<	0.1	ug/g						
		1,2-dichlorobenzene		<	0.1	ug/g						
		n-butylbenzene		<	0.1	ug/g						
		1,2-dibromo-3-chloropropane (DBCP)		<	0.1	ug/g						
		1,2,4-trichlorobenzene		<	0.1	ug/g						
		1,3,5-trichlorobenzene		<	0.1	ug/g						
		hexachlorobutadiene		<	0.1	ug/g						
		naphthalene		<	0.2	ug/g						
		1,2,3-trichlorobenzene		<	0.1	ug/g						
		dibromofluoromethane SUR			96	%			78	114		
		toluene-D8 SUR			101	%			88	110		
		4-bromofluorobenzene SUR			104	%			86	115		
		a,a,a-trifluorotoluene SUR			109	%			70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS7486	dichlorodifluoromethane			0.8	ug/g	1	75		70	130		
		chloromethane			0.9	ug/g	1	89		70	130		
		vinyl chloride			1.2	ug/g	1	124		70	130		
		bromomethane			0.5	ug/g	1	45	*	70	130		
		chloroethane			1.1	ug/g	1	106		70	130		
		trichlorofluoromethane			1.1	ug/g	1	113		70	130		
		diethyl ether			1.1	ug/g	1	109		70	130		
		acetone		<	2.5	ug/g	1	130					
		1,1-dichloroethene			1.1	ug/g	1	107		70	130		
		methylene chloride			1.1	ug/g	1	108		70	130		
		carbon disulfide			0.9	ug/g	1	91		70	130		
		methyl t-butyl ether (MTBE)			1.1	ug/g	1	107		70	130		
		trans-1,2-dichloroethene			1.1	ug/g	1	111		70	130		
		isopropyl ether (DIPE)			1.1	ug/g	1	107		70	130		
		ethyl t-butyl ether (ETBE)			1.0	ug/g	1	102		70	130		
		1,1-dichloroethane			1.0	ug/g	1	102		70	130		
		t-butanol (TBA)			6.2	ug/g	5	123		70	130		
		2-butanone (MEK)			1.1	ug/g	1	114		70	130		
		2,2-dichloropropane			1.0	ug/g	1	97		70	130		
		cis-1,2-dichloroethene			1.1	ug/g	1	113		70	130		
		chloroform			1.1	ug/g	1	110		70	130		
		bromochloromethane			1.1	ug/g	1	109		70	130		
		tetrahydrofuran (THF)			1.1	ug/g	1	113		70	130		
		1,1,1-trichloroethane			1.1	ug/g	1	107		70	130		
		1,1-dichloropropene			1.1	ug/g	1	109		70	130		
		t-amyl-methyl ether (TAME)			1.0	ug/g	1	96		70	130		
		carbon tetrachloride			1.0	ug/g	1	101		70	130		
		1,2-dichloroethane			1.1	ug/g	1	106		70	130		
		benzene			1.1	ug/g	1	107		70	130		
		trichloroethene			1.1	ug/g	1	109		70	130		
		1,2-dichloropropane			1.1	ug/g	1	105		70	130		
		bromodichloromethane			1.0	ug/g	1	100		70	130		
		1,4-dioxane		<	2.5	ug/g	2	112		70	130		
		dibromomethane			1.1	ug/g	1	109		70	130		
		4-methyl-2-pentanone (MIBK)			1.1	ug/g	1	113		70	130		
		cis-1,3-dichloropropene			1.0	ug/g	1	95		70	130		
		toluene			1.1	ug/g	1	108		70	130		
		trans-1,3-dichloropropene			0.9	ug/g	1	92		70	130		
		2-hexanone			1.1	ug/g	1	110		70	130		
		1,1,2-trichloroethane			1.0	ug/g	1	104		70	130		
		1,3-dichloropropane			1.0	ug/g	1	100		70	130		
		tetrachloroethene			1.1	ug/g	1	107		70	130		
		dibromochloromethane			0.9	ug/g	1	92		70	130		
		1,2-dibromoethane (EDB)			1.1	ug/g	1	109		70	130		
		chlorobenzene			1.1	ug/g	1	106		70	130		
		1,1,1,2-tetrachloroethane			0.9	ug/g	1	94		70	130		
		ethylbenzene			1.0	ug/g	1	98		70	130		
		m&p-xylenes			2.0	ug/g	2	100		70	130		
		o-xylene			1.0	ug/g	1	105		70	130		
		styrene			1.0	ug/g	1	98		70	130		
		bromoform			0.9	ug/g	1	91		70	130		

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCS7486	isopropylbenzene		1.0	ug/g	1	103		70	130		
		1,1,2,2-tetrachloroethane		1.1	ug/g	1	113		70	130		
		1,2,3-trichloropropane		1.1	ug/g	1	112		70	130		
		n-propylbenzene		1.1	ug/g	1	109		70	130		
		bromobenzene		1.1	ug/g	1	111		70	130		
		1,3,5-trimethylbenzene		1.1	ug/g	1	111		70	130		
		2-chlorotoluene		1.1	ug/g	1	110		70	130		
		4-chlorotoluene		1.0	ug/g	1	105		70	130		
		tert-butylbenzene		1.1	ug/g	1	108		70	130		
		1,2,4-trimethylbenzene		1.1	ug/g	1	113		70	130		
		sec-butylbenzene		1.1	ug/g	1	109		70	130		
		1,3-dichlorobenzene		1.1	ug/g	1	112		70	130		
		4-isopropyltoluene		1.1	ug/g	1	110		70	130		
		1,4-dichlorobenzene		1.1	ug/g	1	112		70	130		
		1,2-dichlorobenzene		1.1	ug/g	1	112		70	130		
		n-butylbenzene		1.1	ug/g	1	110		70	130		
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	103		70	130		
		1,2,4-trichlorobenzene		1.2	ug/g	1	121		70	130		
		1,3,5-trichlorobenzene		1.1	ug/g	1	112		70	130		
		hexachlorobutadiene		1.1	ug/g	1	109		70	130		
		naphthalene		1.4	ug/g	1	141	*	70	130		
		1,2,3-trichlorobenzene		1.4	ug/g	1	137	*	70	130		
		dibromofluoromethane SUR		99	%				78	114		
		toluene-D8 SUR		99	%				88	110		
		4-bromofluorobenzene SUR		101	%				86	115		
		a,a,a-trifluorotoluene SUR		116	%				70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD		RPD Limit
SW5035A8260C	MLCSD7486	dichlorodifluoromethane			0.8	ug/g	1	76	70	130	1		30
		chloromethane			0.9	ug/g	1	90	70	130	1		30
		vinyl chloride			1.3	ug/g	1	126	70	130	2		30
		bromomethane			0.9	ug/g	1	89	70	130	65	*	30
		chloroethane			1.1	ug/g	1	109	70	130	3		30
		trichlorofluoromethane			1.1	ug/g	1	113	70	130	0		30
		diethyl ether			1.1	ug/g	1	111	70	130	2		30
		acetone		<	2.5	ug/g	1	141			8		30
		1,1-dichloroethene			1.1	ug/g	1	108	70	130	1		30
		methylene chloride			1.1	ug/g	1	114	70	130	6		30
		carbon disulfide			0.9	ug/g	1	93	70	130	3		30
		methyl t-butyl ether (MTBE)			1.1	ug/g	1	107	70	130	0		30
		trans-1,2-dichloroethene			1.1	ug/g	1	113	70	130	1		30
		isopropyl ether (DIPE)			1.1	ug/g	1	109	70	130	3		30
		ethyl t-butyl ether (ETBE)			1.0	ug/g	1	101	70	130	2		30
		1,1-dichloroethane			1.1	ug/g	1	105	70	130	3		30
		t-butanol (TBA)			6.3	ug/g	5	125	70	130	1		30
		2-butanone (MEK)			1.2	ug/g	1	120	70	130	5		30
		2,2-dichloropropane			1.0	ug/g	1	98	70	130	1		30
		cis-1,2-dichloroethene			1.1	ug/g	1	115	70	130	2		30
		chloroform			1.1	ug/g	1	115	70	130	4		30
		bromochloromethane			1.1	ug/g	1	111	70	130	1		30
		tetrahydrofuran (THF)			1.1	ug/g	1	113	70	130	0		30
		1,1,1-trichloroethane			1.1	ug/g	1	107	70	130	0		30
		1,1-dichloropropene			1.1	ug/g	1	111	70	130	2		30
		t-amyl-methyl ether (TAME)			0.9	ug/g	1	92	70	130	4		30
		carbon tetrachloride			1.0	ug/g	1	101	70	130	1		30
		1,2-dichloroethane			1.1	ug/g	1	113	70	130	6		30
		benzene			1.1	ug/g	1	109	70	130	2		30
		trichloroethene			1.1	ug/g	1	110	70	130	1		30
		1,2-dichloropropane			1.0	ug/g	1	103	70	130	2		30
		bromodichloromethane			1.0	ug/g	1	103	70	130	3		30
		1,4-dioxane		<	2.5	ug/g	2	119	70	130	7		30
		dibromomethane			1.1	ug/g	1	113	70	130	4		30
		4-methyl-2-pentanone (MIBK)			1.2	ug/g	1	118	70	130	5		30
		cis-1,3-dichloropropene			1.0	ug/g	1	97	70	130	2		30
		toluene			1.1	ug/g	1	112	70	130	3		30
		trans-1,3-dichloropropene			1.0	ug/g	1	95	70	130	4		30
		2-hexanone			1.1	ug/g	1	112	70	130	2		30
		1,1,2-trichloroethane			1.1	ug/g	1	110	70	130	5		30
		1,3-dichloropropane			1.0	ug/g	1	104	70	130	3		30
		tetrachloroethene			1.1	ug/g	1	108	70	130	2		30
		dibromochloromethane			0.9	ug/g	1	95	70	130	3		30
		1,2-dibromoethane (EDB)			1.1	ug/g	1	113	70	130	4		30
		chlorobenzene			1.1	ug/g	1	109	70	130	3		30
		1,1,1,2-tetrachloroethane			1.0	ug/g	1	95	70	130	1		30
		ethylbenzene			1.0	ug/g	1	101	70	130	3		30
		m&p-xylenes			2.0	ug/g	2	102	70	130	2		30
		o-xylene			1.1	ug/g	1	108	70	130	3		30
		styrene			1.0	ug/g	1	103	70	130	5		30
		bromoform			1.0	ug/g	1	95	70	130	4		30

