

June 3, 2016

Project IR16166120 Sent via E-mail

Ms. Sara Vela
Department Toxic Substances Control
Brownfields and Environmental Restoration Program
9211 Oakdale Avenue
Chatsworth, California 91311

Re: Revised Work Plan for Environmental Site Assessment Former Specific Plating Facility 1350 South Eastern Avenue Commerce, California 90022

Dear Ms. Vela:

On behalf of the City of Commerce (the City), Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) has prepared this Revised Work Plan for Environmental Site Assessment (work plan) to assess subsurface conditions at the Former Specific Plating Facility (Specific Plating) located at 1350 South Easter Avenue in the City of Commerce, California (the site, Figure 1). This work plan is being submitted pursuant to the State of California Environmental Protection Agency (EPA), Department of Toxic Substances Control (DTSC)'s requests in its letter to the City dated October 19, 2015. Currently, the DTSC is negotiating an oversight agreement with the City. Representatives from the DTSC, the City, and Amec Foster Wheeler discussed potential scope, locations, and rationale for additional assessment during the meeting on March 23, 2016. Due to funding limitation and budgetary constraints, the overall scope of site assessment would be conducted in phases. The first phase (Phase 1) addresses the higher priority items that fit the current funding (approved budget). Amec Foster Wheeler submitted an initial version of the work plan for the site to DTSC in April 2016. This work plan has been revised to address comments received from DTSC on May 13, 2016.

Amec Foster Wheeler has conducted a preliminary review of documents provided by DTSC and the City and obtained from the DTSC's and the California State Water Resources Control Board's online databases (Envirostor and GeoTracker, respectively). The following sections of this work plan list the assessment objectives, summarize relevant background information and site lithology and hydrogeology, describe the proposed approach, locations, and methods for the assessment, and present a general schedule for implementation of the proposed work.

### **OBJECTIVES**

The assessment proposed in this work plan is intended to update and supplement the previous surface and subsurface investigations conducted at the site.

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The site assessment will be performed to assess whether historical site activities have resulted in environmental conditions that may need to be further evaluated and/or addressed for the future site development. The overall objective of the site assessment is to evaluate whether hazardous materials are present at the site at concentrations that may pose unacceptable human health risks and threat to groundwater.

To meet with this objective, the proposed scope of work will include the following:

- assessing the nature, extent, and concentrations of hazardous materials that may be present in soil, soil gas, and groundwater at the site;
- assessing potential impact of site contamination to offsite areas and potential risk of vapor intrusion to nearby residences;
- assessing lithologic conditions, depth to groundwater, and monitoring groundwater flow direction and groundwater quality beneath the site;
- assessing the nature and concentrations of metals in soil and whether they represent natural or regional background conditions or should be considered as site contaminants; and
- estimating the potential threat to public health posed by hazardous materials that may be present at the site in context of future redevelopment plans.

### BACKGROUND

This section summarizes the site description, historical site operations, and previous site investigations conducted at the site and nearby offsite properties.

### Site Description

The 1.46 acre site is located in a mixed residential and industrial/commercial area of the City of Commerce within the County of Los Angeles, California. The site is currently vacant with an electrical hub station and comprised of four parcels: Los Angeles County Assessor's Parcel Numbers (APN#) 5241-013-016, 5241-013-017, 5241-013-018, and 5241-013-019 which include the addresses of 1350, 1362, and 1368 South Eastern Avenue. As shown on Figure 2, the site is bounded by South Eastern Avenue to the west, Triggs Street to the south, and Interstate 710 to the east. Residential properties are located in the north and northwest of the site. Commercial/industrial businesses are located further west of South Eastern Avenue, Najarian Trading Inc., a furniture wholesaler and Sabroso Corporation, a small grocery wholesaler. A church and residences are located further south of Triggs Street. The City recently acquired the adjoining residential property in the north (APN# 5241-013-904) with the street address of 1338 South Eastern Avenue, which is not included in the site assessment proposed in this work plan.



The site was formerly occupied by a single-story light industrial building (Building 1) and an open work area in the northern and northeastern portions of the site, respectively. A steel building (Building 2) and equipment storage were located in the southcentral and southern portions of the site. Western and southwestern portions of the site were primarily used as a parking lot.

According to DTSC, stockpile(s) of soil are currently at the site. These stockpiles were from the unauthorized dumping of soil at the site.

# **Historical Site Operations**

Specific Plating conducted electroplating operations at the site from 1969 to 2002. The electroplating operations utilized large quantities of acids, caustic soda, and inorganic salts (copper, cyanide, copper sulfate, zinc sulfate, zinc cyanide, nickel, silver, gold, rhodium, cadmium oxide, chromium, etc.). The site was occupied by an aluminum shower door manufacturing company from 1926 to 1969, and was a residential neighborhood prior to 1926. No electroplating or metal finishing operations have reportedly been conducted at the site prior to Specific Plating's occupancy.<sup>1</sup>

The site operations included:2

- alkaline cleaning and etching;
- acid cleaning, stripping, and activation;
- electroless nickel and copper applications;
- electroplating of copper, zinc, nickel, tin, brass, bronze, lead, tin/lead, and cadmium;
- electroplating of precious metals including gold, silver, and rhodium;
- hot oil fusing of tin and tin/lead;
- chromate coatings on both ferrous and non-ferrous metals; and
- vapor degreasing of parts (using tetrachloroethylene [PCE] and 1,1,1trichloroethane).

<sup>&</sup>lt;sup>1</sup> Jack Orswell & Associates, Inc. (JOA), 1997, Phase I Environmental Site Assessment Report, Specific Plating, 1350 South Eastern Avenue, Commerce, California 90022, March 5.

<sup>&</sup>lt;sup>2</sup> Chemical Consultants, 1995, Preliminary Phase I Site Assessment, Specific Plating, 1350 South Eastern Avenue, City of Commerce, California 90022, April 12.



The primary electroplating and wet operations were conducted in Building 1. Additional plating operations including barrel plating of nickel, copper, and cadmium and reel-to-reel plating were conducted in Building 2. There were twelve aboveground chemical storage tanks onsite and no records of underground storage tanks.

A large open work area with large cleaning and plating tanks was located east of Building 1. Various metal parts were brought into this area, placed on racks, and dipped into a heated chemical solution. The cleaned parts were then placed into chemical plating and washing tanks. Chemical storage sheds and a drum storage area were also located in this open work area. A sump was located at the southeast corner of the site (within the spill containment area) to capture any surface runoff water which was channeled to a purification machine for detoxification.<sup>3</sup>

Between 1975 and 1985, all industrial wastewater was pH adjusted and discharged into the sewer through a 1,500-gallon clarifier (possibly referring to the former interceptor, location shown on Figure 2) located in the southwest corner of the main wet processing area (Building 1).<sup>5</sup> The use of the clarifier was discontinued in 1985 and replaced with a new aboveground wastewater treatment system (Figure 2). The clarifier was cleaned and closed in place following the guidelines set forth by the Los Angeles County Department of Public Works.<sup>1,5</sup>

Starting in 1985, wastewater from the various wet processing operations was routed through a closed hard-pipe system to a fully permitted aboveground industrial wastewater treatment system for onsite treatment and monitoring prior to discharge to the sanitary sewer. The wastewater was collected in a pre-treatment clarifier (cyanide treatment pit; Figure 2) and then sent to an aboveground tank at the wastewater treatment system, filtered, and neutralized before being discharged into the sanitary sewer system. Approximately 300 gallons of wastewater was pumped out into the wastewater pretreatment tank each night. The wastewater was treated using cyanide destruction, pH adjustment, polymer/coagulant addition, suspended solid removal, and sludge de-watering and drying. Filter cake was dried and packaged into carton and stored in a large, covered roll-off bin prior to offsite disposal. The wastewater was electronically monitored for compliance with State and federal standards.<sup>1,4</sup>

A cyanide treatment pit (Figure 2) was a dual purpose system used for treatment of cyanide-containing wastewater and also for collection and transfer of all other wastewater. It was constructed with a fiberglass tank placed within epoxy-coated pit constructed of 8-inch thick concrete. The interior of the pit was coated with fiberglass and divided into three compartments which were constructed with wood and coated with fiberglass. Two of the compartments were used for the cyanide treatment system and the other was used for the collection of wastewater

<sup>&</sup>lt;sup>3</sup> USA Environmental, Inc. (USAE), 2002, Phase I Environmental Site Assessment Report, Industrial Building Located at 1350 South Eastern Avenue, Commerce, March.

<sup>&</sup>lt;sup>4</sup> Orswell & Kasman, Inc. (OKI), 2001, Environmental Site Assessment Transaction Screen Report, Specific Plating, 1350 South Eastern Avenue, City of Commerce, California 90022, April 12.



and as a transfer sump. There was a gap between the floor of the compartments and the concrete pit to allow for visual inspection of leaks. Cyanide containing wastewater gravity flowed into the dual compartment, 1,550-gallon cyanide treatment system. The pH of the wastewater was adjusted and sodium hypochlorite (bleach) was added to destroy the cyanide. Overflow from the cyanide treatment system then gravity flowed into the 1,830-gallon transfer sump. Non-cyanide wastewaters were also collected in the transfer sump. Wastewater collected in the transfer sump was pumped into the wastewater treatment system for solids removal and additional treatment prior to discharge into the sewer system.

# <u>Historical Site Investigation</u>

Limited subsurface assessments were conducted between 1989 and 2011. Several Phase I site assessment reports were also completed between 1995 and 2002 and concluded that no remedial actions with regards to site operations were necessary. Based on information reviewed, metals impacts have been identified in soil and volatile organic compounds (VOCs) impacts in soil and soil gas beneath the site.

In 1985, Specific Plating purchased one of the parcels (5241-013-018, Lot #26) located at the southeast portion of the site. The parcel was occupied by a small house which was subsequently demolished by Specific Plating. In 1989, subsurface soil samples were collected and analyzed, and the results indicated the presence of chlorinated solvents in both under and around the former house. Subsequently, samples were collected on the site adjacent to the purchased property. The results of the samples collected on the site did not indicate the presence of solvents.<sup>2</sup>

In 1995, soil samples were obtained from various locations at the site, including Buildings 1 and 2 and the area around the waste water treatment tank. The soil samples were analyzed for heavy metals and solvents. No significant contamination problems were reportedly discovered.<sup>1</sup>

In 1998, a soil investigation was conducted by Chemical Consultants to establish baseline subsurface conditions beneath the site.<sup>5</sup> Soil samples were collected from depths ranging from approximately 1 to 11 feet from Buildings 1 and 2, chemical/drum storage area, and wastewater treatment system area (borings 1 to 21). A "background" soil sample was also collected from the southwestern corner of the site (boring 22). In addition, soil samples were collected to a depth of approximately 40 feet at one location (boring B6) southwest of Building 2. Boring locations are shown in Attachment A. Soil samples were analyzed for VOCs, metals, pH, and cyanide. According to Chemical Consultants, the soil sample results showed no indications of contamination to warrant further investigation. It was concluded that metal concentrations detected in the soil samples were within the ranges detected in the "background" soil sample

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<sup>&</sup>lt;sup>5</sup> Chemical Consultants, 1998, Phase I Environmental Site Assessment Report, Specific Plating, Inc., 1350 South Eastern Avenue, Commerce, California 90022, April 24.



suggesting no indication of soil contamination from the site operations. No remediation was required based on Chemical Consultants' review of environmental regulations at that time.

In June and August 2002, a focused soil investigation was conducted by USA Environmental, Inc. (USAE) and consisted of the installation of a total of 9 borings (1 boring to 10 feet [B-6] and 8 borings to 20 feet [B-1 to B-5 and B-6A; boring IDs B-1 and B-2 were used twice to identify separate borings]). Borings were located inside Building 1 and near Building 2, wastewater treatment system, and the sump in the southeast corner of the site (Attachment A; Note: A figure for the June 2002 sampling event (borings B-1 and B-2) was not available. According to USAE, B-1 and B-2 were drilled south of the wastewater treatment system and southeast side of Building 1, respectively). Soil samples were collected from 10 and 20 feet and select samples were analyzed for metals, acid, and cyanide. Reportedly, the results showed non-detectable to low concentrations of metals and cyanide and normal levels of acid, indicating that there was no environmental impacts from site operations.

In September 2011, a site investigation was conducted at the site as part of the DTSC's Vernon/Commerce Discovery Project to identify possible contamination sources.<sup>8</sup> The site investigation consisted of soil and soil gas sampling at five locations to a depth of approximately 20 feet (SP-1 to SP-5). Soil samples were collected at depths of approximately 1, 5, and 15 feet, and select samples were analyzed for VOCs, semi-volatile organic compounds (SVOCs), metals, hexavalent chromium (Cr[VI]), and cyanide. Soil gas samples were collected at depths of approximately 5 and 20 feet at each location and analyzed for VOCs. PCE was the only VOC detected in soil samples at concentrations up to 1,300 micrograms per kilogram. Detected Cr(VI) concentrations in soil samples ranged from 0.44 to 0.73 milligrams per kilogram (mg/kg). Cyanide was not detected in any of the soil samples analyzed. PCE and trichloroethylene (TCE) were the primary VOCs detected in the soil gas samples at concentrations up to 13,000 and 48 micrograms per liter, respectively. Figure 2 shows the sampling locations and select detected compounds in soil and soil gas.

