

October 12, 2015

# **RECEIVED**

By Alameda County Environmental Health 2:49 pm, Nov 18, 2015

Mr. Mark Detterman Senior Hazardous Materials Specialist, PG, CEG Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

RE: ADDITIONAL REMEDIAL INVESTIGATION REPORT

AND PROPOSED INTERIM REMEDIAL ACTION PLAN

FORMER ROCKBRIDGE DRY CLEANERS

SHOPS AT THE RIDGE REDEVELOPMENT SITE 5100 BROADWAY, OAKLAND, CALIFORNIA

RO# 0003172

**TETRA TECH PROJECT NO. 117-7429001** 

Dear Mr. Detterman:

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,

Terramar Retail Centers

Rick Henderson

Vice President Construction & Design



ADDITIONAL REMEDIAL INVESTIGATION REPORT
AND

PROPOSED INTERIM REMEDIAL ACTION PLAN FORMER ROCKBRIDGE DRY CLEANERS SHOPS AT THE RIDGE REDEVELOPMENT SITE 5100 BROADWAY, OAKLAND, CALIFORNIA

October 12, 2015

# Prepared for:

# Alameda County Department of Environmental Health 1131 Harbor Bay Parkway

Alameda, California 94502

and

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#### 1.0 INTRODUCTION

This report presents Tetra Tech's additional site characterization work in connection with the former Rockridge Cleaners located at 5100 (5114 tenant space) Broadway in Oakland, California. Two additional rounds of subsurface investigation were conducted in July/August and September 2015, in accordance with:

- 1) Work Plan for Additional Site Characterization, Former Rockridge Cleaners, 5100 Broadway, Oakland, California, Tetra Tech Project No. 117-7429001, dated June 18, 2015; and
- 2) Addendum Work Plan for Additional Site Characterization, Former Rockridge Cleaners, 5100 Broadway, Oakland, California, RO# 0003172, Tetra Tech Project No. 117-7429001, dated August 31, 2015.

Both documents were previously uploaded to the Alameda County Department of Environmental Health (ACDEH) Cleanup Oversight Program database on June 18 and August 31, 2015, respectively, and subsequently uploaded to GeoTracker. The ACDEH conditionally approved the work plans on July 13 and September 1, 2015, respectively. The July 13, 2015 ACDEH approval letter also approved Tetra Tech's June 18, 2015 *Site Management Plan* (SMP) scope of work, to be implemented during demolition of the multitenant building housing the former Rockridge Dry Cleaner, just prior to implementing the July/August 2015 work.

This report also presents an interim remedial action plan (IRAP) to take advantage of the window of time available to excavate soil in the area of impact during site redevelopment work currently in progress.

#### 2.0 BACKGROUND

The former Rockridge Cleaners was located in "Building 5" of the six building Rockridge Shopping Center (Figure 1), which is slated for two phases of demolition and construction, resulting in the new "Shops at the Ridge" redevelopment (Figure 2). Buildings 5 and 6 have been demolished during the first phase (Phase I) of redevelopment, and generally will be replaced by contiguous Building K and Building A, respectively, along with stand-alone Building C and Building D (Figure 2). Terramar, with their general contractor Swinerton Builders, demolished Building 6 beginning the week of June 8, 2015, and demolished Building 5 between July 23 and July 29, 2015.

Tetra Tech was on-site during Building 5 demolition, in accordance with our June 18, 2015 SMP scope of work to monitor sub-slab soils during foundation and footing removals. Construction of the new Building A (future Safeway) is underway, with primary footing and block wall work nearly complete as of October 9, 2015. The former Building 5 area has remained undisturbed following demolition, while Tetra Tech has implemented

both work plans. Figure 3 depicts the SMP observation areas and presents the results of Tetra Tech's field monitoring of sub-slab soils after building demolition. No positive field readings were detected in soil using a MiniRAE 3000 field instrument, and no unusual odors or soil discoloration were noted when the slab and footings were pulled up.

Building 5 demolition photos are presented in Appendix A, focusing on the former Rockridge Dry Cleaner tenant space. During demolition of the tenant space, it was learned that rear 15-feet of the Rockridge Dry Cleaner 5114 tenant space was actually the bathroom/server room area for the adjacent 5112 tenant space to north (former credit union). This was not readily obvious during prior walk-throughs of the tenant spaces prior to demolition. As such, the SS-VMP-1 borings completed inside by the "rear wall" of the dry cleaner in 2014, were actually located 15 feet farther to the southeast than previously believed. As the 5112 tenant space slab was 14-inches higher than the 5114 tenant space, the rear floor area at 5114 had been raised with a concrete slab to match grade at 5112, which covered over a 12"x12" steel floor drain that was original to the rear of the 5114 dry cleaner tenant space. The drain likely served the former dry cleaner machine(s) in the tenant space, but no bolt holes were observed in the original slab to indicate where a dry cleaner machine would have been positioned.

A concrete step up was also discovered beneath the raised slab area, leading to a former doorway between 5114 and 5112, indicating the two tenant spaces were connected at one time. A shared foyer door (metal door) entrance at sidewalk level was also present at the rear of the two tenant spaces, prior to the installation of the concrete ramp-up to a former doorway into the 5112 expansion area (tenant improvement -T.I. - prior to credit union). Both doors had been walled off on the interior by more recent T.I. work (likely by the credit union to prevent break-ins from the rear of the space). Figure 4 presents the updated tenant space layout, and observations made during building demolition.

The July/August 2015 sampling was intended to further evaluate shallow soil and soil gas concentrations previously detected at the former dry cleaner, where a limited release of tetrachlorothethene (PCE) was believed to have occurred in connection with the sanitary sewer line serving the former dry cleaner space (based on previous data collected by Tetra Tech in 2001 and 2014). In summary, low concentrations of PCE were detected in soil at three locations along the sewer line in 2001: SB-11-5' (6.3 micrograms per kilogram, μg/Kg); SB-3-4' (14 μg/Kg); and SB-4-3.5' (17 μg/Kg). Elevated concentrations of PCE were subsequently detected in soil vapor samples collected in 2014 from two locations between soil borings SB-3 and SB-4: VMP-2 (3,800 micrograms per cubic meter, μg/m³); and VMP-3 (3,600 μg/m³). PCE was not detected in soil (SS-VMP-1-1.5') or soil vapor (SS-VMP-1) in borings completed inside the dry cleaner tenant space in 2014, or in groundwater samples collected in 2001 and 2014 from two borings (SB-2 and SB-1) completed in front of the dry cleaner space (parking stall area). PCE was not detected in soil vapor at VMP-1, also completed in front of the dry cleaner in 2014. Figure 3 shows the 2001 and 2014 soil boring and vapor probe locations in the vicinity of the

former dry cleaner, and also depicts a previously proposed soil excavation along a section of sanitary sewer line behind the former dry cleaner. The excavation was proposed to remove the low concentrations of PCE detected in soil, and elevated PCE concentrations detected in soil vapor, along the sewer line behind the former cleaners.

Based the data obtained from the July/August 2015 sampling, the nature of the former PCE release appears more likely associated with a minor surface spill, directly behind the former dry cleaner tenant space. It should be noted that the asphalt behind Building 5 was 8 to 10 inches thick, and was removed the morning of July 30, 2015, the day the July/August 2015 field work as initiated. Additional sampling was conducted in September 2015 to collect sufficient data to define the lateral and vertical extent of PCE in soil and soil gas, and to assess if PCE impacts extended to groundwater, with the goal of rapidly transitioning into an interim soil source area removal to allow for construction of Building K to commence. Construction relating to Building K has been temporarily suspended to allow for the recent remedial investigation activities to be completed, and to allow for targeted soil removal to be performed as an interim source removal effort while the limited time opportunity presents itself.

#### 3.0 ADDITIONAL INVESTIGATION

A total of 14 direct push Geoprobe soil borings, labeled DC-SB-1 through DC-SB-14, were completed to 5 feet in depth, with eight of the locations converted into vapor monitoring points (VMPs), labeled DC-VMP-1 through DC-VMP-8. A total of 11 hollow-stem auger borings, labeled DC-SB-15 through DC-SB-21 and DC-SB-23 through DC-SB-25, were completed to between 20 and 25 feet in depth, with the exception of DC-SB-19, which encountered bedrock at 4 feet below grade and was terminated at 5 feet in depth. Dual completion VMPs were installed in ten of the auger borings, labeled DC-VMP-9 through DC-VMP-12, DC-VMP-14, DC-VMP-15, and DC-VMP-17 through DC-VMP-20. A single completion VMP was installed at shallow bedrock boring DC-SB-19, and labeled DC-VMP-13. Twelve auger borings were originally planned, but utility conflicts prevented completion of boring DC-SB-22/DC-VMP-16.

The boring locations are shown on Figure 4 and Figure 5. Figure 4 is based on a pre-demolition aerial base map and Figure 5 is based on a more recent post-demolition drone aerial photograph taken on August 31, 2015.

#### 3.1 Dates of Work

July 30, 2015 Drilled borings DC-SB-1 through DC-SB-8 and installed VMPs

DC-VMP-1 through DC-VMP-8.

August 4, 2015 Sampled and abandoned DC-VMP-1 through DC-VMP-8.

September 8-10, 2015 Drilled borings DC-SB-15 through DC-SB-21 and DC-SB-23

through DC-SB-25, and installed DC-VMP-9 through

DC-VMP-15 and DC-VMP-17 through DC-VMP-20.

September 15, 2015 Sampled DC-VMP-9 through DC-VMP-15 and DC-VMP-17

through DC-VMP-20.

October 6, 2015 Abandoned DC-VMP-9 through DC-VMP-15 and DC-VMP-17

through DC-VMP-20.

# 3.2 Soil Boring Permits

The soil borings and VMPs were permitted through the Alameda County Public Works Agency (ACPWA). The permits, three in total, are included in Appendix B.

#### 3.3 Drilling Method

Soil borings DC-SB-1 through DC-SB-8 were completed using a direct push Geoprobe 7720DH track rig using dual tube 5-foot core sampling system (Vannucci Technologies). Soil borings DC-SB-15 through DC-SB-21 and DC-SB-23 through DC-SB-25 were completed using a Rhino Limited Access Rig (LAR) using 5-inch outside diameter hollow stem augers (Gregg Drilling).

#### 3.4 Soil Sampling Method

GeoProbe soil samples were collected using a 60-inch dual tube core barrel fitted with new 1.125-inch diameter acetate sample sleeves. Soil cores were collected continuously in 5-foot intervals. The hollow-stem auger borings were continuously cored using 1.5-inch diameter x 18-inch long and 24-inch long split spoon samplers lined with new brass tubes.

Soil was field-screened using an organic vapor monitor (MiniRAE 3000), generally every 5-feet in depth. The 1-foot and 5-foot depth intervals from the shallow Geoprobe borings were selected for laboratory analysis, whereas soil sample depths from the deeper auger borings were selected based on observed breaks in lithology. Soil boring logs are provided in Appendix C. All soil samples were sealed with Teflon-lined plastic caps, labeled, and placed on ice pending laboratory analyses under chain-of-custody protocols.

No elevated field instrument readings or other indications of potential soil or groundwater impact were noted at the boring locations.

# 3.5 Lithology

The overall redevelopment site is located in a former rock quarry (Blake & Bilger Quarry; previously Oakland Paving Co.) that operated from prior to 1939 up until the 1950s. The quarry operation also extended to the southeast of this site, in the area of the existing

pond. According to on-line sources discussing the former quarry, the bedrock that was quarried, and which is visible along the cliff walls on the north and east perimeter of the Property, is quartz diorite of the Franciscan Formation; other sources describe the rock as metamorphosed sandstone. Following the end of quarry operations, the quarry pit beneath the Rockridge Shopping center was partially backfilled/leveled to facilitate construction of shopping center in the early 1960s. The fill material used appears to have been uncontrolled backfill (unknown source), based on Tetra Tech's many soil borings completed at the site to date.

Similar to previous Tetra Tech subsurface investigations, debris consisting metal, plastic, glass and brick, and decaying organic material consisting of lumber and trees, was encountered beneath a 6- to 11-foot thick layer of dense, silty sandy gravel, with cobbles and boulders (cap fill). The debris material is generally entrained in layers of finer soil material (silts, clays) beneath the cap fill, extending to 20 to 25 feet in depth (deepest explored) and exhibits a putrid odor, typical of anaerobic (reducing) conditions. Some fine to coarse carbonate gravel material is present at depth (based on reaction to HCl). Carbonate rock is also present in the cap fill materials. Soil boring logs are presented in Appendix C.

#### 3.6 Depth to Groundwater

First water was observed between 16 and 24 feet in depth in the deeper auger soil borings. Depth to static water ranged from 11.6 feet to 15.7 feet below grade (open hole – augers out). Based on Tetra Tech's prior review of historical aerial photography of the quarry, water within the quarry limits is expected to be localized, bound by the topography of the former quarry pit, and not contiguous with the true water table in the area.

# 3.7 Groundwater Sampling Method

Groundwater was not encountered in the shallow 5-foot Geoprobe borings (DC-SB-1 through DC-SB-14). Groundwater was encountered in the deeper hollow stem auger borings completed, except DC-SB-19, where shallow bedrock was encountered at 4 feet in depth. Groundwater samples were collected using new polyethylene small diameter disposable bailers inserted through new temporary PVC blank pipe and well screen inserted to total depth through the augers. The augers were then retracted approximately 5-feet to expose the screen. This groundwater sampling method prevented soil material from potentially sloughing off from above and entering the water sample. Approximately 0.25-liters of water was initially purged from each soil boring to reduce sediment content before collecting the water samples. Steam cleaned augers were used to complete each soil boring.

Due to the carbonate content in the water, the hydrochloric acid (HCI) preservative in the laboratory-supplied VOA bottles reacted strongly to most of the water samples (vigorous fizzing). As such, much of the preservative had to be discarded (leaving only streaks of

HCl in the VOA) prior to filling each VOA bottle in order to collect a sample without entrained air bubbles, and that had not been aerated by the reaction. Most of the water samples exhibited a decaying organic odor, with a reduced sulfur odor noticeable upon reaction with the HCl preservative (Note: sulfur has routinely been reported as matrix interference during laboratory analyses of construction soil generated during the site redevelopment).

#### 3.8 VMP Installation

Stainless steel mesh screens measuring ½" OD x 3" long were installed from 4.75-5' bgs (shallow VMPs), and at varying depths for the deeper VMPs (based on depth to static water). The screens were compression fit to stainless steel rigid tubing (¼" O.D. x 0.17" ID), extending to just below ground surface. The tip of each mesh screen was also fitted with an expendable anchor point, which helped to center the VMP in the hole during construction. In borings where deeper VMPs were installed, the boring was first backgrouted with bentonite hole-plug, 1- to 2-feet above static water level, where the deeper VMP was constructed similar to the shallow VMP. A new compression fit brass ball valve/hose barb assembly was fitted to each VMP to facilitate later sampling. The VMP construction details are shown on the boring logs provided in Appendix C.

#### 3.9 VMP Sampling

Soil vapor samples were collected from each VMP a minimum of 48-hours after installation, according to the sampling methodology described in Appendix D. No loss in vacuum was detected during the shut-in test at each VMP, indicating all surface connections were air-tight. Water was present in DC-VMP-1-5', DC-VMP-10-13' and DC-VMP-12-14' at the time of sampling; therefore, soil vapor samples were not collected from those VMPs. The source of the water at VMP-1 was likely a leaking water valve box in the immediate vicinity, disturbed during recent building demolition. The water present in the two deeper VMPs appears to have been groundwater.

The shallow GeoProbe VMPs (DC-VMP-1 through DC-VMP-8) were abandoned immediately after sampling by twisting the VMP assembly until the threaded anchor point detached, and pulling the VMP out of the ground. The bentonite gel self-sealed the tubing void, and the surface was capped with additional hydrated granular bentonite. For the dual-completion VMPs installed in the deeper auger borings, those were over drilled to the depth of the deeper VMP, both VMP tubing strings were removed, and the borings tremie-grouted with neat cement to grade. An ACPWA inspector provided oversight during borehole abandonments during the course of the field work.

#### 3.10 Soil Cuttings, Decon/Purge Water

Soil cuttings (approximately 2 cubic yards) generated from drilling program were placed in a single pile on visqueen and covered. The equipment decon water from the Geoprobe

drilling program was used to mix the grout used to abandon the shallow Geoprobe borings that were not converted into VMPs. The equipment decon water from the auger drilling program was placed on the soil cuttings pile and allowed to absorb. A sample of the soil cuttings stockpile (DC-SOILPILE-1) was collected for waste profiling purposes at the end of the field investigation work.

# 3.11 Laboratory Analyses

- Soil samples (54 total) were submitted to California Laboratory Services (CLS) of Ranch Cordova, California for analysis of volatile organic compounds (VOC) using EPA Method 8260B. The samples were analyzed on a 3-day turn around time.
- Groundwater Samples (10 total) were submitted to CLS for analysis of volatile VOCs using EPA Method 8260B. The samples were analyzed on a 3-day turnaround time.
- Soil vapor samples (26 samples total) were submitted to Eurofins Air Toxics of Folsom, California for laboratory analysis of VOCs using EPA Method TO-15, and for helium (leak check) using the Modified ASTMD-1946 method. The samples were analyzed on a 3-day turnaround time.
- The one soil stockpile waste profile sample (DC-SOILPILE-1) was submitted to CLS for analysis of total petroleum hydrocarbons (TPH) in the diesel and motor oil ranges (TPH-d and TPH-mo) using EPA Method 8015M, TPH-gasoline/VOCs using EPA Method 8260B, and LUFT 5 metals (cadmium, chromium, nickel, lead and zinc) using EPA Method 6010. The sample was analyzed on a 5-day turnaround time.

#### 3.12 Results and Discussion

Copies of the laboratory analytical data sheets and chain-of-custody forms are presented in Appendix E (soil, groundwater, soil vapor, and waste profiling). Tabulated laboratory analytical results are presented in Table 1 (soil), Table 2 (soil vapor) and Table 3 (groundwater), and are also presented graphically on Figure 6. Figure 7 also presents all of the original 2001 soil boring locations, in addition to the tabulated soil and groundwater data from that sampling event.

As shown in Table 1 and on Figure 6, low concentrations of PCE and associated breakdown products were detected in the upper 5-feet of soil, primarily in the immediate vicinity of the former dry cleaner and adjacent former tenant space to the north, with elevated PCE concentrations detected in one shallow boring (DC-SB-10) directly behind the former dry cleaner tenant space. PCE was detected at 2,700 micrograms per kilogram (µg/Kg) and 1,100 µg/Kg in the 1-foot and 5-foot samples, respectively, at

DC-SB-10. These concentrations exceed the Commercial Environmental Screening Level (ESL) value for PCE of 700 µg/Kg.

PCE and associated breakdown products were not detected in the deeper soil samples (ranging between 6- and 19-feet in depth) in the immediate vicinity of the former dry cleaner, or in the step-out soil borings, with one exception. The one exception being a low concentration (20 µg/Kg) of trichloroethene (TCE) detected at step-out boring DC-SB-23-7.5'. TCE was not detected in the deeper soil sample (14.5') at DC-SB-23. The Commercial ESL value for TCE in soil is 460 µg/Kg.

As previously indicated, soil boring DC-SB-22 could not be completed due to utility conflicts, which was intended to assess deeper soil at boring DC-SB-10. Based on groundwater data in the area (discussed below), this data gap is not considered significant.

Acetone was detected in 11 samples from deeper soil at five of the additional soil boring locations, at concentrations ranging from 110 to 220 µg/Kg, with one detection of 650 μg/Kg. The 650 μg/Kg detection (DC-SB-24-9.5') exceeds the Commercial ESL value for acetone in soil of 500 µg/Kg.

As shown in Table 2 and on Figure 6, elevated concentrations of PCE and associated breakdown products were primarily detected in shallow soil vapor (upper 5-feet) in the immediate vicinity of the former dry cleaner and immediately adjacent tenant spaces to the north and south. The highest PCE soil vapor concentration was detected at 5-feet in depth at DC-VMP-6 (19,000,000 micrograms per cubic meter - µg/m3), which corresponds to the location (DC-SB-10) where the highest concentrations of PCE were detected in soil in the upper 5-feet. The deeper soil vapor samples and step-out locations generally contained low to non-detect concentrations of PCE and breakdown products. two exceptions - step-out locations DC-VMP-14 and DC-VMP-15. Vinyl chloride was detected in soil vapor at 210 µg/m3 and 500 µg/m3 in the 5-foot and 14-foot vapor samples, respectively, at DC-VMP-14, and at 850 µg/m3 in the 5-foot vapor sample at DC-VMP-15. The Commercial ESL value for vinyl chloride in soil vapor is 160 µg/m3.

As shown in Table 2, helium leak-check concentrations in each vapor sample were acceptable (< 5%), with one possible exception; sample DC-VMP-3, where helium was detected at 5.4%, indicating a possible short circuit between the sample screen and ground surface. This potential leak is considered insignificant, given the detected concentrations are similar in magnitude to other shallow vapor points located the same distance from the apparent source area (DC-SB-10/DC-VMP-6).

As shown in Table 3 and on Figure 6, groundwater was non-detect for PCE and associated breakdown products in the 10 groundwater samples collected and analyzed from across the former dry cleaner area. Only Freon 12 was detected at concentrations ranging from 17 to 75 micrograms per liter ( $\mu$ g/L), at seven locations. Freon 12 does not have a Commercial ESL value for groundwater, or a California maximum contaminant level (MCL). Freon 12 was also detected in groundwater during the 2001 investigation work at boring SB-2, directly in front of the former dry cleaner location and adjacent to recent boring DC-SB-25. Groundwater at boring DC-SB-25 did not contain Freon 12 during this sampling event.

The soil waste profile sample (DC-SOILPILE-1) contained only a trace concentration of motor oil (1.2 milligrams per kilogram, mg/kg). Metals were also detected, but at relatively low concentrations. The sample did not contain VOCs.

Based on review of the data, the source of PCE appears to be from a minor surface release directly behind the former dry cleaner tenant space, limited to the upper 5 feet of soil. The release did not impact groundwater. The lateral distribution of PCE and associated breakdown products in soil vapor are likely attributed to the coarse lithology in the upper 11 feet of soil (gravel, cobble and boulders), numerous utilities that transect the area which possibly are creating preferential pathways for vapor migration, and the thick asphalt cap (8-10 inches thick) that was present across the area behind Building 5.

#### 4.0 PROPOSED INTERIM REMEDIAL ACTION PLAN

Tetra Tech is proposing a soil source area removal as part of an interim remedial action plan (IRAP). The IRAP is presented in response to recent discussions with Mark Detterman of the Alameda County Department of Environmental Health. Tetra Tech had discussed quickly proceeding with targeted source removal in the area of the former dry cleaner lease space, and Mr. Detterman requested formalizing the approach in the form of an IRAP. The IRAP is included in this report to summarize the planned soil excavation activities in an effort to secure regulatory approval to quickly proceed with work in advance of pending construction activities in the area.

The IRAP is proposed for the vicinity of the former dry cleaner in order to remove the elevated concentrations of PCE detected in shallow soil (upper 5 feet) at DC-SB-10, in addition to removing soil containing elevated concentrations of PCE/breakdown products in shallow soil vapor (upper 5 feet) under the footprint of future Building K. As a conservative measure, soil from along a 120-foot section of the sanitary sewer downstream from the former dry cleaner is also proposed for excavation to mitigate elevated concentrations of PCE previously detected in soil vapor, as well as low concentrations of PCE in soil. Elevated concentrations are identified as those concentrations that exceed Commercial ESL values. The proposed soil excavation areas are presented on Figure 6.

Soil excavation is proposed since construction activities will currently allow for access to those areas, and access will not be available following construction. The opportunity to proceed with an IRAP excavation is limited in time and must be carefully coordinated with

the on-going construction activities. The window of opportunity is closing in the coming weeks. The general contractor already has the necessary City of Oakland permit to perform trenching and excavation, which has been on-going since May 2015 as part of site redevelopment.

Surrounding property owners/occupants are currently apprised of the on-going redevelopment work and nuisance conditions brought about by construction work in general; however, surrounding land use is briefly discussed below, along with the potential for fugitive dust/VOC emissions, followed by the proposed soil removal IRAP.

#### 4.1 Surrounding Land Use

California College of the Arts is located northwest of the proposed soil excavation work area, above the bluff, in addition to residential land use (apartment buildings) north of the work area, above the bluff. East of the proposed excavation area on-site is non-residential, currently undergoing site redevelopment work, with a large pond located directly east of the redevelopment area. Land use farther off-site to the northeast and east is a country club and gold course, respectively, with a cemetery farther east.

Prevailing winds are expected to be mostly west to east, toward the open space (construction area, pond, gold course), based on two references reviewed (1950-1970 study at Lake Meritt, and BAAQMD data). A copy of the two references are presented in Appendix F. Wind rose diagrams in summer and fall from the Lake Meritt reference are shown on Pages 5 and 9 of that reference, and indicate that the prevailing wind direction is from west to east. Pages F-11 and F-12 in the BAAQMD reference present data from Oakland, also showing that the prevailing wind direction is primarily west to east.

#### 4.1.1 Potential Fugitive Dust Emissions

Since redevelopment work was initiated in May 2015, routine excavation and trenching has been on-going. Excavated soils have been moist to very moist, generating no dust, and all constructions soil stockpiles are covered by plastic at the end of each work day. Surface dust, created by routine truck and equipment traffic moving about the unimproved surfaces, is controlled by water spray on a daily basis by Swinerton as part of normal site management procedures. The same soil and stockpile handling procedures will be followed for this proposed soil excavation.

The potential for fugitive dust emissions to impact surrounding land use during excavation is considered very low.

# 4.1.2 Potential Fugitive VOC Emissions

Despite elevated soil vapor concentrations in the shallow 5-foot VMPs, field readings (MiniRAE 3000) have not registered above 1 or 2 ppmv during SMP monitoring of sub-slab soil and deeper soil (3 feet in depth) from Building 5 footing removals. Field

readings were also below 2 ppmv in the upper 10 feet of soil during field screening of the recent Geoprobe and hollow-stem auger borings (24 soil borings in total).

The potential for fugitive VOC emissions to impact surrounding land use during excavation is considered very low. During the excavation activities a Tetra Tech staff member will periodically collect perimeter work area ambient air readings using a MiniRAE 3000 field PID instrument, or equivalent field screening instrument. Perimeter work area ambient air readings will be collected north, east, south and west of the excavation area, every half hour during active excavation work. Should ambient air readings exceed a total VOC concentration of 10 ppmv, water spray will be applied to the excavation area to reduce the ambient VOC concentrations to below 10 ppmv.

## 4.2 Proposed Soil Removal IRAP

As shown on Figure 6, Tetra Tech is proposing to excavate soil from two contiguous areas in the vicinity of the former Rockridge Dry Cleaner – a large rectangular excavation area beneath an area of the former dry cleaner footprint, and along a section of sanitary sewer line directly behind the former dry cleaner tenant space. Tetra Tech will direct the soil excavation work, which will be performed by Shoreline Environmental Resources of Benicia, California; a hazardous waste excavation and remediation contractor. Most of the proposed work area is located behind secured chain-link construction fencing, with a portion of the sewer excavation extending into an unsecured area by the former Safeway loading dock.