Method	QC ID	Parameter	Associated Sample	Result	Units	Amt Added	%R		Limits		RPD	RPD Limit
SW5035A8260C	MLCSD7486	isopropylbenzene		1.1	ug/g	1	105		70	130	2	30
		1,1,2,2-tetrachloroethane		1.1	ug/g	1	108		70	130	4	30
		1,2,3-trichloropropane		1.1	ug/g	1	110		70	130	2	30
		n-propylbenzene		1.0	ug/g	1	104		70	130	5	30
		bromobenzene		1.1	ug/g	1	106		70	130	5	30
		1,3,5-trimethylbenzene		1.1	ug/g	1	106		70	130	5	30
		2-chlorotoluene		1.1	ug/g	1	106		70	130	4	30
		4-chlorotoluene		1.0	ug/g	1	102		70	130	3	30
		tert-butylbenzene		1.0	ug/g	1	102		70	130	5	30
		1,2,4-trimethylbenzene		1.1	ug/g	1	108		70	130	5	30
		sec-butylbenzene		1.1	ug/g	1	105		70	130	3	30
		1,3-dichlorobenzene		1.1	ug/g	1	108		70	130	3	30
		4-isopropyltoluene		1.1	ug/g	1	106		70	130	4	30
		1,4-dichlorobenzene		1.1	ug/g	1	107		70	130	5	30
		1,2-dichlorobenzene		1.1	ug/g	1	109		70	130	3	30
		n-butylbenzene		1.0	ug/g	1	105		70	130	5	30
		1,2-dibromo-3-chloropropane (DBCP)		1.0	ug/g	1	102		70	130	1	30
		1,2,4-trichlorobenzene		1.2	ug/g	1	118		70	130	3	30
		1,3,5-trichlorobenzene		1.1	ug/g	1	106		70	130	5	30
		hexachlorobutadiene		1.0	ug/g	1	104		70	130	5	30
		naphthalene		1.4	ug/g	1	136	*	70	130	4	30
		1,2,3-trichlorobenzene		1.3	ug/g	1	133	*	70	130	3	30
		dibromofluoromethane SUR		106	%				78	114		
		toluene-D8 SUR		102	%				88	110		
		4-bromofluorobenzene SUR		109	%				86	115		
		a,a,a-trifluorotoluene SUR		106	%				70	130		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3550C8270D	BLK7496	naphthalene		<	0.50	ug/g						
		2-methylnaphthalene		<	0.50	ug/g						
		acenaphthylene		<	0.50	ug/g						
		acenaphthene		<	0.50	ug/g						
		dibenzofuran		<	0.50	ug/g						
		fluorene		<	0.50	ug/g						
		phenanthrene		<	0.50	ug/g						
		anthracene		<	0.50	ug/g						
		fluoranthene		<	0.50	ug/g						
		pyrene		<	0.50	ug/g						
		benzo(a)anthracene		<	0.50	ug/g						
		chrysene		<	0.50	ug/g						
		benzo(b)fluoranthene		<	0.50	ug/g						
		benzo(k)fluoranthene		<	0.50	ug/g						
		benzo(a)pyrene		<	0.50	ug/g						
		indeno(1,2,3-cd)pyrene		<	0.50	ug/g						
		dibenzo(a,h)anthracene		<	0.50	ug/g						
		benzo(g,h,i)perylene		<	0.50	ug/g						
		2-fluorobiphenyl SUR			65	%			43	116		
		o-terphenyl SUR			81	%			33	141		
SW3550C8270D	DUP7496	naphthalene	31951-002	<	0.57	ug/g						30
		2-methylnaphthalene	31951-002	<	0.57	ug/g						30
		acenaphthylene	31951-002	<	0.57	ug/g						30
		acenaphthene	31951-002	<	0.57	ug/g						30
		dibenzofuran	31951-002	<	0.57	ug/g						30
		fluorene	31951-002	<	0.57	ug/g						30
		phenanthrene	31951-002	<	0.57	ug/g						30
		anthracene	31951-002	<	0.57	ug/g						30
		fluoranthene	31951-002	<	0.57	ug/g						30
		pyrene	31951-002	<	0.57	ug/g						30
		benzo(a)anthracene	31951-002	<	0.57	ug/g						30
		chrysene	31951-002	<	0.57	ug/g						30
		benzo(b)fluoranthene	31951-002	<	0.57	ug/g						30
		benzo(k)fluoranthene	31951-002	<	0.57	ug/g						30
		benzo(a)pyrene	31951-002	<	0.57	ug/g						30
		indeno(1,2,3-cd)pyrene	31951-002	<	0.57	ug/g						30
		dibenzo(a,h)anthracene	31951-002	<	0.57	ug/g						30
		benzo(g,h,i)perylene	31951-002	<	0.57	ug/g						30
		2-fluorobiphenyl SUR	31951-002		65	%			43	116		
		o-terphenyl SUR	31951-002		75	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3550C8270D	LCS7496	naphthalene			2.9	ug/g	4	73	40	140		
		2-methylnaphthalene			2.6	ug/g	4	65	40	140		
		acenaphthylene			2.8	ug/g	4	69	40	140		
		acenaphthene			2.7	ug/g	4	67	40	140		
		dibenzofuran		<	0.50	ug/g						
		fluorene			2.7	ug/g	4	67	40	140		
		phenanthrene			2.9	ug/g	4	72	40	140		
		anthracene			2.6	ug/g	4	66	40	140		
		fluoranthene			2.9	ug/g	4	72	40	140		
		pyrene			3.4	ug/g	4	84	40	140		
		benzo(a)anthracene			3.3	ug/g	4	82	40	140		
		chrysene			3.1	ug/g	4	78	40	140		
		benzo(b)fluoranthene			3.1	ug/g	4	78	40	140		
		benzo(k)fluoranthene			3.7	ug/g	4	92	40	140		
		benzo(a)pyrene			3.0	ug/g	4	75	40	140		
		indeno(1,2,3-cd)pyrene			2.1	ug/g	4	52	40	140		
		dibenzo(a,h)anthracene			2.2	ug/g	4	55	40	140		
		benzo(g,h,i)perylene			2.1	ug/g	4	52	40	140		
		2-fluorobiphenyl SUR			70	%			43	116		
		o-terphenyl SUR			81	%			33	141		
SW3550C8270D	MS7496	naphthalene	31951-002		3.1	ug/g	4.40	69	40	140		
		2-methylnaphthalene	31951-002		2.7	ug/g	4.40	62	40	140		
		acenaphthylene	31951-002		2.9	ug/g	4.40	65	40	140		
		acenaphthene	31951-002		2.8	ug/g	4.40	62	40	140		
		dibenzofuran	31951-002	<	0.55	ug/g						
		fluorene	31951-002		2.8	ug/g	4.40	64	40	140		
		phenanthrene	31951-002		3.2	ug/g	4.40	69	40	140		
		anthracene	31951-002		2.6	ug/g	4.40	59	40	140		
		fluoranthene	31951-002		3.3	ug/g	4.40	70	40	140		
		pyrene	31951-002		3.7	ug/g	4.40	79	40	140		
		benzo(a)anthracene	31951-002		3.4	ug/g	4.40	78	40	140		
		chrysene	31951-002		3.4	ug/g	4.40	76	40	140		
		benzo(b)fluoranthene	31951-002		3.7	ug/g	4.40	83	40	140		
		benzo(k)fluoranthene	31951-002		3.1	ug/g	4.40	69	40	140		
		benzo(a)pyrene	31951-002		3.1	ug/g	4.40	70	40	140		
		indeno(1,2,3-cd)pyrene	31951-002		2.4	ug/g	4.40	55	40	140		
		dibenzo(a,h)anthracene	31951-002		2.5	ug/g	4.40	56	40	140		
		benzo(g,h,i)perylene	31951-002		2.6	ug/g	4.40	59	40	140		
		2-fluorobiphenyl SUR	31951-002		67	%			43	116		
		o-terphenyl SUR	31951-002		75	%			33	141		