### Historical Site Investigations at Nearby Offsite Property

The National Lighting Supply, Inc. (NLS) property, currently occupied by Najarian Trading Inc., is located west of the site at 1365 South Eastern Avenue. The property was occupied by Concerto Company, a clock manufacture, from the 1970s to 1983. From 1983 to 1991, NLS occupied the site and manufactured lamp parts. As part of the manufacturing process, solvents including PCE, and oils were used. In 1989, Los Angeles County Department of Health Services, predecessor of Los Angeles County Fire Department (LACFD), discovered solvent

<sup>&</sup>lt;sup>6</sup> USAE, 2002, Phase II Sampling and Analysis Report, Industrial Building Located at 1350 South Eastern Avenue, Commerce, June.

<sup>&</sup>lt;sup>7</sup> USAE, 2002, Phase II Sampling and Analysis Report, Industrial Building Located at 1350 South Eastern Avenue, Commerce, August.

<sup>&</sup>lt;sup>8</sup> Tetra Tech, Inc., 2011, Vernon/Commerce Discovery Investigation Report Addendum, Vernon, Commerce, and Huntington Park, California, December.



contamination in soil beneath the NLS property. Soil investigations were conducted between 1989 and 1993. LACFD reported PCE impacts (up to 100 mg/kg) to a depth of 66 feet and polychlorinated biphenyl (PCB) and petroleum hydrocarbons impacts (up to 81 and 6,400 mg/kg, respectively) at 1 foot bgs. In 1994, the site was referred to the DTSC.<sup>9</sup> In 1999, a preliminary assessment was completed by DTSC for the NLS property.<sup>10</sup> Based on elevated concentrations of PCBs in the site soils, the maximum score of 50 was assigned.<sup>9</sup> According to DTSC, EPA closed the NLS property with a no further action determination.<sup>11</sup>

#### SITE LITHOLOGY AND HYDROGEOLOGY

Groundwater assessments have not been conducted at the site. Based on the lithologic conditions encountered at the nearby Former Univar USA facility located at 4256 Noakes Street and 1363 South Bonnie Beach Place in Commerce, California<sup>12</sup>, the site area is underlain by lithologic and hydrogeologic units of the Bellflower aguitard, Exposition aguifer, Gage-Gardena aquifer, and the Hollydale aquifer. The Bellflower aquitard (vadose zone) consists primarily of interbedded heterogeneous layers of fine-grained sediments (silts and clays) with some sands to a depth of approximately 135 feet. The underlying Exposition aquifer generally comprises of approximately 30 feet of fine-grained sediments (fine sands and silts). A laterally continuous clay unit is present at depth of approximately 150 to 160 feet and it is underlain by the Gage-Gardena aquifer. The Gage-Gardena aquifer, a merged intermediate water bearing zone. consists of interbedded coarse- and fine-grained sediments encountered at a depth of approximately 170 feet. An approximate 20-foot thick fine-grained unit (consisting of silts and clays) is present at a depth of approximately 200 feet and between the Gage-Gardena and the Hollydale aquifers. The Hollydale aquifer, comprises of sands to silty sands (thickness of approximately 35 feet) extending to a depth of approximately 260 feet. The underlying finegrained unit (silts and clays) extends to approximately 294 feet.

Based on the most recently measured depths to groundwater in monitoring wells at the Univar site (approximately 0.5 mile southwest of the site) in May 2015, groundwater is present at a depth of approximately 124 to 143 feet in the Exposition aquifer, 141 to 149 feet in the Gage-Gardena aquifer, and 152 feet in the Hollydale aquifer. <sup>13</sup> Groundwater flow directions in the Exposition and Gage-Gardena aquifers are generally towards the west to southwest with a

<sup>&</sup>lt;sup>9</sup> Weston Solutions, Inc., 2009, National Lighting Supply, Inc., Los Angeles, City and County, California, Preliminary Assessment/Site Inspection Sampling and Analysis Plan, July.

<sup>&</sup>lt;sup>10</sup> DTSC, 1999, Preliminary Assessment, National Lighting Supply, 1365 South Eastern Avenue, Los Angeles, California, June 30.

<sup>&</sup>lt;sup>11</sup> DTSC, email correspondence, April 8, 2016.

<sup>&</sup>lt;sup>12</sup> URS, 2014, Enhanced In-Situ Bioremediation (EISB) Pilot Testing Work Plan, Former Univar USA Facility, 4256 Noakes Street and 1363 South Bonnie Beach Place, Commerce, California 90040, August 29.

<sup>&</sup>lt;sup>13</sup> AECOM, 2015, Semi-Annual Progress Report, January – June 2015, Former Univar USA Facility, 4256 Noakes Street and 1363 South Bonnie Beach Place, Commerce, California 90040, July 30.



horizontal hydraulic gradient of 0.002 to 0.003. There is insufficient data to estimate groundwater flow direction in the Hollydale aquifer.

### PROPOSED SCOPE OF WORK

The proposed approach to achieve the assessment objectives consists the following scope of work, which will be split into two phases of field work due to budgetary constraints:

# Phase 1

- soil gas sampling; and
- soil sampling.

## Phase 2

- sampling soil from the soil stockpile(s) from the unauthorized dumping of soil at the site;
- lithologic assessment and soil sampling;
- groundwater monitoring well installation and development;
- permanent soil gas probe installation;
- · sampling the permanent soil gas probes; and
- groundwater monitoring and sampling.

After the first phase of work is completed, the second phase of work will commence once additional funds are made available to the City by the California Department of Finance.

# PROPOSED METHODS OF ASSESSMENT

The methods of the proposed work are organized into tasks and described below.

### **Pre-Field Activities**

Planning and coordination activities to be conducted in preparing for the assessment will include:

- preparing a site-specific Health and Safety Plan for the planned field work;
- notifying the DTSC a minimum of one week in advance of the planned field activities;



- notifying Underground Service Alert a minimum of two business days in advance of the planned drilling activities;
- completing an underground utility check using a private utility locating subcontractor;
- obtaining permits from the Los Angeles County Environmental Health for monitoring well installation;
- obtaining encroachment permits (for offsite work) through the City and County of Los Angeles Department of Public Works; and
- coordinating with subcontractors.

The proposed sampling locations will be finalized in the field after the underground utility clearance is completed and will be based on equipment access, utilities, and logistical factors.

# Soil Gas Sampling (Phase 1)

The purpose of the soil gas sampling is to assess potential presence of VOCs in the subsurface. Soil gas samples will be collected from roughly a grid pattern throughout the site and at a number of offsite locations. As shown on Figure 3, the soil gas sample location spacing will be along approximate 75- by 65-foot grid to provide adequate site coverage. Semi-permanent soil gas probes will be installed onsite at 18 locations (SG1 to SG18) in the grid pattern and select target areas at depths of approximately 5 and 15 feet to minimize potential dilution by ambient air. In addition, as requested by the DTSC, temporary soil gas probes will be installed and soil gas samples will be collected from five offsite locations (SG19 to SG23) to the south (along the south side of Triggs Street) and west (along the west side of South Eastern Avenue) of the site to assess if the COPCs have moved offsite, if there is a potential for vapor intrusion into indoor air, and assess for potential offsite source(s) of VOCs to soil gas.

The soil gas survey will be conducted using a direct push Geoprobe-type rig for probe installation and an onsite mobile laboratory for analysis of VOCs (including fuel oxygenates and 1,4-dioxane). The soil gas survey will be conducted in accordance with the DTSC Advisory<sup>14</sup> – Active Soil Gas Investigations. Soil gas sampling will not occur during any rainfall or within seven days after a heavy rain event.

The soil gas probes will be installed following the method described in Section 3.2 of the DTSC Advisory. Each boring will be hand augered to approximately 4 feet and then advanced with direct-push methods to the target total depth. Soil gas probes will be installed at depths of approximately 5 and 15 feet. Each probe will be constructed with a 1-inch stainless steel tip and ¼-inch outside diameter (OD) Nylaflow or Teflon tubing which will be fitted with a 3-way sampling valve at the surface. Hydrated bentonite or cement bentonite grout will be used to

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<sup>&</sup>lt;sup>14</sup> DTSC, 2015, Advisory – Active Soil Gas Investigations, July.



seal around the tubing and ground surface to prevent ambient air intrusion. A shut-in test will be performed to evaluate the system for leaks prior to purging. The soil gas probe will be then left undisturbed for a minimum of 2 hours prior to purging and sampling to allow for soil gas conditions to equilibrate.

The soil gas samples will be collected in a gas-tight syringe or glass bulb using a 3-way sampling valve after. The air flow rate during soil gas sampling will be between 100 and 200 milliliters per minute, in accordance with the DTSC advisory. During purging and sampling, a leak test will be conducted using a tracer compound (such as 1,1-difluoroethane or isopropanol) placed near the surface seal and around the sample train to check for potential intrusion of ambient air. After one round of soil gas sampling, the onsite semi-permanent soil gas probes will be retained for potential future use and the offsite temporary soil gas probes will be destroyed.

Table 1 summarizes the proposed soil gas sampling and analysis plan. The soil gas samples will be analyzed for VOCs (including fuel oxygenates and 1,4-dioxane) by an onsite mobile laboratory using EPA Method 8260B modified for soil gas. Analytical laboratory reporting limits for soil gas samples are included in Attachment B. For quality assurance/quality control (QA/QC) purposes, field duplicate soil gas samples will be collected at a minimum frequency of 10 percent of the primary samples collected. An equipment blank sample of the Nylaflow or Teflon tubing used to construct the soil gas probes will be collected and analyzed for VOCs (including fuel oxygenates and 1,4-dioxane).

### Soil Sampling (Phase 1)

Soil samples will be collected during the soil gas probe installation at depths between approximately 2 and 10 feet from select onsite sample locations (Table 1). The proposed sample locations are shown on Figure 3.

Soil will be continuously cored using a dual-case sampling system fitted with an acetate liner. Soil samples at 2 feet depth may be collected using a slide hammer drive sampler equipped with brass or stainless steel sampling tubes. The soil samples at below 4 feet depth will be collected by cutting the sample liner at target depth, and then capped on both ends with Teflon film and plastic caps, labeled, placed in a resealable plastic bag, and stored in a chilled cooler. The soil samples will also be field placed in plastic bags for visual observation and field-screening for potential presence of VOCs using a photoionization detector (PID).

Select soil samples will be analyzed for one or more of the following COPCs:

- VOCs (including fuel oxygenates and 1,4-dioxane) using EPA Method 8260B;
- semi volatile organic compounds (SVOCs) using EPA Method 8270C;



- total petroleum hydrocarbons (TPH; C6 to C44 carbon chain analysis) using EPA Method 8015B(M);
- Title 22 metals using EPA Method 6010B/7471A;
- Cr(VI) using EPA Method 7199; and
- cyanide using EPA Method 9010C/9014.

Table 1 presents a summary of the proposed soil matrix sampling and analyses plan. Soil samples for VOC analysis will be subsampled following EPA Method 5035 protocols. Analytical laboratory reporting limits for soil samples are included in Attachment B. For QA/QC purposes, one laboratory-supplied trip blank will be submitted and analyzed for VOCs with each sample cooler containing soil samples for VOC analysis, and one equipment blank sample where non-dedicated equipment is used for sampling (per each sampling day) will be collected and will be analyzed by the same laboratory method(s), and for the same analytes, as the samples collected with the sampling equipment. Samples will be placed in ice-chilled cooler pending transport to the analytical laboratory certified under the California Environmental Laboratory Accreditation Program.

# **Stockpile Soil Sampling (Phase 2)**

For characterization purposes, up to four soil samples will be collected from the soil stockpile(s) from the unauthorized dumping of soil at the site. Soil samples will be analyzed for the following constituents:

- VOCs (including fuel oxygenates and 1,4-dioxane) using EPA Method 8260B;
- SVOCs using EPA Method 8270C;
- TPH (C6 to C44 carbon chain analysis) using EPA Method 8015B(M);
- Title 22 metals using EPA Method 6010B/7471A;
- polychlorinated biphenyls using EPA Method 8082; and
- organochlorine pesticides by EPA Method 8081A.

Table 1 presents a summary of the proposed soil matrix sampling and analyses plan. Analytical laboratory reporting limits for soil samples are included in Attachment B.



# Lithologic Assessment, Soil Sampling, Groundwater Monitoring Well Installation/ Development, and Soil Gas Probe Installation (Phase 2)

At four locations (W-1 to W-4), a single groundwater monitoring well nested with four permanent soil gas probes will be installed to assess groundwater flow direction and groundwater and soil gas quality beneath the site. The proposed well locations are shown on Figure 3.

Lithologic Assessment and Soil Sampling

Based on the groundwater level information at a nearby property, depth to groundwater is anticipated at 130 feet or deeper. The boring for each well will be drilled using hollow stem auger (HSA) or sonic drilling methods to a depth of approximately 140 to 160 feet. Soil will be sampled in 5-foot or 10-foot intervals to the total depth for lithologic logging purposes. Lithology encountered during drilling will be described by an Amec Foster Wheeler field geologist working under the direction of a State of California licensed Professional Geologist. Soil characteristics will be described using visual-manual procedures of ASTM D2488 for guidance, which are based on the Unified Soil Classification System. Soil samples will be field-screened using a PID for potential presence of VOCs in soil. Color, moisture content, grain size, PID readings, and other pertinent soil characteristics will be recorded on the well logs. Soil samples for chemical analyses will be collected using brass or stainless steel sampling tubes at target depths, and then capped on both ends with Teflon film and plastic caps, labeled, placed in a resealable plastic bag, and stored in a chilled cooler. Soil samples collected at depths of approximately 10, 20, 40, 60, and 80 feet will be analyzed for the following COPCs (Table 1):

- VOCs (including fuel oxygenates and 1,4-dioxane) using EPA Method 8260B;
- SVOCs using EPA Method 8270C;
- TPH (C6 to C44 carbon chain analysis) using EPA Method 8015B(M);
- Title 22 metals using EPA Method 6010B/7471A;
- Cr(VI) using EPA Method 7199; and
- cyanide using EPA Method 9010C/9014.