# 4.2.1 Large Excavation Area

The proposed large excavation area measures roughly 45' long x 35' wide x 6' deep (300 cubic yards, in-place), and includes boring DC-SB-10, where elevated PCE concentrations were detected in the upper 5-feet of soil. An approximate 10' x 10' area centered on borings DC-SB-10 will be excavated to 8-feet deep, as this is the suspected soil source area. The excavation will not extend greater than 8-feet in depth, as groundwater is expected to enter the excavation at near 10-feet in depth, and groundwater data indicate PCE is not present in groundwater in the area.

The proposed excavation footprint will capture the elevated PCE/breakdown products in soil vapor beneath the future Building K slab. Two areas outside the future Building K slab, where elevated vinyl chloride concentrations were detected in soil vapor (DC-VMP-13 and -14) are not proposed for excavation as these two areas are distant from Building K and the source area, and soil did not contain PCE or breakdown products.

As the existing 6' x 15' electrical transformer pad (immediately adjacent to DC-SB-10) will remain in service until approximately mid-November 2015, this area of soil (50 cubic yards) will not be excavated at this time. Confirmation soil sampling (discussed below) will determine if this area of soil will require excavation and disposal after the transformer has been decommissioned and removed.

The excavation area around the electrical transformer pad will require hand digging to maintain safe clearance of the buried electrical lines, in addition to the many other subsurface utilities in the area. If hand digging is required at depths greater than 4-feet, then appropriate excavation safety measure will be implemented (1:1 sidewall sloping, or temporary trench wall jacks).

The excavation is expected to require up to 5 days to complete.

#### 4.2.2 Sewer Line Trench Excavation

The proposed trench excavation area measures roughly 120' long x 3' wide x 8' deep (106 cubic yards, in-place), and includes removing the abandoned approximate 8-inch diameter sanitary sewer pipe (vitrified clay pipe – VCP). The bottom of the 8-inch VCP is located at 7.5-feet below grade.

Sections of the trench excavation may require hand digging to avoid damaging utilities that cross the trench. If hand digging is required at depths greater than 4-feet, then appropriate excavation safety measures will be implemented (1:1 sidewall sloping, or temporary trench wall jacks).

The excavation is expected to require up to 3 days to complete.

# 4.2.3 Proposed Excavation Confirmation Soil Sampling

Tetra Tech proposes collecting 10 excavation confirmation soil samples from the large excavation – 1 sample from each sidewall center, at a depth of approximately 3 feet (4 samples); 4 samples across the excavation base (with one sample at the base of the 8 feet deep portion of the excavation; and 2 sidewall samples around the island of soil that will remain beneath the 6' x 15' transformer pad. The samples will be collected by hand, placed in 9-ounce glass jars, labeled under chain of custody protocols, and stored on ice pending laboratory analysis. Two sides of the excavation will be sloped 1:1 for safety while collecting samples, and for equipment access at the time of backfilling.

Up to 6 confirmation soil samples will be collected along the base of the trench excavation; one per every 20 linear feet of trench. The samples will be collected by hand from the excavator bucket, placed in 9-ounce glass jars, labeled under chain of custody protocols, and stored on ice pending laboratory analysis. Tetra Tech personnel will not enter the 8-foot deep trench.

The confirmation soil samples will be analyzed for VOCs, including PCE and breakdown products, using EPA Method 8260B. The samples will be analyzed on a 2-day turnaround time by CLS of Rancho Cordova, California.

#### 4.2.4 Soil Stockpiling and Security

The approximate 400 cubic yards (in-place) of excavated soil will be temporarily staged on-site in an area designated by Swinerton Builders; likely on the east side of the overall redevelopment area, away from the IRAP excavation area and closest to open space east of the redevelopment area (pond and golf course). The soil will be transported from the excavation area to the stockpile area by a small dump truck. The stockpile will be placed on an asphalt surface and covered with 6-mil visqueen pending waste profiling and landfill acceptance. The visqueen will be secured with rope and sandbags as needed.

#### 4.2.5 Dust Control

While dust is not expected to be generated during excavation work, water is available onsite to suppress any dust that may be generated. The primary source of dust is expected to be from the dump truck moving the soil to the stockpile staging area over unimproved ground. Any dust from this activity will be controlled by routine water applications by Swinerton's subcontractors during their normal work.

#### 4.3 Excavation Security

Pending excavation backfill, after receipt of exception confirmation sample data, the trench excavation will be secured with steel trench plate. The larger excavation area, located behind a secured area of the Swinerton redevelopment site already, will be further secured with orange construction fencing until backfilled.

# 4.4 Waste Profiling and Disposal

Tetra Tech will collect three discrete soil samples from the stockpiled soil (approximately 500 cubic yards, ex-situ) for waste profiling purposes. The samples will be collected by hand, placed in 9-ounce glass jars, labeled under chain of custody protocols, and stored on ice pending laboratory analysis.

The profile soil samples will be analyzed for VOCs and total petroleum hydrocarbons in the gasoline range (TPH-g) using EPA Method 8260B, TPH-diesel and TPH-motor oil using EPA Method 8015M, and LUFT 5 Metals using EPA Method 6010. The samples will be analyzed on a 2-day turnaround time by CLS of Rancho Cordova, California.

The soil, based on the existing in-situ data, will be disposed of as a Class II waste. Once accepted, the soil will be loaded and transported off-site for disposal at Potrero Hills Landfill in Suisun City, California. The soil stockpile from the recent soil boring investigation work will be included in the off-haul. Off-site disposal is anticipated to occur approximately 7 to 10 days following completion of soil excavation.

# 4.5 Backfill and Compaction

Swinerton Builders will be responsible for excavation backfill and compaction, in order to meet specifications needed for construction of Building K.

# 5.0 CLOSURE

Tetra Tech is prepared to begin implementation of the IRAP as soon as possible.

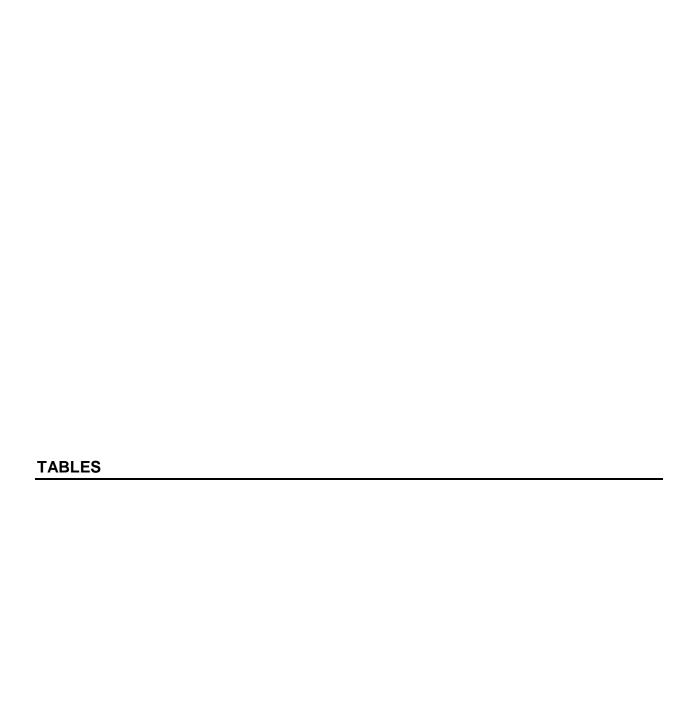


TABLE 1
Analytical Results Summary - Soil
Former Rockridge Cleaners Area
5100 Broadway (Former 5114 tenant space)
Oakland, California

						\	/OCs - EPA 826	0B			
0 1		5					(µg/Kg)				
Sample Location	Date Sampled	Depth (feet, bgs)	Acetone	Freon 12	n-Butylbenzene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC
					cinty of Former Dry			•	,	, -	
DC-SB-1	7/30/2015	1	< 100	< 10	< 5.0	6.0	< 5.0	5.0	< 5.0	< 5.0	< 1
	7/30/2015	5	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DC-SB-2	7/30/2015	1	< 100	< 10	< 5.0	36	21	25	< 5.0	< 5.0	< 1
	7/30/2015	5	< 100	< 10	< 5.0	< 5.0	36	27	< 5.0	< 5.0	< 1
DC-SB-3	7/30/2015	1	< 100	< 10	< 5.0	11	< 5.0	< 5.0	< 5.0	< 5.0	< 1
	7/30/2015	5	< 100	< 10	< 5.0	12	12	26	< 5.0	< 5.0	< 1
DC-SB-4	7/30/2015	1	< 100	< 10	< 5.0	10	15	16	< 5.0	< 5.0	< 1
	7/30/2015	5	< 100	< 10	< 5.0	6.9	19	23	< 5.0	< 5.0	< 1
DC-SB-5	7/30/2015	1	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
	7/30/2015	5	< 100	< 10	< 5.0	19	9.2	23	< 5.0	< 5.0	< 1
DC-SB-6	7/30/2015	1	< 100	< 10	< 5.0	21	10	8.0	< 5.0	< 5.0	< 1
20 02 0	7/30/2015	5	< 100	< 10	< 5.0	12	17	23	< 5.0	< 5.0	< 1
DC-SB-7	7/30/2015	1	< 100	< 10	< 5.0	6.8	< 5.0	5.2	< 5.0	< 5.0	< 1
2002.	7/30/2015	5	< 100	< 10	< 5.0	7.5	< 5.0	6.0	< 5.0	< 5.0	< 1
DC-SB-8	7/30/2015	1	< 100	< 10	< 5.0	7.8	< 5.0	< 5.0	< 5.0	< 5.0	< 1
20 02 0	7/30/2015	5	< 100	< 10	< 5.0	8.1	12	6.3	< 5.0	< 5.0	< 1
DC-SB-9	7/30/2015	1	< 100	< 10	< 5.0	54	6.4	< 5.0	< 5.0	< 5.0	< 1
20 02 0	7/30/2015	5	< 100	< 10	< 5.0	39	8.7	6.0	< 5.0	< 5.0	< 1
DC-SB-10	7/30/2015	1	< 100	< 10	< 5.0	2,700	5.6	< 5.0	< 5.0	< 5.0	< 1
DO 0B 10	7/30/2015	5	< 100	< 10	< 5.0	1,100	12	5.6	< 5.0	< 5.0	< 1
DC-SB-11	7/30/2015	1	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DO 0D 11	7/30/2015	5	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DC-SB-12	7/30/2015	1	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DO 0D 12	7/30/2015	5	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DC-SB-13'	7/30/2015	1	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DO-0D-13	7/30/2015	5	< 100	< 10	< 5.0	< 5.0	8.6	8.5	< 5.0	< 5.0	< 1
DC-SB-14	7/30/2015	1	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DO 0D 14	7/30/2015	5	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
					ner Dry Cleaner and A					< 0.0	
DC-SB-15	9/8/2015	12	120	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DO-0D-10	9/8/2015	17	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DC-SB-16	9/8/2015	8	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
סו-סס-וט	9/8/2015	13	< 100	< 10	< 5.0	< 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0	< 1
	9/8/2015	15	150	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DC-SB-17	9/8/2015	12	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1
DO-0D-11	9/8/2015	15	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1

TABLE 1
Analytical Results Summary - Soil
Former Rockridge Cleaners Area
5100 Broadway (Former 5114 tenant space)
Oakland, California

						V	/OCs - EPA 8260 (μg/Kg)	В			
Sample Location	Date Sampled	Depth (feet, bgs)	Acetone	Freon 12	n-Butylbenzene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC
DC-SB-18	9/8/2015	11.5	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/8/2015	17	130	< 10	5.3	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-19	9/9/2015				NO SOIL SAMPL	ES - ENCOUN	TERED BEDROC	CK AT 4 feet, bgs			
DC-SB-20	9/9/2015	6	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/9/2015	10	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/9/2015	17	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-21	9/9/2015	7	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/9/2015	13.5	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/9/2015	17	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-22	9/9/2015				NOT COMPLETE	D - WATER LIN	IE/NEARBY UTIL	LITY CONFLICTS			
DC-SB-23	9/10/2015	7.5	< 100	< 10	< 5.0	< 5.0	20	< 5.0	< 5.0	< 5.0	< 10
	9/10/2015	14.5	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-24	9/10/2015	9.5	650	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/10/2015	13.5	170	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/10/2015	17	200	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-25	9/10/2015	9	220	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/10/2015	11.5	130	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/10/2015	16.5	220	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/10/2015	19	< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-26	9/10/2015	9.5	140	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
	9/10/2015	14.5	110	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
ESL - (	Commercial (<3m /	>3m)	500 / 500	NV	NV	700 / 700	460 / 460	190 / 190	670 / 670	1,000 / 1,000	85 / 85
С	HHSL - Commercia	al	NV	NV	NV	NV	NV	NV	NV	NV	NV

#### Notes:

Soil borings DC-SB-1 through DC-SB-14 compeleted on bare ground, shortly after building slab and asphalt out back were removed (July 27-29, 2015). Former building pad was 4-5" thick concrete, and asphalt out back was 8-10-inches thick.

ESL Environmental Screening Level, Regional Water Quality Control Board, Table A-2 (< 3m) and C-2 (> 3m), Commercial Land Use, Interim Final, December 2013.

CHHSL California Human Health Screening Level, Department of Toxic Substances Control (DTSC) / Office of Environmental Health Hazard Assessment (OEHHA), soil screening numbers for Commercial land use, Table 1, September 2010.

μg/Kg micrograms per kilogram or parts per billion (ppb).

NV No Value

Exceeds ESL Value

**TABLE 2** 

# Analytical Results Summary - Soil Vapor Former Rockridge Cleaners Area 5100 Broadway (Former 5114 tenant space) Oakland, California

						V	DCs - EPA TO-1 (μg/m3)	15				Modified ASTN D-1946
Sample Location	Date	Depth (feet, bgs)	Acetone	Freon 12	Benzene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichlorethene	1,1-Dichloroethene	Vinyl Chloride	Helium (%)
			Shallow So.	il Vapor - Imn	nediate Vicin	ity of Former D	ry Cleaner and	l Adjacent Fori	ner Tenant S	paces		
DC-VMP-1	8/4/2015	4.75 - 5					No Sample (1)					NA
DC-VMP-2	8/4/2015	4.75 - 5	< 520	600	< 180	85,000	130,000	120,000	2,300	680	8,100	< 0.11
DC-VMP-3	8/4/2015	4.75 - 5	< 140	79	34	11,000	4,000	4,400	< 23	< 23	30	5.4
DC-VMP-4	8/4/2015	4.75 - 5	< 140	< 72	< 46	54,000	41,000	2,600	< 57	< 57	< 37	< 0.12
DC-VMP-5	8/4/2015	4.75 - 5	< 130	2,000	< 44	45,000	39,000	24,000	1,400	280	7,100	< 0.11
DC-VMP-6	8/4/2015	4.75 - 5	< 35,000	< 18,000	< 12,000	19,000,000	99,000	65,000	< 15,000	< 15,000	13,000	< 0.12
DC-VMP-7	8/4/2015	4.75 - 5	53	12	< 3.7	140	< 6.3	< 4.6	< 4.6	< 4.6	< 3.0	< 0.14
DC-VMP-8	8/4/2015	4.75 - 5	< 270	3,300	< 37	380	720	7,400	380	55	6,100	< 0.11
	Sha	allow and De	ep Soil Vapor	- Immediate	Vicinty of Fo	ormer Dry Clea	ner and Adjace	ent Former Ten	ant Spaces, a	and Step-Out	Locations	L
DC-VMP-9	9/15/2015		34	< 6.2	15	< 8.5	< 6.8	< 5.0	< 5.0	< 5.0	4.8	< 0.13
	9/15/2015		30	< 6.2	12	< 8.5	< 6.8	12	< 5.0	< 5.0	13	< 0.13
DC-VMP-10	9/15/2015	4.75 - 5	< 120	< 25	< 16	100	220	1,700	110	29	5,300	< 0.13
		12.75 - 13					No Sample (1)					NA
DC-VMP-11	9/15/2015	4.75 - 5	630	< 120	< 78	720	1,300	4,300	250	< 96	17,000	< 0.12
		12.75 - 13	54	< 6.5	8.4	39	40	30	< 5.2	< 5.2	13	< 0.13
DC-VMP-12	9/15/2015		< 380	< 78	< 51	1,600	12,000	17,000	620	140	12,000	< 0.12
56 ) (145 46	0/4-/004-	13.75 - 14					No Sample (1)					NA
DC-VMP-13			< 48	< 10.0	8.9	1,500	31	< 8.0	< 8.0	< 8.0	< 5.2	< 0.20
DC-VMP-14	9/15/2015		330	< 5.8	63	17	38	95	33	6.9	210	< 0.12
DC-VMP-15			150 150	< 6.0 < 5.8	18 54	17 680	50 310	90 1,200	17 100	12 13	500 850	< 0.12 < 0.12
DO- AIME - 12		12.75 - 13	88	< 6.0	11	9.1	7.3	1,200	< 4.8	< 4.8	35	< 0.12
DC-VMP-16	3/ 13/2010	12.70 10		٧ ٥.٥			eted due to utilit		₹.0	\ т.о		NA
DC-VMP-17	9/15/2015	4.75 - 5	57	< 6.1	13	24	< 6.6	< 4.9	< 4.9	< 4.9	< 3.2	0.39
		14.75 - 15	120	< 6.1	16	10	< 6.6	7.3	< 4.9	< 4.9	31	< 0.12

# TABLE 2

# Analytical Results Summary - Soil Vapor Former Rockridge Cleaners Area 5100 Broadway (Former 5114 tenant space) Oakland, California

	VOCs - EPA TO-15 (μg/m3)										Modified ASTM D-1946	
Sample Location	Date	Depth (feet, bgs)	Acetone	Freon 12	Benzene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichlorethene	1,1-Dichloroethene	Vinyl Chloride	Helium (%)
DC-VMP-18	9/15/2015	4.75 - 5	50	< 6.2	15	160	250	1,100	30	< 5.0	22	1.3
	9/15/2015	12.75 - 13	< 30	< 6.2	5.8	48	56	190	5.8	< 5.0	4.1	< 0.13
DC-VMP-19	9/15/2015	4.75 - 5	40	< 5.8	10	< 7.9	< 6.3	< 4.6	< 4.6	< 4.6	< 3.0	0.90
	9/15/2015	10.75 - 11	96	< 6.1	9.7	< 8.4	< 6.6	11	< 4.9	< 4.9	21	< 0.12
DC-VMP-20	9/15/2015	4.75 - 5	59	< 6.1	16	120	8.1	< 4.9	< 4.9	< 4.9	5.6	< 0.12
	9/15/2015	9.75 - 10	< 580	< 120	< 77	< 160	< 130	< 96	< 96	< 96	< 62	< 0.12
ESL	- Commerc	ial	140,000,000	NV	420	2,100	3,000	31,000	260,000	880,000	160	NA
CHHS	SL - Comme	rcial	NV	NV	280	600	1,600	120,000	240,000	NV	95	NA

Notes:	
NOTE:	

Additional compounds detected below screening values; see laboratory data sheets.

(1) No sample due to water in probe. For VMP-1, leaking water valve boxes in immediate vicinty are suspected source of water, damaged during recent building demolition.

μg/m3 micrograms per cubic meter

ESL RWQCB Environmental Screening Level, Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion, Table E-2, Interim Final, December 2013.

CHHSL California Human Health Screening Level (CHHSL), Office of Environmental Health Hazard Assessment (OEHHA), Table 2; Soil-Gas Screening Values, September 23, 2010.

NV No Value NA Not Applicable

Exceeds ESL Value

TABLE 3
Analytical Results Summary - Groundwater
Former Rockridge Cleaners Area
5100 Broadway (Former 5114 tenant space)
Oakland, California

						V	/OCs - EPA 8260 (μg/Kg)	В			
Sample Location	Date Sampled	Static Water Depth (feet, bgs)	Acetone	Freon 12	n-Butylbenzene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	VC
DC-SB-15-GW	9/8/2015		< 100	17	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-16-GW	9/8/2015		< 100	47	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-17-GW	9/8/2015		< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-18-GW	9/8/2015		< 100	21	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-19-GW	9/9/2015			NC	GROUNDWATER S	AMPLE - ENC	COUNTERED BEI	DROCK AT 4 feet	, bgs		
DC-SB-20-GW	9/9/2015		< 100	47	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-21-GW	9/9/2015		< 100	39	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-22-GW	9/9/2015				NOT COMPLETED	- WATER LIN	NE/NEARBY UTIL	ITY CONFLICTS			
DC-SB-23-GW	9/10/2015		< 100	24	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-24-GW	9/10/2015		< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-25-GW	9/10/2015		< 100	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
DC-SB-26-GW	9/10/2015		< 100	75	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10
E	SL - Commercial		Use Soil Gas	NV	NV	640	1,300	26,000	120,000	130,000	18
	MCL		6,300 (1)	1,000 (2)	260 (2)	5	5	6	10	6	0.5

ESL Environmental Screening Level, Regional Water Quality Control Board, Table E-1 (fine-coarse mix), Commercial Land Use, Interim Final, December 2013.

MCL California State Water Resouces Control Board, Maxium Contaminant Level, on-line database, 10/05/15.

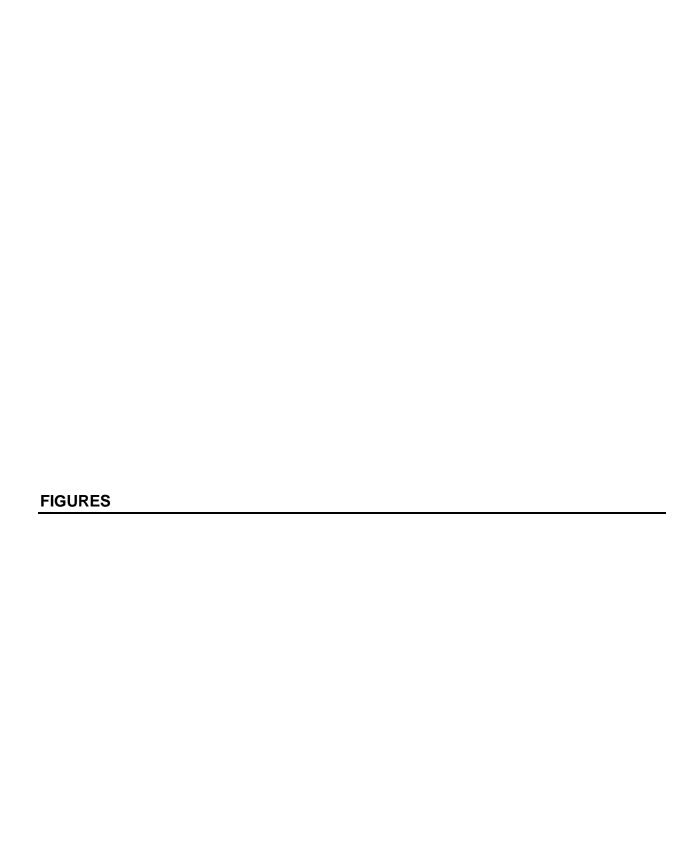
μg/L micrograms per liter or parts per billion (ppb).