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3051A6010C	BLK7499	Arsenic		<	0.50	ug/g						
		Chromium		<	2.5	ug/g						
		Lead		<	0.50	ug/g						
		Antimony		<	0.30	ug/g						
SW3051A6010C	CRM7499	Arsenic			440	ug/g	400		292	508		
		Chromium			16	ug/g	14		2.45	24.7		
		Lead			5400	ug/g	5100		3750	6470		
		Antimony			6.1	ug/g	8.4		0	21.4		
SW3051A6010C	CRMD7499	Arsenic			430	ug/g	400		292	508	2	35
		Chromium			16	ug/g	14		2.45	24.7	0	35
		Lead			5800	ug/g	5100		3750	6470	6	35
		Antimony			6.4	ug/g	8.4		0	21.4	4	35
SW3051A6010C	MS7499	Arsenic	31961-010		79	ug/g	32	132	75	125		
		Chromium	31961-010		240	ug/g	32.9	126	75	125		
		Lead	31961-010		170	ug/g	32.9	88	75	125		
		Antimony	31961-010		29	ug/g	32	89	75	125		
SW3051A6010C	MSD7499	Arsenic	31961-010		83	ug/g	32	147	75	125	6	
		Chromium	31961-010		240	ug/g	32.9	105	75	125	3	
		Lead	31961-010		190	ug/g	32.9	134	75	125	8	
		Antimony	31961-010		30	ug/g	32	91	75	125	2	

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3060A7196A	CRM1403562	Chromium, Hexavalent			39	ug/g	93		26.2	288		
SW3060A7196A	CRMD1403562	Chromium, Hexavalent			46	ug/g	93		26.2	288	16	30
SW3060A7196A	PB1403562	Chromium, Hexavalent		<	0.40	ug/g						

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

31961

Company Name: Credere Associates, LLC
Company Address: 716 Main St, Westbrook, ME
Report To: Allison Drouin
Phone #: 207-749-1141
Invoice to Email: TPalter@credenellc.com
☐ Hard Copy Invoice Required

Project Name: Ferrari
Project #: 14001247
Project Location: (NH) MA ME VT NY Other
Protocol: RCRA SDWA NPDES MCP (NHDES) OTHER
Reporting Limits: (QAPP) EPA DW GW-1 S-1 Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	VOC 8260	Total Metals-list: Sb, As, Cr, Pb	Cr+6 Hexavalent	Grab (G) or Composite (C)
1219WI-01	Trip Blank			X						X	12/18/14	—	AS	X			
02	DUP-3	3		X						X		—		X	X		
03	CA-TP-4(1-4)	1		X								0920				X	
04	CA-SS-2(6-2)	1		X								0940				X	
05	CA-SS-5(0-2)	1		X								0950				X	
06	CA-SS-7(0-2)	1		X								1005				X	
07	CA-SED-1	3		X						X		1010		X	X		
08	CA-SED-2 MS	3		X						X		1015		X	X		
09	CA-SS-8(0-2)	3		X						X		1030		X	X		
10	CA-SS-9(0-2)	3		X						X		1040		X	X		MS MSD
11	CA-SS-10(0-2)	3		X						X		1055		X	X		

16.5

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) adrouin@credenellc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 7.4 °C

CUSTODY RECORD
QSD-01 Revision 08/05/14

Relinquished by Sampler:	Date	Time	Received by:	Date	Time
Allison Drouin	12/19/14	1012	[signature]	12/19/14	1012
Relinquished by: [signature]	12/19/14	1420	Received by:	Date	Time
Relinquished by:	Date	Time	Received by Laboratory: [signature]	12/19/14	1420

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Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

31961

Company Name: Credere Associates, LLC
Company Address: 776 Main St. Westbrook, ME
Report To: Allison Dragon
Phone #: 207-749-1141
Invoice to Email: TPatten@crederellc.com
☐ Hard Copy Invoice Required

Project Name: Ferrari
Project #: 14001247
Project Location: (NH) MA ME VT NY ____ Other
Protocol: RCRA SDWA NPDES MCP (NHDES) OTHER
Reporting Limits: (QAPP) GW-1 S-1 EPA DW Other ____
Quote # ____ ☐ NH Reimbursement Pricing
PO # ____

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER	☒ VOC 8260	☐ VOC 624	☐ VPH MADEP	☐ VOC 524.2	☐ TPH	☒ 8270PAH	☐ 8082 PCB	☐ O&G 1664	☐ pH	☐ TSS	☐ RCRA Metals	☒ Total Metals-list: Sb, As, Cr, Pb	☐ Dissolved Metals-list:	☐ Ammonia	☐ T-Phosphorus	☐ Cyanide	☐ Nitrate	☐ Corrosivity	☐ TCLP Metals	Subcontract:	Grab (G) or Composite (C)
12	CA-SS-11(0-2) 10.5	3		X						X	12/18/14	1105	ASD	X					X						X									

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP
☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT
☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane
☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:
☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint
☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB
☐ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB
☐ O&G 1664 ☐ Mineral O&G SM5520F
☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity
☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity
☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness
☐ Total Metals-list: Sb, As, Cr, Pb
☐ Dissolved Metals-list:
☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC
☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN
☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P
☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride
☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP
☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide
Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☑
*Date Needed ____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) adragon@crederellc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#) ____

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 4 °C

CUSTODY RECORD
QSD-01 Revision 08/05/14

	Date	Time		Date	Time
Relinquished by Sampler: Allison Dragon	12/19/14	1012	Received by:	12/19/14	1012
Relinquished by:	12/19/14	1420	Received by:		
Relinquished by:			Received by Laboratory:	12/19/14	1420

43

EMSL Analytical, Inc.
161 John Roberts Road, South Portland, ME 04106
Phone/Fax: (207) 517-6921 / (207) 517-6922
http://www.EMSL.com portlandlab@emsl.com

EMSL Order:	621401365
CustomerID:	CRED25
CustomerPO:	14001247
ProjectID:	

Attn: **Silas Miller**
Credere Associates, LLC
776 Main Street
Westbrook, ME 04092

Phone:	(207) 820-81272
Fax:	(207) 887-1051
Received:	10/22/14 2:38 PM
Analysis Date:	10/23/2014
Collected:	

Project: **Ferrari Mill/14001247**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
CA-PACM-1A *621401365-0001*	BASEMENT - PIPE WRAP	Gray Fibrous Homogeneous		50% Non-fibrous (other)	**50% Chrysotile**
CA-PACM-1B *621401365-0002*	BASEMENT - PIPE WRAP				**Stop Positive (Not Analyzed)**
CA-PACM-1C *621401365-0003*	BASEMENT - PIPE WRAP				**Stop Positive (Not Analyzed)**
CA-PACM-2A *621401365-0004*	BASEMENT - MUDDED ELBOW	Gray Fibrous Homogeneous		60% Non-fibrous (other)	**40% Chrysotile**
CA-PACM-2B *621401365-0005*	BASEMENT - MUDDED ELBOW				**Stop Positive (Not Analyzed)**
CA-PACM-2C *621401365-0006*	BASEMENT - MUDDED ELBOW				**Stop Positive (Not Analyzed)**
CA-PACM-3A *621401365-0007*	1ST FLOOR - PIPE WRAP	Gray Non-Fibrous Homogeneous	15% Cellulose	60% Non-fibrous (other)	**25% Chrysotile**
CA-PACM-3B *621401365-0008*	1ST FLOOR - PIPE WRAP				**Stop Positive (Not Analyzed)**
CA-PACM-3C *621401365-0009*	1ST FLOOR - PIPE WRAP				**Stop Positive (Not Analyzed)**