In addition, up to 12 soil samples will be collected for physical property/vapor transport testing by PTS Laboratories using the Johnson and Ettinger Vapor Transport Package that includes the following tests and methods:

- air permeability using Method API RP40;
- porosity (total, effective, air-filled, water-filled) using methods API RP40, ASTM D854, and ASTM D2937;



- volumetric air and water using Method API RP40;
- moisture content using ASTM D2216;
- intrinsic permeability/hydraulic conductivity using API RP40;
- grain density using API RP40;
- dry bulk density using ASTM D2937;
- total organic carbon and/or fraction organic carbon using the Walkley-Black Method;
   and
- USDA/USCS soil classification (grain size distribution and Atterberg limits) using Methods ASTM D4318, ASTM D2487 and USDA.

Soil samples for VOC analysis will be subsampled following EPA Method 5035 protocols. For QA/QC purposes, an equipment blank sample where non-dedicated equipment is used for sampling (per each sampling day) and a laboratory-supplied trip blank will be collected. QA/QC samples will be analyzed as summarized in Phase 1. Samples will be placed in an ice-chilled cooler pending submittal under chain-of-custody to an analytical laboratory certified under the California Environmental Laboratory Accreditation Program.

Nested Groundwater Monitoring Well and Soil Gas Probe Installation

For purposes of this work plan, it is assumed that the groundwater monitoring wells will be installed and screened within the Exposition aquifer (total depth of wells between 130 and 150 feet). Within the annual space of each groundwater monitoring well, nested permanent soil gas probes will be installed at depths of approximately 20, 40, 60, and 80 feet, in accordance with the DTSC advisory. Figure 4 shows a conceptual nested well diagram.

Each new groundwater monitoring well will be constructed using 4-inch diameter, Schedule 80 PVC casing and approximately 15 to 20 feet of 0.010-inch machine slotted PVC well screen. The well screen and casing will be lowered to the selected well completion depth and will be suspended above the bottom of the borehole during well construction activities. Annular well fill material will be emplaced through the augers or a tremie pipe. The approximate length of the augers or tremie pipe will be tracked. The augers will act as a guide for the well casing and they will be retracted from the borehole as the well is installed. The final well design will be modified as appropriate based on lithologic conditions encountered. Filter pack (#2/12 sand) will be placed to approximately 1 to 2 feet above the top of the well screen followed by an approximate 2-foot thick transition seal of bentonite chips or pellets hydrated in place. The remainder of the annular space will be sealed with cement-bentonite grout until approximately 80 feet where the first permanent soil gas probe will be installed in approximately 1 foot of filter sand. Each probe



will be constructed with a 1-inch stainless steel tip and ¼-inch OD Nylaflow or Teflon tubing which will be fitted with a 3-way sampling valve at the surface. After the probe and filter pack are set, the annular space between the tubing, groundwater monitoring well casing, and the soil borehole sidewall will be backfilled with dry granular bentonite to a level approximately 1 foot above the top of the filter pack. The annular space above the dry bentonite will be filled to the next probe filter pack interval or ground surface with cement-bentonite grout to provide a seal. The surface will be completed with a flush-mounted, traffic-rated well box set in concrete.

# Groundwater Monitoring Well Development

The groundwater monitoring wells will be developed a minimum of 48 hours after installation using a combination of surging, bailing, and pumping methods until purged groundwater is relatively clear and free of suspended sediments. The location and elevation of each well will be surveyed by a California licensed surveyor to calculate groundwater elevations in the wells.

# **Groundwater Monitoring and Sampling (Phase 2)**

Groundwater monitoring and sampling will be conducted during one event to assess groundwater flow direction and groundwater quality beneath the site. During the monitoring and sampling event, groundwater levels will be measured prior to purging and sampling at each well. Groundwater samples will be collected using low-flow purging methods using a bladder pump. Groundwater samples will be analyzed for the following COPCs:

- VOCs (including fuel oxygenates) using EPA Method 8260B;
- 1,4-dioxane using EPA Method 8270C (M) Isotope Dilution;
- TPH (C6 to C44 carbon chain analysis) using EPA Method 8015B(M);
- Title 22 metals using EPA Method 6010B/7470A;
- Cr(VI) using EPA Method 7199; and
- cyanide using Standard Method (SM)4500-CN or EPA Method 9014.

Table 1 summarizes the proposed sampling locations, groundwater sampling and analysis, and rationale. Analytical laboratory reporting limits for groundwater samples are included in Attachment B. For QA/QC purposes, one laboratory-supplied trip blank will be submitted and analyzed for VOCs with each sample cooler containing groundwater samples for VOC analysis; one equipment blank sample where non-dedicated equipment is used for sampling (per each sampling day) will be collected and will be analyzed by the same laboratory method(s), and for the same analytes, as the samples collected with the sampling equipment; and one field duplicate groundwater sample will be collected and analyzed in the same manner, and at the same time, as the primary sample.



# Soil Gas Sampling - Nested Permanent Soil Gas Probes (Phase 2)

Soil gas samples will be collected from the nested permanent soil gas probes (W-1 to W-4) using the same methods described in Phase 1. Table 1 summarizes the proposed soil gas sampling and analysis plan. The soil gas samples will be analyzed for VOCs (including fuel oxygenates and 1,4-dioxane) by an onsite mobile laboratory using EPA Method 8260B modified for soil gas. For QA/QC purposes, field duplicate soil gas samples will be collected at a minimum frequency of 10 percent of the primary samples collected. An equipment blank sample of the Nylaflow or Teflon tubing used to construct the soil gas probes will be collected and analyzed for VOCs (including fuel oxygenates and 1,4-dioxane).

# **Equipment Decontamination and Investigative-Derived Waste Management**

All downhole drilling and sampling equipment will be steam-cleaned or washed in a solution of detergent (e.g., Alconox or similar) and rinsed with potable water before each use. Investigation-derived liquid (equipment decontamination wash water and purged groundwater) and solid (soil cuttings) wastes will be separately contained in DOT-approved 55-gallon drums and/or bins. The waste drums and/or bins will be labeled and temporarily stored on site pending analysis and waste characterization. Wastes will be sampled, analyzed for profiling, and disposed or recycled at an offsite facility following applicable regulations.

# **SCREENING EVALUATION**

Detected concentrations of chemicals in soil gas, soil, and groundwater (with the exception of the soil stockpile samples) will be compared to screening levels to select whether they are COPCs related to historical site activities. The data collected during this assessment will be compared to the following screening levels summarized by media.

- Soil gas sample results will be evaluated using EPA Region 9 Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites for residential and commercial/industrial soils<sup>15</sup> or the DTSC-modified air screening levels for VOCs.<sup>16</sup> RSLs and DTSC-modified air screening levels will be adjusted for a default attenuation factor for future residential and commercial/industrial buildings by multiplying the air RSLs and DTSC-modified air screening levels by 1,000 and 2,000 (representing a soil gas-to-indoor air attenuation of 0.001 and 0.0005), respectively. Therefore, the soil gas screening levels will be protective of future residential and commercial/industrial buildings.
- Soil (0 to 10 feet depth) sample results will be compared to their respective RSLs for residential and commercial/industrial land use. Soil (greater than 10 feet depth)

<sup>&</sup>lt;sup>15</sup> U.S. EPA, 2016, RSLs for Chemical Contaminants at Superfund Sites, Region 9, <a href="http://www.epa.gov/region9/superfund/prg/">http://www.epa.gov/region9/superfund/prg/</a>, May.

<sup>&</sup>lt;sup>16</sup> DTSC, 2016, Human and Ecological Risk Office Note Number 3, January.



sample results will be evaluated using EPA Region 9 Protection of Groundwater Soil Screening Levels (SSLs) for Chemical Contaminants at Superfund Sites for residential and commercial/industrial soils. In addition, soil sample results will be compared to their respective Regional Water Quality Control Board (RWQCB) (updated 2006), Maximum Soil Screening Levels (MSSLs) for TPH, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tert-butyl ether (MTBE) above drinking water aquifers.<sup>17</sup>

Detected concentrations of metals will be compared to maximum local background concentrations. A representative local background data set will be selected from the following sources: U.S. Geological Survey (USGS) Geochemical and mineralogical database<sup>18</sup> and the DTSC Envirostor database. Specifically, the Envirostor will be searched for local sites that have collected and reported background data sets. Arsenic concentrations in soil will be compared to the DTSC Los Angeles County upper bound limits.<sup>19</sup> Consistent with DTSC screening level policy<sup>16</sup>, lead concentrations in soil will be compared to the DTSC LeadSpread 8 screening levels for residential and commercial/industrial land use, rather than the RSLs.<sup>20</sup>

Groundwater sample results will be evaluated using primary (health based)
 Maximum Contaminant Levels (MCLs) issued by the California Department of Public Health or EPA<sup>21,22</sup>, where available.

### ANTICIPATED SCHEDULE FOR FIELD WORK AND REPORTING

Due to budgetary constraints, field implementation will be conducted in a phased approach. Table 1 lists proposed scope of work by each phase.

The first phase of field work is anticipated to include soil gas survey and soil sampling. We anticipate initiating the first phase of field work within 2 to 3 weeks after receipt of the DTSC's approval of this work plan. We anticipate a duration of approximately 2 to 3 weeks for pre-field activities, 7 to 8 days for field work, 2 weeks for laboratory analyses, and 4 weeks for data transmittal which summaries the findings during the first phase of field work.

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<sup>&</sup>lt;sup>17</sup> RWQCB, 2006, Maximum Soil Screening Levels for TPH, BTEX and MTBE above Drinking Water Aquifers, September.

<sup>&</sup>lt;sup>18</sup> USGS, 2016, Geochemical and mineralogical data for soils of the conterminous United States: U.S. Geological Survey Data Series 801, U.S. Geological Survey, Denver, CO.

<sup>&</sup>lt;sup>19</sup> DTSC, 2008, Determination of a Southern California Regional Background Arsenic Concentration in Soil, March.

<sup>&</sup>lt;sup>20</sup> DTSC, 2011, LeadSpread 8, September.

<sup>&</sup>lt;sup>21</sup> California Environmental Protection Agency (Cal EPA) State Water Resources Control Board, 2015, MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants, September 23.

<sup>&</sup>lt;sup>22</sup> EPA, 2016, Table of Regulated Drinking Water Contaminants, February 18.



After completing the first phase of field work, a data transmittal report will be prepared and submitted. The data transmittal report will include a summary of field activities, analytical data in a tabulated format, figure showing assessment locations, and laboratory reports as attachments.

The second phase of field work will consist of additional soil gas and soil sampling, lithologic assessment, and groundwater monitoring well installation, development, and sampling (one event). The scope of work for the second phase may be modified based on the initial findings.

After completing the second phase of field work and final laboratory reports have been received, data obtained from each phase of work will be compiled and evaluated. A site assessment report will be prepared to describe overall assessment activities and summarize the assessment results, including identifying any known data gaps necessary to complete the site characterization. The site assessment report will contain text describing the methods and findings of the assessment along with a working draft of the current conceptual site model. tables, figures, cross-sections showing lithology and chemical concentrations in soil, soil gas, and groundwater, well logs, and laboratory analytical data. The report will also include a preliminary assessment of human health risks posed by chemicals present on site. The site assessment report will not include a feasibility study or full human health risk assessment.

If you have any questions, please contact Hassan Amini or Ana Paine at (949) 642-0245.

and Jame

Ana Paine, PG

Senior Geologist

Sincerely.

Amec Foster Wheeler Environment & Infrastructure, Inc.

Hassan Amini, Ph.D., CHG

Principal Hydrogeologist

**Enclosures** 

Table

Table 1 - Proposed Sampling and Analysis Plan

Figures

Figure 1 – Site Location Map

Figure 2 – Previous Site Investigation Map

Figure 3 – Proposed Sample Locations

Figure 4 – Conceptual Groundwater Monitoring Well and Soil Gas Probes Diagram

CERTIFIED



# **Attachments**

Attachment A – Historical Boring Location Maps Attachment B – Analytical Laboratory Reporting Limits for Soil Gas, Soil, and Groundwater