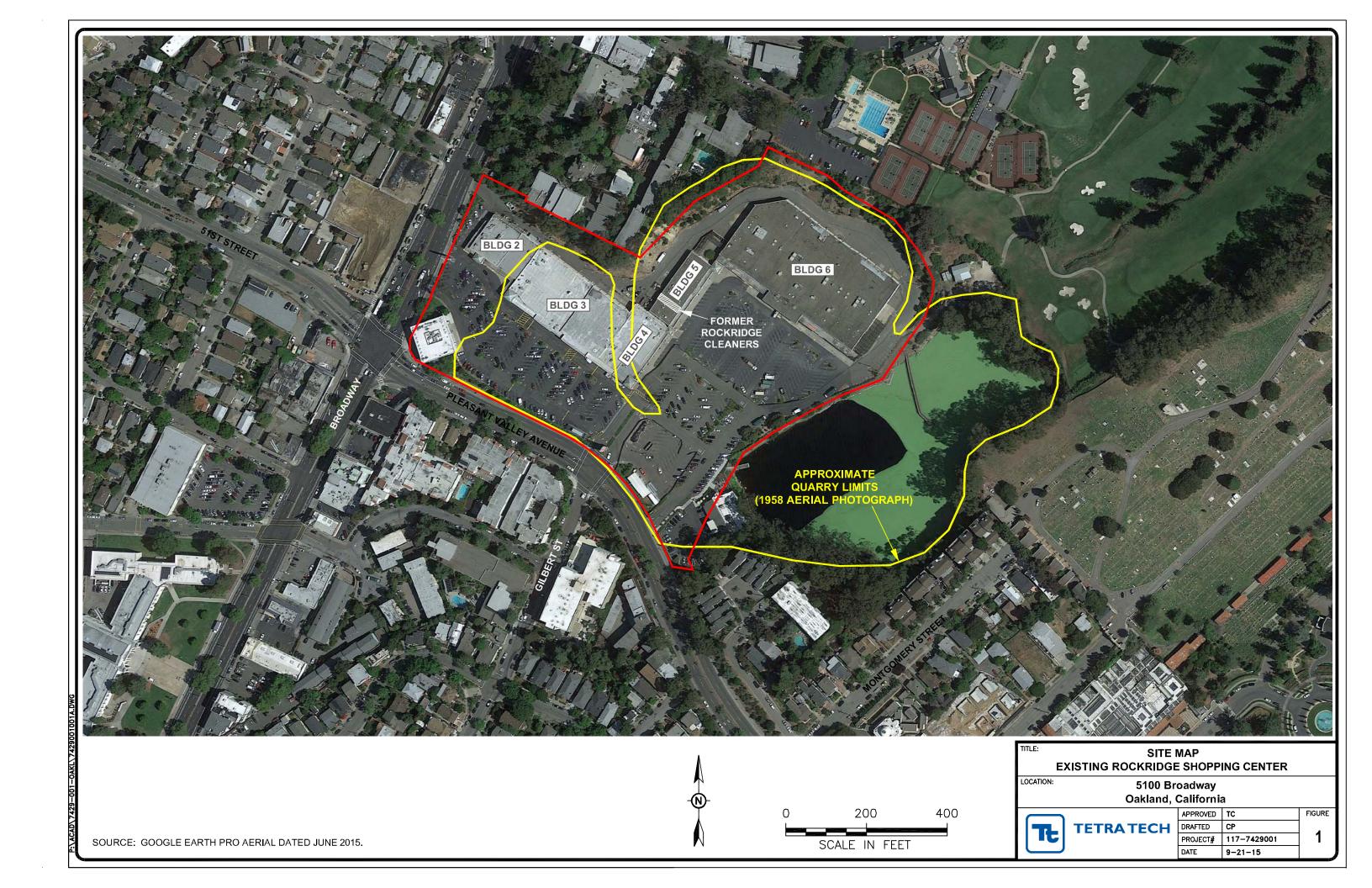
NV No Value

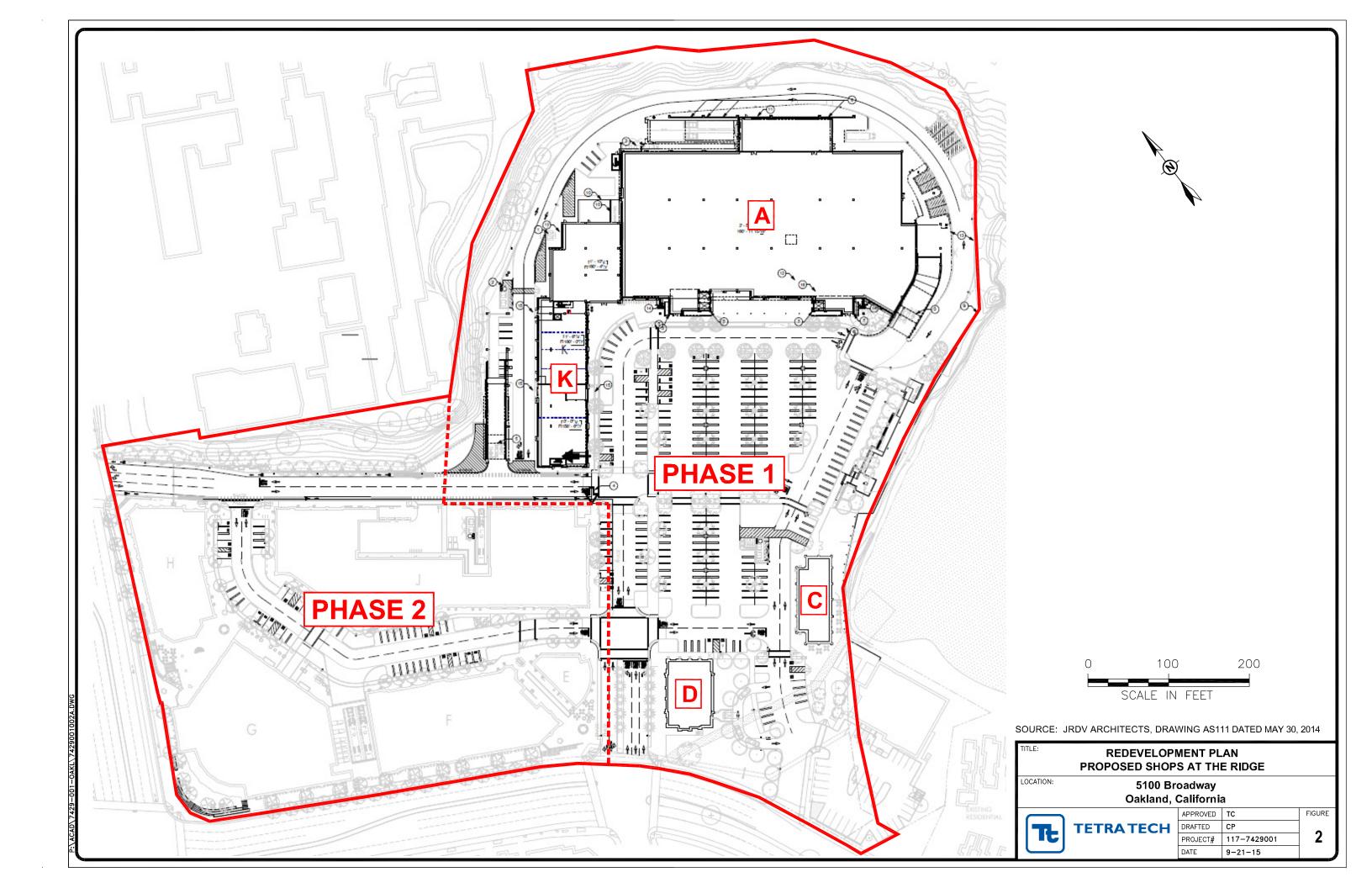
Exceeds ESL or MCL Value

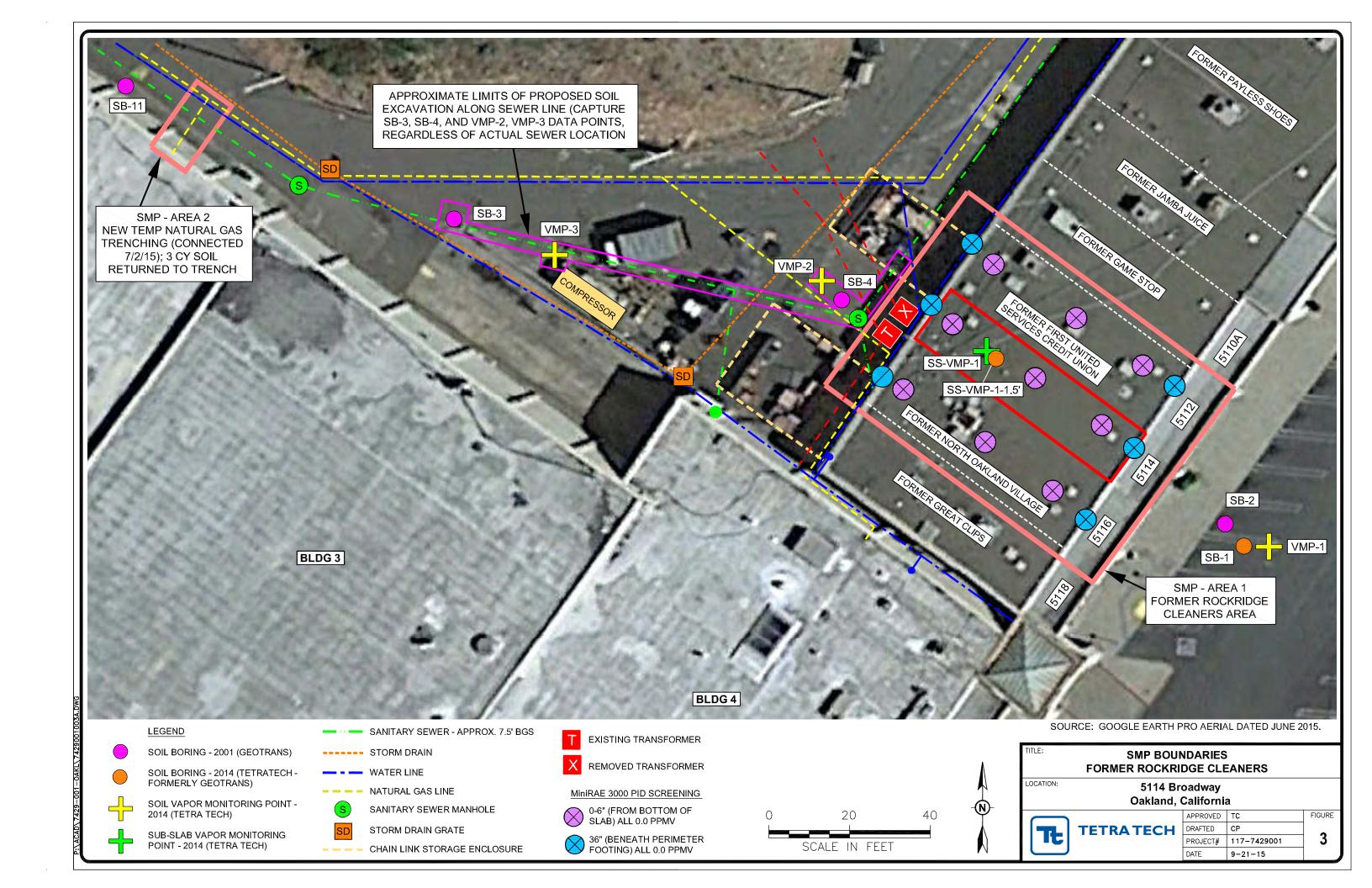
(1) No MCL value. Value represents USEPA IRIS Reference Dose as a drinking water level (Suggested No-Adverse-Response Levels for non-cancer health effects).

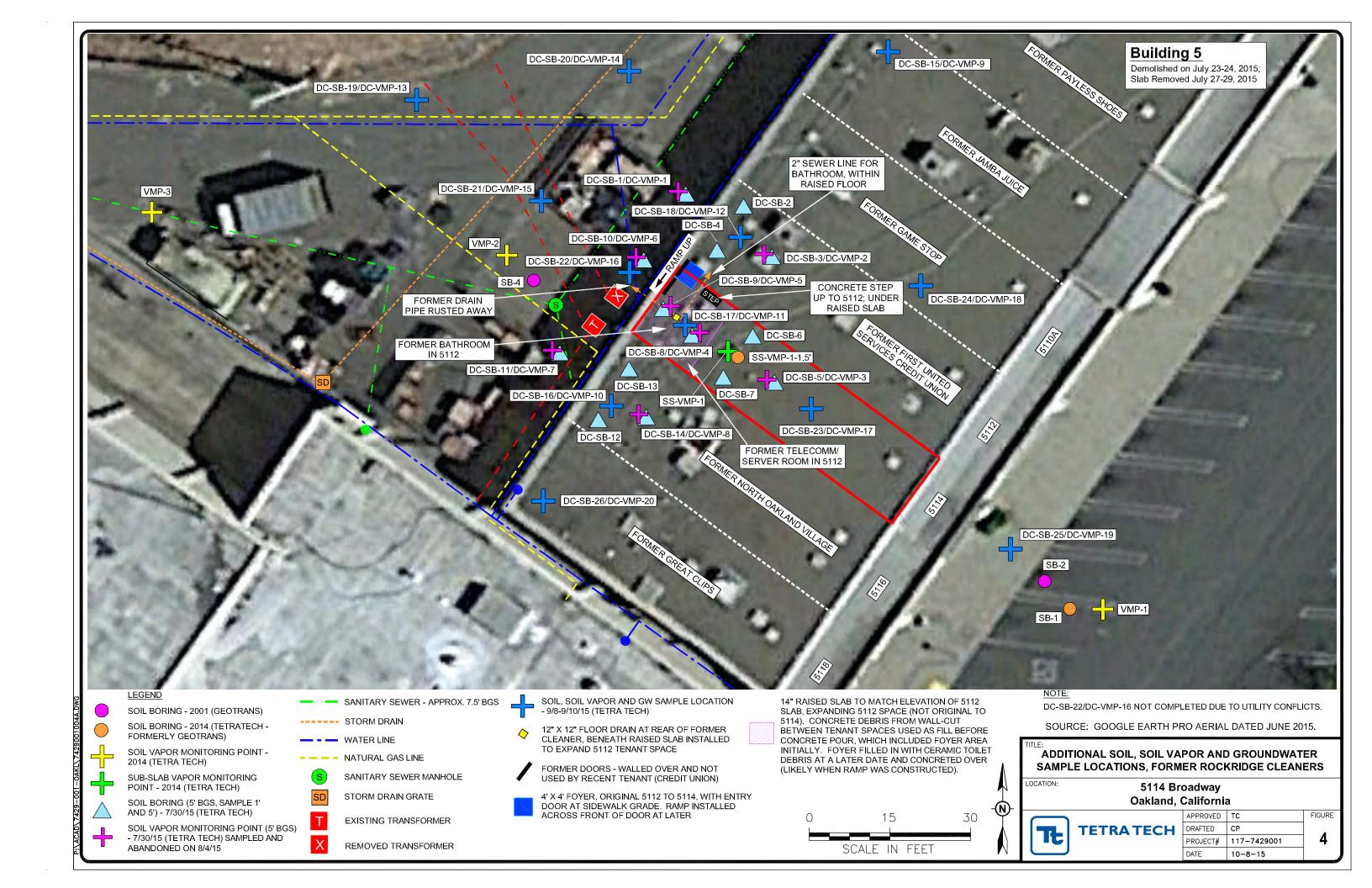
(2) No MCL value. Value represents California Department of Public Health Notification Level.

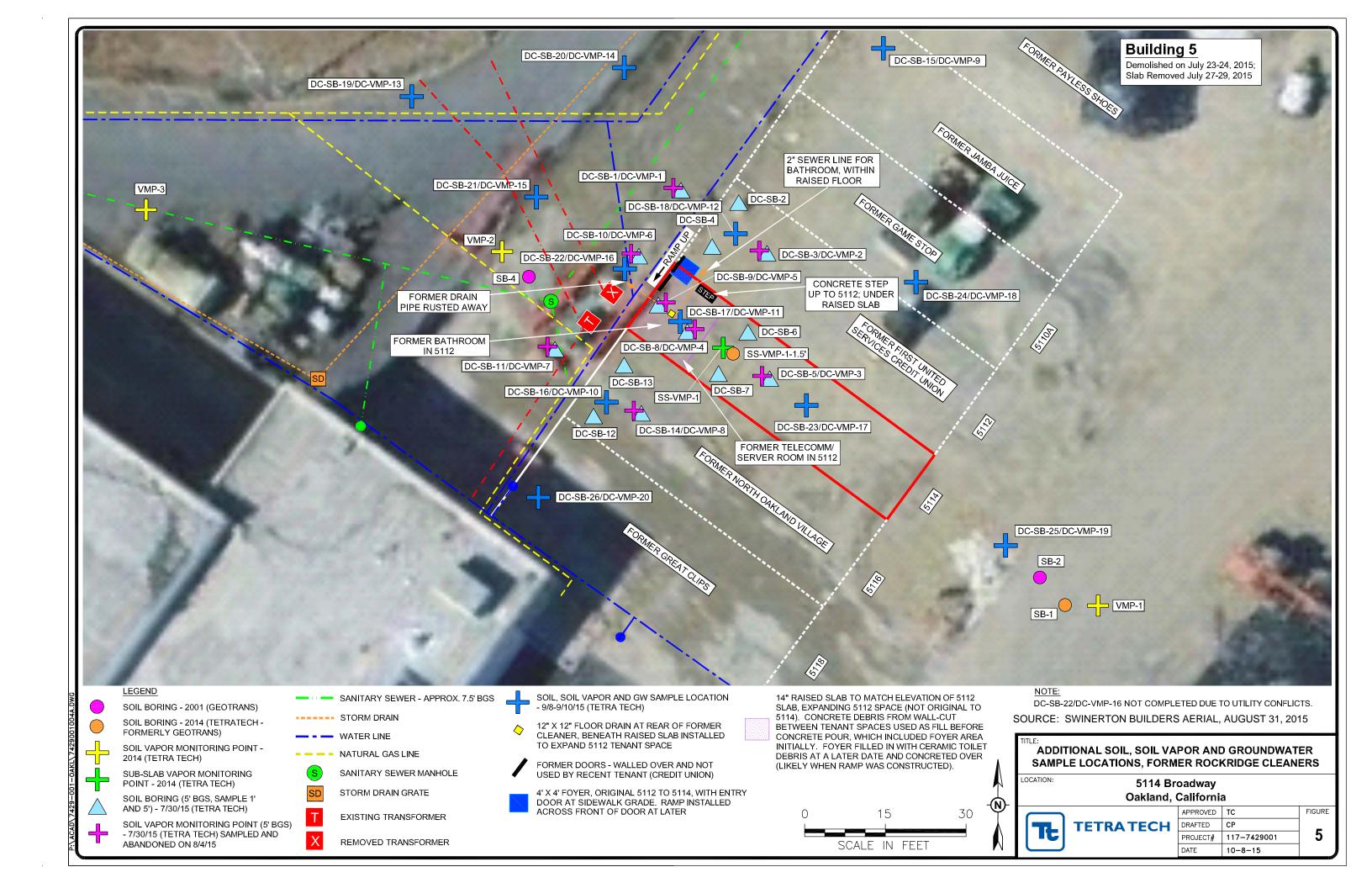


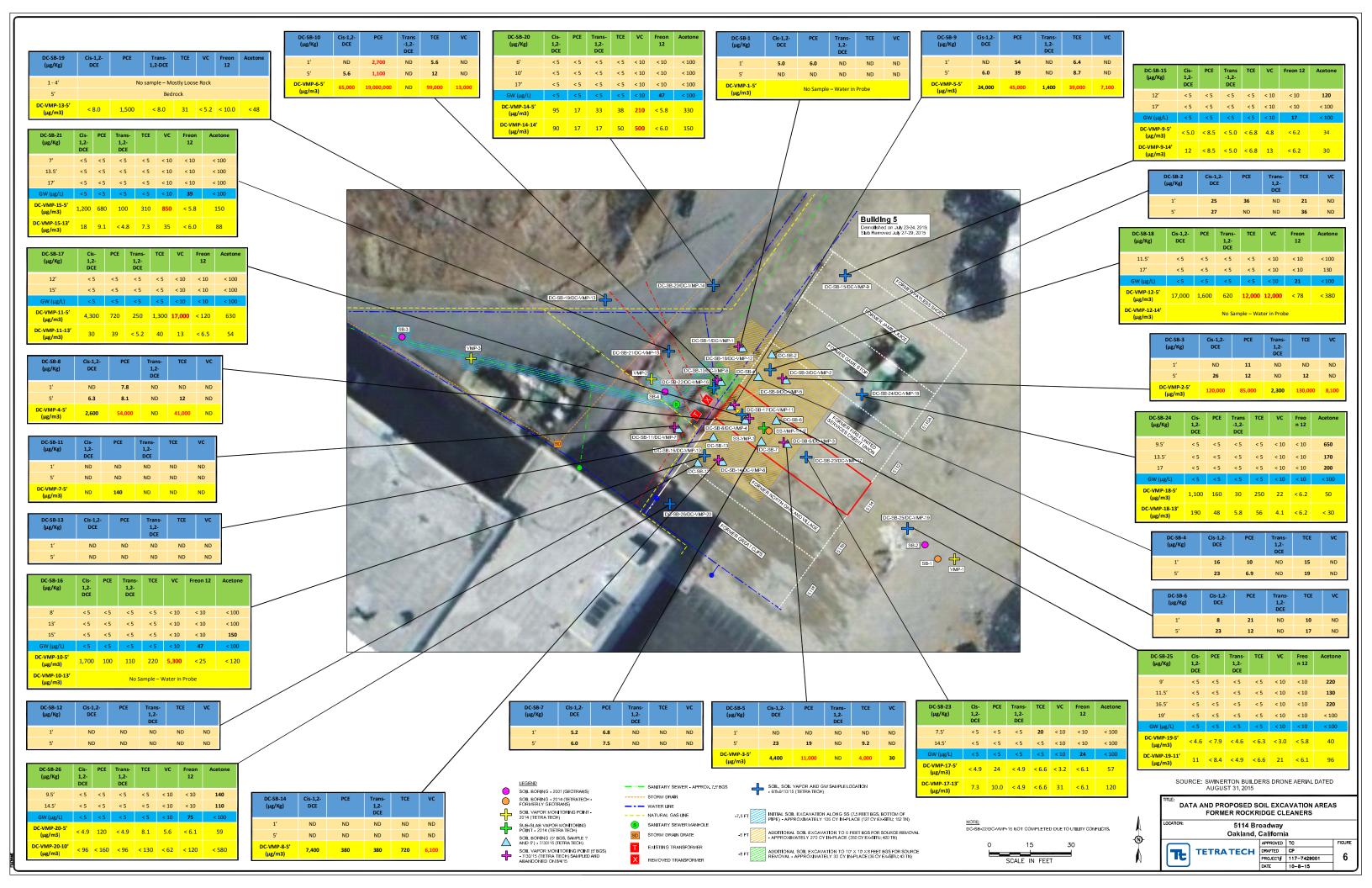


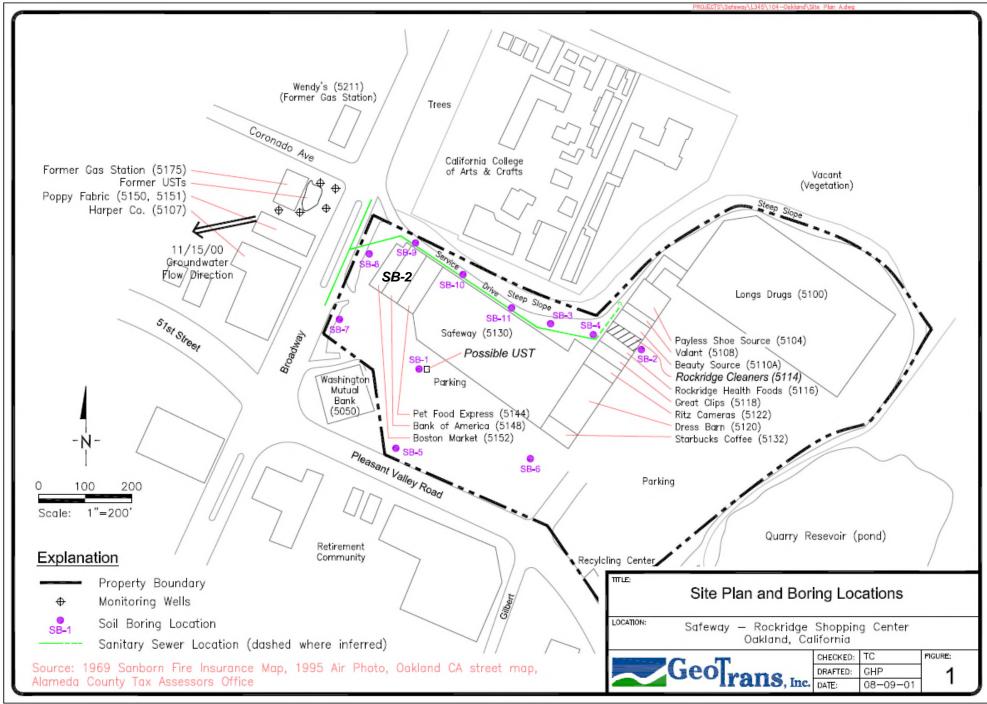












**SOURCE**: Addendum to Screening Level Phase II Environmental Assessment, Rockridge Shopping Center, 5100 Broadway, Oakland, California, dated August 10, 2001 (GeoTrans, Inc.)

#### Soil Data

	Sample Depth	PCE	Other VOCs	BTEX	MTBE	7	ΓΡΗ (mg/kį	g)	<b>Total Depth</b>	DTW
Sample ID	(ft, bgs)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	Gasoline	Diesel	Motor oil	(ft, bgs)	(ft, bgs)
SB-1	10	ND (<5.0)	ND	ND	ND (<5.0)	1.6	ND (<1.0)	ND (<1.0)	20	NE
SB-2	10	ND (<5.0)	ND	ND	ND (<5.0)				20	17
SB-3	4	14	ND	ND	ND (<5.0)				4.5	NE
SB-4	3.5	17	ND	ND	ND (<5.0)				4	NE
SB-5	6	ND (<5.0)	ND	ND	ND (<5.0)				10	NE
SB-9	5	ND (<5.0)	ND	ND	ND (<5.0)				9	8.8
SB-11	5	6.3	ND	ND	ND (<5.0)					
	10	ND (<25)	ND	ND	ND (<5.0)				23	NE
	15	ND (<25)	ND	ND	ND (<5.0)				-	

#### **Groundwater Data**

	PCE	Other VOCs	BTEX	MTBE
Sample ID	(μg/L)	(μg/L)	(μg/L)	(μg/L)
SB-2	<1.0	Freon 12 – 14	B – 1.7	ND (<1.0)
SB-9	<5.0	ND	ND	48

2001 Soil Boring Locations and Analytical Results

LOCATION:

Rockridge Shopping Center 5100 Broadway Oakland, California



CHECKED:	TRC	FIGURE:
DRAFTED:	KDH	7
FILE:	117-4704123.01	
DATE:	06-06-144	

APPENDIX A Photographic Log – Building 5 Demolition and Field Work



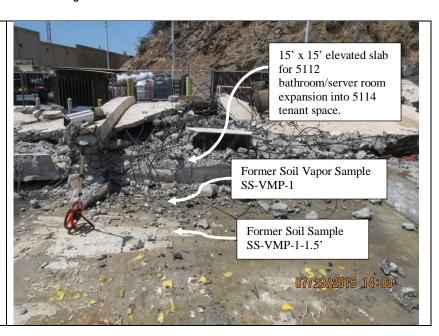
# Photographic Documentation Building Demolition and Soil Boring and Vapor Monitoring Probe Installation Former Rockridge Dry Cleaner – 5100 Broadway

(5114 tenant space area) Oakland California Project No.: 117-7429001.06

Photo: 1

Description: During building demolition, it was discovered that the bathroom/server room at the rear of 5112 was actually the rear 15-feet of the 5114 dry cleaner tenant space, constructed atop a concrete pad installed to match the 5112 tenant space floor elevation.

**Orientation:** Northwest



### Photo: 2

**Description**: Rear of dry cleaner tenant space. Demolition revealed a rusted steel door, with bottom of door behind the concrete ramp, at sidewalk grade. Sidewalk is beneath the ramp.

**Orientation:** Southeast





# Photographic Documentation Building Demolition and Soil Boring and Vapor Monitoring Probe Installation Former Rockridge Dry Cleaner – 5100 Broadway

(5114 tenant space area) Oakland California Project No.: 117-7429001.06

Photo: 3

**Description:** Rusted out steel door. Formerly served both 5112/5114 tenant spaces.

**Orientation:** Southeast



#### Photo: 4

Description: Elevated slab removed from rear of 5114. Consists of concrete wall debris created when 5112 expanded into 5114 space. The notch in the slab represents the 4'x4' foyer entry for the original steel door that served both 5112 and 5114 spaces. Foyer was not initially filled in when elevated slab was installed in 5114.





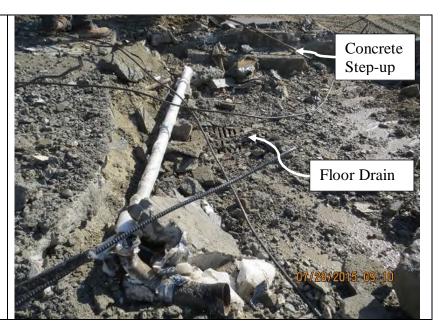
# Photographic Documentation Building Demolition and Soil Boring and Vapor Monitoring Probe Installation Former Rockridge Dry Cleaner – 5100 Broadway

(5114 tenant space area) Oakland California Project No.: 117-7429001.06

Photo: 5

**Description:** 12" x 12" steel floor drain in the original concrete slab of 5114, beneath the elevated slab used to expand 5112 into 5114. White wrapped piping is more recent sewer line for bathroom in 5112 space. Concrete step up from 5114 to 5112 visible in background, used prior to 5112 expansion into 5114.

**Orientation:** Northeast



### Photo: 6

**Description:** PID reading of floor drain immediately after uncovering (0.0 ppmv). Associated drain piping headed to rear of tenant space, but was only identified by a rust stain in the soil.

#### **Orientation:**





(5114 tenant space area) Oakland California Project No.: 117-7429001.06

Photo: 7

**Description:** Looking southeast along the length of the former 5114 tenant space in Building 5; former Rockridge Cleaners. Near, square area, represents bathroom/server room raised floor area, most recently associated with the 5112 tenant space (to left).

**Orientation:** Southeast

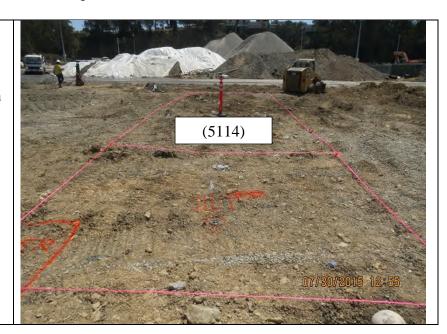
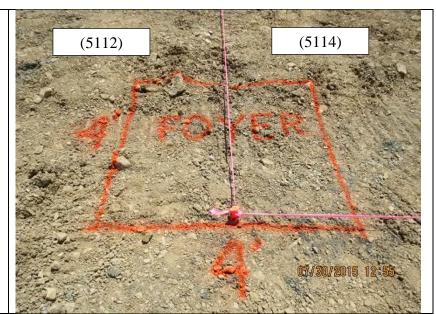


Photo: 8

**Description:** Former entrance foyer to both 5112 and 5114 tenant spaces. The 5112 floor slab was elevated 14" compared to the 5114 floor slab.