Analyst(s)

Joshua Snyder (5)
Leslie McCluskeyEissing (19)

CWalker

Christina Walker, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. South Portland, ME

Initial report from 10/23/2014 17:12:52

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Phone/Fax: (207) 517-6921 / (207) 517-6922
http://www.EMSL.com portlandlab@emsl.com

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Project: **Ferrari Mill/14001247**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
CA-PACM-4A *621401365-0010*	1ST FLOOR - MUDDED ELBOW	Gray Fibrous Homogeneous		25% Non-fibrous (other)	**75% Chrysotile**
CA-PACM-4B *621401365-0011*	1ST FLOOR - MUDDED ELBOW				**Stop Positive (Not Analyzed)**
CA-PACM-4C *621401365-0012*	1ST FLOOR - MUDDED ELBOW				**Stop Positive (Not Analyzed)**
CA-PACM-5A *621401365-0013*	MAIN ROOF - FELT PAPER	Black Fibrous Homogeneous		50% Non-fibrous (other)	**50% Chrysotile**
CA-PACM-5B *621401365-0014*	MAIN ROOF - FELT PAPER				**Stop Positive (Not Analyzed)**
CA-PACM-5C *621401365-0015*	MAIN ROOF - FELT PAPER				**Stop Positive (Not Analyzed)**
CA-PACM-6A *621401365-0016*	MAIN ROOF - 2ND LAYER FELT PAPER	Black Non-Fibrous Homogeneous		50% Non-fibrous (other)	**50% Chrysotile**
CA-PACM-6B *621401365-0017*	MAIN ROOF - 2ND LAYER FELT PAPER				**Stop Positive (Not Analyzed)**
CA-PACM-6C *621401365-0018*	MAIN ROOF - 2ND LAYER FELT PAPER				**Stop Positive (Not Analyzed)**

Analyst(s)

Joshua Snyder (5)
Leslie McCluskeyEissing (19)

CWalker

Christina Walker, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. South Portland, ME

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Phone:	(207) 820-81272
Fax:	(207) 887-1051
Received:	10/22/14 2:38 PM
Analysis Date:	10/23/2014
Collected:	

Project: **Ferrari Mill/14001247**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos				Asbestos	
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**%**	**Non-Fibrous**	**%**	**Type**
CA-PACM-7A *621401365-0019*	ENTRANCE ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	35%	Cellulose	65%	Non-fibrous (other)		**None Detected**
CA-PACM-7B *621401365-0020*	ENTRANCE ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	35%	Cellulose	65%	Non-fibrous (other)		**None Detected**
CA-PACM-7C *621401365-0021*	ENTRANCE ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	30%	Cellulose	70%	Non-fibrous (other)		**None Detected**
CA-PACM-8A *621401365-0022*	1ST FLOOR WINDOWS - HARD WINDOW CAULKING	Gray/White Fibrous Homogeneous	2%	Fibrous (other)	93%	Non-fibrous (other)	**5%**	**Chrysotile**
CA-PACM-8B *621401365-0023*	1ST FLOOR WINDOWS - HARD WINDOW CAULKING							**Stop Positive (Not Analyzed)**
CA-PACM-8C *621401365-0024*	1ST FLOOR WINDOWS - HARD WINDOW CAULKING							**Stop Positive (Not Analyzed)**
CA-PACM-9A *621401365-0025*	1ST FLOOR WINDOWS - WINDOW GLAZING	Tan/Black Non-Fibrous Homogeneous			100%	Non-fibrous (other)		**None Detected**

Analyst(s)

Joshua Snyder (5)
Leslie McCluskeyEissing (19)

Christina Walker, Laboratory Manager
or other approved signatory

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Phone:	(207) 820-81272
Fax:	(207) 887-1051
Received:	10/22/14 2:38 PM
Analysis Date:	10/23/2014
Collected:	

Project: **Ferrari Mill/14001247**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos				Asbestos
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**%**	**Non-Fibrous**	**% Type**
CA-PACM-9B *621401365-0026*	1ST FLOOR WINDOWS - WINDOW GLAZING	Tan/Black Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
CA-PACM-9C *621401365-0027*	1ST FLOOR WINDOWS - WINDOW GLAZING	Tan/Black Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
CA-PACM-10A *621401365-0028*	ARMORY - CEILING TILE	Brown/White Fibrous Homogeneous	95%	Cellulose	5%	Non-fibrous (other)	**None Detected**
CA-PACM-10B *621401365-0029*	ARMORY - CEILING TILE	Brown/White Fibrous Homogeneous	95%	Cellulose	5%	Non-fibrous (other)	**None Detected**
CA-PACM-10C *621401365-0030*	ARMORY - CEILING TILE	Brown/White Fibrous Homogeneous	95%	Cellulose	5%	Non-fibrous (other)	**None Detected**
CA-PACM-11A *621401365-0031*	ROADSIDE ENTRANCE ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	35%	Cellulose	65%	Non-fibrous (other)	**None Detected**
CA-PACM-11B *621401365-0032*	ROADSIDE ENTRANCE ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	35%	Cellulose	65%	Non-fibrous (other)	**None Detected**

Analyst(s)

Joshua Snyder (5)
Leslie McCluskeyEissing (19)

Christina Walker, Laboratory Manager
or other approved signatory

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161 John Roberts Road, South Portland, ME 04106
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http://www.EMSL.com portlandlab@emsl.com

EMSL Order:	621401365
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Credere Associates, LLC
776 Main Street
Westbrook, ME 04092

Phone:	(207) 820-81272
Fax:	(207) 887-1051
Received:	10/22/14 2:38 PM
Analysis Date:	10/23/2014
Collected:	

Project: **Ferrari Mill/14001247**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos				Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**		**% Non-Fibrous**		**% Type**
CA-PACM-11C *621401365-0033*	ROADSIDE ENTRANCE ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	40%	Cellulose	60%	Non-fibrous (other)	**None Detected**
CA-PACM-12A-Shingle *621401365-0034*	EAST SIDE SMALL ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	25% 5%	Cellulose Synthetic	70%	Non-fibrous (other)	**None Detected**
CA-PACM-12A-Felt *621401365-0034A*	EAST SIDE SMALL ROOF - BLACK ASPHALT SHINGLES	Black Non-Fibrous Homogeneous	40%	Cellulose	60%	Non-fibrous (other)	**None Detected**
CA-PACM-12B-Shingle *621401365-0035*	EAST SIDE SMALL ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	25% 5%	Cellulose Synthetic	70%	Non-fibrous (other)	**None Detected**
CA-PACM-12B-Felt *621401365-0035A*	EAST SIDE SMALL ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	35%	Cellulose	65%	Non-fibrous (other)	**None Detected**
CA-PACM-12C *621401365-0036*	EAST SIDE SMALL ROOF - BLACK ASPHALT SHINGLES	Black Fibrous Homogeneous	30%	Cellulose	70%	Non-fibrous (other)	**None Detected**

The sample group is not homogeneous

Analyst(s)

Joshua Snyder (5)
Leslie McCluskeyEissing (19)

CWalker

Christina Walker, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. South Portland, ME

Initial report from 10/23/2014 17:12:52

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Allie Drouin
CREDERE Associates
776 Main Street
Westbrook, ME 04092

PO Number: None
Job ID: 31349
Date Received: 10/24/14

Project: Ferrari Mill 14001247

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

(for)

Sue Sylvester
Principal, General Manager

Date of Approval: 11/15/2014
Total number of pages: 14

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Project ID: Ferrari Mill 14001247