cc: Ms. Gina Nila, City of Commerce



# **TABLE**

#### TABLE 1

#### PROPOSED SAMPLING AND ANALYSIS PLAN

Former Specific Plating Facility 1350 South Eastern Avenue Commerce, California

	1		ı	1	Proposed Sample /	T	
		Barriera la Barrada I	Tentative	Proposed	1 :	Proposed	
A		Previously Detected		•	Well Depth <sup>1</sup>	•	Particular 2
Area	Media	Chemicals	Boring ID <sup>1</sup>	Locations <sup>1</sup>	(feet bgs)	Analysis <sup>1</sup>	Rationale <sup>2</sup>
First Phase of Field Work	0.10	DOE TOE 44 DOE	1 0	75 1005 (001 00)	F 45		In
Soil Gas Sampling (onsite)	Soil Gas	PCE, TCE, 1,1-DCE,	SG1 to SG18 3	~75- by 65-foot grid	5, 15	VOCs	to assess soil gas site-wide and in targeted areas, potential health risks, and to verify
		Chloroform, 1,1,1-TCA		and historical site operation areas;		(including fuel oxygenates and 1,4-D)	previous assessment results
				see Figure 3			SG1 and SG2 - Building 1 plating areas
							SG3 - cyanide treatment area
							SG4 - Building 1, interceptor
							SG5 - south of Building 1 and adjacent to sewer line
							SG6 - drum storage area/CN tanks area
							SG7 - wastewater treatment system area
							SG8, SG9, SG12, and SG13 - hydraulically downgradient of site operations
							SG10 - Building 2, plating areas
							SG11 - spill containment area east of Building 2
							SG14 - formerly identified solvent impacts (Lot #26)
							SG15 - City owned easement
							SG16 - Building 1, reel-to-reel plating area
							SG17 - Building 1, PCE degreaser and pit
Soil Gas Sampling (offsite)	Soil Gas	NA		along west side of Triggs Street and	5, 15	VOCs	SG18 - Building 1.1.1.1-TCA degreaser to assess any offsite migration of site chemicals in soil gas, potential vapor intrusion
Soil Gas Sampling (offsite)	Soil Gas	INA	SG19 to SG23 <sup>3</sup>		5, 15	, 555	
				south side of South Eastern Avenue across from the site: see Figure 3		(including fuel oxygenates and 1,4-D)	into indoor air, and potential offsite source(s) of VOCs to shallow soil gas
Soil Sampling (onsite)	Soil	PCE, Cr(VI)	SG1,	historical site operation areas;	SG1 (2, 5),	all proposed soil samples will be analyzed for	to assess soil impacts from historic site operations onsite, targeted assessment (see
Soil Sampling (onsite)	3011	FCE, CI(VI)	SG2,	see Figure 3	SG2 (2, 5),		above)
			SG3,	See Figure 3	SG3 (5, 10),	metals; of these soil samples, only the 5-foot	above)
			SG4,		SG4 (2, 5, 10),	samples will be analyzed for Cr(VI), CN, and TPH;	
			SG6,		SG6 (2, 5),	the 5-foot soil samples from SG1, SG3, SG4, SG6,	
			SG7,		SG7 (2, 5, 10),	and SG10 will be analyzed for SVOCs	
			SG10,		SG10 (2, 5, 10),	and 30 to will be analyzed for 3 vocs	
			SG10, SG14,		SG10 (2, 5, 10), SG14 (2, 5),		
			SG14, SG15,		SG15 (2, 5,10),		
			SG15, SG16,		SG16 (2, 5, 10), SG16 (2, 5, 10),		
			SG16, SG17.		SG16 (2, 5, 10), SG17 (2, 5, 10),		
			SG17, SG18		SG17 (2, 5, 10), SG18 (2, 5, 10)		
Second Phase of Field Work	(		3010		3(1012 3 10)		
Stockpiles soil sampling (onsite)	Soil	NA	NA	soil stockpiles	up to four soil samples	VOCs (including fuel oxygenates and 1,4-D), metals, TPH, SVOCs, PCBs, and OCPs	to characterize the soil stockpile(s) from the unauthorized dumping of soil at the site
Soil Gas Sampling (onsite)	Soil Gas	PCE, TCE, 1,1-DCE,	W-1 to W-4	historical site operation areas;	20, 40, 60, 80	VOCs	soil gas samples will be collected to further assess the lateral and vertical extent of
		Chloroform, 1,1,1-TCA		hydraulically upgradient and		(including fuel oxygenates and 1,4-D)	COPCs in soil gas
Soil Sampling (onsite)	Soil	PCE, Cr(VI)	W-1 to W-4	downgradient of historical site operation	10, 20, 40, 60, 80	VOCs (including fuel oxygenates and 1,4-D),	soil samples will be collected to further assess the lateral and vertical extent of COPCs
		, , ,		areas; see Figure 3		metals, Cr(VI), CN, TPH, and SVOCs; up to 12 soil	in soil '
				_		samples will be collected for physical	
						property/vapor transport testing <sup>4</sup>	
Groundwater Monitoring Well	Groundwater	NA	W-1 to W-4	†	130-150	VOCs (including fuel oxygenates), 1,4-D, metals,	to assess groundwater flow directions and groundwater quality for potential impacts
Installation (onsite)	Ciodilawatei	14/3			100 100	Cr(VI), CN, TPH, and SVOCs	from historical site operations
inotanation (onsite)						51(v1), 514, 11 11, and 5 v 555	non nictorical one operations
Groundwater Monitoring and							
Sampling (1 event)							
Camping (1 ovolit)	1		1	I	1	i .	1

- Notes

  1. The proposed sampling locations, depths, and analyses may be modified as appropriate based on access, equipment refusal, soil types, and other logistics. Analytical laboratory reporting limits are included in Attachment B.

  2. Site features have been removed, the site is vacant.

- Site features have been removed, the site is vacant.
   Onsite soil gas probes (SG1 to SG18) will be installed as semi-permanent probes. Offsite soil gas probes (SG19 to SG23) will be installed as temporary probes and will be destroyed after one sampling event during the first phase of field work.
   Select soil samples will be analyzed for one or more of the following analyses: air permeability using Method API RP40; porosity (total, effective, air-filled, water-filled) using methods API RP40, ASTM D854, and ASTM D2937; volumetric air and water using Method API RP40; moisture content using ASTM D2216; intrinsic permeability/hydraulic conductivity using API RP40; grain density using API RP40; dry bulk density using ASTM D2937; total organic carbon and/or fraction organic carbon using the Walkley-Black Method; and USDA/USCS soil classification (grain size distribution and Atterberg limits) using Methods ASTM D4318, ASTM D2487 and USDA.

Abbreviations and Analytical Methods
CN = cyanide using U.S. Environmental Protection Agency (EPA) Method 9010C/9014 for soil and

(SM)4500-CN or EPA Method 9014 for groundwater

Cr(VI) = hexavalent chromium using EPA Method 7199

Metals = Title 22 Metals using EPA Methods 6010B/7471A/7470A

TPH = total petroleum hydrocarbons (C6 to C44) using EPA Method 8015B (M) VOCs = volatile organic compounds (including fuel oxygenates and 1,4-dioxane [1,4-D]) using

EPA Method 8260B for soil and groundwater and EPA Method 8260B modified for soil gas

1,4-D = 1,4-dioxane using EPA Method 8270C (M) Isotope Dilution for groundwater

SVOCs = semi volatile organic compounds using EPA Method 8270C

OCPs = organochlorine pesticides by EPA Method 8081A

PCBs = polychlorinated biphenyls using EPA Method 8082

NA = not available

1,1,1-TCA = 1,1,1-trichloroethane

1,1-DCE = 1,1-dichloroethene

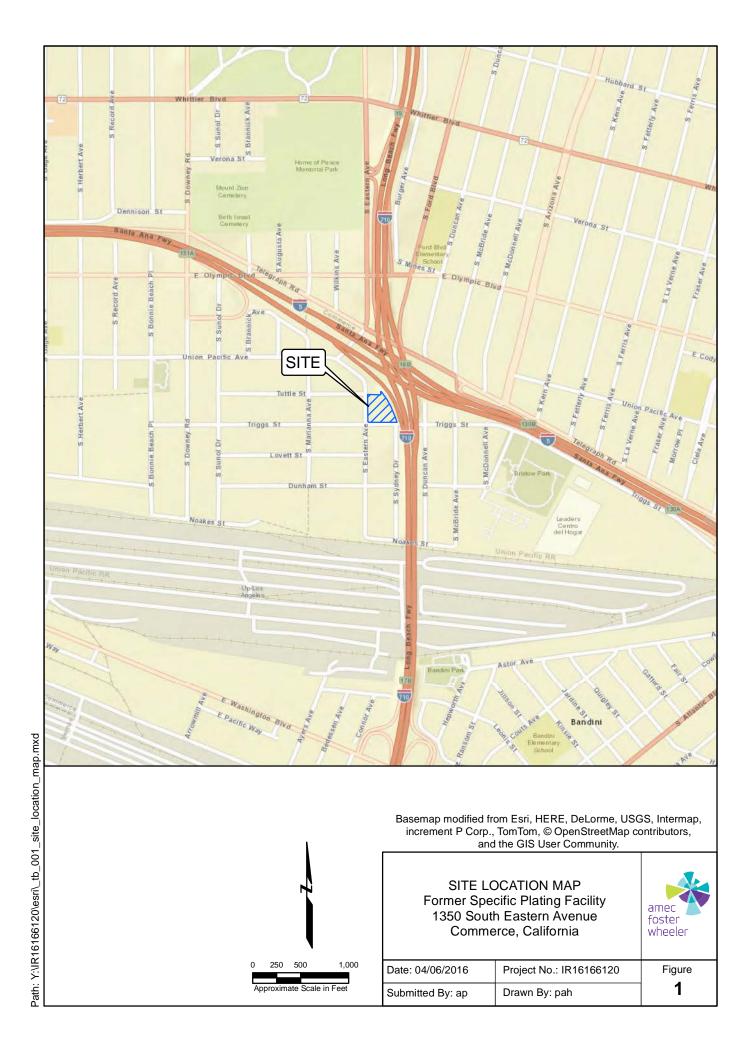
PCE = tetrachloroethylene/ perchloroethylene