**Orientation:** Southeast





(5114 tenant space area) Oakland California Project No.: 117-7429001.06

Photo: 9

**Description:** Former 12" x 12" floor drain located in 5114 floor slab, subsequently covered by raised floor slab during expansion of 5112 tenant space into the 5114 tenant space (15' x 15' area to back).

**Orientation:** Southeast

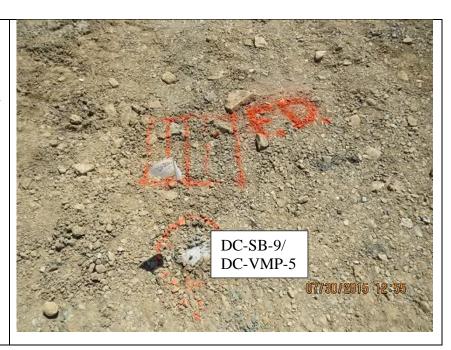


Photo: 10

**Description:** Looking southwest along the rear of former 5112 tenant space.

**Orientation:** Southwest





(5114 tenant space area) Oakland California Project No.: 117-7429001.06

Photo: 11

**Description:** Looking northwest along the length of the former 5114 tenant space in Building 5; former Rockridge Cleaners.

**Orientation:** Northwest



Photo: 12

**Description:** Sample point DC-SB-14/DC-

VMP-8.

**Orientation:** Northwest





(5114 tenant space area) Oakland California Project No.: 117-7429001.06

Photo: 13

**Description:** Sample point DC-SB-3/DC-VMP-2. Water valve box and DC-SB-1/DC-VMP-1 (next to orange delineator) visible in background. Water line is live.

**Orientation:** Northwest



Photo: 14

**Description:** Sample point DC-SB-10/DC-VMP-6. Remnant slab of 8- to 10-inch thick asphalt is visible next to bollard. Water valve box visible left of frame.

**Orientation:** Southwest





(5114 tenant space area) Oakland California Project No.: 117-7429001.06

Photo: 15

**Description:** Sample point DC-SB-11/DC-VMP-7.

**Orientation:** Northeast



Photo: 16

**Description:** Looking northwest along the dividing line between 5114 and 5116 tenant spaces.

**Orientation:** Northwest





(5114 tenant space area) Oakland California Project No.: 117-7429001.06

Photo: 17

**Description:** Summa canisters set up for sampling VMPs on August 4, 2015.

**Orientation:** West



Photo: 18

**Description:** Typical VMP sampling setup.

**Orientation:** N/A



APPENDIX B
ACPWA Soil Boring Permits



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 07/27/2015 By jamesy Permit Numbers: W2015-0650 to W2015-0651 Permits Valid from 07/30/2015 to 07/31/2015

Application Id: 1437762444589 City of Project Site:Oakland

Site Location: 5100 Broadway (Construction area of Rockridge Shopping Center)

Project Start Date: 07/30/2015 Completion Date:07/31/2015
Assigned Inspector: Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com

Applicant: Tetra Tech Inc - Keith McIntyre Phone: 916-853-4566

2969 Prospect Park Drive, Suite 100, Rancho Cordova, CA 95670

Property Owner: Terramar Retail Centers Rick Henderson Phone: 925-738-1232

5918 Stoneridge Mall Road, Pleasanton, CA 94588

Client: \*\* same as Property Owner \*\*

**Contact:** Keith Hoofard **Phone:** 916-853-4523 **Cell:** 916-709-4732

Receipt Number: WR2015-0366 Total Amount Paid: \$530.00

Payer Name : Keith E McIntyre Paid By: VISA PAID IN FULL

#### **Works Requesting Permits:**

Borehole(s) for Investigation-Vapor Sampling 24 to 48 hours only - 8 Boreholes

Driller: Vannucci Technologies - Lic #: 814760 - Method: DP Work Total: \$265.00

#### **Specifications**

Permit Issued Dt Expire Dt # Hole Diam Max Depth
Number Boreholes

W2015- 07/27/2015 10/28/2015 8 4.00 in. 5.00 ft

0650

#### **Specific Work Permit Conditions**

- 1. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
- 2. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
- 3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 4. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.

- 5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 6. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 8. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

#### 9. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

- 10. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Temp Vapor wells shall not be converted to monitoring Vapor wells, without a seperate permit application process.
- 11. Vapor monitoring wells constructed with tubing shall be decomissioned by complete removal of tubing, grout seal, and fill material of sand or bentonite. Fill material may be removed by hand auger if material can be removed completely.

Vapor monitoring wells constructed with pvc pipe less than 2" shall be overdrilled to total depth.

Vapor monitoring wells constructed with 2" pvc pipe or larger may be grouted by tremie pipe (any depth) or pressure grouted (less than 30', 25 psi for 5 min).

Work Total: \$265.00

Borehole(s) for Investigation-Environmental/Monitorinig Study - 8 Boreholes

Driller: Vannucci Technologies - Lic #: 814760 - Method: DP

#### Specifications

 Permit
 Issued Dt
 Expire Dt
 #
 Hole Diam
 Max Depth

 Number
 Boreholes

 W2015 07/27/2015
 10/28/2015
 8
 2.50 in.
 5.00 ft

 0651

#### **Specific Work Permit Conditions**

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall

be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

- 2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
- 3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
- 4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 6. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

#### 7. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

- 8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 09/02/2015 By jamesy

Permit Numbers: W2015-0823

Permits Valid from 09/08/2015 to 09/10/2015

City of Project Site: Oakland Application Id: 1441041568220

Site Location: 5100 Broadway (former 5114 tenant space)

**Project Start Date:** 09/08/2015 Completion Date: 09/10/2015

Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Phone: 916-853-1800 x4523 Applicant: Tetra Tech, Inc. - Keith Hoofard

2969 Prospect Park Drive, Suite 100, Rancho Cordova, CA 95670

Rick Henderson Terramar Retail Centers **Property Owner:** Phone: 925-738-1232

5918 Stoneridge Mall Road, Pleasanton, CA 94588

Phone: 925-738-1232 Client: Rick Henderson Terramar Retail Centers

5918 Stoneridge Mall Road, Pleasanton, CA 94588 Contact: Keith Hoofard Phone: 916-853-1800 x4523

Cell: 916-709-4732

Total Due: \$265.00 Receipt Number: WR2015-0434 **Total Amount Paid:** \$265.00

Payer Name : Keith D. Hoofard Paid By: VISA PAID IN FULL

#### **Works Requesting Permits:**

Borehole(s) for Investigation-Vapor Sampling 24 to 48 hours only - 12 Boreholes

Driller: Gregg Drilling & Testing Inc. - Lic #: 485165 - Method: auger Work Total: \$265.00

#### **Specifications**

**Permit** Issued Dt **Expire Dt** Hole Diam Max Depth Number **Boreholes** W2015-09/02/2015 12/07/2015 12 6.00 in. 25.00 ft 0823

#### **Specific Work Permit Conditions**

- 1. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
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property damage, personal injury and wrongful death.

- 5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 6. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 8. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

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Vapor monitoring wells constructed with 2" pvc pipe or larger may be grouted by tremie pipe (any depth) or pressure grouted (less than 30', 25 psi for 5 min).



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 09/30/2015 By jamesy

Permit Numbers: W2015-0930 Permits Valid from 10/05/2015 to 10/08/2015

City of Project Site:Oakland Application Id: 1443028046152

Site Location: 5100 Broadway (former 5114 tenant space)

**Project Start Date:** 10/05/2015 Completion Date: 10/08/2015

Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: Tetra Tech, Inc. - Keith Hoofard **Phone:** 916-853-1800 x4523

2969 Prospect Park Drive, Suite 100, Rancho Cordova, CA 95670 Rick Henderson Terramar Retail Centers **Property Owner:** Phone: 925-738-1232

5918 Stoneridge Mall Road, Pleasanton, CA 94588

Phone: 925-738-1232 Client: Rick Henderson Terramar Retail Centers

5918 Stoneridge Mall Road, Pleasanton, CA 94588

Contact: Keith Hoofard **Phone:** 916-853-1800 x4523

Cell: 916-709-4732

Total Due: \$265.00 Receipt Number: WR2015-0489 **Total Amount Paid:** \$265.00

Payer Name: Keith D Hoofard Paid By: VISA **PAID IN FULL** 

#### **Works Requesting Permits:**

Well Destruction-Vapor monitoring well - 11 Wells

Driller: Gregg Drilling & Testing, Inc. - Lic #: 485165 - Method: over Work Total: \$265.00

#### **Specifications**

Permit #	Issued Date	Expire Date	Owner Well	Hole Diam.	•	Seal Depth	Max. Depth	State Well #	•	DWR #
			ld		Diam.				Permit #	
W2015-	09/30/2015	01/03/2016	DC-VMP-10	5.00 in.	0.25 in.	4.00 ft	13.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-11	5.00 in.	0.25 in.	4.00 ft	13.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-12	5.00 in.	0.25 in.	4.00 ft	14.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-13	5.00 in.	0.25 in.	4.00 ft	5.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-14	5.00 in.	0.25 in.	4.00 ft	14.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-15	5.00 in.	0.25 in.	4.00 ft	13.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-17	5.00 in.	0.25 in.	4.00 ft	13.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-18	5.00 in.	0.25 in.	4.00 ft	13.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-19	5.00 in.	0.25 in.	4.00 ft	11.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-20	5.00 in.	0.25 in.	4.00 ft	10.00 ft	NA	W2015-	NA
0930									0823	
W2015-	09/30/2015	01/03/2016	DC-VMP-9	5.00 in.	0.25 in.	4.00 ft	14.00 ft	NA	W2015-	NA
0930									0823	

#### **Specific Work Permit Conditions**

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to,

properly damage, personal injury and wrongful death.

- 2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
- 4. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.
- 5. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.
- 6. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 7. Remove the Christy box or similar structure. Overdrill or clean out to original depth. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
- 8. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 9. Vapor monitoring wells constructed with tubing shall be decomissioned by complete removal of tubing, grout seal, and fill material of sand or bentonite. Fill material may be removed by hand auger if material can be removed completely.

Vapor monitoring wells constructed with pvc pipe less than 2" shall be overdrilled to total depth.

Vapor monitoring wells constructed with 2" pvc pipe or larger may be grouted by tremie pipe (any depth) or pressure grouted (less than 30', 25 psi for 5 min).

APPENDIX C Soil Boring Logs



PROJ LOCA DRILL SAMP DEPT	ECT NUM ECT NAM TION LING MET LING ME H TO SA SED BY	THOD	Terra ) Broad  Geo	oprobe ' Macro IL (ft)	akland Ikland ( Core	fmr 511	BORING/WELL NUMBER DC-SB-1/DC-VMP-1  DATE DRILLING BEGAN 7/30/2015  Tenant)  DATE DRILLING ENDED 7/30/2015  REMARKS Fill material to total depth				
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)				
0.0			5'	- 5 -	GM		0-5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.  Installed temporary VMP  Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing  Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel  Annular Material: 0-4' - Hydrated bentonite (gel) 4'-5' - #2/12 sand (34% porosity)  VMP not sampled on 8/4/15 due to water in screen; pulled from ground; gel self-sealed boring.				
							De MA				

Name of Geologist

TT GEO (NO COORDINATES) TERRAMAR - OAKLAND GPJ LAEWNN01.GDT 10/27/15

PROJ LOCA DRILL SAMF DEPT	ECT NUI ECT NAI ATION LING MET PLING ME TH TO SA GED BY	ME 51 THOI THO	Ter 100 Broa D G DD ATED S	ram adw Seor 5' I	orobe Macro ( . (ft)	akland kland ( Core	fmr 51	BORING/WELL NUMBER DC-SB-2  DATE DRILLING BEGAN 7/30/2015  Attenant) DATE DRILLING ENDED 7/30/2015  REMARKS Fill material to total depth
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
0.0		THE REAL PROPERTY.	1'		  	GM		0-5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND,GPJ LAEWNN01.GDT 10/27/15								

Name of Geologist



PROD LOCA DRIL SAMI DEPT	LING METHO PLING METHO	Terri 100 Broa D Ge DD ATED SO	amar - Oa dway, Oal eoprobe 5' Macro ( OIL (ft)	kland kland (fmr Core	DAT		DC-SB-3/DC-VMP-2 7/30/2015 7/30/2015 al to total depth
PID (ppm)	BLOW COUNTS RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH DEPTH (ft. BGL)	U.S.C.S.		LITHOLOGIC DE (Percent Gravel, Sa	and, Silt, Clay)
0.0		1' 5'	5	GM	0-5' SILTY SANDY GRAV gravel; sub-angular cobble slightly moist.	EL/COBBLES (GM): Bres; fine to coarse, angula	own (7.5YR 4/3); fine to coarse, angular ar to sub-angular sand; dense to hard;
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNNO1.GDT 10/27/15					Installed temporary VMP  Casing: 0-4.75' - 1/4" OD stainless  Screen: 4.75'-5' - 1/2" OD 50 Mesh  Annular Material: 0-4' - Hydrated bentonite ( 4'-5' - #2/12 sand (34% po  Sampled VMP on 8/4/15 a	gel)	gel self-sealed boring.
	W.	ell	site	Me	<i>l</i>	SATI	(let

Name of Geologist



	PROJILL DRILL SAMP	ECT NUI ECT NAI TION ING MET LING ME H TO SA ED BY	ME 51 THOI THO	Ter 100 Bros D G DD _ ATED S	rama adwa Geopr 5' M	ny, Oal robe lacro ( (ft)	kland ( Core	fmr 511	BORING/WELL NUMBER DC-SB-4  DATE DRILLING BEGAN 7/30/2015  4 tenant) DATE DRILLING ENDED 7/30/2015  REMARKS Fill material to total depth
	PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
	0.0			1' 5'		- 5 -	GM	IX IX	0-5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNN01.GDT 10/27/15		E.							
			K.	ul	L'	The	refre	ed	State Miles

Name of Geologist



PROJ	ECT NUI	MBE	R <u>1</u>	17-	742900	1.06		BORING/WELL NUMBER DC-SB-5/DC-VMP-3
PROJ	ECT NA	ME	Ter	ram	ar - Oa	kland		DATE DRILLING BEGAN 7/30/2015
LOCA	TION	_5′	100 Bro	adw	ay, Oa	kland (	fmr 511	14 tenant) DATE DRILLING ENDED 7/30/2015
DRILL	ING ME	THO	D _G	Seor	orobe			REMARKS Fill material to total depth
SAMP	LING ME	ETHO	DD _	5' 1	Macro (	Core		
DEPT	H TO SA	TUR	ATED S	SOIL	. (ft)			
LOGG	ED BY	_ <u> </u>	Ceith Ho	ofa	rd			
		٦	<u>.</u>	F				
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID	SAMPLE DEPTH	DEPTH (ft. BGL)	ς.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
9	 일 	S S	<u>F</u>	PLE	EP.	U.S.C.S.		(Percent Gravel, Sand, Silt, Clay)
<u> </u>	-0	RE	SAI	SAM	□ €	) >	g	
							. 7	0-5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular
0.0			1'		-			gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard;
					-	GM		slightly moist.
					-			
0.0			5'					
0.0			3		— 5 —			Installed temporary VMP
								Casing:
								0-4.75 - 1/4" OD stainless steel rigid tubing
								Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel
								Annular Material:
								0-4' - Hydrated bentonite (gel) 4'-5' - #2/12 sand (34% porosity)
								Sampled VMP on 8/4/15 and pulled from ground; gel self-sealed boring.
27/15								
GDT 10/27/15								
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNNOT								
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	PROJI LOCA DRILL SAMP DEPTI	ECT NUI ECT NAI TION ING MET LING ME H TO SA EED BY	ME 51 THOI THO		ram adw eop 5' N	ar - Oa ay, Oa probe Macro (	kland ( Core	fmr 511	BORING/WELL NUMBER DC-SB-6 DATE DRILLING BEGAN 7/30/2015  14 tenant) DATE DRILLING ENDED 7/30/2015  REMARKS Fill material to total depth
	PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
	0.0			1' 5'		  	GM		0-5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNN01.GDT 10/27/15		4		el		Th	oes)		Der Mad-
			× 2	et l	C	m	90]]	ero	Sty Mi Cel

Name of Geologist



	PROJ LOCA DRILL SAMP DEPT	ING MET	ME 5: THO: THO	Ter 100 Broad D G DD ATED S	ram adw Seor 5' I	orobe Macro (	akland kland ( Core	fmr 51	BORING/WELL NUMBER DC-SB-7  DATE DRILLING BEGAN 7/30/2015  DATE DRILLING ENDED 7/30/2015  REMARKS Fill material to total depth
	PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND GPJ LAEWNN01.GDT 10/27/15	0.0			1' 5'		5	GM		0-5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
FL									

Name of Geologist



ł	JECT NU				742900				BORING/WELL NUMBER	DC-SB-8/DC-VMP-4
1	JECT NA				nar - Oa				DATE DRILLING BEGAN _	7/30/2015
1	ATION					kland		4 tenant)		7/30/2015
1	LING ME				orobe					to total depth
1	PLING M									
1	TH TO SA									
LOG	GED BY	r	veith Ho	ora	ra				-	
-	1			_		T	T			
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG		LITHOLOGIC DES (Percent Gravel, Sar	
0.4			1'			GM		0-5' SILTY SANDY of gravel; sub-angular of slightly moist.	GRAVEL/COBBLES (GM): Bro cobbles; fine to coarse, angular	own (7.5YR 4/3); fine to coarse, angular r to sub-angular sand; dense to hard;
0.0			5'	1000	- 5 -			Installed temporary	VMP	····
								Casing:		
								0-4.75' - 1/4" OD sta	inless steel rigid tubing	
								Screen:		
								4.75'-5' - 1/2" OD 50	Mesh stainless steel	
								Annular Material: 0-4' - Hydrated bento	onito (gal)	
								4'-5' - #2/12 sand (3	4% porosity)	
								Sampled VMP on 8/	4/15 and pulled from ground; g	el self-sealed boring.
									n ro and panda nom ground, g	or our occurs borning.
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	_	1/u	1th	2	W.	200/	rel		SER	(CO)
	Name o	of Ge	ologist			V			Name of Reviewer	
		,	<b>U</b>							PAGE 1 OF



DRILLING METH SAMPLING MET	E Terran  5100 Broadv  HOD Geo  'HOD 5'  URATED SOII	mar - Oakland way, Oakland (fmr probe Macro Core L (ft)	5114 tenant)	DATE DRILLING BEGAN  DATE DRILLING ENDED  REMARKS  Fill material	DC-SB-9/DC-VMP-5 7/30/2015 7/30/2015 I to total depth
PID (ppm) BLOW COUNTS	SAMPLE ID.	DEPTH (ft. BGL) U.S.C.S. GRAPHIC		LITHOLOGIC DES (Percent Gravel, Sai	nd, Silt, Clay)
0.0	1'	GM	0-5' SILTY SANDY gravel; sub-angular slightly moist.	GRAVEL/COBBLES (GM): Bro r cobbles; fine to coarse, angula	own (7.5YR 4/3); fine to coarse, angular r to sub-angular sand; dense to hard;
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNNO1.GDT 10/27/15			Screen: 4.75'-5' - 1/2" OD 5 Annular Material: 0-4' - Hydrated ber 4'-5' - #2/12 sand (	tainless steel rigid tubing 60 Mesh stainless steel	gel self-sealed boring.

Name of Geologist



SAMPLING METHOD 5' Macro Core  DEPTH TO SATURATED SOIL (ft)  LOGGED BY Keith Hoofard	
SAMPLE DEPTH  (ft. BGL)  COUNTS  SAMPLE DEPTH  (ft. BGL)  Chocal Counts  Chocal C	
0.2  0.5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YF gravel; sub-angular cobbles; fine to coarse, angular to sub-angular moist.	R 4/3); fine to coarse, angular ngular sand; dense to hard;
Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel Annular Material: 0-4' - Hydrated bentonite (gel) 4'-5' - #2/12 sand (34% porosity) Sampled VMP on 8/4/15 and pulled from ground; gel self-sea	aled boring.

Name of Geologist

Name of Reviewer

PAGE 1 OF 1



PROJI LOCA DRILL SAMP DEPTI	ING ME	ME 51 THOE THOE		ramadwa seop 5' N	robe //acro ( (ft)	kland kland ( Core	fmr 511	BORING/WELL NUMBER DC-SB-11/DC-VMP-7  DATE DRILLING BEGAN 7/30/2015  14 tenant) DATE DRILLING ENDED 7/30/2015  REMARKS Fill material to total depth
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
0.0			1'	STATE OF STREET	  - 5 —	GM		0-5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNN01.GDT 10/27/15	2 5					7		Installed temporary VMP  Casing: 0-4.75 - 1/4" OD stainless steel rigid tubing  Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel  Annular Material: 0-4' - Hydrated bentonite (gel) 4'-5' - #2/12 sand (34% porosity)  Sampled VMP on 8/4/15 and pulled from ground; gel self-sealed boring.
	Name o	f Ged	ologist	7	href	and		Name of Reviewer PAGE 1 OF

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	JECT NUI	MBE	R 1	17-7	742900	1.06		BORING/WELL NUMBER DC-SB-12
	JECT NAI				ar - Oa			DATE DRILLING BEGAN 7/30/2015
1	ATION					kland (		4 tenant) DATE DRILLING ENDED 7/30/2015
	LLING ME				robe			REMARKS Fill material to total depth
	MPLING ME							
	TH TO SA GED BY							
	OLD D1							
<u> </u>	· σ	Œ	<u>.</u>	Ĕ			o	
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
9	¤S		AME	MPL	DE (ft. I	U.S	SRA L	(Percent Gravel, Sand, Silt, Clay)
	_	<u>«</u>		ŷ				0.51.01.72.0.0.101.00.001.50.401.00.001.50.401.00.001.00.001.001.001.001.001.001.
0.0			1'					0-5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard;
0.0			•			GM		slightly moist.
0.0			5'		_ 5 <u>_</u>			
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TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNN01.GDT 10/27/15								
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Name of Geologist



PROD LOCA DRILL SAM DEP	JECT NUI JECT NAI ATION LING ME PLING ME IH TO SA GED BY	ME 51 THOE THO	Ter 00 Broa ) G	rama adwa Geopi 5' M	ar - Oa ay, Oal robe lacro C (ft)	kland kland ( Core	fmr 511	4 tenant)	REMARKS	NG BEGAN _ NG ENDED _	DC-SB-13 7/30/2015 7/30/2015 I to total depth	
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG		LITH (Perce	HOLOGIC DES ent Gravel, Sa	SCRIPTION nd, Silt, Clay)	
0.0			1'		- 5	GM		0-5' SILTY SANDY ( gravel; sub-angular o slightly moist.	GRAVEL/COBBI cobbles; fine to d	<b>LES (GM):</b> Broccoarse, angula	own (7.5YR 4/3); fine to coarse, angular ar to sub-angular sand; dense to hard;	
GDT 10/27/15												
LAND.GPJ LAEWNNO1.												
TES) TERRAMAR - OAK												
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNN01.GDT 10/27/15												
	Name o	of Geo	~	ي ل	rto	refo	uf	)	Name o	of Reviewer	Male 1 OF	1



1	JECT NUI JECT NAI				742900 ıar - Oa			BORING/WELL NUMBER         DC-SB-14/DC-VMP-8           DATE DRILLING BEGAN         7/30/2015
LOCA	NOITA	51	00 Bro	adw	ay, Oa	kland (	fmr 511	14 tenant) DATE DRILLING ENDED 7/30/2015
DRILI	LING ME	THO	) _	Geor	orobe			REMARKS Fill material to total depth
SAME	PLING ME	ETHC	D _	<u>5' N</u>	Macro (	Core		
- 1	'H TO SA							<del></del>
LOGG	SED BY	_K	eith Ho	oofa	rd			
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
0.0			1'		 	GM	比	0-5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
0.0			5'		— 5 —			Installed temporary VMP
								Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing
								Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel
								Annular Material: 0-4' - Hydrated bentonite (gel) 4'-5' - #2/12 sand (34% porosity)
								Sampled VMP on 8/4/15 and pulled from ground; gel self-sealed boring.
27/15								
.GDT 10/2								
EWNN01								
D.GPJ LA								
- OAKLAN								
RRAMAR								
ATES) TE								
COORDIN								
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNN01.GDT. 10/27/15								
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Name of Geologist



PROJI LOCA DRILL SAMP DEPTI	ECT NUMB ECT NAME TIONING METH LING METI H TO SATU ED BY _	5100 Bro 500 HOD		akland akland ( on		BORING/WELL NUMBER DC-SB-15/DC-VMP-9 DATE DRILLING BEGAN 9/8/2015  DATE DRILLING ENDED 9/8/2015  REMARKS Fill material to total depth
PID (ppm)	BLOW COUNTS	SAMPLE ID.	SAMPLE DEPTH DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
0.0			5 -	GM		0-11' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
1.5		12' 17'	¥- ¥-	ML		11-18' CLAYEY SILT (ML): Dark greenish gray (3/5GY); firm; slightly moist; slight plasticity.  18-20' SANDY GRAVEL (GM): Dark greenish gray (3/5GY); fine to coarse, angular sand;
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNN01.GDT 10/27/15			20-	GM		Installed temporary dual-completion VMPs  Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing 0'-13.75' - 1/4" OD 50 Mesh stainless steel 13.75'-14' - 1/2" OD 50 Mesh stainless steel 13.75'-14' - 1/2" OD 50 Mesh stainless steel 13.75'-14' - 1/2" OD 50 Mesh stainless steel Annular Material: 0-4' - Neat cement w/ 5% bentonite 4'-5' - #2/12 sand (34% porosity) 5'-13' - hydrated bentonite (gel) 13'-14' - #2/12 sand (34% porosity) 14'-20' - hydrated bentonite (chips)  Sampled VMPs on 9/15/15; abandoned by overdrilling and backgrouting on 10/6/15.

Name of Geologist

Name of Reviewer

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F L C S	PROJECTION OF THE PROJECT OF THE PRO	ECT NUM ECT NAM TION ING MET LING ME H TO SA EED BY	ME 5: THO: THO	Ten 100 Bro D A	rram adw luge Spi SOIL	er lit Spoc . (ft)	ikland kland ( on	fmr 51	BORING/WELL NUMBER DC-SB-16/DC-VMP-10 DATE DRILLING BEGAN 9/8/2015  14 tenant) DATE DRILLING ENDED 9/8/2015  REMARKS Fill material to total depth
	PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
	0.0					  - 5 - 	GM		0-8' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
	0.0			8'		  -10-	ML		8-13' CLAYEY SILT (ML): Dark greenish grayy (3/5GY); firm; slightly moist; slight to low plasticity.
	0.0			401		- - - -	IVIL		40.40 51 011 TV 01 AV (01 ) D. J
	0.0			13' 15'		_ ⊻ _ 15 - ∑ - 	CL		13-18.5' SILTY CLAY (CL): Dark greenish grayy (3/5GY); stiff to firm; moist; low plasticity. At 17': Roots in saturated soupy material; wood; bark.
21/15	0.0				X	 20	GM	14	18.5-20' SILTY SANDY GRAVEL (GM): Fine to coarse, angular gravel; angular cobbles; fine to coarse, angular to sub-angular sand; moist to very moist.
VNN01.GDT 10/2	0.0								Installed temporary dual-completion VMPs  Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing 0'-12.75' - 1/4" OD stainless steel rigid tubing
D.GPJ LAEV									Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel 12.75'-13' - 1/2" OD 50 Mesh stainless steel
TERRAMAR - OAKLAN									Annular Material: 0-4' - Neat cement w/ 5% bentonite 4'-5' - #2/12 sand (34% porosity) 5'-12' - hydrated bentonite (gel) 12'-13' - #2/12 sand (34% porosity) 13'-20' - hydrated bentonite (chips)
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWINI01.GDT 10/27/15									Sampled shallow VMP on 9/15/15 (deep not sampled due to water in screen); abandoned by overdrilling and backgrouting on 10/6/15.