Lab ID: 31349

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
CA-PCB-1	Bulk	10/20/2014 9:37	31349-001	PCBs in soil by 8082
CA-PCB-2	Bulk	10/20/2014 9:46	31349-002	PCBs in soil by 8082
CA-PCB-3	Bulk	10/20/2014 10:00	31349-003	PCBs in soil by 8082
CA-PCB-4	Bulk	10/20/2014 10:10	31349-004	PCBs in soil by 8082
CA-PCB-5	Bulk	10/20/2014 10:13	31349-005	PCBs in soil by 8082
CA-PCB-6	Bulk	10/20/2014 10:19	31349-006	PCBs in soil by 8082
CA-PCB-7	Bulk	10/20/2014 10:30	31349-007	PCBs in soil by 8082
CA-PCB-8	Bulk	10/20/2014 11:45	31349-008	PCBs in soil by 8082
CA-PCB-9	Bulk	10/20/2014 11:53	31349-009	PCBs in soil by 8082
CA-PCB-10	Bulk	10/20/2014 12:00	31349-010	PCBs in soil by 8082
CA-PCB-11	Bulk	10/20/2014 12:10	31349-011	PCBs in soil by 8082
CA-PCB-12	Bulk	10/20/2014 12:15	31349-012	PCBs in soil by 8082
Dup-1	Bulk	10/20/2014 0:00	31349-013	PCBs in soil by 8082

Absolute Resource associates

Project ID: Ferrari Mill 14001247
Job ID: 31349

Sample#: 31349-001
Sample ID: CA-PCB-1
Matrix: Bulk Material
Sampled: 10/20/14 9:37

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	13:58	SW3540C8082A
PCB-1221	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	13:58	SW3540C8082A
PCB-1232	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	13:58	SW3540C8082A
PCB-1242	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	13:58	SW3540C8082A
PCB-1248	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	13:58	SW3540C8082A
PCB-1254	**1.3**	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	13:58	SW3540C8082A
PCB-1260	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	13:58	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**95**	30-150	%	5	JZ	10/28/14	7325	10/31/14	13:58	SW3540C8082A
decachlorobiphenyl SUR	**82**	30-150	%	5	JZ	10/28/14	7325	10/31/14	13:58	SW3540C8082A

Note: Dilution due to matrix interference.

Sample#: 31349-002
Sample ID: CA-PCB-2
Matrix: Bulk Material
Sampled: 10/20/14 9:46

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:29	SW3540C8082A
PCB-1221	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:29	SW3540C8082A
PCB-1232	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:29	SW3540C8082A
PCB-1242	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:29	SW3540C8082A
PCB-1248	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:29	SW3540C8082A
PCB-1254	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:29	SW3540C8082A
PCB-1260	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:29	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**95**	30-150	%	5	JZ	10/28/14	7325	10/31/14	14:29	SW3540C8082A
decachlorobiphenyl SUR	**78**	30-150	%	5	JZ	10/28/14	7325	10/31/14	14:29	SW3540C8082A

Note: Dilution due to matrix interference.

Project ID: Ferrari Mill 14001247
Job ID: 31349

Sample#: 31349-003
Sample ID: CA-PCB-3
Matrix: Bulk Material
Sampled: 10/20/14 10:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:59	SW3540C8082A
PCB-1221	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:59	SW3540C8082A
PCB-1232	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:59	SW3540C8082A
PCB-1242	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:59	SW3540C8082A
PCB-1248	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:59	SW3540C8082A
PCB-1254	**0.7**	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:59	SW3540C8082A
PCB-1260	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	14:59	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**89**	30-150	%	5	JZ	10/28/14	7325	10/31/14	14:59	SW3540C8082A
decachlorobiphenyl SUR	**67**	30-150	%	5	JZ	10/28/14	7325	10/31/14	14:59	SW3540C8082A

Note: Dilution due to matrix interference.

Sample#: 31349-004
Sample ID: CA-PCB-4
Matrix: Bulk Material
Sampled: 10/20/14 10:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	15:30	SW3540C8082A
PCB-1221	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	15:30	SW3540C8082A
PCB-1232	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	15:30	SW3540C8082A
PCB-1242	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	15:30	SW3540C8082A
PCB-1248	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	15:30	SW3540C8082A
PCB-1254	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	15:30	SW3540C8082A
PCB-1260	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	15:30	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**54**	30-150	%	5	JZ	10/28/14	7325	10/31/14	15:30	SW3540C8082A
decachlorobiphenyl SUR	**68**	30-150	%	5	JZ	10/28/14	7325	10/31/14	15:30	SW3540C8082A

Note: Dilution due to matrix interference.

Project ID: Ferrari Mill 14001247
Job ID: 31349

Sample#: 31349-005
Sample ID: CA-PCB-5
Matrix: Bulk Material
Sampled: 10/20/14 10:13

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	16:00	SW3540C8082A
PCB-1221	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	16:00	SW3540C8082A
PCB-1232	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	16:00	SW3540C8082A
PCB-1242	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	16:00	SW3540C8082A
PCB-1248	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	16:00	SW3540C8082A
PCB-1254	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	16:00	SW3540C8082A
PCB-1260	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	16:00	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**69**	30-150	%	5	JZ	10/28/14	7325	10/31/14	16:00	SW3540C8082A
decachlorobiphenyl SUR	**63**	30-150	%	5	JZ	10/28/14	7325	10/31/14	16:00	SW3540C8082A

Note: Dilution due to matrix interference.

Sample#: 31349-006
Sample ID: CA-PCB-6
Matrix: Bulk Material
Sampled: 10/20/14 10:19

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	19:07	SW3540C8082A
PCB-1221	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	19:07	SW3540C8082A
PCB-1232	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	19:07	SW3540C8082A
PCB-1242	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	19:07	SW3540C8082A
PCB-1248	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	19:07	SW3540C8082A
PCB-1254	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	19:07	SW3540C8082A
PCB-1260	< 0.7	0.7	ug/g	5	JZ	10/28/14	7325	10/31/14	19:07	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**91**	30-150	%	5	JZ	10/28/14	7325	10/31/14	19:07	SW3540C8082A
decachlorobiphenyl SUR	**87**	30-150	%	5	JZ	10/28/14	7325	10/31/14	19:07	SW3540C8082A

Note: Dilution due to matrix interference.

Project ID: Ferrari Mill 14001247
Job ID: 31349

Sample#: 31349-007
Sample ID: CA-PCB-7
Matrix: Bulk Material
Sampled: 10/20/14 10:30

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	19:37	SW3540C8082A
PCB-1221	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	19:37	SW3540C8082A
PCB-1232	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	19:37	SW3540C8082A
PCB-1242	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	19:37	SW3540C8082A
PCB-1248	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	19:37	SW3540C8082A
PCB-1254	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	19:37	SW3540C8082A
PCB-1260	< 0.8	0.8	ug/g	5	JZ	10/28/14	7325	10/31/14	19:37	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**84**	30-150	%	5	JZ	10/28/14	7325	10/31/14	19:37	SW3540C8082A
decachlorobiphenyl SUR	**94**	30-150	%	5	JZ	10/28/14	7325	10/31/14	19:37	SW3540C8082A

Note: Dilution due to matrix interference.

Sample#: 31349-008
Sample ID: CA-PCB-8
Matrix: Bulk Material
Sampled: 10/20/14 11:45

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.7	0.7	ug/g	5	JZ	10/29/14	7325	11/3/14	14:21	SW3540C8082A
PCB-1221	< 0.7	0.7	ug/g	5	JZ	10/29/14	7325	11/3/14	14:21	SW3540C8082A
PCB-1232	< 0.7	0.7	ug/g	5	JZ	10/29/14	7325	11/3/14	14:21	SW3540C8082A
PCB-1242	< 0.7	0.7	ug/g	5	JZ	10/29/14	7325	11/3/14	14:21	SW3540C8082A
PCB-1248	< 0.7	0.7	ug/g	5	JZ	10/29/14	7325	11/3/14	14:21	SW3540C8082A
PCB-1254	< 0.7	0.7	ug/g	5	JZ	10/29/14	7325	11/3/14	14:21	SW3540C8082A
PCB-1260	< 0.7	0.7	ug/g	5	JZ	10/29/14	7325	11/3/14	14:21	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**68**	30-150	%	5	JZ	10/29/14	7325	11/3/14	14:21	SW3540C8082A
decachlorobiphenyl SUR	**66**	30-150	%	5	JZ	10/29/14	7325	11/3/14	14:21	SW3540C8082A

Note: Dilution due to matrix interference.