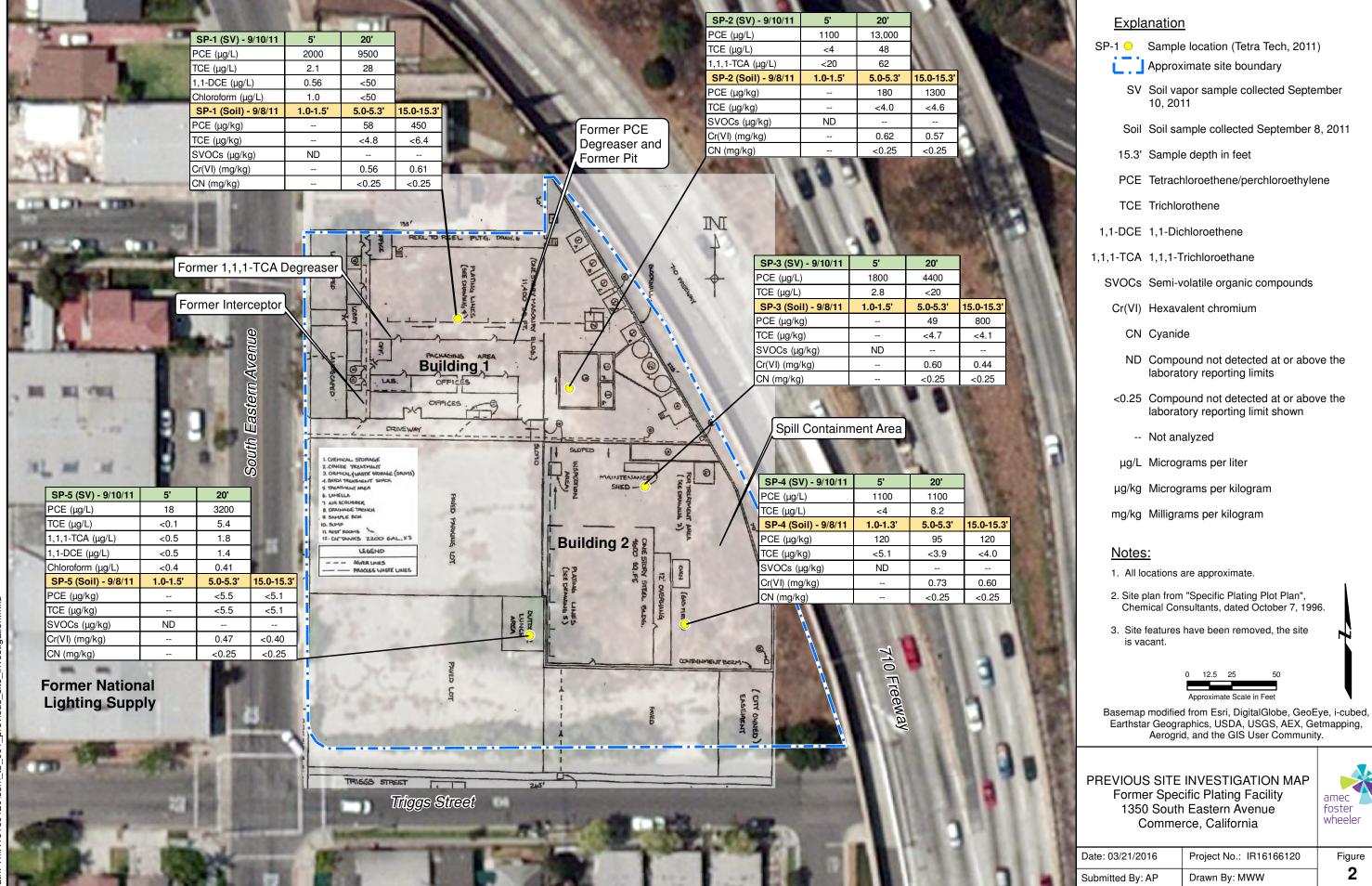
TCE = trichloroethylene

COPC = Chemical of Potential Concern

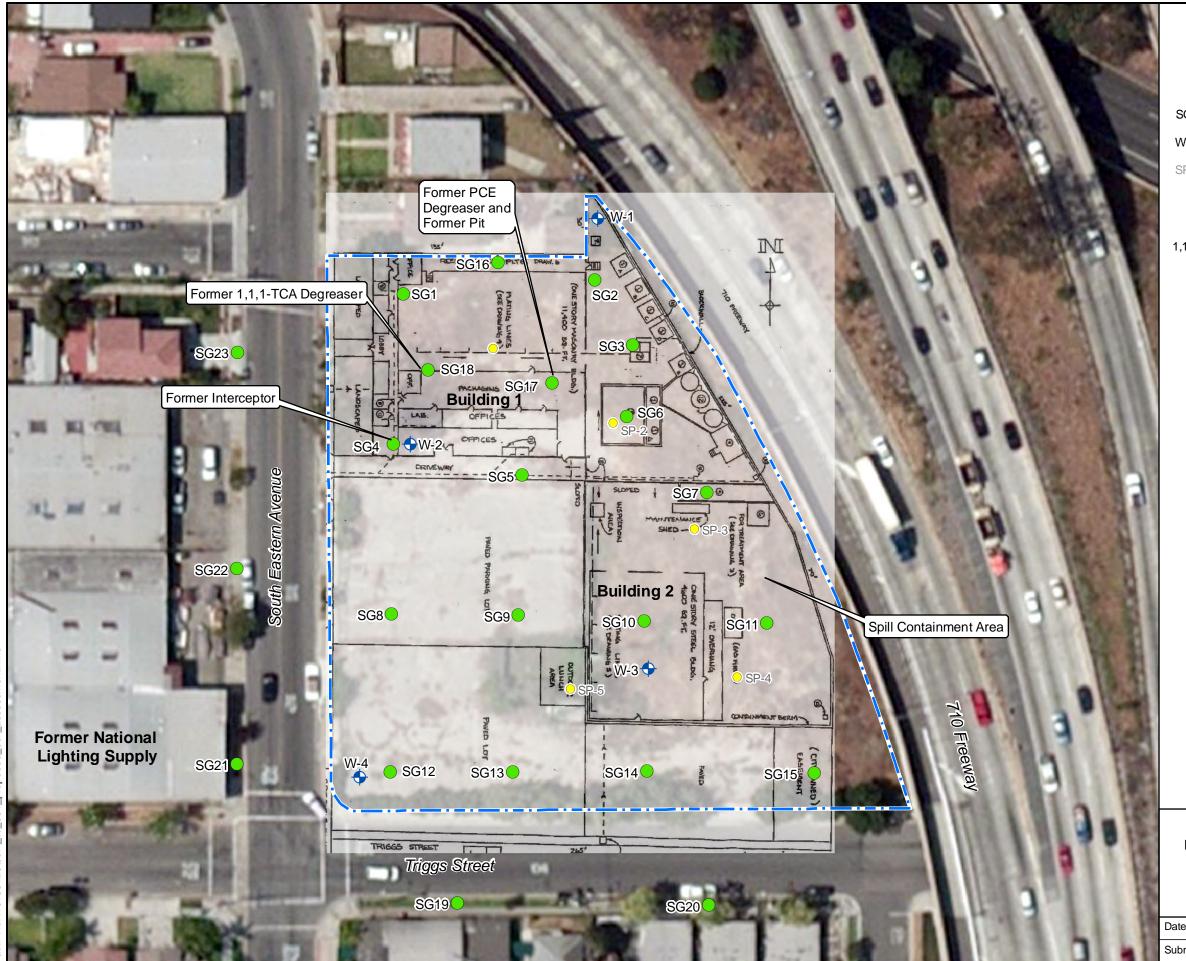


# **FIGURES**





YNB16166120\esr\ tb 001 previous site investiga



# **Explanation:**

SG1 🛑

Proposed sampling location



Proposed nested groundwater monitoring well/soil gas probes



Sample location (Tetra Tech, 2011)
Approximate site boundary



PCE Tetrachloroethene/perchloroethylene

1,1,1-TCA 1,1,1-Trichloroethane

# Notes:

- 1. All locations are approximate.
- 2. Site plan from "Specific Plating Plot Plan", Chemical Consultants, dated October 7, 1996.
- 3. Site features have been removed, the site is vacant.



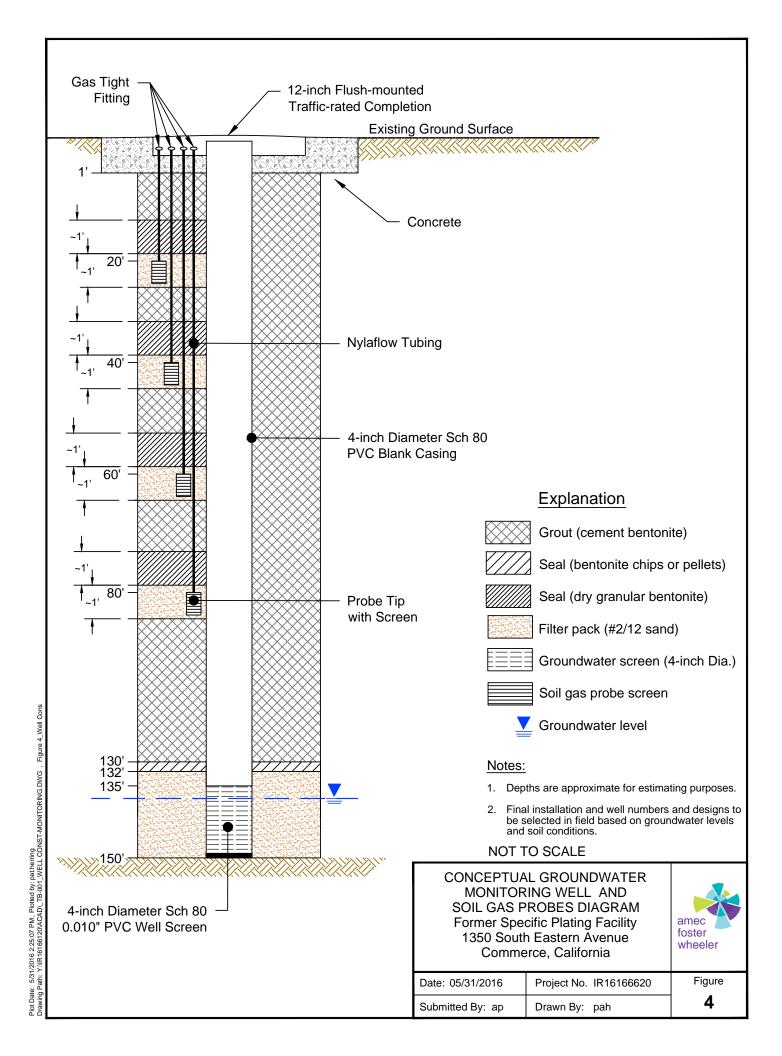
Basemap modified from Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, USDA, USGS, AEX, Getmapping, Aerogrid, and the GIS User Community.

PROPOSED SAMPLE LOCATIONS
Former Specific Plating Facility
1350 South Eastern Avenue
Commerce, California



 Date: 03/21/2016
 Project No.: IR16166120
 Figure

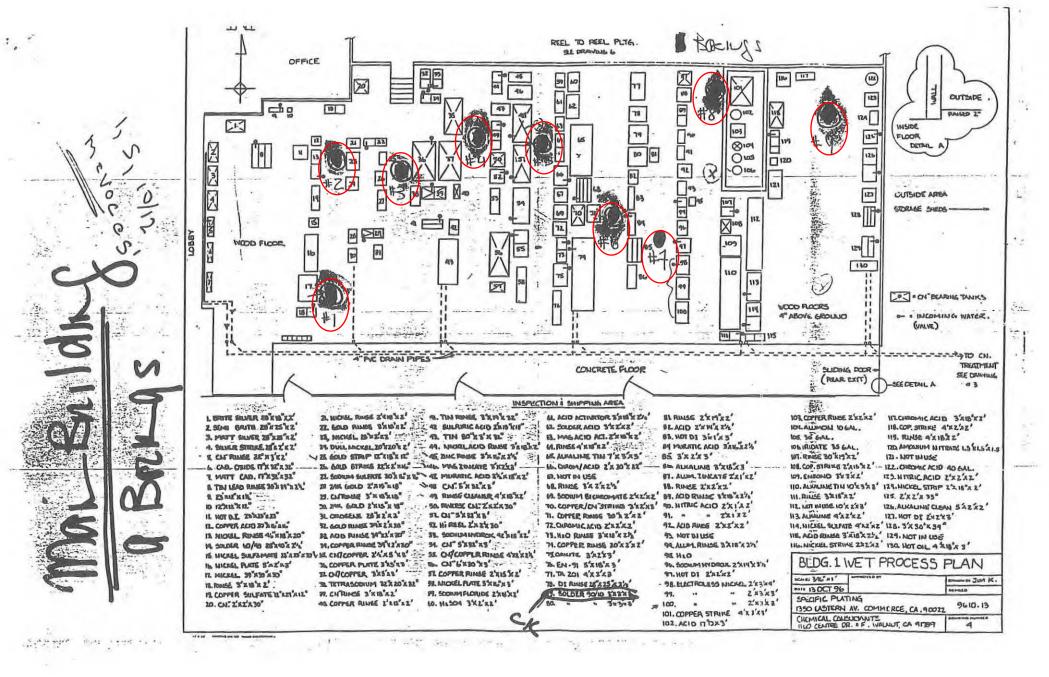
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 Drawn By: MWW
 3