Name of Geologist



PROJ	ECT NUI	MBE	R	117-7	742900	1.06		BORING/WELL NUMBER DC-SB-17/DC-VMP-11
PROJ	ECT NAI				ar - Oa			DATE DRILLING BEGAN 9/8/2015
LOCA				adw	ay, Oa	kland (	fmr 511	4 tenant) DATE DRILLING ENDED 9/8/2015
DRILL	ING ME	ТНО	D _A	Auge				REMARKS Fill material to total depth
	LING ME		_		it Spoo			
	H TO SA						16	
LOGG	ED BY	_	Keith Ho	ootar	ra			
							, ,	
<u></u>	S	£	⊡.	틝		ندن	o	
PID (ppm)	BLOW COUNTS	RECOVERY (ft)	SAMPLE ID	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
9	찍	[8]	AMF	MPLI	DE (ft. l	U.S	87	(Percent Gravel, Sand, Silt, Clay)
ш.		쮼	/S	S,				
								0-11.5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse,
						1		angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
						-	- 25	
					-	-		
0.0					— 5 —	-		
						GM		
				X				
				$\forall$	_			
				A	- 10			
0.0				X				
00			401	$\bigvee$		-		11.5-15 CLAYEY SILT (ML): Slightly moist; slight plasticity.
0.0			12'			ML		
				*				
0.0			15'		- <b>1</b> 5-			15-20' SILTY CLAY (CL): Dark greenish gray (3/5GY); slightly moist; medium to low
					- ¥ -			plasticity; no odor. From 16-17': Saturated zone w/wood pieces; soupy. At 17.5': Water.
				X		CL		At 20': Organic material; saturated; minor angular gravels; fine.
ĺ				$\bigvee$				
				A	-20 <del></del>			
0.0				11			70	20-25' CLAYEY SANDY GRAVEL (GC): Dark greenish gray (3/5GY); fine to coarse, angular gravel; fine to coarse, angular to sub-angular sand; loose to dense; saturated.
						-		angular graver, mile to source, angular to sub angular carret, reces to deriver, catalates.
				1 }		GC	70	
						1		
					25			Installed temporary dual-completion VMPs
								Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing
								0'-12.75' - 1/4" OD stainless steel rigid tubing
								Screen:
								4.75'-5' - 1/2" OD 50 Mesh stainless steel 12.75'-13' - 1/2" OD 50 Mesh stainless steel
								Annular Material: 0-4' - Neat cement w/ 5% bentonite
								4'-5' - #2/12 sand (34% porosity)
								5'-12' - hydrated bentonite (gel) 12'-13' - #2/12 sand (34% porosity)
								13'-25' - hydrated bentonite (chips)
								Sampled VMPs on 9/15/15; abandoned by overdrilling and backgrouting on 10/6/15.
	4/		0-0	i	11-	1/2		Ha III h
	K.	عو	XX		VO V	0//0	ex	Hay M Con

Name of Geologist

TT GEO (NO COORDINATES) TERRAMAR - OAKLAND GPJ LAEWNNO1.GDT 10/27/15

Name of Reviewer

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PROD LOCA DRILL SAMI DEPT	JECT NUI JECT NAI ATION LING MET PLING ME I'H TO SA GED BY	ME 5 THO ETHO	Te 100 Bro D A	rram padw Auge Spl	er lit Spoo . <b>(ft)</b>	ikland kland ( on	40	BORING/WELL NUMBER DC-SB-18/DC-VMP-12 DATE DRILLING BEGAN 9/9/2015  4 tenant) DATE DRILLING ENDED 9/9/2015  REMARKS Fill material to total depth
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
0.0 0.0 0.6		· · · · · · · · · · · · · · · · · · ·	11.5'			GM		0-11' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.  11-17' CLAYEY SILT W/ RED BRICK FRAGMENTS (ML): Greenish black (2.5Y/10G); soft to firm; slightly moist to moist; low plasticity to slight plasticity. At 13': Dark greenish gray (4/5GY).
2.3		<b>新聞教養養養養</b>	17'		 -	CL GC		17-19' SILTY CLAY W/ WOOD FRAGMENTS (CL): Dark greenish gray (3/5GY); soft; moist; low plasticity.  19-22' CLAYEY SANDY GRAVEL (GC): Fine to coarse sub-angular to angular sand; fine to coarse angular gravels; wood fragments; saturated.
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND,GPJ LAEWNNO1.GDT O						ML OL		22-23' CLAYEY SILT W/ WOOD FRAGMENTS (CL): Dark greenish gray (3/5GY); stiff; saturated; low plasticity.  23-25' ORGANIC MATERIAL (OL): Black; wood; decomposing material.  Installed temporary dual-completion VMPs  Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing 0'-13.75' - 1/4" OD stainless steel rigid tubing  Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel 13.75'-14' - 1/2" OD 50 Mesh stainless steel  Annular Material: 0-4' - Neat cement w/ 5% bentonite 4'-5' - #2/12 sand (34% porosity) 5'-13' - hydrated bentonite (gel) 13'-14' - #2/12 sand (34% porosity) 14'-25' - hydrated bentonite (chips)  Sampled shallow VMP on 9/15/15 (deep not sampled due to water in screen); abandoned by overdrilling and backgrouting on 10/6/15.

Name of Geologist



PROD LOCA DRIL SAMI	JECT NU JECT NA ATION LING ME PLING MI I'H TO SA GED BY	ME 51 THOE THO		mar - Oa way, Oa ler plit Spoo	ıkland kland ( on	(fmr 511	4 tenant)	REMARKS	NG BEGAN _ NG ENDED _	DC-SB-19/DC-VMP-13 9/9/2015 9/9/2015 I to total depth
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG		LITH (Perce	IOLOGIC DESent Gravel, Sa	SCRIPTION nd, Silt, Clay)
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNNOT.GDT 10/27/15				5 —	GM		angular gravel; sub-al hard; slightly moist.  4-5' BEDROCK: Installed temporary V Casing: 0-4.75' - 1/4" OD stain Screen: 4.75'-5' - 1/2" OD 50 I Annular Material: 0-4' - Neat cement w/ 4'-5' - #2/12 sand (34'	MP  Mesh stainless  5% bentonite  porosity)	tubing	own (7.5YR 4/3); fine to coarse, angular to sub-angular sand; dense to
F	C	K.	ill	. Yf	ref	rus		A	9/1	1 Cel

Name of Geologist



PRO. LOCA DRILI	JECT NUM JECT NAM ATION LING MET PLING ME	ΛΕ <u>51</u> ΓΗΟΙ		17-742 ramar adway, uger Split S	- Oakla Oakla	and	nr 511	BORING/WELL NUMBER
DEPT	TH TO SA	TUR	-	SOIL (ft		20	•	
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH DEPTH	(ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
0.0					5 —	ЭМ		0-8" ASPHALT  8"-6' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
			6'		3	SM		6-9' SILTY SAND W/ MINOR GRAVELS (SM): Greenish gray (5/5GY); fine sub-angular gravel; fine to coarse sub-angular sand; dense; slightly moist.
0.0			10'	1	10	ИL		9-16' CLAYEY SILT (ML) Greenish black (2.5/5GY); red brick fragments and organics; slightly moist; slight plasticity.
5.3			17'			CL		16-21' SILTY CLAY (CL): Greenish black; brick fragments and organics; firm; moist; low plasticity. At 17': Increasing organics. At 18': Wood present in split spoon (no soil); moist to very moist.
1.GDT 10/28/15					- 0	3C		21-23' GRAVEL W/ CLAY (GC): Mixture of muddy debris; saturated. At 22': Loose to dense.
TT GEO (NO COORDINATES) TERRAMAR-OAKLAND.GPJ LAEWNNOT								Installed temporary dual-completion VMPs  Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing 0'-13.75' - 1/4" OD stainless steel rigid tubing  Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel 13.75'-14' - 1/2" OD 50 Mesh stainless steel  Annular Material: 0-4' - Neat cement w/ 5% bentonite 4'-5' - #2/12 sand (34% porosity) 5'-13' - hydrated bentonite (gel) 13'-14' - #2/12 sand (34% porosity) 14'-23' - hydrated bentonite (chips)  Sampled VMPs on 9/15/15; abandoned by overdrilling and backgrouting on 10/6/15.

Name of Geologist



PROJ LOCA DRILL SAMF DEPT	ECT NUI ECT NAI ATION LING ME PLING ME TH TO SA BED BY	ME 51 THOE THOE	Ter 100 Bro D A	rram adw Auge Spl	it Spoc	kland kland	(fmr 511	BORING/WELL NUMBER DC-SB-21/DC-VMP-15  DATE DRILLING BEGAN 9/9/2015  4 tenant) DATE DRILLING ENDED 9/9/2015  REMARKS Fill material to total depth
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
0.0					  - 5 —	GM		0-6.5' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
0.8			7'		  10 	ML		6.5-13' CLAYEY SILT (ML): Greenish gray; soft to firm; moist; slight plasticity. At 8': Picking up minor, coarse gravel. At 10': Increasing clay.
0.0			13.5		- <u>v</u> -	CL		13-17' SILTY CLAY (CL): Dark greenish gray (3/5GY); Minor coarse, sub-angular red gravels; soft; slightly moist. At 14.5': Broken glass and ceramics showing. At 16.5': Increasing clay; coarse, angular gravel.
0.0			17'			GC		17-19' CLAYEY SANDY GRAVEL (GC): Dark greenish gray (3/5GY); fine to coarse, angular gravels; fine to coarse, angular sands; dense; saturated.
7/15					-20-			19-20' BEDROCK: bent split spoon; saturated.
II GEO (NO COORDINATES) TERRAMAR - OAKLAND GPJ LAEWNNO1.GDT 10/27/15								Installed temporary dual-completion VMPs  Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing 0'-12.75' - 1/4" OD stainless steel rigid tubing  Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel 12.75'-13' - 1/2" OD 50 Mesh stainless steel  Annular Material: 0-4' - Neat cement w/ 5% bentonite 4'-5' - #2/12 sand (34% porosity) 5'-12' - hydrated bentonite (gel) 12'-13' - #2/12 sand (34% porosity) 13'-20' - hydrated bentonite (chips)  Sampled VMPs on 9/15/15; abandoned by overdrilling and backgrouting on 10/6/15.
TT GEO (NO COOF	4	1	ell,		et o	Jo	ud	Star III Carl

Name of Geologist



PROD LOCA DRIL SAMI DEPT	JECT NUM JECT NAM ATION LING MET PLING ME ITH TO SA GED BY	ME 5' THOI THO		ram adw uge Spl	r it Spoo (ft)_	kland kland ( n	fmr 511	BORING/WELL NUMBER DC-SB-22/DC-VMP-16 DATE DRILLING BEGAN 9/9/2015  14 tenant) DATE DRILLING ENDED 9/9/2015  REMARKS Fill material to total depth
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWINNO1.GDT 10/27/15			NS		- 5	GM		0-3' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.  Boring not completed due to utility conflicts.
	Name o		eologist	7	forly	key	<u>(                                    </u>	Name of Reviewer PAGE 1 OF



PROJ	ECT NAM	MBEI ME	Tei	rram	ar - Oa	1.06 kland		BORING/WELL NUMBER DC-SB-23/DC-VMP-17 DATE DRILLING BEGAN 9/10/2015
	TION						(fmr 511	4 tenant) DATE DRILLING ENDED 9/10/2015
	ING MET			Auge				REMARKS Fill material to total depth
	LING ME				it Spoo			NEWARKS THE MARKET OF THE SECOND SECO
	H TO SA		_				23.9	
	ED BY		eith Ho		`			
-000	LD D.				-			
	· · · · · ·							
Ê	_ \	€	<u>o</u>	핕	T 😙	(i	ပ္	
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
Ö	ᇳ		₩.	M	DE (ft.	U.S	87	(Percent Gravel, Sand, Silt, Clay)
-		22	Ś	δ				
								0-7' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular
	- *							gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
							. 9	
						GM		
					_ 5 _			
0.0				X				
				X		ML		7-8' CLAYEY SILT (ML): Dark greenish gray (3/5GY); firm; slightly moist; slight plasticity
0.9			7.5'			1916		∖to non-plastic.
				Ă		GC		8-10.5' CLAYEY SANDY GRAVEL (GC): Dark greenish gray (3/5GY); fine to coarse, angular sand; fine to coarse, angular gravel; dense; moist to saturated.
0.0				$\bigvee$	-10-			
								10.5-14' GRAVELLY CLAY (CL): Dark greenish gray (3/5GY); soft to firm; fine, angular gravels; moist; low plasticity.
				X		CL		
				abla	]			
0.0			14.5'		— <u>¥</u> —15—	ML		14-16' CLAYEY SILT W/ GRAVEL (ML): Dark greenish gray (3/5GY); angular gravel; firm; moist; non-plastic to slight plasticity.
				X	_			
							79	16-19' CLAYEY SAND GRAVEL (GC): Dark greenish gray (3/5GY); fine to coarse, angular sand; fine to coarse angular gravels; loose.
						GC		
				X				19-25' CLAYEY SAND (SC): Dark greenish gray (3/5GY); fine to medium, angular sand;
					<b>−20</b> −			soft; saturated. At 19.5': Black, decomposing material; putrid odor.
					- 1			
				X		sc		
					_ <u>_</u> _ ]			
				A				
					-25-			Installed temporary dual-completion VMPs
								Casing:
								0-4.75 - 1/4" OD stainless steel rigid tubing
								0'-12.75' - 1/4" OD stainless steel rigid tubing
								Screen:
								4.75'-5' - 1/2" OD 50 Mesh stainless steel 12.75'-13' - 1/2" OD 50 Mesh stainless steel
								Annular Material: 0-4' - Neat cement w/ 5% bentonite
								4'-5' - #2/12 sand (34% porosity)
								5'-12' - hydrated bentonite (gel) 12'-13' - #2/12 sand (34% porosity)
								13'-25' - hydrated bentonite (chips)
								Sampled VMPs on 9/15/15; abandoned by overdrilling and backgrouting on 10/6/15.
								^

Name of Geologist

Name of Reviewer



PROJ LOCA DRILL SAMP DEPT	ECT NUM ECT NAM TION ING MET PLING ME H TO SAT	E 51 HOE THO	Terr 00 Broa D A	rama adwa uge Spli	r it Spoo (ft)	kland kland (	fmr 511	4 tenant)		
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG		LITHOLOGIC D (Percent Gravel, S	Sand, Silt, Clay)
0.0					   - 5  	GM		0-9' SILTY SANDY ( gravel; sub-angular ( slightly moist.	GRAVEL/COBBLES (GM): Exobbles; fine to coarse, angu	Brown (7.5YR 4/3); fine to coarse, angular ular to sub-angular sand; dense to hard;
1.1			9.5'		 10			9-18' CLAYEY SILT to non plasticity.	(ML): Dark greenish gray (3	3/5GY); slightly moist; firm; slight plasticity
0.5			13.5 17'		 - <u>y</u> - -15-	ML				
2						GC			NDY GRAVEL (GC): Red; su	ub-angular gravels. y (3/5GY); fine to medium, angular sand;
WNN01.GDT 10/27/15					-20-  -	sc		soft; saturated.	, , ,	
3PJ LAE					-25-		7.7.7		lual-completion VMPs	
RAMAR - OAKLAND.(								0'-12.75' - 1/4" OD si Screen: 4.75'-5' - 1/2" OD 50	inless steel rigid tubing cainless steel rigid tubing Mesh stainless steel 50 Mesh stainless steel	
TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNNO1								Annular Material: 0-4' - Neat cement w 4'-5' - #2/12 sand (34 5'-12' - hydrated ben 12'-13' - #2/12 sand ( 13'-25' - hydrated ben	/ 5% bentonite  % porosity) tonite (gel) (34% porosity)	
T GEO (N								Sampled VMPs on 9	/15/15; abandoned by overd	drilling and backgrouting on 10/6/15.
,	4	ار	Al	7	cho	Jre	D		Soy	W Cool

Name of Geologist

Name of Reviewer



LOGGED BY Keith Hoofard

#### **BORING LOG**

PROJECT NUMBER <u>117-7429001.06</u>	BORING/WELL NUMBER DC-SB-25/DC-VMP-19
PROJECT NAME Terramar - Oakland	DATE DRILLING BEGAN 9/10/2015
LOCATION 5100 Broadway, Oakland (fmr 5114 tenant)	DATE DRILLING ENDED 9/10/2015
DRILLING METHOD Auger	REMARKS Fill material to total depth
SAMPLING METHOD Split Spoon	
DEPTH TO SATURATED SOIL (ft) 23.5	

PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
0.0					GM		0-9' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
9.4		9'	X	10-	ML		9-11' CLAYEY SILT (ML): Dark greenish gray (3/5GY); fine sand; dense; slightly moist.
0.0		11.9	5' 🙀		SM		11-12.5' SILTY SAND (SM): Greenish gray (5/5G); loose; fine to medium sand; slightly moist.
					CL		12.5-13.5' SILTY CLAY (CL): Dark greenish gray (3/5GY); slightly moist; low plasticity.
0.0				— <del>1</del> 5—	ML		13.5-16' CLAYEY SILT (ML): Black; minor angular gravel; slightly moist to moist; slight plasticity to non-plastic.
0.0		16.9			CL		16-18.5' SILTY CLAY (CL): Dark greenish gray (3/5GY); firm; slightly moist; low plasticity.
0.0		19'		 20  -	ML		18.5-25' CLAYEY SILT (ML): Black; soft; moist.
				-25-			Installed temporary dual-completion VMPs
							Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing 0'-10.75' - 1/4" OD stainless steel rigid tubing
							Screen: 4.75'-5' - 1/2" OD 50 Mesh stainless steel 10.75'-11' - 1/2" OD 50 Mesh stainless steel
							Annular Material: 0-4' - Neat cement w/ 5% bentonite 4'-5' - #2/12 sand (34% porosity) 5'-10' - hydrated bentonite (gel) 10'-11' - #2/12 sand (34% porosity) 11'-25' - hydrated bentonite (chips)
							Sampled VMPs on 9/15/15; abandoned by overdrilling and backgrouting on 10/6/15.

Name of Geologist

Name of Reviewer



PROJILL SAMP	ECT NUMETON ING METON LING METON ETON TO SA	ME 5 THO THO	Te 100 Bro D _ A	rram adw luge Spl SOIL	r it Spoo (ft)	ikland kland ( on	fmr 511	BORING/WELL NUMBER DC-SB-26/DC-VMP-20 DATE DRILLING BEGAN 9/10/2015  14 tenant) DATE DRILLING ENDED 9/10/2015  REMARKS Fill material to total depth
PID (ppm)	BLOW	RECOVERY (ft)	SAMPLE ID.	SAMPLE DEPTH	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION (Percent Gravel, Sand, Silt, Clay)
0.0		· · · · · · · · · · · · · · · · · · ·				GM		0-9' SILTY SANDY GRAVEL/COBBLES (GM): Brown (7.5YR 4/3); fine to coarse, angular gravel; sub-angular cobbles; fine to coarse, angular to sub-angular sand; dense to hard; slightly moist.
0.0			9.5'		-10- - <u>*</u> -	ML		9-14' CLAYEY SILT (ML): Greenish gray (5/5GY); firm; moist; slight plasticity.
0.0			14.5'		-15- -	GC		14-17' CLAYEY SANDY GRAVEL (GC): Dark greenish gray (3/5GY); fine to coarse gravel; fine to coarse sand; moist.
					- ☑ -	GM GC		17-18' SILTY GRAVEL (GM): dry; hard.  18-19' CLAYEY SANDY GRAVEL (GC): Dark greenish gray (3/5GY); loose; saturated.
				A	-20-	ML		19-20' CLAYEY SILT (ML): Black; slightly moist; low plasticity.
0.0					20			Installed temporary dual-completion VMPs  Casing: 0-4.75' - 1/4" OD stainless steel rigid tubing 0'-9.75' - 1/4" OD stainless steel rigid tubing  Screen:
								4.75'-5' - 1/2" OD 50 Mesh stainless steel 9.75'-10' - 1/2" OD 50 Mesh stainless steel  Annular Material: 0-4' - Neat cement w/ 5% bentonite 4'-5' - #2/12 sand (34% porosity) 5'-9' - hydrated bentonite (gel) 9'-10' - #2/12 sand (34% porosity) 10'-20' - hydrated bentonite (chips)
								Sampled VMPs on 9/15/15; abandoned by overdrilling and backgrouting on 10/6/15.

Name of Geologist

TT GEO (NO COORDINATES) TERRAMAR - OAKLAND.GPJ LAEWNN01.GDT 10/28/15

Name of Reviewer

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APPENDIX D
Active Soil Gas Sampling Protocol

#### **Active Soil Gas Sampling Protocol**

Active soil gas samples are collected from the vapor monitoring points (VMPs) by connecting ¼-inch diameter Teflon tubing (LARWQCB, 2015), from the hose barb at the top of the VMP to a dedicated sampling manifold. A laboratory-supplied manifold prevents soil particles or water from entering the sample canisters and restricts the air flow to less than 200 milliliters per minute (mL/min). Manifolds are used once and then returned to the laboratory for cleaning.

Three purge volumes are extracted from each VMP using a 6-liter Summa canister that is only used for purging (LARWQCB, 2015). The soil gas samples are collected in a 1-liter Summa canister. As part of the quality control procedures, Summa canister vacuum levels are measured prior to and after collecting each soil gas sample. These measurements are recorded on the sample label and on the sample chain of custody form.

Ambient air leaks during soil gas sampling may dilute the samples and produce results that underestimate the actual site concentrations or contaminate the sample with external contaminants. Prior to collecting a soil gas sample in the 1-liter Summa canister, a shut-in test is conducted followed by a leak detection test using helium.

The shut-in test is used to test if the above-ground fittings are air tight. The soil gas sampling apparatus is assembled (e.g. valves, tubing, manifold, fittings) downstream from the top of the probe. The apparatus is evacuated using a vacuum of about 20 inches of mercury. The applied vacuum is allowed to equilibrate in the apparatus, all valves are then closed, and the vacuum held for at least one minute. If there is an observable loss of vacuum, then the fittings are adjusted as needed until the apparatus holds a vacuum (LARWQCB, 2015).

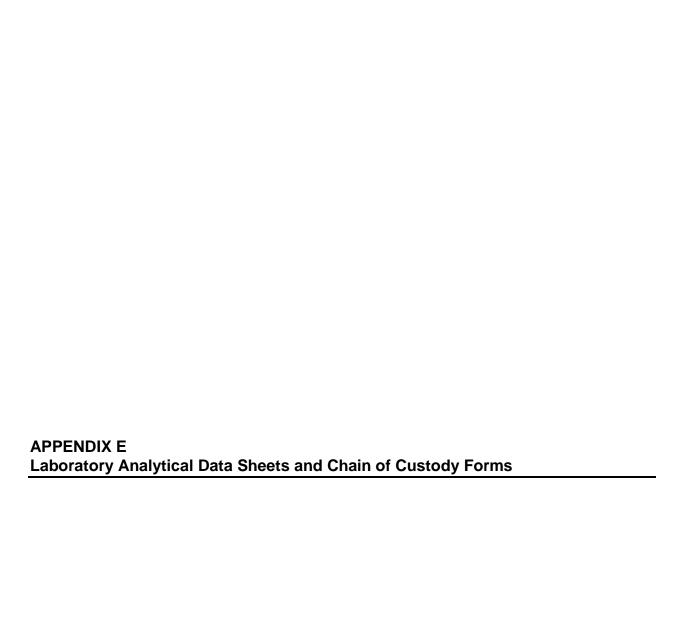
Helium is a naturally occurring compound and is present in air at about 5 parts per million by volume (ppmv). The potential for ambient air leaks is evaluated using a shroud. Assuming a reasonably good seal can be obtained with the shroud, the ambient air leak can be quantified with helium. The apparatus for leak detection is set up after the shut-in test has been conducted. Leak detection is implemented at the well head using industrial-grade helium gas within the sampling shroud. The shroud consists of a plastic container placed over the entire top of the VMP well head. The shroud has two ports fitted with ¼-inch stainless steel or brass through-wall bulkhead fittings equipped with hose barbs. One barb is for injection of the helium into the shroud and the second barb is for the helium detector to connect to the shroud. The Summa canister sample tubing is fed through a third hole in the shroud, fitted with a rubber grommet, and connected to the VMP via compression fittings. The helium cylinder is connected to the shroud via ¼-inch tubing.

The shroud is secured to cover the entire well top and aluminum foil or hydrated bentonite is used to seal around the bottom the shroud where the shroud does not fit evenly to the ground. The helium gas is injected into the shroud to a concentration equal to 50 percent by volume, as measured using a helium gas detector. A purge volume is calculated using the volume of the screened probe tip, the volume of the rigid tubing from the probe tip to brass ball valve at the

surface, the filter pack void space volume, and the length of tubing from the brass ball valve to the vacuum 6-liter Summa canister. Three purge volumes are purged from the well tubing using the vacuum 6-liter Summa canister. The 6-liter Summa canister is closed and the 1-liter Summa sample canister valve is opened to collect the soil gas sample. The helium concentration inside the shroud is measured continuously using a helium gas detector during the soil gas sampling. The concentrations of helium are noted at the start and end of sampling.

The 1-liter Summa canisters is submitted under COC documentation to Air Toxics, LTD in Folsom, California and analyzed for VOCs using Method TO-15 Direct Inject and helium to assess potential leak detection.

Helium is analyzed based on a percentage basis. An ambient air leak of five percent of the concentration within the shroud is acceptable for quantitative testing performed by shrouding. If the concentration of helium in the laboratory sample is less than five percent of the helium concentration in the shroud (using the helium gas detector), then the sample is considered valid.



3249 Fitzgerald Road Rancho Cordova, CA 95742

August 03, 2015

CLS Work Order #: CYG1470 COC #:

Tim Costello Tetra Tech EM Inc. 2969 Prospect Park Drive, Suite 100 Rancho Cordova, CA 95670

**Project Name: Terramar -5100 Broadway** 

Enclosed are the results of analyses for samples received by the laboratory on 07/30/15 16:34. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D. Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

Page 1 of 78 08/03/15 13:59

Tetra Tech EM Inc.

Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100

Rancho Cordova, CA 95670

Project Number: 117-7429001.06

CLS Work Order #: CYG1470

Project Manager: Tim Costello COC #:

		Report To:			Client	Job Numb 7429001.00	er		AN/	LYS	IS RE	QUE	STED	GE	OTRA	CKER		,	
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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

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08/03/15 13:59

Tetra Tech EM Inc.