Project ID: Ferrari Mill 14001247
Job ID: 31349

Sample#: 31349-009
Sample ID: CA-PCB-9
Matrix: Bulk Material
Sampled: 10/20/14 11:53

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 3.2	3.2	ug/g	20	JZ	10/29/14	7325	11/4/14	13:26	SW3540C8082A
PCB-1221	< 3.2	3.2	ug/g	20	JZ	10/29/14	7325	11/4/14	13:26	SW3540C8082A
PCB-1232	< 3.2	3.2	ug/g	20	JZ	10/29/14	7325	11/4/14	13:26	SW3540C8082A
PCB-1242	< 3.2	3.2	ug/g	20	JZ	10/29/14	7325	11/4/14	13:26	SW3540C8082A
PCB-1248	< 3.2	3.2	ug/g	20	JZ	10/29/14	7325	11/4/14	13:26	SW3540C8082A
PCB-1254	< 3.2	3.2	ug/g	20	JZ	10/29/14	7325	11/4/14	13:26	SW3540C8082A
PCB-1260	< 3.2	3.2	ug/g	20	JZ	10/29/14	7325	11/4/14	13:26	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**105**	30-150	%	20	JZ	10/29/14	7325	11/4/14	13:26	SW3540C8082A
decachlorobiphenyl SUR	**95**	30-150	%	20	JZ	10/29/14	7325	11/4/14	13:26	SW3540C8082A

Note: Dilution due to matrix interference.

Sample#: 31349-010
Sample ID: CA-PCB-10
Matrix: Bulk Material
Sampled: 10/20/14 12:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:07	SW3540C8082A
PCB-1221	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:07	SW3540C8082A
PCB-1232	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:07	SW3540C8082A
PCB-1242	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:07	SW3540C8082A
PCB-1248	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:07	SW3540C8082A
PCB-1254	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:07	SW3540C8082A
PCB-1260	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:07	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**81**	30-150	%	5	JZ	10/29/14	7325	10/31/14	20:07	SW3540C8082A
decachlorobiphenyl SUR	**81**	30-150	%	5	JZ	10/29/14	7325	10/31/14	20:07	SW3540C8082A

Note: Dilution due to matrix interference.

Project ID: Ferrari Mill 14001247
Job ID: 31349

Sample#: 31349-011
Sample ID: CA-PCB-11
Matrix: Bulk Material
Sampled: 10/20/14 12:10

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:38	SW3540C8082A
PCB-1221	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:38	SW3540C8082A
PCB-1232	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:38	SW3540C8082A
PCB-1242	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:38	SW3540C8082A
PCB-1248	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:38	SW3540C8082A
PCB-1254	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:38	SW3540C8082A
PCB-1260	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	10/31/14	20:38	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**55**	30-150	%	5	JZ	10/29/14	7325	10/31/14	20:38	SW3540C8082A
decachlorobiphenyl SUR	**70**	30-150	%	5	JZ	10/29/14	7325	10/31/14	20:38	SW3540C8082A

Note: Dilution due to matrix interference.

Sample#: 31349-012
Sample ID: CA-PCB-12
Matrix: Bulk Material
Sampled: 10/20/14 12:15

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 1.0	1.0	ug/g	5	JZ	10/29/14	7325	11/4/14	12:55	SW3540C8082A
PCB-1221	< 1.0	1.0	ug/g	5	JZ	10/29/14	7325	11/4/14	12:55	SW3540C8082A
PCB-1232	< 1.0	1.0	ug/g	5	JZ	10/29/14	7325	11/4/14	12:55	SW3540C8082A
PCB-1242	< 1.0	1.0	ug/g	5	JZ	10/29/14	7325	11/4/14	12:55	SW3540C8082A
PCB-1248	< 1.0	1.0	ug/g	5	JZ	10/29/14	7325	11/4/14	12:55	SW3540C8082A
PCB-1254	< 1.0	1.0	ug/g	5	JZ	10/29/14	7325	11/4/14	12:55	SW3540C8082A
PCB-1260	< 1.0	1.0	ug/g	5	JZ	10/29/14	7325	11/4/14	12:55	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**51**	30-150	%	5	JZ	10/29/14	7325	11/4/14	12:55	SW3540C8082A
decachlorobiphenyl SUR	**56**	30-150	%	5	JZ	10/29/14	7325	11/4/14	12:55	SW3540C8082A

Note: Elevated reporting limit due to matrix interference.
Note: Dilution due to matrix interference.

Project ID: Ferrari Mill 14001247
Job ID: 31349
Sample#: 31349-013
Sample ID: Dup-1
Matrix: Bulk Material
Sampled: 10/20/14 0:00

Parameter	Result	Reporting Limit	Units	Instr Dil'n Factor	Analyst	Prep Date	Batch	Analysis Date	Time	Reference
PCB-1016	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	11/3/14	16:13	SW3540C8082A
PCB-1221	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	11/3/14	16:13	SW3540C8082A
PCB-1232	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	11/3/14	16:13	SW3540C8082A
PCB-1242	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	11/3/14	16:13	SW3540C8082A
PCB-1248	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	11/3/14	16:13	SW3540C8082A
PCB-1254	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	11/3/14	16:13	SW3540C8082A
PCB-1260	< 0.8	0.8	ug/g	5	JZ	10/29/14	7325	11/3/14	16:13	SW3540C8082A
Surrogate Recovery		**Limits**								
tetrachloro-m-xylene SUR	**78**	30-150	%	5	JZ	10/29/14	7325	11/3/14	16:13	SW3540C8082A
decachlorobiphenyl SUR	**78**	30-150	%	5	JZ	10/29/14	7325	11/3/14	16:13	SW3540C8082A

Note: Dilution due to matrix interference.

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Case Narrative
Lab # 31349

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, at 2 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

No exceptions noted.

Laboratory Control Sample Results

No exceptions noted.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

PCB: Sample dilution was required for all samples due to matrix interferences.
Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

- QC Report -

Method	QC ID	Parameter	Associated Sample		Result	Units	Amt Added	%R	Limits		RPD	RPD Limit
SW3540C8082A	BLK7325	PCB-1016		<	0.1	ug/g						
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260		<	0.1	ug/g						
		tetrachloro-m-xylene SUR			80	%			30	150		
		decachlorobiphenyl SUR			83	%			30	150		
SW3540C8082A	LCS7325	PCB-1016			2.5	ug/g	2	123	40	140		
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			2.1	ug/g	2	107	40	140		
		tetrachloro-m-xylene SUR			93	%			30	150		
		decachlorobiphenyl SUR			103	%			30	150		
SW3540C8082A	LCSD7325	PCB-1016			2.5	ug/g	2	126	40	140	3	30
		PCB-1221		<	0.1	ug/g						
		PCB-1232		<	0.1	ug/g						
		PCB-1242		<	0.1	ug/g						
		PCB-1248		<	0.1	ug/g						
		PCB-1254		<	0.1	ug/g						
		PCB-1260			2.3	ug/g	2	113	40	140	5	30
		tetrachloro-m-xylene SUR			90	%			30	150		
		decachlorobiphenyl SUR			103	%			30	150		

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

31349

Company Name: Credere Associates LLC
Company Address: 776 Main St. Westbrook, ME
Report To: Allie Drouin
Phone #: 207-828-1272 ext. 15
Invoice to Email: adrouin@credere llc.com
☐ Hard Copy Invoice Required

Project Name: Ferrari Mill
Project #: 14001247
Project Location: (NH) MA ME VT NY Other
Protocol: RCRA SDWA NPDES MCP NHDES OTHER
Reporting Limits: (QAPP) GW-1 S-1 EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	SAMPLER
31349-01	CA-PCB-1	1		X							10/20/14	0937	
-02	CA-PCB-2											0946	
-03	CA-PCB-3											1000	
-04	CA-PCB-4											1010	
-05	CA-PCB-5											1013	
-06	CA-PCB-6											1019	
-07	CA-PCB-7											1030	
-08	CA-PCB-8											1145	
-09	CA-PCB-9											1153	
-10	CA-PCB-10											1200	
-11	CA-PCB-11											1210	

Analyses requested (X = 8082 PCB; Soxlet):
☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP ☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List: ☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint ☐ 8270BAH ☐ 8270ABN ☐ 625 ☐ EDB ☐ 8081 Pesticides ☐ 608 Pest/PCB X 8082 PCB ☐ O&G 1664 ☐ Mineral O&G SM5520F
☐ VOC 624 ☐ VOC BTEX ☐ MtBE, only ☐ VOC 8021VT ☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane
☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness ☐ Total Metals-list: ☐ Dissolved Metals-list: ☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN ☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride ☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP ☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide
Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde
Grab (G) or Composite (C)

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) X
*Date Needed 10/29 10/31

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS X PDF (e-mail address) adrouin@credere llc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE X YES ☐ NO
TEMPERATURE 2 °C

CUSTODY RECORD
QSD-01 Revision 03/03/14

	Date	Time		Date	Time
Relinquished by Sampler:	10/24/14	1137	Received by:	10/24/14	1137
Relinquished by:	10/29/14	1615	Received by:		
Relinquished by:			Received by Laboratory:	10/24/14	16:15