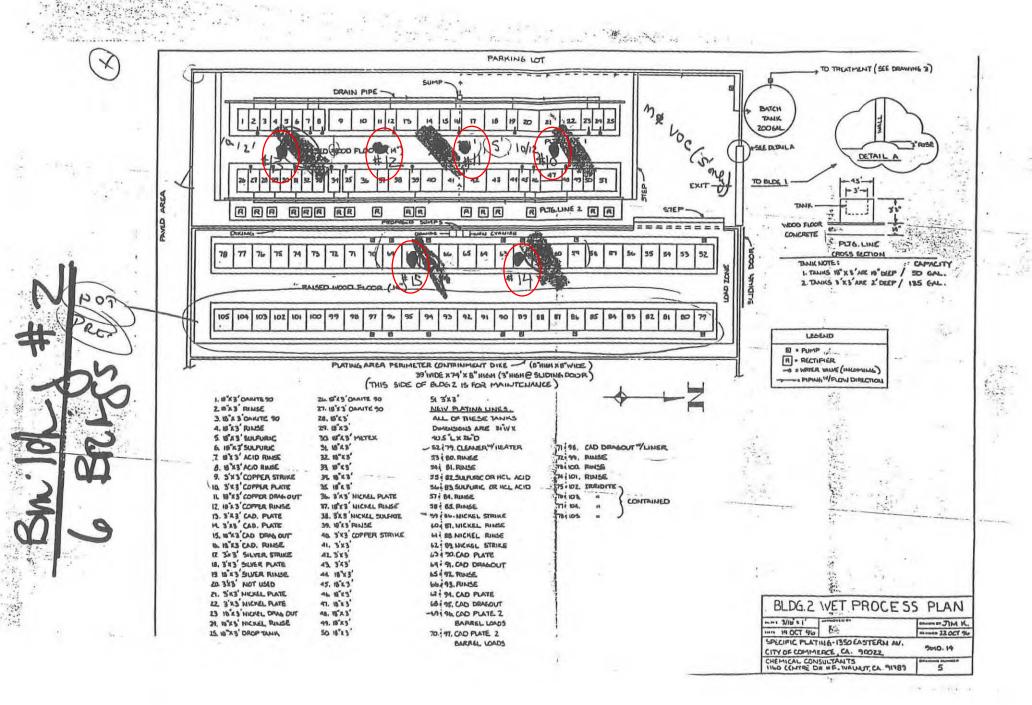


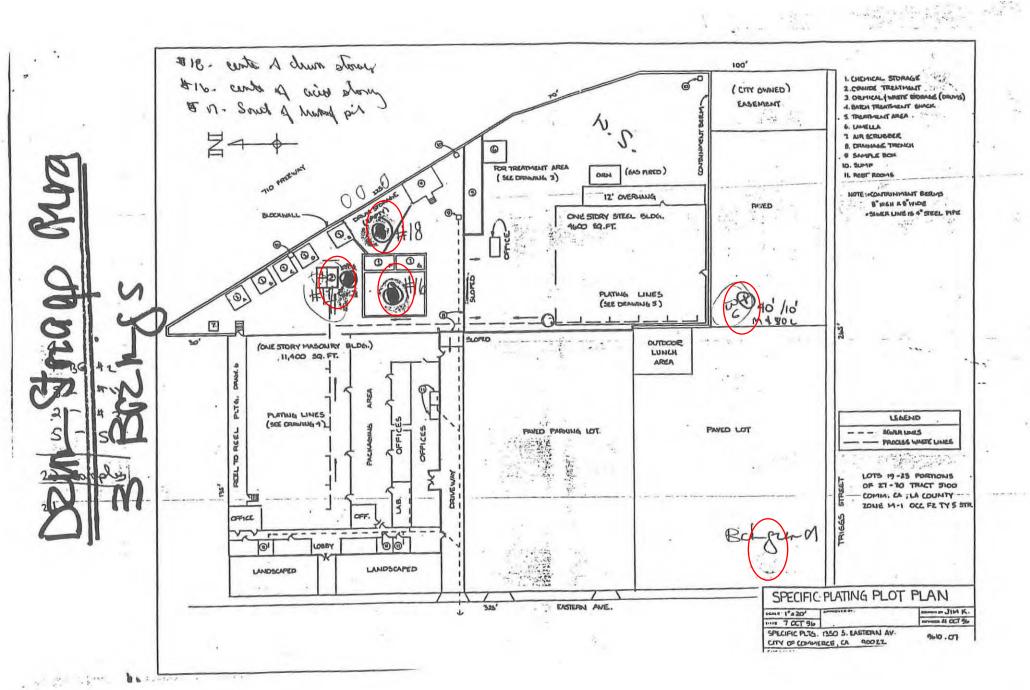


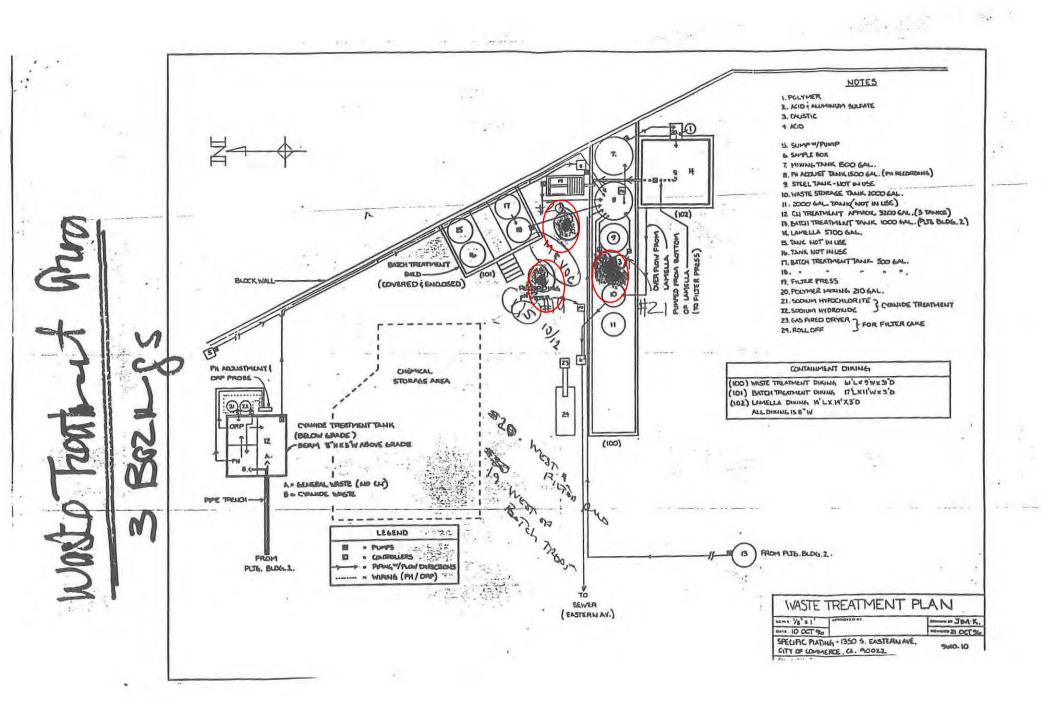
# ATTACHMENT A

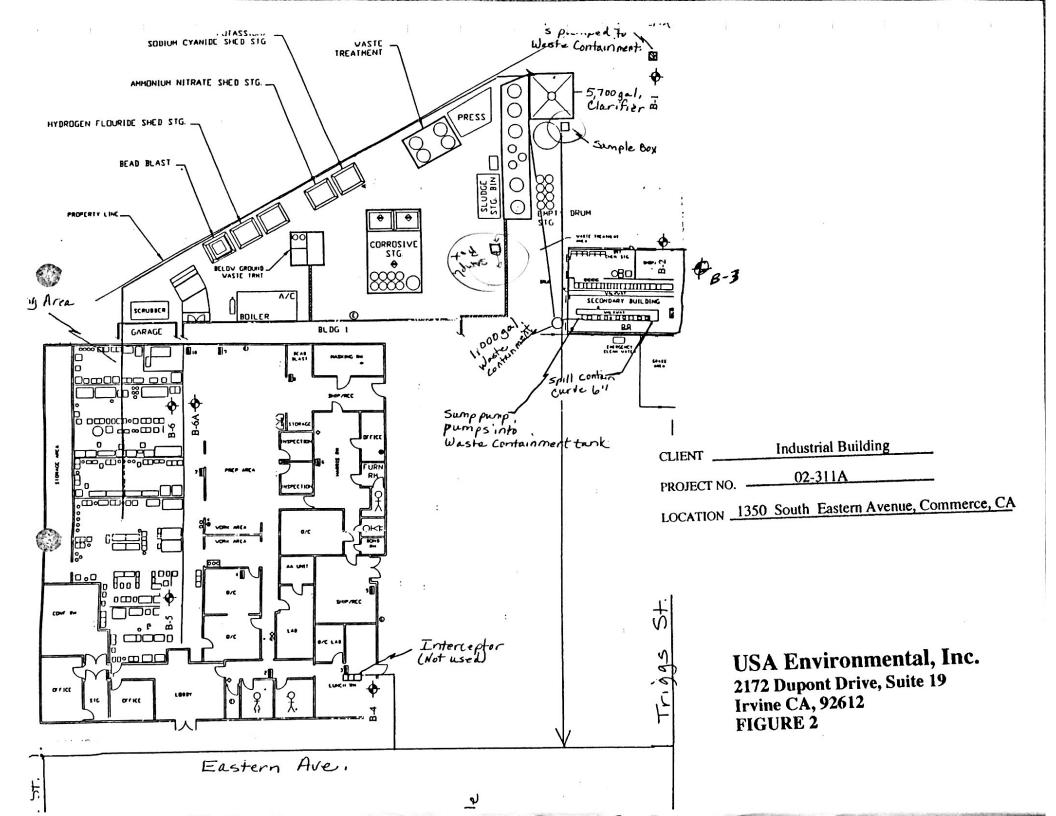
Historical Boring Location Maps













# ATTACHMENT B

Analytical Laboratory Reporting Limits for Soil Gas, Soil, and Groundwater

			7			
Matrix	Methodname	Analyte	CASNUMBER	surrogate	MRL1	Units1
Vapor	EPA 8260M	Acetone	67-64-1	False	1.0	ug/L
Vapor	EPA 8260M	Benzene	71-43-2	False	0.10	ug/L
Vapor	EPA 8260M	Bromobenzene	108-86-1	False	0.10	ug/L
Vapor	EPA 8260M	Bromochloromethane	74-97-5	False	0.10	ug/L
Vapor	EPA 8260M	Bromodichloromethane	75-27-4	Faise	0.10	ug/L
Vapor	EPA 8260M	4-Bromofluorobenzene	460-00-4	True		ug/L
Vapor	EPA 8260M	Bromoform	75-25-2	False	0.10	ug/L
Vapor	EPA 8260M	Bromomethane	74-83-9	False	0,10	ug/L
Vapor	EPA 8260M	2-Butanone (MEK)	78-93-3	False	1.0	ug/L
Vapor	EPA 8260M	n-Butylbenzene	104-51-8	False	0.10	ug/L
Vарог	EPA 8260M	sec-Butylbenzene	135-98-8	Faise	0.10	ug/L
Vapor	EPA 8260M	tert-Butylbenzene	98-06-6	False	0.10	ug/L
Vapor	EPA 8260M	Carbon Disulfide	75-15-0	False	0.10	ug/L
Vapor	EPA 8260M	Carbon Tetrachloride	56-23-5	False	0.080	ug/L
Vapor	EPA 8260M	Chlorobenzene	108-90-7	False	0.10	ug/L
Vapor	EPA 8260M	Chloroethane	75-00-3	False	0.10	ug/L
Vapor	EPA 8260M	Chloroform	67-66-3	False	0.10	ug/L
Vapor	EPA 8260M	Chloromethane	74-87-3	False	0.10	ug/L
Vapor	EPA 8260M	2-Chlorotoluene	95-49-8	False	0.10	ug/L
Vapor	EPA 8260M	4-Chiorotoluene	106-43-4	False	0.10	ug/L
Vapor	EPA 8260M	1,2-Dibromo-3-chloropropane	96-12-8	False	0.10	ug/L
Vapor	EPA 8260M	Dibromochloromethane	124-48-1	False	0.10	ug/L_
Vapor	EPA 8260M	1,2-Dibromoethane (EDB)	106-93-4	False	0.10	ug/L
Vapor	EPA 8260M	Dibromofluoromethane	1868-53-7	True		ug/L
Vapor	EPA 8260M	Dibromomethane	74-95-3	Faise	0.10	ug/L
Vapor	EPA 8260M	1,3-Dichlorobenzene	541-73-1	False	0.10	ug/L
Vapor	EPA 8260M	1,2-Dichlorobenzene	95-50-1	False	0.10	ug/L
Vapor	EPA 8260M	1,4-Dichlorobenzene	106-46-7	False	0.10	ug/L
Vapor	EPA 8260M	Dichlorodifluoromethane (R12)	75-71-8	False	0.10	ug/L
Vapor	EPA 8260M	1,1-Dichloroethane	75-34-3	False	0.10	ug/L
Vapor	EPA 8260M	1,2-Dichloroethane (EDC)	107-06-2	False	0.10	ug/L
Vapor	EPA 8260M	1,1-Dichloroethylene	75-35-4	False	0.10	ug/L
Vapor	EPA 8260M	cis-1,2-Dichloroethylene	156-59-2	False	0.10	ug/L
Vapor	EPA 8260M	trans-1,2-Dichioroethylene	156-60-5	False	0.10	ug/L
Vapor	EPA 8260M	2,2-Dichloropropane	594-20-7	False	0.10	ug/L.

				T		
Vapor	EPA 8260M	1,2-Dichloropropane	78-87-5	False	0.10	ug/L
Vapor	EPA 8260M	1,3-Dichloropropane	142-28-9	False	0.10	ug/L
Vapor	EPA 8260M	trans-1,3-Dichloropropylene	10061-02-6	False	0.10	ug/L
Vapor	EPA 8260M	cis-1,3-Dichloropropylene	10061-01-5	False	0.10	ug/L
Vapor	EPA 8260M	1,1-Dichloropropylene	563-58-6	False	0.10	ug/L
Vapor	EPA 8260M	Ethylbenzene	100-41-4	Faise	0.10	ug/L
Vapor	EPA 8260M	Hexachlorobutadiene	87-68-3	False	0,10	ug/L
Vapor	EPA 8260M	2-Hexanone (MBK)	591-78-6	Faise	1.0	ug/L
Vapor	EPA 8260M	isopropylbenzene	98-82-8	False	0.10	ug/L
Vapor	EPA 8260M	4-isopropyitaluene	99-87-6	False	0.10	ug/L
Vapor	EPA 8260M	Methyl-tert-Butyl Ether (MTBE)	1634-04-4	False	0.50	ug/L
Vapor	EPA 8260M	Methylene Chloride	75-09-2	False	0.50	ug/L
Vapor	EPA 8260M	4-Methyl-2-pentanone (MIBK)	108-10-1	False	1.0	ug/L
Vapor	EPA 8260M	Naphthalene	91-20-3	False	0.10	ug/L
Vapor	EPA 8260M	n-Propylbenzene	103-65-1	False	0.10	ug/L
Vapor	EPA 8260M	Styrene	100-42-5	False	0.10	ug/L
Vapor	EPA 8260M	1,1,2,2-Tetrachioroethane	79-34-5	False	0.10	ug/L
Vapor	EPA 8260M	1,1,1,2-Tetrachloroethane	630-20-6	False	0.10	ug/L
Vapor	EPA 8260M	Tetrachioroethylene (PCE)	127-18-4	False	0.10	ug/L
Vapor	EPA 8260M	Toluana	108-88-3	False	0.10	ug/L
Vapor	EPA 8260M	Toluene-d8	2037-26-5	True		ug/L
Vapor	EPA 8260M	1,2,4-Trichlorobenzene	120-82-1	False	0.10	ug/L
Vapor	EPA 8260M	1,2,3-Trichlorobenzene	87-61-6	False	0.10	ug/L
√apor	EPA 8260M	1.1,2-Trichioroethane	79-00-5	False	0.10	ug/L
Vapor	EPA 8260M	1,1,1-Trichtoroethane	71-55-6	False	0.10	ug/L
Vapor	EPA 8260M	Trichloroethylene (TCE)	79-01-6	False	0.10	ug/L
Vapor	EPA 8260M	Trichlorofluoromethane (R11)	75-69- <b>4</b>	False	0.10	ug/L
Vapor	EPA 8260M	1,2,3-Trichloropropane	96-18-4	False	0.10	ug/L
Vapor	EPA 8260M	1,1,2-Trichloro-1,2,2-trifluoroet	76-13-1	False	0.20	ug/L
Vapor	EPA 8260M	1,3,5-Trimethylbenzene	108-67-8	False	0.10	ug/L
Vapor	EPA 8260M	1,2,4-Trimethylbenzene	95-63-6	False	0.10	ug/L
Vapor	EPA 8260M	Vînyl chloride	75-01-4	False	0.050	ug/L
Vapor	EPA 8260M	o-Xylene	95-47-6	False	0,10	ug/L
Vapor	EPA 8260M	m,p-Xylenes	179501-23-1	Faise	0.10	ug/L
Vapor	EPA 8260M	Isopropanol (IPA)	67-63-0	False	1.0	ug/L
Vapor	EPA 8260M	1,4-Dioxane	123-91-1	False	5.0	ug/L

TC#	METHOD	TC Description	Matrix	T	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
				PE											KFD
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,1,1,2- Tetrachloroethane	630-20-6	0.40			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	1,1,1- Trichloroethane	71-55-6	0.30			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,1,2,2- Tetrachloroethane	79-34-5	0.41			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	1,1,2-Trichloro- 1,2,2- Trifluoroethane	76-13-1	3.9			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,1,2- Trichloroethane	79-00-5	0.38			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	1,1-Dichloroethane	75-34-3	0.28			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,1-Dichloroethene	75-35-4	0.43			1.0	ug/L	52 - 136	0 - 21	66 - 126	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,1- Dichloropropene	563-58-6	0.46			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,2,3- Trichlorobenzene	87-61-6	0.51			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,2,3- Trichloropropane	96-18-4	0.64			5.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,2,4- Trichlorobenzene	120-82-1	0.50			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,2,4- Trimethylbenzene	95-63-6	0.36			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,2-Dibromo-3- Chloropropane	96-12-8	1.2			5.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	1,2-Dibromoethane	106-93-4	0.36			1.0	ug/L	80 - 122	0 - 20	80 - 120	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,2- Dichlorobenzene	95-50-1	0.46			1.0	ug/L	70 - 120	0 - 26	63 - 129	0 - 20