Project:

Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Rancho Cordova, CA 95670

Project Number: 117-7429001.06

CLS Work Order #: CYG1470

Project Manager: Tim Costello

COC #:

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Page 4 of 78 08/03/15 13:59

Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-1-1' (CYG1470-01) Soil Sampled:	07/30/15 10:05 Re	ceived: 07/30/1	5 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	07/31/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	,,	"	"	"	"	
Bromodichloromethane	ND	5.0	"	,,	"	"	"	"	

Page 5 of 78 08/03/15 13:59

Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-1-1' (CYG1470-01) Soil	Sampled: 07/30/15 10:05	Received: 07/30/	15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	5.0	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	6.0	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

Page 6 of 78 08/03/15 13:59

Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-1-1' (CYG1470-01) Soil Sampled:	07/30/15 10:05 Rec	eived: 07/30/	15 16:34						
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		100 %	50	)-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		95 %	62	2-125	"	"	"	"	
DC-SB-1-5' (CYG1470-02) Soil Sampled:	07/30/15 10:06 Rec	eived: 07/30/	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	07/31/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	,,	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resul	Reporting t Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-1-5' (CYG1470-02) Soil	Sampled: 07/30/15 10:06	Received: 07/30/	15 16:34						
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-1-5' (CYG1470-02) Soil Sampled	: 07/30/15 10:06 Rec	eived: 07/30/1	15 16:34						
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		99 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		96 %	62	-125	"	"	"	"	
DC-SB-2-1' (CYG1470-03) Soil Sampled	: 07/30/15 10:12 Rec	eived: 07/30/1	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	07/31/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-2-1' (CYG1470-03) Soil	Sampled: 07/30/15 10:12	Received: 07/30/	15 16:34						
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	m .	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	m .	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	m .	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	m .	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	m .	
Chloromethane	ND	10	"	"	"	"	"	m .	
cis-1,2-Dichloroethene	25	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	II .	
Dichlorodifluoromethane (Freon 1	2) ND	10	"	"	"	"	"	II .	
Ethylbenzene	ND	5.0	"	"	"	"	"	II .	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-2-1' (CYG1470-03) Soil	Sampled: 07/30/15 10:12	Received: 07/30/	15 16:34						
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	36	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	21	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	1	110 %	50	-125	"	,,	"	"	
Surrogate: 4-Bromofluorobenzene		120 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		99 %	62	-125	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resul	Reporting It Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-2-5' (CYG1470-04) Soil	Sampled: 07/30/15 10:13	Received: 07/30/	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	07/31/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethan	e ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-2-5' (CYG1470-04) Soil	Sampled: 07/30/15 10:13	Received: 07/30/	15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	27	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	36	5.0	"	"	"	"	"	II .	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-2-5' (CYG1470-04) Soil Sampled:	07/30/15 10:13 Red	ceived: 07/30/	15 16:34						
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		95 %	50	)-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		97 %	62	2-125	"	"	"	"	
DC-SB-3-1' (CYG1470-05) Soil Sampled:	07/30/15 10:20 Rec	ceived: 07/30/	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	07/31/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	,,	,,	,,	,,	"	
, ,	ND ND	5.0	,,	,,	,,	"	,,	"	
1,1-Dichloroethane 1,1-Dichloroethene	ND ND	5.0	"		,,	"	,,		
1,1-Dichloropropene	ND ND	5.0	"		,,	"	"	"	
1,2,3-Trichlorobenzene	ND ND	5.0	,,	,,	,,	,	,,	,,	
1,2,3-Trichloropropane	ND ND	5.0	,,	"	"	,	"	"	
1,2,4-Trichlorobenzene	ND ND	5.0	,,	"	"	,,	"	"	
1,2,4-Trimethylbenzene	ND	5.0	,,	"	"	,,	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	,,	"	"	,,	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-3-1' (CYG1470-05) Soil	Sampled: 07/30/15 10:20 I	Received: 07/30/	15 16:34						
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	,,	,,	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-3-1' (CYG1470-05) Soil Sampled	d: 07/30/15 10:20 Reco	eived: 07/30/1	15 16:34						
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	11	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	H .	
Surrogate: 1,2-Dichloroethane-d4		102 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		93 %	62	-125	"	"	"	"	
DC-SB-3-5' (CYG1470-06) Soil Sampled	d: 07/30/15 10:21 Reco	eived: 07/30/1	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	07/31/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
	ND	5.0					"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-3-5' (CYG1470-06) Soil	Sampled: 07/30/15 10:21	Received: 07/30/	15 16:34						
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	26	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-3-5' (CYG1470-06) Soil	Sampled: 07/30/15 10:21	Received: 07/30/	15 16:34						
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY05254	"	07/31/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	12	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	12	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	Ħ	"	
Surrogate: 1,2-Dichloroethane-d4		108 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		112 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		97 %	62	-125	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resul		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-4-1' (CYG1470-07) Soil Sa	ampled: 07/30/15 10:26	Received: 07/30/	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-4-1' (CYG1470-07) Soil S	Sampled: 07/30/15 10:26 R	Received: 07/30/1	15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	16	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	10	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	15	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-4-1' (CYG1470-07) Soil Sampl	ed: 07/30/15 10:26 R	eceived: 07/30/	15 16:34						
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	11	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		105 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		117 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		93 %	62	-125	"	"	"	"	
DC-SB-4-5' (CYG1470-08) Soil Sampl	ed: 07/30/15 10:27 R	eceived: 07/30/	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)			_	,,	,,		,,	"	
1,1,2-Trichloroethane	ND	5.0	"			"			
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting alt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-4-5' (CYG1470-08) Soil	Sampled: 07/30/15 10:27	Received: 07/30/	15 16:34						
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	II .	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	23	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	II .	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	II .	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	II .	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-4-5' (CYG1470-08) Soil Sample	ed: 07/30/15 10:27 Re	eceived: 07/30/1	15 16:34						
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	6.9	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	19	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		102 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		98 %	62	-125	"	"	"	"	
DC-SB-5-1' (CYG1470-09) Soil Sample	ed: 07/30/15 10:52 Re	eceived: 07/30/1	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane							"	"	
1,1,2-111cmoro-1,2,2-umuoroethane	ND	5.0	"	"	"	"			
(Freon 113) 1,1,2-Trichloroethane	ND ND	5.0	"	"	"	"	"	"	
(Freon 113)								"	
(Freon 113) 1,1,2-Trichloroethane 1,1-Dichloroethane	ND	5.0	"	"	"	"	"		
(Freon 113) 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	ND ND	5.0 5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene	ND ND ND	5.0 5.0 5.0	"	"	" "	" "	" "	"	
(Freon 113) 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	ND ND ND ND	5.0 5.0 5.0 5.0	" "	11 11 11	" " "	" " "	" " "	" "	
(Freon 113) 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND ND ND ND	5.0 5.0 5.0 5.0 5.0	" " "	" "	" " " " "	" " " " " " " " " " " " " " " " " " " "	" " " " " " " " " " " " " " " " " " " "	" " "	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-5-1' (CYG1470-09) Soil	Sampled: 07/30/15 10:52	Received: 07/30/	15 16:34						
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 1	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-5-1' (CYG1470-09) Soil	Sampled: 07/30/15 10:52	Received: 07/30/	15 16:34						
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	11	II .	
Surrogate: 1,2-Dichloroethane-d4		105 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		99 %		-125	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-5-5' (CYG1470-10) Soil	Sampled: 07/30/15 10:53	Received: 07/30/	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethand	e ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resul	Reporting t Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-5-5' (CYG1470-10) Soil	Sampled: 07/30/15 10:53	Received: 07/30/	15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	23	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	ND ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	19	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	9.2	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-5-5' (CYG1470-10) Soil Sam	pled: 07/30/15 10:53 F	Received: 07/30/	15 16:34						
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	II .	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		101 %	50	1-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		99 %	62	-125	"	"	"	"	
DC-SB-6-1' (CYG1470-11) Soil Samp	oled: 07/30/15 10:59 R	Received: 07/30/	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)		- 0	_	,,	,,		,,	"	
1,1,2-Trichloroethane	ND	5.0	"			"			
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resul	Reporting It Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-6-1' (CYG1470-11) Soil	Sampled: 07/30/15 10:59	Received: 07/30/	15 16:34						
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	8.0	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-6-1' (CYG1470-11) Soil Sampled:	07/30/15 10:59 Rec	eived: 07/30/1	5 16:34						
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	21	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	10	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	II .	
Surrogate: 1,2-Dichloroethane-d4		100 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		99 %	62	-125	"	"	"	"	
DC-SB-6-5' (CYG1470-12) Soil Sampled:	07/30/15 11:00 Rec	eived: 07/30/1	5 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	$\mu g/kg$	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
	ND ND	5.0 5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane									
1,1,2-Trichloroethane 1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	ND ND	5.0 5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene	ND ND ND	5.0 5.0 5.0	"	"	" "	" "	n n	" "	
1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND ND ND	5.0 5.0 5.0 5.0	""	" "	" "	" "	" " "	n n n	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-6-5' (CYG1470-12) Soil	Sampled: 07/30/15 11:00	Received: 07/30/	15 16:34						
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	23	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 1	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-6-5' (CYG1470-12) Soil	Sampled: 07/30/15 11:00	Received: 07/30/	15 16:34						
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	12	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	17	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		96 %	50	)-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		95 %		2-125	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-7-1' (CYG1470-13) Soil Sam	npled: 07/30/15 11:08 R	eceived: 07/30/1	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-7-1' (CYG1470-13) Soil	Sampled: 07/30/15 11:08	Received: 07/30/	15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	5.2	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	ND ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	6.8	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting llt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-7-1' (CYG1470-13) Soil	Sampled: 07/30/15 11:08	Received: 07/30/	15 16:34						
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		114 %	50	)-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97 %	50	0-128	"	"	"	"	
Surrogate: Toluene-d8		102 %	62	?-125	"	"	"	"	
DC-SB-7-5' (CYG1470-14) Soil	Sampled: 07/30/15 11:09	Received: 07/30/2	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroetha	ne ND	5.0	"	"	"	"	"	"	
(Freon 113)			_	,,	,,		,,	_	
1,1,2-Trichloroethane	ND	5.0	"			"		"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting alt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-7-5' (CYG1470-14) Soil	Sampled: 07/30/15 11:09	Received: 07/30/	15 16:34						
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	6.0	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 1	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-7-5' (CYG1470-14) Soil Sampled	d: 07/30/15 11:09 Red	ceived: 07/30/1	5 16:34						
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	7.5	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	II .	
Surrogate: 1,2-Dichloroethane-d4		108 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		115 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		98 %	62	-125	"	"	"	"	
DC-SB-8-1' (CYG1470-15) Soil Sampled	d: 07/30/15 11:15 Rec	ceived: 07/30/1	5 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	NID	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0							
, ,	ND ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane			"	"	"	"	"	"	
1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene	ND	5.0							
1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene	ND ND	5.0 5.0	"	"	"	"	"	"	
1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND ND ND	5.0 5.0 5.0	"	"	"	"	"	"	
1,1-Dichloroethane 1,1-Dichloroethene	ND ND ND ND	5.0 5.0 5.0 5.0	"	"	" "	" "	" "	" "	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-8-1' (CYG1470-15) Soil	Sampled: 07/30/15 11:15	Received: 07/30/	15 16:34						
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 1	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-8-1' (CYG1470-15) Soil	Sampled: 07/30/15 11:15	Received: 07/30/	15 16:34						
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	7.8	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	н	II .	
Surrogate: 1,2-Dichloroethane-d4		111 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		95 %	62	-125	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-8-5' (CYG1470-16) Soil Sai	mpled: 07/30/15 11:16 R	eceived: 07/30/1	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	N.D.	5.0	,,	,,	"		,,	"	
1,1,2-Trichloroethane	ND	5.0				"			
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"			"			
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-8-5' (CYG1470-16) Soil	Sampled: 07/30/15 11:16	Received: 07/30/	15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	6.3	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	ND ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	8.1	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	12	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resul	Reporting t Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-8-5' (CYG1470-16) Soil Sa	mpled: 07/30/15 11:16	Received: 07/30/1	15 16:34						
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		98 %	50	)-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		98 %	62	?-125	"	"	"	"	
DC-SB-9-1' (CYG1470-17) Soil Sa	mpled: 07/30/15 11:23	Received: 07/30/1	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05254	07/31/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	N.D.	5.0	"	,,	,,		,,	"	
1,1,2-Trichloroethane	ND	5.0		"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	,,	,,	
1,1-Dichloroethene	ND	5.0	"	"	"	"	,,	,,	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0		"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"			"			
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-9-1' (CYG1470-17) Soil Sampled:	: 07/30/15 11:23 Rece	ived: 07/30/1	15 16:34						
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-9-1' (CYG1470-17) Soil Sample	d: 07/30/15 11:23 Rece	eived: 07/30/1	15 16:34						
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY05254	"	08/01/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	54	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	6.4	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		111 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		95 %	62	-125	"	"	"	"	
DC-SB-9-5' (CYG1470-18) Soil Sampled	d: 07/30/15 11:24 Rece	eived: 07/30/1	15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	$\mu g/kg$	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-9-5' (CYG1470-18) Soil	Sampled: 07/30/15 11:24	Received: 07/30/	15 16:34						
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	6.0	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 1	2) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu	Reporting alt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-9-5' (CYG1470-18) Soil	Sampled: 07/30/15 11:24	Received: 07/30/	15 16:34						
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	39	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	8.7	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	н	II .	
Surrogate: 1,2-Dichloroethane-d4		84 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		101 %	62	-125	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-10-1' (CYG1470-19) Soil	Sampled: 07/30/15 11:35	Received: 07/30	/15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	,,	,,	,,	,,	,,	"	
1,1-Dichloroethane	ND	5.0	,,	,,	"	,,	"	"	
1,1-Dichloroethene	ND	5.0	,,	,,	"	,,	"	"	
1,1-Dichloropropene	ND ND	5.0	"	,,	"	,,	"	,,	
1,2,3-Trichlorobenzene	ND ND	5.0	,,	,,	"	,,	"	,,	
1,2,3-Trichloropropane	ND	5.0	,,	,,	"	,,	"	"	
1,2,4-Trichlorobenzene	ND	5.0	,,	,,	,,	,,	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	,,	,,	,,	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	,,	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	,,	"	"	
1,2-Dichlorobenzene	ND	5.0	,,	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	,,	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-10-1' (CYG1470-19) Soil	Sampled: 07/30/15 11:35 R	Received: 07/30	/15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	2700	1000	"	200	"	"	"	"	
Toluene	ND	5.0	"	1	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	5.6	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-10-1' (CYG1470-19) Soil	Sampled: 07/30/15 11:35 F	Received: 07/30	/15 16:34	ļ					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		86 %	50	-125	"		"	"	
Surrogate: 4-Bromofluorobenzene		106 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		100 %	62	-125	"	"	"	"	
DC-SB-10-5' (CYG1470-20) Soil	Sampled: 07/30/15 11:37 F	Received: 07/30	/15 16:34	ļ					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	MD	5.0	,,	,,	,,	,,	,,	"	
1,1,2-Trichloroethane	ND	5.0	,,	"	"		"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	,,	,,	
1,1-Dichloroethene	ND	5.0			,,	"	,,		
1,1-Dichloropropene	ND	5.0	,,	"	,,	"	"	"	
1,2,3-Trichlorobenzene	ND ND	5.0	,,		,,	"	,,	,,	
1,2,3-Trichloropropane 1,2,4-Trichlorobenzene	ND ND	5.0 5.0	,,		,,	"	,,		
	ND ND		,,	,,	"	,,	,,	,,	
1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane	ND ND	5.0 10	,,	,,	,,	"	,,		
1,2-Dibromoethane (EDB)	ND ND	5.0	"	,,	,,	,,	,,	,	
1,2-Dichlorobenzene	ND ND	5.0	,,	"	"	,,	"	,,	
1,2-Dichloroethane	ND ND	5.0	,,	"	"	,,	"	"	
1,2-Dichloropropane	ND ND	5.0	,,	"	"	,,	"	"	
1,3,5-Trimethylbenzene	ND ND	5.0	,,	"	"	,,	"	"	
1,3-Dichlorobenzene	ND ND	5.0	,,	"	"	,,	"	"	
1,3-Dichloropropane	ND ND	5.0	,,	"	"	,,	"	"	
1,4-Dichlorobenzene	ND ND	5.0	"	"	"	,,	"	,,	
1,4-DICHIOIOUCHZCHC	ND	3.0				"			

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-10-5' (CYG1470-20) Soil S	Sampled: 07/30/15 11:37	Received: 07/30	/15 16:34						
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	5.6	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-10-5' (CYG1470-20) Soil	Sampled: 07/30/15 11:37	Received: 07/30	/15 16:34						
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	1100	100	"	20	"	"	"	"	
Toluene	ND	5.0	"	1	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	12	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		85 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		103 %	62	-125	"	"	"	"	
DC-SB-11-1' (CYG1470-21) Soil	Sampled: 07/30/15 11:41	Received: 07/30	/15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethan	e ND	5.0	"	"	"	"	"	"	
(Freon 113)			_		_		"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"		
1,1-Dichloroethane	ND	5.0	"	"	"	"		"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

	Analyte	Resul	Reporting t Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	DC-SB-11-1' (CYG1470-21) Soil	Sampled: 07/30/15 11:41	Received: 07/30	/15 16:34						
2-Dichlorobenzene   ND   5.0	1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
2.2-Dichlorogethane	1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
2Dichloropropane	1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
3.5-Trimethylbenzene   ND   5.0   "   "   "   "   "   "   "   "   "	1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
ND   S   S   S   S   S   S   S   S   S	1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
3-Dichloropropane   ND   5.0   "   "   "   "   "   "   "     "	1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
A-Dichlorobenzene	1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2.2-Dichloropropane   ND   5.0   "   "   "   "   "   "   "   "   "	1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
ND	1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Part   Part	2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
ND   SO   "	2-Butanone	ND	100	"	"	"	"	"	"	
ND	2-Hexanone	ND	50	"	"	"	"	"	"	
Serior   ND   S.0   "   "   "   "   "   "   "   "   "	4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Stromobenzene   ND   S.0   "	Acetone	ND	100	"	"	"	"	"	"	
Stromochloromethane   ND   S.0   "   "   "   "   "   "   "   "   "	Benzene	ND	5.0	"	"	"	"	"	"	
Stromodichloromethane   ND   S.0   "                       "	Bromobenzene	ND	5.0	"	"	"	"	"	"	
Stromoform   ND   S.0   "	Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Stomomethane   ND   10   "   "   "   "   "   "   "   "   "	Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	Bromoform	ND	5.0	"	"	"	"	"	"	
Chlorobenzene ND 5.0 " " " " " " " " " " " " " " " Chloroethane ND 5.0 " " " " " " " " " " " " " " " " " " "	Bromomethane	ND	10	"	"	"	"	"	"	
Chloroethane         ND         5.0         "	Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chloroform         ND         5.0         "         <	Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloromethane         ND         10         "	Chloroethane	ND	5.0	"	"	"	"	"	"	
Sis-1,2-Dichloroethene       ND       5.0       "<	Chloroform	ND	5.0	"	"	"	"	"	"	
ND   5.0	Chloromethane	ND	10	"	"	"	"	"	"	
Dibromochloromethane         ND         5.0         "	cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane         ND         5.0         "	cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12) ND 10 " " " " " " "	Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
	Dibromomethane	ND	5.0	"	"	"	"	"	"	
	Dichlorodifluoromethane (Freon 12	2) ND	10	"	"	"	"	"	"	
	Ethylbenzene		5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resul	Reporting t Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-11-1' (CYG1470-21) Soil	Sampled: 07/30/15 11:41	Received: 07/30	/15 16:34						
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		84 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		101 %	62	-125	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-11-5' (CYG1470-22) Soil	Sampled: 07/30/15 11:42 R	eceived: 07/30/	/15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethan	e ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-11-5' (CYG1470-22) Soil	Sampled: 07/30/15 11:42	Received: 07/30	/15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-11-5' (CYG1470-22) Soil	Sampled: 07/30/15 11:42	Received: 07/30	/15 16:34	ļ					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		80 %	50	)-125	"		"	"	
Surrogate: 4-Bromofluorobenzene		99 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		104 %	62	2-125	"	"	"	"	
DC-SB-12-1' (CYG1470-23) Soil	Sampled: 07/30/15 11:59	Received: 07/30	/15 16:34	ļ					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethan	e ND	5.0	"	"	"	"	"	"	
(Freon 113)	ND	5.0	"	,,	,,	,,	,,	"	
1,1,2-Trichloroethane	ND	5.0	,,	"	,,		,,	,,	
1,1-Dichloroethane	ND ND	5.0 5.0	"	"	,,	"	,,	,,	
1,1-Dichloroethene			"	"	,,	"	,,		
1,1-Dichloropropene	ND	5.0	"	"	,,	"	"	"	
1,2,3-Trichlorobenzene	ND ND	5.0	"	"	,,	"	,,	"	
1,2,3-Trichloropropane	ND ND	5.0 5.0	"		,,	"	,,		
1,2,4-Trichlorobenzene			"	"	"	"	,,	"	
1,2,4-Trimethylbenzene	ND ND	5.0 10	"	"	,,	"	,,	,,	
1,2-Dibromo-3-chloropropane	ND ND	5.0	"	"	,,	"	,,	,,	
1,2-Dibromoethane (EDB)		5.0	"		,,	"	,,	"	
1,2-Dichlorobenzene	ND ND	5.0	"	"	,,	"	,,	"	
1,2-Dichloroethane	ND ND		"	"	,,	"	"	"	
1,2-Dichloropropane	ND ND	5.0 5.0	,,	"	,,	"	,,	,,	
1,3,5-Trimethylbenzene	ND ND	5.0	"	"	,,	"	,,	,,	
1,3-Dichlorobenzene			"	"	,,	"	"	"	
1,3-Dichloropropane	ND	5.0		"	,,		,,	,,	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	**	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-12-1' (CYG1470-23) Soil Sa	mpled: 07/30/15 11:59	Received: 07/30	/15 16:34						
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	,,	,,	,,	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-12-1' (CYG1470-23) Soil Sample	ed: 07/30/15 11:59 Re	ceived: 07/30	/15 16:34						
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	H .	
Surrogate: 1,2-Dichloroethane-d4		85 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		103 %	62	-125	"	"	"	"	
DC-SB-12-5' (CYG1470-24) Soil Sample	ed: 07/30/15 12:00 Re	ceived: 07/30	/15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	TID								
1,2,3-Trichloropropane 1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-12-5' (CYG1470-24) Soil	Sampled: 07/30/15 12:00	Received: 07/30	/15 16:34						
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-12-5' (CYG1470-24) Soil	Sampled: 07/30/15 12:00	Received: 07/30	/15 16:34						
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	II .	
Surrogate: 1,2-Dichloroethane-d4		92 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		102 %	62	-125	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-13-1' (CYG1470-25) Soil S	Sampled: 07/30/15 12:06 Ro	eceived: 07/30	/15 16:34	ı					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	n	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-13-1' (CYG1470-25) Soil	Sampled: 07/30/15 12:06	Received: 07/30	/15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	n n	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-13-1' (CYG1470-25) Soil Sampled:	07/30/15 12:06 Rec	eived: 07/30	/15 16:34	1					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		95 %	50	)-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		104 %	62	2-125	"	"	"	"	
DC-SB-13-5' (CYG1470-26) Soil Sampled:	07/30/15 12:07 Rec	eived: 07/30	/15 16:34	1					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)			_	_				_	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	,,	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-13-5' (CYG1470-26) Soil	Sampled: 07/30/15 12:07	Received: 07/30	/15 16:34	ļ					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	n	
2-Hexanone	ND	50	"	"	"	"	"	n	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	n	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	n	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	8.5	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resul	Reporting t Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-13-5' (CYG1470-26) Soil S	Sampled: 07/30/15 12:07	Received: 07/30	/15 16:34	ļ					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	n	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	8.6	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		94 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		102 %	62	-125	"	"	"	"	
DC-SB-14-1' (CYG1470-27) Soil S	Sampled: 07/30/15 12:17	Received: 07/30	/15 16:34	!					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	,,	,,	"	"	"	"	
1.15:11	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane			,,	"	"	"	"	"	
	ND	5.0							
1,1-Dichloroethene	ND ND	5.0 5.0	"	,,	"	"	"	"	
1,1-Dichloroethene 1,1-Dichloropropene				"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"						
1,1-Dichloroethene 1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND ND	5.0 5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-14-1' (CYG1470-27) Soil	Sampled: 07/30/15 12:17	Received: 07/30	/15 16:34						
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-14-1' (CYG1470-27) Soil	Sampled: 07/30/15 12:17	Received: 07/30	/15 16:34						
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	II .	"	
Surrogate: 1,2-Dichloroethane-d4		89 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		102 %	62	-125	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-14-5' (CYG1470-28) Soil Sampled	: 07/30/15 12:18 I	Received: 07/30	/15 16:34						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY05268	08/01/15	08/01/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

DC-SB-14-5' (CYG1470-28) Soil	Sampled: 07/30/15 12:18				Batch	Prepared	Analyzed	Method	Notes
		Received: 07/30	/15 16:34						
Bromoform	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

# **Volatile Organic Compounds by EPA Method 8260B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-14-5' (CYG1470-28) Soil	Sampled: 07/30/15 12:18 R	Received: 07/30	/15 16:34						
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY05268	"	08/01/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		88 %	50-1	125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	50-1	128	"	"	"	"	
Surrogate: Toluene-d8		104 %	62-1	125	"	"	"	"	

CA DOHS ELAP Accreditation/Registration Number 1233

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch CY05254 - EPA 5030 Soil MS

Blank (CY05254-BLK1)				Prepared & Analyzed: 07/31/15
Acetone	ND	100	μg/kg	
Benzene	ND	5.0	"	
Bromobenzene	ND	5.0	"	
Bromochloromethane	ND	5.0	"	
Bromodichloromethane	ND	5.0	"	
Bromoform	ND	5.0	"	
Bromomethane	ND	10	"	
2-Butanone	ND	100	"	
n-Butylbenzene	ND	5.0	"	
sec-Butylbenzene	ND	5.0	"	
tert-Butylbenzene	ND	5.0	"	
Carbon tetrachloride	ND	5.0	"	
Chlorobenzene	ND	5.0	"	
Chloroethane	ND	5.0	"	
Chloroform	ND	5.0	"	
Chloromethane	ND	10	"	
o-Chlorotoluene	ND	5.0	"	
p-Chlorotoluene	ND	5.0	"	
Dibromochloromethane	ND	5.0	"	
1,2-Dibromo-3-chloropropane	ND	10	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	
Dibromomethane	ND	5.0	"	
1,2-Dichlorobenzene	ND	5.0	"	
1,3-Dichlorobenzene	ND	5.0	"	
1,4-Dichlorobenzene	ND	5.0	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	
1,1-Dichloroethane	ND	5.0	"	
1,2-Dichloroethane	ND	5.0	"	
1,1-Dichloroethene	ND	5.0	"	
cis-1,2-Dichloroethene	ND	5.0	"	
trans-1,2-Dichloroethene	ND	5.0	"	

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

Result

ND

ND

ND

ND

ND

ND

5.0

5.0

5.0 5.0

5.0

5.0

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Reporting

Limit

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Units

Spike

Level

Source

Result

%REC

%REC

Limits

RPD

RPD

Limit

Notes

Blank (CY05254-BLK1)			
1,2-Dichloropropane	ND	5.0	μg/kg
1,3-Dichloropropane	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
1,1-Dichloropropene	ND	5.0	"
cis-1,3-Dichloropropene	ND	5.0	"
trans-1,3-Dichloropropene	ND	5.0	"
Ethylbenzene	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
2-Hexanone	ND	50	"
Isopropylbenzene	ND	5.0	"
p-Isopropyltoluene	ND	5.0	"
Methylene chloride	ND	20	"
4-Methyl-2-pentanone	ND	50	"
Methyl tert-butyl ether	ND	5.0	"
Naphthalene	ND	5.0	"
n-Propylbenzene	ND	5.0	"
Styrene	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,1,2-Tetrachloroethane	ND	5.0	"
Tetrachloroethene	ND	5.0	"
Toluene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	5.0	"
1,2,4-Trichlorobenzene	ND	5.0	"