13

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

31349

Company Name: Credere Associates llc
Company Address: 776 Main St. Westbrook, ME
Report To: Allie Drouin
Phone #: 207-828-1272
Invoice to Email: adrouin@crederellc.com
☐ Hard Copy Invoice Required

Project Name: Ferroni Mill
Project #: 14001247
Project Location: (NH) MA ME VT NY Other
Protocol: RCRA SDWA NPDES MCP NHDES OTHER
Reporting Limits: (QAPP) GW-1 S-1 EPA DW Other
Quote # ☐ NH Reimbursement Pricing
PO #

ANALYSIS REQUEST

☐ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP
☐ VOC 624 ☐ VOC BTEX ☐ MTBE, only ☐ VOC 8021VT
☐ VPH MADEP ☐ MEGRO ☐ GRO 8015 ☐ 1,4-Dioxane
☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:
☐ TPH ☐ DRO 8015 ☐ MEDRO ☐ EPH MADEP ☐ TPH Fingerprint
☐ 8270PAH ☐ 8270ABN ☐ 625 ☐ EDB
☒ 8082 PCB ☐ 8081 Pesticides ☐ 608 Pest/PCB Saxlet
☐ O&G 1664 ☐ Mineral O&G SM5520F
☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity
☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity
☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness
☐ Total Metals-list:
☐ Dissolved Metals-list:
☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC
☐ T-Phosphorus ☐ Phenols ☐ Bacteria P/A ☐ Bacteria MPN
☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P
☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride
☐ Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP
☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide
Subcontract: ☐ Grain Size ☐ Herbicides ☐ Formaldehyde
Grab (G) or Composite (C)

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	SAMPLER
31349-12	CA-PCB-12	1		X							10/20/14	1215	
-13	DUP-1	1		X							10/20/14	—	

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed 10/24/31

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS ☒ PDF (e-mail address) adrouin@crederellc.com
☐ HARD COPY REQUIRED ☐ FAX (FAX#)

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 2 °C

CUSTODY RECORD
QSD-01 Revision 03/03/14

	Date	Time
Relinquished by Sampler: Allie Drouin	10/24/83	1137
Relinquished by:	10/24/14	1615
Relinquished by:		

	Date	Time
Received by:	10/24/14	1659
Received by:		
Received by Laboratory:	10/24/14	1615

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APPENDIX F

DATA USABILITY EVALUATION

Data Usability Assessment (DUA)
Ferrari Realty Trust Property
93-119 Memorial Street, Franklin, New Hampshire
Phase II Environmental Site Assessment

Credere has reviewed the following laboratory analytical data reports for precision, bias, accuracy, representativeness, comparability, and completeness:

- Absolute Resource Associates Job ID 31349
- Absolute Resource Associates Job ID 31420
- Absolute Resource Associates Job ID 31961
- Absolute Resource Associates Job ID 31599
- EMSL Analytical, Inc. Order 621401365

A Sample Association Table identifying the field sample IDs, laboratory sample IDs, sample dates, and requested analyses is attached to this DUA.

General Summary

In general, the data reviewed for this project are usable for making project decisions. Data are considered representative with regard to the sample design as the highest detected concentrations were generally found in the samples collected from the most obviously contaminated soil (i.e., the industrial fill material). Data qualified as estimated (J+ or J-) was evaluated relative to the respective regulatory criteria. No qualified results were noted in proximity to their respective criteria and therefore the qualifications are not expected to alter the conclusions drawn from the data. The following significant concerns were noted:

- Non-detect VOCs results for samples CA-SB-4 (7.5), CA-SB-5 (5), CA-SB-6 (11) and CA-TP-A3 (2) are rejected (R) since the samples were analyzed outside the method allowed hold times. Since these samples were intended to delineate the vertical extent of fill and since the overlying sample results were either also non-detect or below the regulatory criteria, these data are considered usable for these delineations.

- Samples were analyzed in accordance with the SSQAPP and email amendment; however, non-detect results for soil samples CA-SB-5 (0-4), CA-SB-6 (0.5-10), and CA-SS-10 (0-2) had reporting limits that exceeded the regulatory criteria for certain PAHs as a result of dilutions. Per Credere's Generic QAPP, these non-detect results are not considered to exceed the regulatory criteria; however, the results cannot be used to rule out exceedances in these samples.

Precision

Precision is a measure of the mutual agreement between concentrations of samples (e.g., duplicates) collected at the same time from the same location. Precision is measured by

performing duplicate measurements in the field or laboratory. Precision is expressed in terms of relative percent difference (RPD) using the following equation:

$$RPD = [(C1-C2) /(C1+C2)/2)] \times 100$$

Where:
C1 = The larger of the two concentrations.
C2 = The smaller of the two concentrations.

The following duplicate samples were collected during this Phase II ESA:

- DUP-1: Duplicate soil sample collected from CA-SB-4 (0-7/3)
- DUP-2: Duplicate soil sample collected from CA-TP-2 (0-3.5/1.5)
- DUP-3: Duplicate soil sample collected from CA-SS-10 (0-2/0.5)
- DUP-GW-1: Duplicate groundwater sample collected from CA-MW-4
- DUP-CC: Duplicate concrete sample collected from CA-CC-3
- DUP-1 (PCB): Duplicate PCB-containing building material sample collected from CA-PCB-9

All analyte results were either non-detect (for at least one of the samples), less than 5 times the laboratory practical quantitation limit (PQL), or the calculated RPDs were less than the acceptable limit of 50% for soil and 30% for groundwater with the exception of the following:

- CA-SB-4/DUP-1 soil results differed by more than 50% for tetrachloroethene, acenaphthene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(g,h,i)perylene, chrysene, fluorene, fluoranthene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene, and barium. Despite being homogenized prior to sampling, this differentiation is attributed to the variability of fill constituents and the long sample interval (0-7 feet bgs), and is not attributed to poor laboratory precision.
- CA-SS-10/DUP-3 soil results differed by more than 50% for arsenic and chromium. Despite being homogenized prior to sampling, this differentiation is attributed to the variability of fill constituents, and is not attributed to poor laboratory precision.

Bias

Bias is the systematic or persistent distortion of a measurement process that causes errors in one direction. Bias assessments are made using personnel, equipment, and spiking materials or reference materials as independent as possible from those used in the calibration of the measurement system. Bias assessments were based on the analysis of spiked samples so that the effect of the matrix on recovery is incorporated into the assessment. A documented spiking protocol and consistency in following that protocol are important in obtaining meaningful data quality estimates.

Matrix spike and matrix spike duplicate samples (MS/MSD) were used to assess bias as prescribed in EPA Method 6010C. Control samples for assessing bias were analyzed at a rate as specified in the analytical SOPs and specified analytical methods.

The laboratory provides quality control non-conformance reports that indicate if Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD) and/or MS/MSD had low, failing, or high recoveries, and if the sample result was affected. Likewise, the laboratory reports any compounds that had failing RPDs in the LCS/LCSD pair or the MS/MSD pair. This indicates the percent difference between the laboratory sample and its duplicate or the spike and it's duplicate. The following were reported by the laboratory as being outside their acceptable limits:

- The MS/MSD percent recoveries were below the acceptance limits for zinc. Percent recoveries were below the 30% limit, indicating results below the laboratory reporting limits would be unusable (R). However, zinc was detected in all affected samples and was therefore flagged as estimated with a potential low bias (J-). Since results were well below the applicable regulatory criteria, this qualification is not expected to affect the conclusions drawn for this data. Affected samples include CA-SB-1 (0-2), CA-SB-2 (0-2), CA-SB-2 (15-17), CA-SB-3 (16-18), CA-SB-4 (0-7), CA-SB-5 (0-4), CA-SB-6 (0.5-10), CA-SS-1 (0-2), CA-SS-2 (0-2), CA-SS-3 (0-2), CA-SS-4 (0-2), CA-SS-5 (0-2), and CA-SS-7 (0-2).
- The MS percent recoveries were above the acceptance limits and MSD were below the acceptance criteria for nickel. Therefore, results may be biased high or low and have therefore been qualified as estimated with a potential low or high bias (J-+). Since results were well below the applicable regulatory criteria, this qualification is not expected to affect the conclusions drawn for this data. Affected samples include CA-SB-1 (0-2), CA-SB-2 (0-2), CA-SB-2 (15-17), CA-SB-3 (16-18), CA-SB-4 (0-7), CA-SB-5 (0-4), CA-SB-6 (0.5-10), CA-SS-1 (0-2), CA-SS-2 (0-2), CA-SS-3 (0-2), CA-SS-4 (0-2), CA-SS-5 (0-2), and CA-SS-7 (0-2).
- The LCSD (certified reference material duplicate [CRMD] for metals) relative percent difference for antimony exceeded the allowable limit for soil sample DUP-1; however, the percent recoveries for both the LCS (CRM) and LCSD (CRMD) were within allowable range. Therefore, data is not expected to be impacted by this non-conformance.
- The LCS and LCSD for VOCs affecting soil samples CA-SB-2 (15.5), CA-SB-3 (17), CA-SB-6 (2), CA-SB-6 (11), CA-SB-4 (15), CA-SB-4 (3), CA-SB-4 (5), CA-SB-5 (1), CA-SB-5 (5), and CA-SB-5 (20) reported the bromomethane percent recovery below the acceptable range. Since less than 10% of analytes were affected no corrective action was taken. The data is not expected to be impacted by this non-conformance.
- The LCS and LCSD for VOCs affecting soil sample CA-TP-2 (4) reported the dichlorodifluoromethane, carbon disulfide, and 1,2-dibromo-3-chloropropane percent recoveries below the acceptable range. Since less than 10% of analytes were affected no

corrective action was taken. The data is not expected to be impacted by this non-conformance.