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,2-Dichloroethane	107-06-2	0.24			0.50	ug/L	64 - 142	0 - 20	70 - 130	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,2- Dichloropropane	78-87-5	0.42			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	1,3,5- Trimethylbenzene	108-67-8	0.28			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	1,3- Dichlorobenzene	541-73-1	0.40			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	1,3- Dichloropropane	142-28-9	0.30			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	1,4- Dichlorobenzene	106-46-7	0.43			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	2,2- Dichloropropane	594-20-7	0.36			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	2-Butanone	78-93-3	4.4			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	2-Chlorotoluene	95-49-8	0.24			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	2-Hexanone	591-78-6	4.2			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	4-Chlorotoluene	106-43-4	0.13			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	4-Methyl-2- Pentanone	108-10-1	4.4			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	Acetone	67-64-1	10			20	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Benzene	71-43-2	0.14			0.50	ug/L	74 - 122	0 - 21	80 - 120	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	Bromobenzene	108-86-1	0.30			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Bromochlorometha ne	74-97-5	0.48			1.0	ug/L				

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Bromodichlorometh ane	75-27-4	0.21			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Bromoform	75-25-2	0.50			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Bromomethane	74-83-9	3.9			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	c-1,2- Dichloroethene	156-59-2	0.48			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	c-1,3- Dichloropropene	10061-01-5	0.25			0.50	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Carbon Disulfide	75-15-0	4.1			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Carbon Tetrachloride	56-23-5	0.23			0.50	ug/L	60 - 144	0 - 21	67 - 139	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Chlorobenzene	108-90-7	0.17			1.0	ug/L	73 - 120	0 - 22	78 - 120	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Chloroethane	75-00-3	2.3			5.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Chloroform	67-66-3	0.46			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Chloromethane	74-87-3	3.5			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Dibromochlorometh ane	124-48-1	0.25			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Dibromomethane	74-95-3	0.46			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Dichlorodifluoromet hane	75-71-8	0.46			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	Diisopropyl Ether (DIPE)	108-20-3	0.33			2.0	ug/L	61 - 139	0 - 20	68 - 128	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Ethanol	64-17-5	50			100	ug/L	34 - 178	0 - 58	42 - 168	0 - 20

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Ethylbenzene	100-41-4	0.14			1.0	ug/L	77 - 125	0 - 24	80 - 123	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Ethyl-t-Butyl Ether (ETBE)	637-92-3	0.44			2.0	ug/L	64 - 136	0 - 20	63 - 135	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Isopropylbenzene	98-82-8	0.58			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Methylene Chloride	75-09-2	3.8			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Methyl-t-Butyl Ether (MTBE)	1634-04-4	0.31			1.0	ug/L	68 - 134	0 - 21	69 - 129	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Naphthalene	91-20-3	5.0			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	n-Butylbenzene	104-51-8	0.23			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	n-Propylbenzene	103-65-1	0.17			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	o-Xylene	95-47-6	0.23			1.0	ug/L	62 - 128	0 - 24	74 - 122	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	p/m-Xylene	179601-23-1	0.30			1.0	ug/L	63 - 129	0 - 25	75 - 123	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	p-Isopropyltoluene	99-87-6	0.16			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	sec-Butylbenzene	135-98-8	0.25			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	Styrene	100-42-5	0.17			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	t-1,2- Dichloroethene	156-60-5	0.37			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	t-1,3- Dichloropropene	10061-02-6	0.25			0.50	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Tert-Amyl-Methyl Ether (TAME)	994-05-8	0.22			2.0	ug/L	67 - 133	0 - 20	67 - 133	0 - 20

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Tert-Butyl Alcohol (TBA)	75-65-0	4.6			10	ug/L	65 - 143	0 - 30	69 - 129	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	tert-Butylbenzene	98-06-6	0.28			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Tetrachloroethene	127-18-4	0.39			1.0	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Toluene	108-88-3	0.24			1.0	ug/L	72 - 126	0 - 23	80 - 120	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	A	Trichloroethene	79-01-6	0.37			1.0	ug/L	74 - 128	0 - 22	80 - 122	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Trichlorofluorometh ane	75-69-4	3.3			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	Α	Vinyl Acetate	108-05-4	5.6			10	ug/L				
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	А	Vinyl Chloride	75-01-4	0.30			0.50	ug/L	67 - 133	0 - 20	70 - 130	0 - 20
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	S	1,2-Dichloroethane- d4	17060-07-0						75 - 135			
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	S	1,4- Bromofluorobenzen e	460-00-4						80 - 120			
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	S	Dibromofluorometh ane	1868-53-7						78 - 126			
4408	EPA 8260B	EPA 8260B Volatile Organics + Oxygenates Water	Water	S	Toluene-d8	2037-26-5						80 - 120			
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	1,1,1,2- Tetrachloroethane	630-20-6	0.24			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	1,1,1- Trichloroethane	71-55-6	0.23			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	1,1,2,2- Tetrachloroethane	79-34-5	0.35			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	1,1,2-Trichloro- 1,2,2- Trifluoroethane	76-13-1	0.35			10	ug/kg				

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,1,2- Trichloroethane	79-00-5	0.35			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	1,1-Dichloroethane	75-34-3	0.21			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,1-Dichloroethene	75-35-4	0.35			1.0	ug/kg	55 - 133	0 - 41	68 - 128	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,1- Dichloropropene	563-58-6	0.33			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,2,3- Trichlorobenzene	87-61-6	0.91			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,2,3- Trichloropropane	96-18-4	0.83			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,2,4- Trichlorobenzene	120-82-1	0.31			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,2,4- Trimethylbenzene	95-63-6	0.59			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,2-Dibromo-3- Chloropropane	96-12-8	1.7			10	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,2-Dibromoethane	106-93-4	0.26			1.0	ug/kg	57 - 153	0 - 39	80 - 120	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,2- Dichlorobenzene	95-50-1	0.23			1.0	ug/kg	38 - 128	0 - 62	80 - 120	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,2-Dichloroethane	107-06-2	0.31			1.0	ug/kg	80 - 120	0 - 20	80 - 120	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,2- Dichloropropane	78-87-5	0.44			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	1,3,5- Trimethylbenzene	108-67-8	0.55			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	1,3-Butadiene	106-99-0	0.79			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	1,3- Dichlorobenzene	541-73-1	0.18			1.0	ug/kg				

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	1,3- Dichloropropane	142-28-9	0.25			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	1,4- Dichlorobenzene	106-46-7	0.22			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	1,4-Dioxane	123-91-1	48			100	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	2,2- Dichloropropane	594-20-7	0.33			5.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	2-Butanone	78-93-3	3.8			20	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	2-Chloroethyl Vinyl Ether	110-75-8	8.4			50	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	2-Chlorotoluene	95-49-8	0.23			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	2-Hexanone	591-78-6	1.8			20	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	2-Methyl-2-Butanol (TAA)	75-85-4	18			50	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	4-Chlorotoluene	106-43-4	0.21			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	4-Methyl-2- Pentanone	108-10-1	4.3			20	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Acetone	67-64-1	6.2			50	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Acetonitrile	75-05-8	2.5			100	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Acrolein	107-02-8	12			50	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Acrylonitrile	107-13-1	3.0			100	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Benzene	71-43-2	0.13			1.0	ug/kg	31 - 145	0 - 41	80 - 120	0 - 20

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Bromobenzene	108-86-1	0.21			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Bromochlorometha ne	74-97-5	0.69			5.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Bromodichlorometh ane	75-27-4	0.23			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Bromoform	75-25-2	0.79			5.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	Bromomethane	74-83-9	9.4			20	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	c-1,2- Dichloroethene	156-59-2	0.28			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	c-1,3- Dichloropropene	10061-01-5	0.25			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Carbon Disulfide	75-15-0	0.31			10	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Carbon Tetrachloride	56-23-5	0.28			1.0	ug/kg	49 - 133	0 - 48	65 - 137	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Chlorobenzene	108-90-7	0.22			1.0	ug/kg	54 - 126	0 - 50	80 - 120	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	Chloroethane	75-00-3	1.5			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Chloroform	67-66-3	0.24			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	Chloromethane	74-87-3	0.30			20	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Cyclohexane	110-82-7	2.6			50	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	Dibromochlorometh ane	124-48-1	0.57			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Dibromomethane	74-95-3	0.77			2.0	ug/kg				

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Dichlorodifluoromet hane	75-71-8	0.44			2.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Diethyl Ether	60-29-7	5.9			20	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Diisopropyl Ether (DIPE)	108-20-3	0.48			1.0	ug/kg	59 - 137	0 - 36	69 - 129	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Ethanol	64-17-5	84			500	ug/kg	8 - 170	0 - 77	51 - 135	0 - 27
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	Ethylbenzene	100-41-4	0.15			1.0	ug/kg	32 - 146	0 - 61	80 - 120	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Ethyl-t-Butyl Ether (ETBE)	637-92-3	0.51			1.0	ug/kg	56 - 140	0 - 36	70 - 124	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	Hexachloro-1,3- Butadiene	87-68-3	0.32			5.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Hexane	110-54-3	0.37			5.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Iodomethane	74-88-4	8.3			20	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Isopropanol	67-63-0	28			100	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Isopropylbenzene	98-82-8	0.55			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Methylene Chloride	75-09-2	1.3			10	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Methyl-t-Butyl Ether (MTBE)	1634-04-4	0.30			2.0	ug/kg	61 - 145	0 - 33	70 - 124	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Naphthalene	91-20-3	0.81			10	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	n-Butylbenzene	104-51-8	0.16			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	n-Propylbenzene	103-65-1	0.50			2.0	ug/kg				

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	o-Xylene	95-47-6	0.56			1.0	ug/kg	70 - 130	0 - 30	75 - 125	0 - 25
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	p/m-Xylene	179601-23-1	0.27			2.0	ug/kg	70 - 130	0 - 30	75 - 125	0 - 25
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	p-Isopropyltoluene	99-87-6	0.63			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	sec-Butylbenzene	135-98-8	0.58			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	Styrene	100-42-5	0.60			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	t-1,2- Dichloroethene	156-60-5	0.51			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	t-1,3- Dichloropropene	10061-02-6	0.61			5.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	t-1,4-Dichloro-2- Butene	110-57-6	2.4			5.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	Tert-Amyl-Methyl Ether (TAME)	994-05-8	0.35			1.0	ug/kg	57 - 141	0 - 35	74 - 122	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Tert-Butyl Alcohol (TBA)	75-65-0	5.2			20	ug/kg	44 - 152	0 - 54	73 - 121	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	tert-Butylbenzene	98-06-6	0.15			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Tetrachloroethene	127-18-4	0.21			1.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Tetrahydrofuran	109-99-9	3.7			20	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Thiophene	110-02-1	0.55			5.0	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	A	Toluene	108-88-3	0.52			1.0	ug/kg	39 - 141	0 - 52	80 - 120	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	Α	Trichloroethene	79-01-6	0.30			2.0	ug/kg	57 - 129	0 - 47	80 - 120	0 - 20

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Trichlorofluorometh ane	75-69-4	0.38			10	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Vinyl Acetate	108-05-4	4.7			10	ug/kg				
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	А	Vinyl Chloride	75-01-4	0.50			1.0	ug/kg	47 - 137	0 - 58	67 - 127	0 - 20
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	S	1,2-Dichloroethane- d4	17060-07-0						71 - 155			
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	S	1,4- Bromofluorobenzen e	460-00-4						80 - 120			
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	S	Dibromofluorometh ane	1868-53-7						79 - 133			
5420	EPA 8260B	EPA 8260B Volatile Organics Soil Ext. 5035 Super	Soil	S	Toluene-d8	2037-26-5						80 - 120			

TC#	METHOD	TC Description	Matrix	T	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
				PE											
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	1,2,4- Trichlorobenzene	120-82-1	0.059			0.50	mg/kg	56 - 120	0 - 20	45 - 129	0 - 27
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	1,2- Dichlorobenzene	95-50-1	0.064			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	1,3- Dichlorobenzene	541-73-1	0.073			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	1,4- Dichlorobenzene	106-46-7	0.075			0.50	mg/kg	43 - 120	0 - 26	42 - 132	0 - 30
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	1- Methylnaphthalene	90-12-0	0.056			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2,4,5- Trichlorophenol	95-95-4	0.064			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2,4,6- Trichlorophenol	88-06-2	0.077			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2,4-Dichlorophenol	120-83-2	0.058			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2,4-Dimethylphenol	105-67-9	0.27			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2,4-Dinitrophenol	51-28-5	0.34			2.5	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2,4-Dinitrotoluene	121-14-2	0.067			0.50	mg/kg	28 - 120	0 - 20	51 - 129	0 - 28
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2,6-Dichlorophenol	87-65-0	0.059			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2,6-Dinitrotoluene	606-20-2	0.073			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2- Chloronaphthalene	91-58-7	0.059			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2-Chlorophenol	95-57-8	0.067			0.50	mg/kg	53 - 120	0 - 20	58 - 124	0 - 20
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2- Methylnaphthalene	91-57-6	0.060			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2-Methylphenol	95-48-7	0.087			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2-Nitroaniline	88-74-4	0.052			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	2-Nitrophenol	88-75-5	0.067			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	3,3'- Dichlorobenzidine	91-94-1	0.36			10	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	3/4-Methylphenol	65794-96-9	0.16			0.50	mg/kg				