Analyte

1,1,2-Trichloroethane

1,1,1-Trichloroethane

Trichlorofluoromethane

1,2,3-Trichloropropane

1,3,5-Trimethylbenzene

Trichloroethene

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY05254 - EPA 5030 Soil MS										
Blank (CY05254-BLK1)				Prepared &	Analyzed:	07/31/15				
1,2,4-Trimethylbenzene	ND	5.0	μg/kg							
Vinyl chloride	ND	10	"							
Xylenes (total)	ND	10	"							
Surrogate: 1,2-Dichloroethane-d4	29.3		"	30.0		98	50-125			
Surrogate: Toluene-d8	27.8		"	30.0		93	62-125			
Surrogate: 4-Bromofluorobenzene	30.6		"	30.0		102	50-128			
LCS (CY05254-BS1)				Prepared &	z Analyzed:	07/31/15				
Benzene	21.2	5.0	μg/kg	20.0		106	64-135			
Chlorobenzene	20.1	5.0	"	20.0		101	67-133			
1,1-Dichloroethene	19.0	5.0	"	20.0		95	53-137			
Toluene	19.8	5.0	"	20.0		99	61-138			
Trichloroethene	21.2	5.0	"	20.0		106	64-130			
Surrogate: 1,2-Dichloroethane-d4	30.3		"	30.0		101	50-125			
Surrogate: Toluene-d8	28.5		"	30.0		95	62-125			
Surrogate: 4-Bromofluorobenzene	28.7		"	30.0		96	50-128			
LCS Dup (CY05254-BSD1)				Prepared &	z Analyzed:	07/31/15				
Benzene	20.9	5.0	μg/kg	20.0		105	64-135	1	30	
Chlorobenzene	20.4	5.0	"	20.0		102	67-133	1	30	
1,1-Dichloroethene	19.3	5.0	"	20.0		96	53-137	1	30	
Toluene	19.9	5.0	"	20.0		99	61-138	0.1	30	
Trichloroethene	21.5	5.0	"	20.0		107	64-130	1	30	
Surrogate: 1,2-Dichloroethane-d4	28.3		"	30.0		94	50-125			
Surrogate: Toluene-d8	29.1		"	30.0		97	62-125			
Surrogate: 4-Bromofluorobenzene	31.1		"	30.0		104	50-128			
Matrix Spike (CY05254-MS1)	Sour	ce: CYG1470	)-01	Prepared: (	07/31/15 A	nalyzed: 08	/01/15			
Benzene	18.8	5.0	μg/kg	20.0	ND	94	58-139			
Chlorobenzene	17.7	5.0	"	20.0	ND	89	62-134			
1,1-Dichloroethene	18.5	5.0	"	20.0	ND	93	53-152			
Toluene	18.7	5.0	"	20.0	ND	93	58-139			

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CY05254 - EPA 5030 Soil MS										
Matrix Spike (CY05254-MS1)	Sou	rce: CYG1470	)-01	Prepared: (	07/31/15 A	nalyzed: 08	/01/15			
Trichloroethene	30.0	5.0	μg/kg	20.0	4.85	126	55-138			
Surrogate: 1,2-Dichloroethane-d4	23.7		"	30.0		79	50-125			
Surrogate: Toluene-d8	30.6		"	30.0		102	62-125			
Surrogate: 4-Bromofluorobenzene	31.4		"	30.0		105	50-128			
Matrix Spike Dup (CY05254-MSD1)	Sou	rce: CYG1470	<b>)-01</b>	Prepared: (	07/31/15 A	nalyzed: 08	/01/15			
Benzene	18.6	5.0	μg/kg	20.0	ND	93	58-139	1	30	
Chlorobenzene	16.9	5.0	"	20.0	ND	84	62-134	5	30	
1,1-Dichloroethene	18.0	5.0	"	20.0	ND	90	53-152	3	30	
Toluene	18.7	5.0	"	20.0	ND	93	58-139	0.1	30	
Trichloroethene	39.8	5.0	"	20.0	4.85	175	55-138	28	30	QM-
Surrogate: 1,2-Dichloroethane-d4	24.2		"	30.0		81	50-125			
Surrogate: Toluene-d8	31.2		"	30.0		104	62-125			
Surrogate: 4-Bromofluorobenzene	32.4		"	30.0		108	50-128			
Batch CY05268 - EPA 5030 Soil MS										
Batch CY05268 - EPA 5030 Soil MS Blank (CY05268-BLK1)				Prepared &	Analyzed:	08/01/15				
	ND	100	μg/kg	Prepared &	λ Analyzed:	08/01/15				
Blank (CY05268-BLK1)	ND ND	100	μg/kg "	Prepared &	λ Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone				Prepared &	z Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene	ND	5.0	"	Prepared &	ż Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene Bromobenzene	ND ND	5.0 5.0	"	Prepared &	t Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene Bromobenzene Bromochloromethane	ND ND ND	5.0 5.0 5.0	"	Prepared &	t Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene Bromobenzene Bromochloromethane Bromodichloromethane	ND ND ND ND	5.0 5.0 5.0 5.0	" "	Prepared &	t Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform	ND ND ND ND	5.0 5.0 5.0 5.0 5.0	" " "	Prepared &	t Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane	ND ND ND ND ND	5.0 5.0 5.0 5.0 5.0	" " " " " " " " " " " " " " " " " " " "	Prepared &	t Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane 2-Butanone n-Butylbenzene	ND ND ND ND ND ND ND ND	5.0 5.0 5.0 5.0 5.0 10	" " " " " " " " " " " " " " " " " " " "	Prepared &	ι Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane 2-Butanone n-Butylbenzene sec-Butylbenzene	ND	5.0 5.0 5.0 5.0 5.0 10 100 5.0	"" "" "" "" "" "" "" "" "" "" "" "" ""	Prepared &	t Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane 2-Butanone	ND	5.0 5.0 5.0 5.0 5.0 10 100 5.0 5.0	"" "" "" "" "" "" "" "" "" "" "" "" ""	Prepared &	λ Analyzed:	08/01/15				
Blank (CY05268-BLK1) Acetone Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane 2-Butanone n-Butylbenzene sec-Butylbenzene tert-Butylbenzene	ND	5.0 5.0 5.0 5.0 5.0 10 100 5.0 5.0	11 11 11 11 11 11 11 11 11 11 11 11 11	Prepared &	λ Analyzed:	08/01/15				

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

Result

ND

ND

ND

ND

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Reporting

Limit

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

Units

Spike

Level

Source

Result

%REC

%REC

Limits

RPD

RPD

Limit

Notes

Chloroform ND 5.0 ug/kg
Chloroform ND 5.0 μg/kg
Chloromethane ND 10 "
o-Chlorotoluene ND 5.0 "
p-Chlorotoluene ND 5.0 "
Dibromochloromethane ND 5.0 "
1,2-Dibromo-3-chloropropane ND 10 "
1,2-Dibromoethane (EDB) ND 5.0 "
Dibromomethane ND 5.0 "
1,2-Dichlorobenzene ND 5.0 "
1,3-Dichlorobenzene ND 5.0 "
1,4-Dichlorobenzene ND 5.0 "
Dichlorodifluoromethane (Freon 12) ND 10 "
1,1-Dichloroethane ND 5.0 "
1,2-Dichloroethane ND 5.0 "
1,1-Dichloroethene ND 5.0 "
cis-1,2-Dichloroethene ND 5.0 "
trans-1,2-Dichloroethene ND 5.0 "
1,2-Dichloropropane ND 5.0 "
1,3-Dichloropropane ND 5.0 "
2,2-Dichloropropane ND 5.0 "
1,1-Dichloropropene ND 5.0 "
cis-1,3-Dichloropropene ND 5.0 "
trans-1,3-Dichloropropene ND 5.0 "
Ethylbenzene ND 5.0 "
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon ND 5.0 "
Hexachlorobutadiene ND 5.0 "

50 5.0

5.0

20

Analyte

2-Hexanone

Isopropylbenzene

p-Isopropyltoluene

Methylene chloride

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CY05268 - EPA 5030 Soil MS										
Blank (CY05268-BLK1)				Prepared &	z Analyzed:	08/01/15				
4-Methyl-2-pentanone	ND	50	μg/kg							
Methyl tert-butyl ether	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
Toluene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	10	"							
Xylenes (total)	ND	10	"							
Surrogate: 1,2-Dichloroethane-d4	24.5		"	30.0		82	50-125			
Surrogate: Toluene-d8	30.3		"	30.0		101	62-125			
Surrogate: 4-Bromofluorobenzene	28.6		"	30.0		95	50-128			
LCS (CY05268-BS1)				Prepared &	Analyzed:	08/01/15				
Benzene	17.5	5.0	μg/kg	20.0		88	64-135			
Chlorobenzene	17.7	5.0	"	20.0		88	67-133			
1,1-Dichloroethene	18.9	5.0	"	20.0		94	53-137			
Toluene	18.4	5.0	"	20.0		92	61-138			
Trichloroethene	17.6	5.0	"	20.0		88	64-130			
Surrogate: 1,2-Dichloroethane-d4	26.6		"	30.0		89	50-125			

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

		Reporting		Spike	Source	0/5	%REC	<b>D.</b> F. F.	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY05268 - EPA 5030 Soil MS										
LCS (CY05268-BS1)				Prepared &	Analyzed:	08/01/15				
Surrogate: Toluene-d8	31.1		μg/kg	30.0		104	62-125			
Surrogate: 4-Bromofluorobenzene	33.1		"	30.0		110	50-128			
LCS Dup (CY05268-BSD1)				Prepared &	Analyzed:	08/01/15				
Benzene	17.9	5.0	μg/kg	20.0		90	64-135	2	30	
Chlorobenzene	18.9	5.0	"	20.0		94	67-133	7	30	
1,1-Dichloroethene	16.7	5.0	"	20.0		84	53-137	12	30	
Toluene	18.9	5.0	"	20.0		94	61-138	3	30	
Trichloroethene	18.4	5.0	"	20.0		92	64-130	5	30	
Surrogate: 1,2-Dichloroethane-d4	24.0		"	30.0		80	50-125			
Surrogate: Toluene-d8	30.9		"	30.0		103	62-125			
Surrogate: 4-Bromofluorobenzene	30.0		"	30.0		100	50-128			
Matrix Spike (CY05268-MS1)	Sou	rce: CYG1470	)-21	Prepared &	Analyzed:	08/01/15				
Benzene	17.5	5.0	μg/kg	20.0	ND	87	58-139			
Chlorobenzene	17.3	5.0	"	20.0	ND	86	62-134			
1,1-Dichloroethene	17.7	5.0	"	20.0	ND	89	53-152			
Toluene	18.6	5.0	"	20.0	ND	93	58-139			
Trichloroethene	22.9	5.0	"	20.0	ND	114	55-138			
Surrogate: 1,2-Dichloroethane-d4	23.5		"	30.0		78	50-125			
Surrogate: Toluene-d8	31.9		"	30.0		106	62-125			
Surrogate: 4-Bromofluorobenzene	20.9		"	30.0		70	50-128			
Matrix Spike Dup (CY05268-MSD1)	Sou	rce: CYG1470	)-21	Prepared &	Analyzed:	08/01/15				
Benzene	17.2	5.0	μg/kg	20.0	ND	86	58-139	2	30	
Chlorobenzene	18.0	5.0	"	20.0	ND	90	62-134	4	30	
,1-Dichloroethene	17.6	5.0	"	20.0	ND	88	53-152	0.6	30	
Гoluene	18.3	5.0	"	20.0	ND	92	58-139	2	30	
Trichloroethene	21.5	5.0	"	20.0	ND	107	55-138	6	30	
Surrogate: 1,2-Dichloroethane-d4	25.9		"	30.0		86	50-125			
Surrogate: Toluene-d8	32.1		"	30.0		107	62-125			

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch CY05268 - EPA 5030 Soil MS

Matrix Spike Dup (CY05268-MSD1)	Source: CY	/G1470-21	Prepared & Analyzed: 08/01/15			
Surrogate: 4-Bromofluorobenzene	21.4	μg/kg	30.0	71	50-128	

CA DOHS ELAP Accreditation/Registration Number 1233

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Tetra Tech EM Inc. Project: Terramar -5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYG1470

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### **Notes and Definitions**

QM-7 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable

LCS/LCSD recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

CA DOHS ELAP Accreditation/Registration Number 1233



8/12/2015 Mr. Garrett Kuhl Tetra Tech - GEO 2969 Prospect Park Suite 100 Rancho Cordova CA 95670

Project Name: TERRAMAR-5100 BROADWAY

Project #: 117-7429001.06 Workorder #: 1508037A

Dear Mr. Garrett Kuhl

The following report includes the data for the above referenced project for sample(s) received on 8/4/2015 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

**Project Manager** 

Kelly Butte



#### WORK ORDER #: 1508037A

Work Order Summary

CLIENT: Mr. Garrett Kuhl BILL TO: Mr. Garrett Kuhl

Tetra Tech - GEO

2969 Prospect Park

2969 Prospect Park

Suite 100 Suite 100

Rancho Cordova, CA 95670 Rancho Cordova, CA 95670

PHONE: 916-853-1800 P.O. #

FAX: 916-853-1860 PROJECT # 117-7429001.06 TERRAMAR-5100

**DATE RECEIVED:** 08/04/2015 **DATE COMPLETED:** 08/12/2015

CONTACT: BROADWAY Kelly Buettner

FRACTION #	<u>NAME</u>	<u>TEST</u>	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	DC-VMP-2-5'	TO-15	2.4 "Hg	15 psi
02A	DC-VMP-3-5'	TO-15	3.7 "Hg	15 psi
03A	DC-VMP-4-5'	TO-15	3.9 "Hg	15 psi
04A	DC-VMP-5-5'	TO-15	2.2 "Hg	15.3 psi
05A	DC-VMP-6-5'	TO-15	4.3 "Hg	15 psi
06A	DC-VMP-7-5'	TO-15	3.9 "Hg	15.1 psi
07A	DC-VMP-8-5'	TO-15	3.7 "Hg	14.9 psi
08A	Lab Blank	TO-15	NA	NA
08B	Lab Blank	TO-15	NA	NA
08C	Lab Blank	TO-15	NA	NA
09A	CCV	TO-15	NA	NA
09B	CCV	TO-15	NA	NA
09C	CCV	TO-15	NA	NA
10A	LCS	TO-15	NA	NA
10AA	LCSD	TO-15	NA	NA
10B	LCS	TO-15	NA	NA
10BB	LCSD	TO-15	NA	NA
10C	LCS	TO-15	NA	NA
10CC	LCSD	TO-15	NA	NA

	Meide Thayes	
CERTIFIED BY:	000	DATE: 08/12/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015. Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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#### LABORATORY NARRATIVE EPA Method TO-15 Tetra Tech - GEO Workorder# 1508037A

Seven 1 Liter Summa Canister samples were received on August 04, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

#### **Receiving Notes**

There were no receiving discrepancies.

#### **Analytical Notes**

Dilution was performed on samples DC-VMP-2-5', DC-VMP-3-5', DC-VMP-4-5', DC-VMP-5-5', DC-VMP-6-5', and DC-VMP-8-5' due to the presence of high level target species.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

## **Definition of Data Qualifying Flags**

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
  - J Estimated value.
  - E Exceeds instrument calibration range.
  - S Saturated peak.
  - Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
  - UJ- Non-detected compound associated with low bias in the CCV
  - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



# **Summary of Detected Compounds EPA METHOD TO-15 GC/MS**

Client Sample ID: DC-VMP-2-5'

Lab ID#: 1508037A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	55	120	270	600
Vinyl Chloride	55	3200	140	8100
1,1-Dichloroethene	55	170	220	680
trans-1,2-Dichloroethene	55	580	220	2300
cis-1,2-Dichloroethene	55	30000	220	120000
Trichloroethene	55	24000	300	130000
Tetrachloroethene	55	12000	370	85000
m,p-Xylene	55	63	240	280

Client Sample ID: DC-VMP-3-5'

Lab ID#: 1508037A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.8	16	28	79
Vinyl Chloride	5.8	12	15	30
Carbon Disulfide	23	25	72	77
cis-1,2-Dichloroethene	5.8	1100	23	4400
Tetrahydrofuran	5.8	9.1	17	27
Chloroform	5.8	21	28	100
Cyclohexane	5.8	11	20	37
Benzene	5.8	11	18	34
Trichloroethene	5.8	750	31	4000
Toluene	5.8	100	22	380
Tetrachloroethene	5.8	1600	39	11000
Ethyl Benzene	5.8	18	25	80
m,p-Xylene	5.8	65	25	280
o-Xylene	5.8	28	25	120
4-Ethyltoluene	5.8	17	28	83
1,3,5-Trimethylbenzene	5.8	8.4	28	41
1,2,4-Trimethylbenzene	5.8	15	28	74



# **Summary of Detected Compounds EPA METHOD TO-15 GC/MS**

Client Sample ID: DC-VMP-4-5'

Lab ID#: 1508037A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Hexane	14	17	51	61	
cis-1,2-Dichloroethene	14	640	57	2600	
Chloroform	14	180	71	870	
Trichloroethene	14	7600	78	41000	
Tetrachloroethene	14	8000	98	54000	

Client Sample ID: DC-VMP-5-5'

Lab ID#: 1508037A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	14	400	68	2000
Vinyl Chloride	14	2800	35	7100
1,1-Dichloroethene	14	72	54	280
trans-1,2-Dichloroethene	14	350	54	1400
Hexane	14	53	48	190
cis-1,2-Dichloroethene	14	6100	54	24000
Cyclohexane	14	78	47	270
Trichloroethene	14	7200	74	39000
Tetrachloroethene	14	6600	93	45000

**Client Sample ID: DC-VMP-6-5'** 

Lab ID#: 1508037A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	3700	5000	9400	13000
cis-1,2-Dichloroethene	3700	16000	15000	65000
Trichloroethene	3700	18000	20000	99000
Tetrachloroethene	3700	2800000	25000	19000000

Client Sample ID: DC-VMP-7-5'

Lab ID#: 1508037A-06A



# **Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN**

Client Sample ID: DC-VMP-7-5'

Lab ID#: 1508037A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	2.4	5.8	12
Ethanol	4.7	9.2	8.8	17
Acetone	12	22	28	53
Chloroform	1.2	33	5.7	160
Toluene	1.2	1.5	4.4	5.6
Tetrachloroethene	1.2	21	7.9	140

Client Sample ID: DC-VMP-8-5'

Lab ID#: 1508037A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	12	670	57	3300
Vinyl Chloride	12	2400	29	6100
1,1-Dichloroethene	12	14	46	55
trans-1,2-Dichloroethene	12	96	46	380
Hexane	12	25	40	89
cis-1,2-Dichloroethene	12	1900	46	7400
Cyclohexane	12	27	40	93
Trichloroethene	12	130	62	720
Tetrachloroethene	12	56	78	380



# Client Sample ID: DC-VMP-2-5' Lab ID#: 1508037A-01A

# **EPA METHOD TO-15 GC/MS**

File Name: Dil. Factor:	14081007 11.0		of Collection: 8/4 of Analysis: 8/10	
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	55	120	270	600
Freon 114	55	Not Detected	380	Not Detected
Chloromethane	220	Not Detected	450	Not Detected
Vinyl Chloride	55	3200	140	8100
1,3-Butadiene	55	Not Detected	120	Not Detected
Bromomethane	55	Not Detected	210	Not Detected
Chloroethane	220	Not Detected	580	Not Detected
Freon 11	55	Not Detected	310	Not Detected
Ethanol	220	Not Detected	410	Not Detected
Freon 113	55	Not Detected	420	Not Detected
1,1-Dichloroethene	55	170	220	680
Acetone	220	Not Detected	520	Not Detected
2-Propanol	220	Not Detected	540	Not Detected
Carbon Disulfide	55	Not Detected	170	Not Detected
3-Chloropropene	220	Not Detected	690	Not Detected
Methylene Chloride	55	Not Detected	190	Not Detected
Methyl tert-butyl ether	55	Not Detected	200	Not Detected
trans-1,2-Dichloroethene	55	580	220	2300
Hexane	55	Not Detected	190	Not Detected
1,1-Dichloroethane	55	Not Detected	220	Not Detected
2-Butanone (Methyl Ethyl Ketone)	220	Not Detected	650	Not Detected
cis-1,2-Dichloroethene	55	30000	220	120000
Tetrahydrofuran	55	Not Detected	160	Not Detected
Chloroform	55	Not Detected	270	Not Detected
1,1,1-Trichloroethane	55	Not Detected	300	Not Detected
Cyclohexane	55	Not Detected	190	Not Detected
Carbon Tetrachloride	55	Not Detected	350	Not Detected
2,2,4-Trimethylpentane	55	Not Detected	260	Not Detected
Benzene	55	Not Detected	180	Not Detected
1,2-Dichloroethane	55	Not Detected	220	Not Detected
Heptane	55	Not Detected	220	Not Detected
Trichloroethene	55	24000	300	130000
1,2-Dichloropropane	55	Not Detected	250	Not Detected
1,4-Dioxane	220	Not Detected	790	Not Detected
Bromodichloromethane	55	Not Detected	370	Not Detected
cis-1,3-Dichloropropene	55	Not Detected	250	Not Detected
4-Methyl-2-pentanone	55	Not Detected	220	Not Detected
Toluene	55	Not Detected	210	Not Detected
trans-1,3-Dichloropropene	55	Not Detected	250	Not Detected
1,1,2-Trichloroethane	55	Not Detected	300	Not Detected
Tetrachloroethene	55	12000	370	85000
2-Hexanone	220	Not Detected	900	Not Detected



# Client Sample ID: DC-VMP-2-5' Lab ID#: 1508037A-01A

## **EPA METHOD TO-15 GC/MS**

File Name:	14081007	Date of Collection: 8/4/15 11:35:00 AM
Dil. Factor:	11.0	Date of Analysis: 8/10/15 11:02 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	55	Not Detected	470	Not Detected
1,2-Dibromoethane (EDB)	55	Not Detected	420	Not Detected
Chlorobenzene	55	Not Detected	250	Not Detected
Ethyl Benzene	55	Not Detected	240	Not Detected
m,p-Xylene	55	63	240	280
o-Xylene	55	Not Detected	240	Not Detected
Styrene	55	Not Detected	230	Not Detected
Bromoform	55	Not Detected	570	Not Detected
Cumene	55	Not Detected	270	Not Detected
1,1,2,2-Tetrachloroethane	55	Not Detected	380	Not Detected
Propylbenzene	55	Not Detected	270	Not Detected
4-Ethyltoluene	55	Not Detected	270	Not Detected
1,3,5-Trimethylbenzene	55	Not Detected	270	Not Detected
1,2,4-Trimethylbenzene	55	Not Detected	270	Not Detected
1,3-Dichlorobenzene	55	Not Detected	330	Not Detected
1,4-Dichlorobenzene	55	Not Detected	330	Not Detected
alpha-Chlorotoluene	55	Not Detected	280	Not Detected
1,2-Dichlorobenzene	55	Not Detected	330	Not Detected
1,2,4-Trichlorobenzene	220	Not Detected	1600	Not Detected
Hexachlorobutadiene	220	Not Detected	2300	Not Detected

## Container Type: 1 Liter Summa Canister

Surre meter	0/ December	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130



# Client Sample ID: DC-VMP-3-5' Lab ID#: 1508037A-02A

# EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080707	Date of Collection: 8/4/15 11:53:00 AM
Dil. Factor:	11.5	Date of Analysis: 8/7/15 01:47 PM

Dil. Factor:	11.5	5 Date of Analysis: 8/7/15 01:47 PM			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Freon 12	5.8	16	28	79	
Freon 114	5.8	Not Detected	40	Not Detected	
Chloromethane	58	Not Detected	120	Not Detected	
Vinyl Chloride	5.8	12	15	30	
1,3-Butadiene	5.8	Not Detected	13	Not Detected	
Bromomethane	58	Not Detected	220	Not Detected	
Chloroethane	23	Not Detected	61	Not Detected	
Freon 11	5.8	Not Detected	32	Not Detected	
Ethanol	23	Not Detected	43	Not Detected	
Freon 113	5.8	Not Detected	44	Not Detected	
1,1-Dichloroethene	5.8	Not Detected	23	Not Detected	
Acetone	58	Not Detected	140	Not Detected	
2-Propanol	23	Not Detected	56	Not Detected	
Carbon Disulfide	23	25	72	77	
3-Chloropropene	23	Not Detected	72	Not Detected	
Methylene Chloride	58	Not Detected	200	Not Detected	
Methyl tert-butyl ether	5.8	Not Detected	21	Not Detected	
trans-1,2-Dichloroethene	5.8	Not Detected	23	Not Detected	
Hexane	5.8	Not Detected	20	Not Detected	
1,1-Dichloroethane	5.8	Not Detected	23	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	23	Not Detected	68	Not Detected	
cis-1,2-Dichloroethene	5.8	1100	23	4400	
Tetrahydrofuran	5.8	9.1	17	27	
Chloroform	5.8	21	28	100	
1,1,1-Trichloroethane	5.8	Not Detected	31	Not Detected	
Cyclohexane	5.8	11	20	37	
Carbon Tetrachloride	5.8	Not Detected	36	Not Detected	
2,2,4-Trimethylpentane	5.8	Not Detected	27	Not Detected	
Benzene	5.8	11	18	34	
1,2-Dichloroethane	5.8	Not Detected	23	Not Detected	
Heptane	5.8	Not Detected	24	Not Detected	
Trichloroethene	5.8	750	31	4000	
1,2-Dichloropropane	5.8	Not Detected	26	Not Detected	
1,4-Dioxane	23	Not Detected	83	Not Detected	
Bromodichloromethane	5.8	Not Detected	38	Not Detected	
cis-1,3-Dichloropropene	5.8	Not Detected	26	Not Detected	
4-Methyl-2-pentanone	5.8	Not Detected	24	Not Detected	
Toluene	5.8	100	22	380	
trans-1,3-Dichloropropene	5.8	Not Detected	26	Not Detected	
1,1,2-Trichloroethane	5.8	Not Detected	31	Not Detected	
Tetrachloroethene	5.8	1600	39	11000	
2-Hexanone	23	Not Detected	94	Not Detected	



# Client Sample ID: DC-VMP-3-5' Lab ID#: 1508037A-02A

## EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080707	Date of Collection: 8/4/15 11:53:00 AM
Dil. Factor:	11.5	Date of Analysis: 8/7/15 01:47 PM