- The LCS and LCSD for VOCs affecting soil sample CA-TP-A3 (2) reported the bromomethane, carbon disulfide, and 1,2-dibromo-3-chloropropane percent recoveries below the acceptable range. Since less than 10% of analytes were affected no corrective action was taken. The data is not expected to be impacted by this non-conformance.
- The LCS and LCSD for VOCs affecting groundwater samples CA-MW-1, CA-MW-2, CA-MW-3, CA-MW-4, CA-MW-5, CA-MW-6, DUP-GW-1, and the trip blank reported the bromomethane percent recovery above the acceptable range. Since this analyte was not detected in any affected samples no corrective action was taken. The data is not expected to be impacted by this non-conformance.
- The LCS and LCSD for SVOCs affecting groundwater samples CA-MW-1, CA-MW-2, CA-MW-3, CA-MW-4, CA-MW-5, CA-MW-6, DUP-GW-1, and the trip blank reported the phenol and hexachloroethane percent recoveries below the acceptable range. Since less than 10% of analytes were affected no corrective action was taken. The data is not expected to be impacted by this non-conformance.
- The LCS and LCSD for VOCs affecting soil samples CA-SED-1, CA-SED-2, CA-SS-9 (0.5), CA-SS-9 (0.5), CA-SS-10 (0.5), CA-SS-11 (0.5), DUP-3, and the trip blank reported the bromomethane for the LCS and naphthalene and 1,2,3-trichlorobenzene for the LCSD percent recoveries below the acceptable range. Since analytes were not detected in any affected samples and since these are not currently COCs for the Site, no corrective action was taken. The data is not expected to be impacted by this non-conformance.

Accuracy

Accuracy is a statistical measurement of correctness and includes components of random error (variability due to imprecision) and systemic error. It, therefore, reflects the total error associated with a measurement. A measurement is accurate when the value reported does not differ from the true value or known concentration of the spike or standard. Surrogate compound recoveries are also used to assess accuracy and method performance for each sample analyzed. Analysis of performance evaluation samples are also used to provide additional information for assessing the accuracy of the analytical data being produced. Both accuracy and precision are calculated for each analytical batch, and the associated sample results are interpreted by considering these specific measurements.

The laboratory provides a non-conformance summary that reports if all of the quality control criteria including initial calibration, calibration verification, surrogate recovery, holding time and method accuracy/precision for analysis are within acceptable limits. The following non-conformances were reported by the laboratory:

- Samples CA-SB-4 (7.5), CA-SB-5 (5), CA-SB-6 (11) and CA-TP-A3 (2) for VOCs were analyzed outside the method allowed holding time per Credere's request. Samples were originally placed on hold pending results of overlying samples. Due to longer turn-

around of the initial results, the hold times on the held samples had expired by the time of authorization. Results may be biased low due to the degradation of the sample; therefore, detected VOC results for these analyses are considered estimated with a potential low bias (J-) and non-detected results are considered unusable (R). Based on results for CA-SB-4 being below the laboratory reporting limit and well below the regulatory criteria for PCE; CA-SB-5 exceeding the regulatory criteria for PCE and being below the laboratory reporting limit for the remaining VOCs; and CA-SB-6 and CA-TP-A3 being below the laboratory reporting limits, this qualification is not expected to affect the conclusions drawn from this data.

- The SVOC surrogate percent recoveries for nitrobenzene-D5 were below the laboratory established lower limit for the base/neutral analysis of CA-SB-6 (0.5-10) and CA-SB-5 (0-4). Since only one percent recovery of the three base/neutral class was out of range (two non-conformances per class required for action), no corrective action was taken. Hydrocarbon interference was suspected. The data is not expected to be impacted by this non-conformance.

- The SVOC surrogate percent recovery for 2-fluorobiphenyl was below the laboratory established lower limit for the base/neutral analysis of CA-TP-3 (3.5-8). Since only one percent recovery of the three base/neutral class was out of range (two non-conformances per class required for action), no corrective action was taken. Hydrocarbon interference was suspected. The data is not expected to be impacted by this non-conformance.

- The SVOC surrogate percent recoveries for nitrobenzene-D5 and 2-fluorobiphenyl were below the laboratory established lower limit for the base/neutral analysis of CA-TP-1 (0-6). Since at least two of the base/neutral class surrogates were out of range and hydrocarbon interference was suspected, the chromatograph was included in the laboratory report as a corrective action. This non-conformance resulted in the qualification of the base/neutral compounds detected in the sample as estimated with a low bias (J-). Non-detect data is not affected. Based on the exceedance of two compounds already above the regulatory criteria and remaining detected compounds well below their respective criteria, this qualification is not expected to affect the conclusions drawn from this data.

- The SVOC surrogate percent recovery for 2-fluorophenol was below the laboratory established lower limit for the acid analysis of CA-MW-1. Since only one percent recovery of the three acid class was out of range (two non-conformances per class required for action), no corrective action was taken. Matrix interference was suspected. The data is not expected to be impacted by this non-conformance.

- The PAH surrogate percent recovery for 2-fluorophenol and o-terphenyl were above the laboratory established lower limit for the base/neutral analysis of DUP-3. Since surrogate recoveries were high and the target analytes were not detected in the sample, no corrective action was required. The data is not expected to be impacted by this non-conformance.

- The PAH surrogate percent recoveries for 2-fluorobiphenyl were below the laboratory established lower limit for the base/neutral analysis of CA-SED-1 and CA-SS-8 (0-2). CA-SS-8 (0-2) was re-extracted and re-analyzed and produced similar results. Matrix

interference was suspected for both analyses. The data is not expected to be impacted by this non-conformance.

Representativeness

Sample representativeness was assessed through an analysis of the blank results. The concentrations and frequencies of target analytes detected in blanks provide an indication of data representativeness. The five times and ten times rules were used judiciously to eliminate potential false positive results indicated by the blank data. Regulatory criteria were considered when using the five and ten times rule to avoid elevation of the reporting limit above the criteria for certain compounds. No non-conformances were identified during data evaluation.

Sample representativeness was also assessed through an evaluation of the sample results compared to the sample design (locations and conceptual site model) to determine if the results are representative of the environment from which the samples were collected.

All objectives for sampling and analytical representativeness for samples that were analyzed, as specified in the SSQAPP Addendum, were met. The following non-conformances were identified during data evaluation:

- Hexachlorobutadiene was detected in the method blank for VOC analysis of all groundwater samples. This compound was not detected in the original samples, and therefore, no corrective action was required and no impact to the data is suspected.

Comparability

Comparability is the confidence with which one data set can be compared to another data set (i.e. how well the data can be reproduced). The objective for this quality assurance/quality control (QA/QC) program is to produce data with the greatest possible degree of comparability. Comparability was achieved by using standard methods for sampling and analysis, reporting data in standard units, normalizing results to standard conditions and using standard and comprehensive reporting formats. Complete field documentation was used, including standardized data collection forms to support the assessment of comparability.

Completeness

Completeness is calculated by comparing the number of samples successfully analyzed to the number of samples collected. The goal for completeness is 95 percent. The completeness for this project was 100 percent, as there were no samples that were not analyzed due to holding time violations, samples spilled or broken, or any other reason.

Several samples were analyzed beyond their method allowed holding times per Credere's request; however, the data is still considered usable due to comparable results from samples analyzed within hold times and the use of the data for delineation purposes. Therefore, these samples were not considered to affect the project completeness.