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	3-Nitroaniline	99-09-2	0.070			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	4,6-Dinitro-2- Methylphenol	534-52-1	0.63			2.5	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	4-Bromophenyl- Phenyl Ether	101-55-3	0.061			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	4-Chloro-3- Methylphenol	59-50-7	0.066			0.50	mg/kg	32 - 120	0 - 20	55 - 121	0 - 20
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	4-Chloroaniline	106-47-8	0.065			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	4-Chlorophenyl- Phenyl Ether	7005-72-3	0.064			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	4-Nitroaniline	100-01-6	0.065			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	4-Nitrophenol	100-02-7	0.054			0.50	mg/kg	14 - 128	0 - 59	24 - 126	0 - 27
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Acenaphthene	83-32-9	0.063			0.50	mg/kg	34 - 148	0 - 20	51 - 123	0 - 26
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Acenaphthylene	208-96-8	0.060			0.50	mg/kg	53 - 120	0 - 20	52 - 120	0 - 28
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Aniline	62-53-3	0.060			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Anthracene	120-12-7	0.063			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Azobenzene	103-33-3	0.054			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Benzidine	92-87-5	0.83			10	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Benzo (a) Anthracene	56-55-3	0.057			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	А	Benzo (a) Pyrene	50-32-8	0.054			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Benzo (b) Fluoranthene	205-99-2	0.064			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Benzo (g,h,i) Perylene	191-24-2	0.055			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Benzo (k) Fluoranthene	207-08-9	0.065			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Benzoic Acid	65-85-0	0.50			2.5	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Benzyl Alcohol	100-51-6	0.066			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Bis(2-Chloroethoxy) Methane	111-91-1	0.056			0.50	mg/kg				

TC#	METHOD	TC Description	Matrix	T Y	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
				P E											
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Bis(2-Chloroethyl) Ether	111-44-4	0.41			2.5	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	А	Bis(2- Chloroisopropyl) Ether	108-60-1	0.057			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Bis(2-Ethylhexyl) Phthalate	117-81-7	0.053			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Butyl Benzyl Phthalate	85-68-7	0.054			0.50	mg/kg	15 - 189	0 - 20	43 - 139	0 - 29
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Chrysene	218-01-9	0.064			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Dibenz (a,h) Anthracene	53-70-3	0.046			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Dibenzofuran	132-64-9	0.060			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Diethyl Phthalate	84-66-2	0.058			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Dimethyl Phthalate	131-11-3	0.11			0.50	mg/kg	44 - 122	0 - 20	51 - 123	0 - 27
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Di-n-Butyl Phthalate	84-74-2	0.060			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Di-n-Octyl Phthalate	117-84-0	0.10			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Fluoranthene	206-44-0	0.062			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Fluorene	86-73-7	0.063			0.50	mg/kg	12 - 186	0 - 20	54 - 126	0 - 27
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Hexachloro-1,3- Butadiene	87-68-3	0.063			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Hexachlorobenzene	118-74-1	0.067			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Hexachlorocyclope ntadiene	77-47-4	0.50			2.5	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Hexachloroethane	67-72-1	0.078			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Indeno (1,2,3-c,d) Pyrene	193-39-5	0.053			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Isophorone	78-59-1	0.057			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Naphthalene	91-20-3	0.059			0.50	mg/kg	20 - 140	0 - 20	32 - 146	0 - 20
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Nitrobenzene	98-95-3	0.32			2.5	mg/kg				

TC#	METHOD	TC Description	Matrix	T Y P E		CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	N- Nitrosodimethylami ne	62-75-9	0.047			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	N-Nitroso-di-n- propylamine	621-64-7	0.084			0.50	mg/kg	38 - 140	0 - 20	40 - 136	0 - 29
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	N- Nitrosodiphenylami ne	86-30-6	0.14			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Pentachlorophenol	87-86-5	0.39			2.5	mg/kg	10 - 124	0 - 20	23 - 131	0 - 22
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Phenanthrene	85-01-8	0.069			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Phenol	108-95-2	0.048			0.50	mg/kg	22 - 124	0 - 20	40 - 130	0 - 20
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Pyrene	129-00-0	0.077			0.50	mg/kg	31 - 169	0 - 20	47 - 143	0 - 20
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	Α	Pyridine	110-86-1	0.055			0.50	mg/kg				
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	S	2,4,6- Tribromophenol	118-79-6						18 - 138			
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	S	2-Fluorobiphenyl	321-60-8						27 - 120			
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	S	2-Fluorophenol	367-12-4						25 - 120			
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	S	Nitrobenzene-d5	4165-60-0						33 - 123			
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	S	Phenol-d6	13127-88-3						26 - 122			
5164	EPA 8270C	EPA 8270C Semi- Volatile Organics	Soil	S	p-Terphenyl-d14	1718-51-0						27 - 159			

TC#	METHOD	TC Description	Matrix	Ţ	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
				PE											KPD
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Antimony	7440-36-0	0.149			0.750	mg/kg	50 - 115	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Arsenic	7440-38-2	0.259			0.750	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Barium	7440-39-3	0.154			0.500	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Beryllium	7440-41-7	0.137			0.250	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Cadmium	7440-43-9	0.135			0.500	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Chromium	7440-47-3	0.142			0.250	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Cobalt	7440-48-4	0.148			0.250	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Copper	7440-50-8	0.135			0.500	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Lead	7439-92-1	0.132			0.500	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Molybdenum	7439-98-7	0.132			0.250	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Nickel	7440-02-0	0.145			0.250	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Selenium	7782-49-2	0.300			0.750	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Silver	7440-22-4	0.0857			0.250	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Thallium	7440-28-0	0.152			0.750	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20
2324	EPA 6010B	EPA 6010B/7471A CAC, Title 22 Metals	Soil	А	Vanadium	7440-62-2	0.141			0.250	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
2324		EPA 6010B/7471A CAC, Title 22 Metals	Soil	A	Zinc	7440-66-6	0.178			1.00	mg/kg	75 - 125	0 - 20	80 - 120	0 - 20

TC#	METHOD	TC Description	Matrix	T	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
				PE											KFD
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	4,4'-DDD	72-54-8	2.4			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	A	4,4'-DDE	72-55-9	2.2			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	4,4'-DDT	50-29-3	2.2			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	Α	Aldrin	309-00-2	2.2			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	Alpha-BHC	319-84-6	3.7			10	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	Α	Beta-BHC	319-85-7	2.5			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	Chlordane	57-74-9	26			50	ug/kg				
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	A	Delta-BHC	319-86-8	4.4			10	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	Dieldrin	60-57-1	2.2			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	A	Endosulfan I	959-98-8	2.0			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	Endosulfan II	33213-65-9	2.4			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	A	Endosulfan Sulfate	1031-07-8	2.6			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	Endrin	72-20-8	2.4			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	Endrin Aldehyde	7421-93-4	3.0			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	Endrin Ketone	53494-70-5	2.5			5.0	ug/kg				

TC#	METHOD	TC Description	Matrix	T Y P	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
				E											
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	Α	Gamma-BHC	58-89-9	2.2			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	Α	Heptachlor	76-44-8	2.2			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	Α	Heptachlor Epoxide	1024-57-3	3.7			10	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	Methoxychlor	72-43-5	2.7			5.0	ug/kg	50 - 135	0 - 25	50 - 135	0 - 25
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	Α	Total Pesticides	TOTAL	0.0			5.0	ug/kg				
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	А	Toxaphene	8001-35-2	45			100	ug/kg				
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	S	2,4,5,6-Tetrachloro- m-Xylene	877-09-8						25 - 145			
5157	EPA 8081A	EPA 8081A Organochlorine Pesticides	Soil	S	Decachlorobiphenyl	2051-24-3						24 - 168			
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Aroclor-1016	12674-11-2	21			50	ug/kg	50 - 135	0 - 20	50 - 135	0 - 20
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Aroclor-1221	11104-28-2	42			50	ug/kg				
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Aroclor-1232	11141-16-5	25			50	ug/kg				
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Aroclor-1242	53469-21-9	37			50	ug/kg				
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Aroclor-1248	12672-29-6	32			50	ug/kg				
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Aroclor-1254	11097-69-1	32			50	ug/kg				
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Aroclor-1260	11096-82-5	30			50	ug/kg	50 - 135	0 - 20	50 - 135	0 - 20
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Aroclor-1262	37324-23-5	35			50	ug/kg				
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Aroclor-1268	11100-14-4	33			50	ug/kg				
5159	EPA 8082	EPA 8082 PCBs	Soil	Α	Total PCB Aroclors	TOTAL	14			50	ug/kg				
5159	EPA 8082	EPA 8082 PCBs	Soil	s	2,4,5,6-Tetrachloro- m-Xylene	877-09-8						25 - 145			
5159	EPA 8082	EPA 8082 PCBs	Soil	S	Decachlorobiphenyl	2051-24-3						24 - 168			

TC#	METHOD	TC Description	Matrix	Ţ	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS
				Y P E											RPD
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C11-C12		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C13-C14		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C15-C16		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C17-C18		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C19-C20		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C21-C22		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C23-C24		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C25-C28		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C29-C32		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C33-C36		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C37-C40		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C41-C44		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C6		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C6-C44 Total		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C7		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C8		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	C9-C10		1.3			5.0	mg/kg				
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	Α	TPH as Diesel	68334-30-5	1.3			5.0	mg/kg	64 - 130	0 - 15	75 - 123	0 - 12
6266	EPA 8015B (M)	EPA 8015B (M) C6- C44	Soil	S	n-Octacosane	630-02-4						61 - 145			
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C11-C12		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C13-C14		32			100	ug/L				

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	╄	C15-C16		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C17-C18		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C19-C20		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	А	C21-C22		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C23-C24		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	А	C25-C28		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C29-C32		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C33-C36		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C37-C40		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	А	C41-C44		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C6		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C6-C44 Total		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C7		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C8		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	C9-C10		32			100	ug/L				
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	Α	TPH as Diesel	68334-30-5	32			100	ug/L	55 - 133	0 - 30	75 - 117	0 - 13
6270	EPA 8015B (M)	EPA 8015B (M) C6- C44 100ppb	Water	S	n-Octacosane	630-02-4						68 - 140			

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
4432		EPA 7199 Chromium (VI)	Water		Chromium, Hexavalent	18540-29-9	0.067			1.0	ug/L	70 - 130	0 - 25	80 - 120	0 - 20
4433	EPA 7199	EPA 7199/3060A Chromium (VI)	Soil		Chromium, Hexavalent	18540-29-9	200			400	ug/kg	75 - 125	0 - 25	80 - 120	0 - 20

TC#	METHOD	TC Description	Matrix	TYPE	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
765		SM 4500-CN E Total Cyanide	Water	А	Cyanide, Total	57-12-5	0.0070			0.020	mg/L	70 - 130	0 - 25	80 - 120	0 - 20
5342	EPA 9010C/9014	EPA 9010C/9014 Total Cyanide	Soil	A	Cyanide, Total	57-12-5	0.22			0.50	mg/kg	70 - 130	0 - 25	80 - 120	0 - 20

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Antimony	7440-36-0	0.00787			0.0150	mg/L	72 - 132	0 - 10	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Arsenic	7440-38-2	0.00438			0.0100	mg/L	80 - 140	0 - 11	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Barium	7440-39-3	0.00296			0.0100	mg/L	87 - 123	0 - 6	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Beryllium	7440-41-7	0.000561			0.0100	mg/L	89 - 119	0 - 8	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Boron	7440-42-8	0.00476			0.0200	mg/L	81 - 135	0 - 7	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Cadmium	7440-43-9	0.00269			0.0100	mg/L	82 - 124	0 - 7	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Chromium	7440-47-3	0.00271			0.0100	mg/L	86 - 122	0 - 8	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Cobalt	7440-48-4	0.00295			0.0100	mg/L	83 - 125	0 - 7	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Copper	7440-50-8	0.00267			0.0100	mg/L	78 - 126	0 - 7	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Lead	7439-92-1	0.00406			0.0100	mg/L	84 - 120	0 - 7	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Molybdenum	7439-98-7	0.00278			0.0100	mg/L	78 - 126	0 - 7	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Nickel	7440-02-0	0.00298			0.0100	mg/L	84 - 120	0 - 7	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Selenium	7782-49-2	0.00699			0.0150	mg/L	79 - 127	0 - 9	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Silver	7440-22-4	0.00139			0.00500	mg/L	86 - 128	0 - 7	80 - 120	0 - 20
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Thallium	7440-28-0	0.00291			0.0150	mg/L	79 - 121	0 - 8	80 - 120	0 - 20

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
2457	EPA 6010B	EPA 6010B/7470A CAC, Title 22 Metals Total	Water	Α	Vanadium	7440-62-2	0.00244			0.0100	mg/L	88 - 118	0 - 7	80 - 120	0 - 20
2457		EPA 6010B/7470A CAC, Title 22 Metals Total	Water	A	Zinc	7440-66-6	0.00352			0.0100	mg/L	89 - 131	0 - 8	80 - 120	0 - 20

TC#	METHOD	TC Description	Matrix	T Y P E	COMPOUND	CAS	MDL	LOD	LOQ	RL	UNIT	MS CL	MS RPD	LCS CL	LCS RPD
6732	EPA 8270C (M) Isotope Dilution	1,4-Dioxane by EPA 8270C (M) Isotope Dilution Water	Water	Α	1,4-Dioxane	123-91-1	0.28			1.0	ug/L	50 - 130	0 - 20	50 - 130	0 - 20
6732	EPA 8270C (M) Isotope Dilution	1,4-Dioxane by EPA 8270C (M) Isotope Dilution Water	Water	S	1,4-Dioxane- d8(IDS-IS)							30 - 120			
6732	Isotope Dilution	1,4-Dioxane by EPA 8270C (M) Isotope Dilution Water	Water	S	Nitrobenzene-d5	4165-60-0						56 - 123			