Dill I dotor.	11.5	Date of Affaiysis. Off 15 01:47 1 W		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	5.8	Not Detected	49	Not Detected
1,2-Dibromoethane (EDB)	5.8	Not Detected	44	Not Detected
Chlorobenzene	5.8	Not Detected	26	Not Detected
Ethyl Benzene	5.8	18	25	80
m,p-Xylene	5.8	65	25	280
o-Xylene	5.8	28	25	120
Styrene	5.8	Not Detected	24	Not Detected
Bromoform	5.8	Not Detected	59	Not Detected
Cumene	5.8	Not Detected	28	Not Detected
1,1,2,2-Tetrachloroethane	5.8	Not Detected	39	Not Detected
Propylbenzene	5.8	Not Detected	28	Not Detected
4-Ethyltoluene	5.8	17	28	83
1,3,5-Trimethylbenzene	5.8	8.4	28	41
1,2,4-Trimethylbenzene	5.8	15	28	74
1,3-Dichlorobenzene	5.8	Not Detected	34	Not Detected
1,4-Dichlorobenzene	5.8	Not Detected	34	Not Detected
alpha-Chlorotoluene	5.8	Not Detected	30	Not Detected
1,2-Dichlorobenzene	5.8	Not Detected	34	Not Detected
1,2,4-Trichlorobenzene	23	Not Detected	170	Not Detected
Hexachlorobutadiene	23	Not Detected	240	Not Detected

## Container Type: 1 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	105	70-130	
4-Bromofluorobenzene	98	70-130	



# Client Sample ID: DC-VMP-4-5' Lab ID#: 1508037A-03A

# **EPA METHOD TO-15 GC/MS**

File Name: Dil. Factor:	14081008 2.90	Date of Collection: 8/4/15 12:12:00 PM Date of Analysis: 8/10/15 11:22 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	14	Not Detected	72	Not Detected
Freon 114	14	Not Detected	100	Not Detected
Chloromethane	58	Not Detected	120	Not Detected
Vinyl Chloride	14	Not Detected	37	Not Detected
1,3-Butadiene	14	Not Detected	32	Not Detected
Bromomethane	14	Not Detected	56	Not Detected
Chloroethane	58	Not Detected	150	Not Detected
Freon 11	14	Not Detected	81	Not Detected
Ethanol	58	Not Detected	110	Not Detected
Freon 113	14	Not Detected	110	Not Detected
1,1-Dichloroethene	14	Not Detected	57	Not Detected
Acetone	58	Not Detected	140	Not Detected
2-Propanol	58	Not Detected	140	Not Detected
Carbon Disulfide	14	Not Detected	45	Not Detected
3-Chloropropene	58	Not Detected	180	Not Detected
Methylene Chloride	14	Not Detected	50	Not Detected
Methyl tert-butyl ether	14	Not Detected	52	Not Detected
trans-1,2-Dichloroethene	14	Not Detected	57	Not Detected
Hexane	14	17	51	61
1,1-Dichloroethane	14	Not Detected	59	Not Detected
2-Butanone (Methyl Ethyl Ketone)	58	Not Detected	170	Not Detected
cis-1,2-Dichloroethene	14	640	57	2600
Tetrahydrofuran	14	Not Detected	43	Not Detected
Chloroform	14	180	71	870
1,1,1-Trichloroethane	14	Not Detected	79	Not Detected
Cyclohexane	14	Not Detected	50	Not Detected
Carbon Tetrachloride	14	Not Detected	91	Not Detected
2,2,4-Trimethylpentane	14	Not Detected	68	Not Detected
Benzene	14	Not Detected	46	Not Detected
1,2-Dichloroethane	14	Not Detected	<del>40</del> 59	Not Detected
	14	Not Detected	59	Not Detected
Heptane				
Trichloroethene	14	7600	78 67	41000
1,2-Dichloropropane	14 50	Not Detected	67 240	Not Detected Not Detected
1,4-Dioxane	58 14	Not Detected	210	
Bromodichloromethane	14	Not Detected	97	Not Detected
cis-1,3-Dichloropropene	14	Not Detected	66	Not Detected
4-Methyl-2-pentanone	14	Not Detected	59	Not Detected
Toluene	14	Not Detected	55	Not Detected
trans-1,3-Dichloropropene	14	Not Detected	66	Not Detected
1,1,2-Trichloroethane	14	Not Detected	79	Not Detected
Tetrachloroethene	14	8000	98	54000
2-Hexanone	58	Not Detected	240	Not Detected



# Client Sample ID: DC-VMP-4-5' Lab ID#: 1508037A-03A

## **EPA METHOD TO-15 GC/MS**

File Name:	14081008	Date of Collection: 8/4/15 12:12:00 PM
Dil. Factor:	2.90	Date of Analysis: 8/10/15 11:22 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	14	Not Detected	120	Not Detected
1,2-Dibromoethane (EDB)	14	Not Detected	110	Not Detected
Chlorobenzene	14	Not Detected	67	Not Detected
Ethyl Benzene	14	Not Detected	63	Not Detected
m,p-Xylene	14	Not Detected	63	Not Detected
o-Xylene	14	Not Detected	63	Not Detected
Styrene	14	Not Detected	62	Not Detected
Bromoform	14	Not Detected	150	Not Detected
Cumene	14	Not Detected	71	Not Detected
1,1,2,2-Tetrachloroethane	14	Not Detected	100	Not Detected
Propylbenzene	14	Not Detected	71	Not Detected
4-Ethyltoluene	14	Not Detected	71	Not Detected
1,3,5-Trimethylbenzene	14	Not Detected	71	Not Detected
1,2,4-Trimethylbenzene	14	Not Detected	71	Not Detected
1,3-Dichlorobenzene	14	Not Detected	87	Not Detected
1,4-Dichlorobenzene	14	Not Detected	87	Not Detected
alpha-Chlorotoluene	14	Not Detected	75	Not Detected
1,2-Dichlorobenzene	14	Not Detected	87	Not Detected
1,2,4-Trichlorobenzene	58	Not Detected	430	Not Detected
Hexachlorobutadiene	58	Not Detected	620	Not Detected

## Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Metnoa Limits
	104	70-130
1,2-Dichloroethane-d4 Toluene-d8	104	70-130 70-130
4-Bromofluorobenzene	100	70-130 70-130



# Client Sample ID: DC-VMP-5-5' Lab ID#: 1508037A-04A

# **EPA METHOD TO-15 GC/MS**

File Name: Dil. Factor:	14081009 2.75		of Collection: 8/4 of Analysis: 8/10	
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	14	400	68	2000
Freon 114	14	Not Detected	96	Not Detected
Chloromethane	55	Not Detected	110	Not Detected
Vinyl Chloride	14	2800	35	7100
1,3-Butadiene	14	Not Detected	30	Not Detected
Bromomethane	14	Not Detected	53	Not Detected
Chloroethane	55	Not Detected	140	Not Detected
Freon 11	14	Not Detected	77	Not Detected
Ethanol	55	Not Detected	100	Not Detected
Freon 113	14	Not Detected	100	Not Detected
1,1-Dichloroethene	14	72	54	280
Acetone	55	Not Detected	130	Not Detected
2-Propanol	55	Not Detected	140	Not Detected
Carbon Disulfide	14	Not Detected	43	Not Detected
3-Chloropropene	55	Not Detected	170	Not Detected
Methylene Chloride	14	Not Detected	48	Not Detected
Methyl tert-butyl ether	14	Not Detected	50	Not Detected
trans-1,2-Dichloroethene	14	350	54	1400
Hexane	14	53	48	190
1,1-Dichloroethane	14	Not Detected	56	Not Detected
•	55		160	
2-Butanone (Methyl Ethyl Ketone)		Not Detected		Not Detected
cis-1,2-Dichloroethene	14	6100	54	24000
Tetrahydrofuran	14	Not Detected	40	Not Detected
Chloroform	14	Not Detected	67	Not Detected
1,1,1-Trichloroethane	14	Not Detected	75	Not Detected
Cyclohexane	14	78	47	270
Carbon Tetrachloride	14	Not Detected	86	Not Detected
2,2,4-Trimethylpentane	14	Not Detected	64	Not Detected
Benzene	14	Not Detected	44	Not Detected
1,2-Dichloroethane	14	Not Detected	56	Not Detected
Heptane	14	Not Detected	56	Not Detected
Trichloroethene	14	7200	74	39000
1,2-Dichloropropane	14	Not Detected	64	Not Detected
1,4-Dioxane	55	Not Detected	200	Not Detected
Bromodichloromethane	14	Not Detected	92	Not Detected
cis-1,3-Dichloropropene	14	Not Detected	62	Not Detected
4-Methyl-2-pentanone	14	Not Detected	56	Not Detected
Toluene	14	Not Detected	52	Not Detected
trans-1,3-Dichloropropene	14	Not Detected	62	Not Detected
1,1,2-Trichloroethane	14	Not Detected	75	Not Detected
Tetrachloroethene	14	6600	93	45000

Not Detected

220

Not Detected

55

2-Hexanone



# Client Sample ID: DC-VMP-5-5' Lab ID#: 1508037A-04A

## **EPA METHOD TO-15 GC/MS**

File Name:	14081009	Date of Collection: 8/4/15 12:34:00 PM
Dil. Factor:	2.75	Date of Analysis: 8/10/15 11:43 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	14	Not Detected	120	Not Detected
1,2-Dibromoethane (EDB)	14	Not Detected	100	Not Detected
Chlorobenzene	14	Not Detected	63	Not Detected
Ethyl Benzene	14	Not Detected	60	Not Detected
m,p-Xylene	14	Not Detected	60	Not Detected
o-Xylene	14	Not Detected	60	Not Detected
Styrene	14	Not Detected	58	Not Detected
Bromoform	14	Not Detected	140	Not Detected
Cumene	14	Not Detected	68	Not Detected
1,1,2,2-Tetrachloroethane	14	Not Detected	94	Not Detected
Propylbenzene	14	Not Detected	68	Not Detected
4-Ethyltoluene	14	Not Detected	68	Not Detected
1,3,5-Trimethylbenzene	14	Not Detected	68	Not Detected
1,2,4-Trimethylbenzene	14	Not Detected	68	Not Detected
1,3-Dichlorobenzene	14	Not Detected	83	Not Detected
1,4-Dichlorobenzene	14	Not Detected	83	Not Detected
alpha-Chlorotoluene	14	Not Detected	71	Not Detected
1,2-Dichlorobenzene	14	Not Detected	83	Not Detected
1,2,4-Trichlorobenzene	55	Not Detected	410	Not Detected
Hexachlorobutadiene	55	Not Detected	590	Not Detected

## Container Type: 1 Liter Summa Canister

••		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	106	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	101	70-130	



# Client Sample ID: DC-VMP-6-5' Lab ID#: 1508037A-05A

# **EPA METHOD TO-15 GC/MS**

Compound         Rpt. Limit (ppbv)         Amount (ppbv)         Rpt. Limit (ug/m3)         Amount (ug/m3)           Freon 12         3700         Not Detected         18000         Not Detected           Freon 114         3700         Not Detected         26000         Not Detected           Chloromethane         15000         Not Detected         30000         Not Detected           Chloromethane         3700         Not Detected         8200         Not Detected           Brommethane         3700         Not Detected         44000         Not Detected           Chloromethane         15000         Not Detected         14000         Not Detected           Fron 11         3700         Not Detected         24000         Not Detected           Freon 11         3700         Not Detected         28000         Not Detected           Ethanol         15000         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         35000         Not Detected           2-	File Name: Dil. Factor:	14081010 738		of Collection: 8/4 of Analysis: 8/10	
Freon 114         3700         Not Detected         26000         Not Detected           Chloromethane         15000         Not Detected         30000         Not Detected           Vinyl Chloride         3700         5000         9400         13000           1,3-Butadiene         3700         Not Detected         8200         Not Detected           Bromomethane         3700         Not Detected         14000         Not Detected           Chloroethane         15000         Not Detected         39000         Not Detected           Freon 11         3700         Not Detected         28000         Not Detected           Freon 113         3700         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         28000         Not Detected           Acetone         15000         Not Detected         35000         Not Detected           Carbon Disulfide         3700         Not Detected         36000         Not Detected           Carbon Disulfide         3700         Not Detected         15000         Not Detected           Archioropropene         15000         Not Detected         13000         Not Detected           Methyl tert-butyl ether	Compound	=	Amount	Rpt. Limit	Amount
Chloromethane         15000         Not Detected         30000         Not Detected           Vinyl Chloride         3700         5000         9400         13000           1,3-Butadiene         3700         Not Detected         8200         Not Detected           Bromomethane         3700         Not Detected         14000         Not Detected           Freon 11         3700         Not Detected         28000         Not Detected           Ethanol         15000         Not Detected         28000         Not Detected           Freon 113         3700         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         35000         Not Detected           Acetone         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           3-Chioropropene         15000         Not Detected         46000         Not Detected           3-Chioropropene         15000         Not Detected         46000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         15000         Not Detected           Methyl tert-butyl ether<	Freon 12	3700	Not Detected	18000	Not Detected
Vinyl Chloride         3700         5000         9400         13000           1,3-Butadiene         3700         Not Detected         8200         Not Detected           Bromomethane         3700         Not Detected         14000         Not Detected           Chloroethane         15000         Not Detected         39000         Not Detected           Freon 11         3700         Not Detected         28000         Not Detected           Ethanol         15000         Not Detected         28000         Not Detected           Freon 113         3700         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         15000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           2-Chloropropene         15000         Not Detected         11000         Not Detected           Active         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Hexane         3700 <td>Freon 114</td> <td>3700</td> <td>Not Detected</td> <td>26000</td> <td>Not Detected</td>	Freon 114	3700	Not Detected	26000	Not Detected
1,3-Butadiene         3700         Not Detected         8200         Not Detected           Bromomethane         3700         Not Detected         14000         Not Detected           Chloroethane         15000         Not Detected         39000         Not Detected           Freon 11         3700         Not Detected         28000         Not Detected           Erhanol         15000         Not Detected         28000         Not Detected           Freon 113         3700         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         15000         Not Detected           Acetone         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           3-Chloropropene         15000         Not Detected         11000         Not Detected           4-Chloropropene         15000         Not Detected         13000         Not Detected           Methylerbene Chloride         3700         Not Detected         13000         Not Detected           Methyler Luyle	Chloromethane	15000	Not Detected	30000	Not Detected
Bromomethane	Vinyl Chloride	3700	5000	9400	13000
Chloroethane         15000         Not Detected         39000         Not Detected           Freon 11         3700         Not Detected         21000         Not Detected           Ethanol         15000         Not Detected         28000         Not Detected           Freon 113         3700         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         15000         Not Detected           Acetone         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           Carbon Disulfide         3700         Not Detected         11000         Not Detected           3-Chloropropene         15000         Not Detected         13000         Not Detected           Methylene Chloride         3700         Not Detected         13000         Not Detected           Methylene Chloride         3700         Not Detected         13000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           1,1-Dichloroethane <td>1,3-Butadiene</td> <td>3700</td> <td>Not Detected</td> <td>8200</td> <td>Not Detected</td>	1,3-Butadiene	3700	Not Detected	8200	Not Detected
Freon 11         3700         Not Detected         21000         Not Detected           Ethanol         15000         Not Detected         28000         Not Detected           Freon 113         3700         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         15000         Not Detected           Acetone         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           3-Chloropropene         15000         Not Detected         11000         Not Detected           3-Chloropropene         15000         Not Detected         46000         Not Detected           Methylene Chloride         3700         Not Detected         13000         Not Detected           Methylene Chloride         3700         Not Detected         13000         Not Detected           Methylene Chloride         3700         Not Detected         15000         Not Detected           Heyane         3700         Not Detected         15000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-But	Bromomethane	3700	Not Detected	14000	Not Detected
Ethanol         15000         Not Detected         28000         Not Detected           Freon 113         3700         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         15000         Not Detected           Acetone         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           2-Propanol         15000         Not Detected         46000         Not Detected           3-Chloropropene         15000         Not Detected         46000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           1,1-Dichloroethene         3700         Not Detected         15000         Not Detected           1,1-Dichloroethene         3700         Not Detected         11000         Not Detected <t< td=""><td>Chloroethane</td><td>15000</td><td>Not Detected</td><td>39000</td><td>Not Detected</td></t<>	Chloroethane	15000	Not Detected	39000	Not Detected
Freon 113         3700         Not Detected         28000         Not Detected           1,1-Dichloroethene         3700         Not Detected         15000         Not Detected           Acetone         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           Carbon Disulfide         3700         Not Detected         11000         Not Detected           3-Chloropropene         15000         Not Detected         46000         Not Detected           Methylere-Chloride         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           1-1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         15000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected <t< td=""><td>Freon 11</td><td>3700</td><td>Not Detected</td><td>21000</td><td>Not Detected</td></t<>	Freon 11	3700	Not Detected	21000	Not Detected
1,1-Dichloroethene         3700         Not Detected         15000         Not Detected           Acetone         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           Carbon Disulfide         3700         Not Detected         11000         Not Detected           3-Chloropropene         15000         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         15000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected <td>Ethanol</td> <td>15000</td> <td>Not Detected</td> <td>28000</td> <td>Not Detected</td>	Ethanol	15000	Not Detected	28000	Not Detected
Acetone         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           3-Chloropropene         15000         Not Detected         11000         Not Detected           3-Chloropropene         15000         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         15000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         15000         Not Detected           Mexane         3700         Not Detected         15000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         15000         Not Detected           1-Ly-Dichlororethene         3700         Not Detected	Freon 113	3700	Not Detected	28000	Not Detected
Acetone         15000         Not Detected         35000         Not Detected           2-Propanol         15000         Not Detected         36000         Not Detected           Carbon Disulfide         3700         Not Detected         11000         Not Detected           3-Chloropropene         15000         Not Detected         46000         Not Detected           Methylene Chloride         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           1,1-Dichloroethane         3700         Not Detected         11000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected	1,1-Dichloroethene	3700	Not Detected	15000	Not Detected
Carbon Disulfide         3700         Not Detected         11000         Not Detected           3-Chloropropene         15000         Not Detected         46000         Not Detected           Methylene Chloride         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           trans-1,2-Dichloroethene         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         13000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         15000         Not Detected           2-Butanone         3700<		15000	Not Detected	35000	Not Detected
Carbon Disulfide         3700         Not Detected         11000         Not Detected           3-Chloropropene         15000         Not Detected         46000         Not Detected           Methylene Chloride         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         11000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         3700         Not Detected         11000         Not Detected           Chlorofrea         3700         No	2-Propanol	15000	Not Detected	36000	Not Detected
Methylene Chloride         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           Hexane         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         13000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           cis-1,2-Dichloroethene         3700         16000         15000         65000           Tetrahydrofuran         3700         Not Detected         11000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected           Cyclohexane         3700         Not Detected         18000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected		3700	Not Detected	11000	Not Detected
Methylene Chloride         3700         Not Detected         13000         Not Detected           Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected           trans-1,2-Dichloroethene         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         13000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           cis-1,2-Dichloroethene         3700         16000         15000         65000           Tetrahydrofuran         3700         Not Detected         11000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected           Cyclohexane         3700         Not Detected         20000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected	3-Chloropropene	15000	Not Detected	46000	Not Detected
Methyl tert-butyl ether         3700         Not Detected         13000         Not Detected trans-1,2-Dichloroethene         3700         Not Detected         15000         Not Detected trans-1,2-Dichloroethene         3700         Not Detected         15000         Not Detected trans-1,2-Dichloroethene         3700         Not Detected trans-1,2-Dichloroethene         3700         Not Detected trans-1,2-Dichloroethene         3700         Not Detected trans-1,2-Dichloroethene         15000         Not Detected trans-1,2-Dichloroethene         15000         Not Detected trans-1,2-Dichloroethene         3700         Not Detected trans-1,2-Dichloroethene         15000         15000         6	<u> </u>	3700	Not Detected	13000	Not Detected
trans-1,2-Dichloroethene         3700         Not Detected         15000         Not Detected           Hexane         3700         Not Detected         13000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           cis-1,2-Dichloroethene         3700         16000         15000         65000           Tetrahydrofuran         3700         Not Detected         11000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected           Chloroform         3700         Not Detected         20000         Not Detected           Cyclohexane         3700         Not Detected         20000         Not Detected           Cyclohexane         3700         Not Detected         23000         Not Detected           Carbon Tetrachloride         3700         Not Detected         17000         Not Detected           Carbon Tetrachloride         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         17000         Not Detected      <			Not Detected		Not Detected
Hexane         3700         Not Detected         13000         Not Detected           1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           cis-1,2-Dichloroethene         3700         16000         15000         65000           Tetrahydrofuran         3700         Not Detected         11000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected           1,1,1-Trichloroethane         3700         Not Detected         20000         Not Detected           1,2,1-Trimethylperothane         3700         Not Detected         23000         Not Detected           2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           1,2-Dichloropropane         3700         Not Detected         15000         Not Detected           1,4-Dioxane         15000         Not Detected         17000         Not Detected<	•				Not Detected
1,1-Dichloroethane         3700         Not Detected         15000         Not Detected           2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected           cis-1,2-Dichloroethene         3700         16000         15000         65000           Tetrahydrofuran         3700         Not Detected         11000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected           Chloroform         3700         Not Detected         20000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected           Carbon Tetrachloride         3700         Not Detected         23000         Not Detected           2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         17000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         Not Detected         15000         Not Detected           Ty-Dichloropropane         3700         Not Detected         17000         Not Detected	•		Not Detected		Not Detected
2-Butanone (Methyl Ethyl Ketone)         15000         Not Detected         44000         Not Detected cis-1,2-Dichloroethene         3700         16000         15000         65000           Tetrahydrofuran         3700         Not Detected         11000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected           Chloroform         3700         Not Detected         20000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected           Carbon Tetrachloride         3700         Not Detected         23000         Not Detected           2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Heptane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane				15000	
cis-1,2-Dichloroethene         3700         16000         15000         65000           Tetrahydrofuran         3700         Not Detected         11000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected           1,1-Trichloroethane         3700         Not Detected         20000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected           Carbon Tetrachloride         3700         Not Detected         23000         Not Detected           2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Trichloroethane         3700         Not Detected         15000         Not Detected           Trichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected      <				44000	
Tetrahydrofuran         3700         Not Detected         11000         Not Detected           Chloroform         3700         Not Detected         18000         Not Detected           1,1,1-Trichloroethane         3700         Not Detected         20000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected           Carbon Tetrachloride         3700         Not Detected         23000         Not Detected           2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         Not Detected         15000         Not Detected           Trichloropropane         3700         Not Detected         17000         Not Detected           Ty-Dichloropropane         3700         Not Detected         53000         Not Detected           Ty-Dichloropropene         3700         Not Detected         53000         Not Detected           Ty-Dichloropropene         3700         Not Detected         17000         Not Detected	, , , , , , , , , , , , , , , , , , , ,				
Chloroform         3700         Not Detected         18000         Not Detected           1,1,1-Trichloroethane         3700         Not Detected         20000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected           Carbon Tetrachloride         3700         Not Detected         23000         Not Detected           2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           1,2-Dichloropropane         3700         Not Detected         15000         Not Detected           1,4-Dioxane         15000         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         17000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           Toluene         3700         Not Detected         15000         Not Detected </td <td>•</td> <td></td> <td></td> <td></td> <td></td>	•				
1,1,1-Trichloroethane         3700         Not Detected         20000         Not Detected           Cyclohexane         3700         Not Detected         13000         Not Detected           Carbon Tetrachloride         3700         Not Detected         23000         Not Detected           2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Heptane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         18000         20000         99000           1,2-Dichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         17000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected	-		Not Detected		Not Detected
Cyclohexane         3700         Not Detected         13000         Not Detected           Carbon Tetrachloride         3700         Not Detected         23000         Not Detected           2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Heptane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         18000         20000         99000           1,2-Dichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected           d-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           Toluene         3700         Not Detected         17000         Not Detected           Toluen					
Carbon Tetrachloride         3700         Not Detected         23000         Not Detected           2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Heptane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         18000         20000         99000           1,2-Dichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         15000         Not Detected           4-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           trans-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected <td></td> <td></td> <td>Not Detected</td> <td>13000</td> <td>Not Detected</td>			Not Detected	13000	Not Detected
2,2,4-Trimethylpentane         3700         Not Detected         17000         Not Detected           Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Heptane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         18000         20000         99000           1,2-Dichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           4-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           trans-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           1,1,2-Trichloroethane         3700         Not Detected         20000         Not Detected </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Benzene         3700         Not Detected         12000         Not Detected           1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Heptane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         18000         20000         99000           1,2-Dichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         15000         Not Detected           4-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           trans-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           1,1,2-Trichloroethane         3700         Not Detected         20000         Not Detected           Tetrachloroethene         3700         2800000         25000         19000000					
1,2-Dichloroethane         3700         Not Detected         15000         Not Detected           Heptane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         18000         20000         99000           1,2-Dichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           4-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           trans-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           1,1,2-Trichloroethane         3700         Not Detected         20000         Not Detected           Tetrachloroethene         3700         2800000         25000         19000000			Not Detected		
Heptane         3700         Not Detected         15000         Not Detected           Trichloroethene         3700         18000         20000         99000           1,2-Dichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           4-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           trans-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           1,1,2-Trichloroethane         3700         Not Detected         20000         Not Detected           Tetrachloroethene         3700         2800000         25000         19000000					
Trichloroethene         3700         18000         20000         99000           1,2-Dichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           4-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           trans-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           1,1,2-Trichloroethane         3700         Not Detected         20000         Not Detected           Tetrachloroethene         3700         2800000         25000         19000000					
1,2-Dichloropropane         3700         Not Detected         17000         Not Detected           1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           4-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           trans-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           1,1,2-Trichloroethane         3700         Not Detected         20000         Not Detected           Tetrachloroethene         3700         2800000         25000         19000000	•				
1,4-Dioxane         15000         Not Detected         53000         Not Detected           Bromodichloromethane         3700         Not Detected         25000         Not Detected           cis-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           4-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           trans-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           1,1,2-Trichloroethane         3700         Not Detected         20000         Not Detected           Tetrachloroethene         3700         2800000         25000         19000000					
Bromodichloromethane3700Not Detected25000Not Detectedcis-1,3-Dichloropropene3700Not Detected17000Not Detected4-Methyl-2-pentanone3700Not Detected15000Not DetectedToluene3700Not Detected14000Not Detectedtrans-1,3-Dichloropropene3700Not Detected17000Not Detected1,1,2-Trichloroethane3700Not Detected20000Not DetectedTetrachloroethene370028000002500019000000					
cis-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           4-Methyl-2-pentanone         3700         Not Detected         15000         Not Detected           Toluene         3700         Not Detected         14000         Not Detected           trans-1,3-Dichloropropene         3700         Not Detected         17000         Not Detected           1,1,2-Trichloroethane         3700         Not Detected         20000         Not Detected           Tetrachloroethene         3700         2800000         25000         19000000					
4-Methyl-2-pentanone3700Not Detected15000Not DetectedToluene3700Not Detected14000Not Detectedtrans-1,3-Dichloropropene3700Not Detected17000Not Detected1,1,2-Trichloroethane3700Not Detected20000Not DetectedTetrachloroethene370028000002500019000000					
Toluene3700Not Detected14000Not Detectedtrans-1,3-Dichloropropene3700Not Detected17000Not Detected1,1,2-Trichloroethane3700Not Detected20000Not DetectedTetrachloroethene370028000002500019000000					
trans-1,3-Dichloropropene 3700 Not Detected 17000 Not Detected 1,1,2-Trichloroethane 3700 Not Detected 20000 Not Detected Tetrachloroethene 3700 2800000 25000 19000000					
1,1,2-Trichloroethane         3700         Not Detected         20000         Not Detected           Tetrachloroethene         3700         2800000         25000         19000000					
Tetrachloroethene 3700 2800000 25000 19000000					
	· ·				
	2-Hexanone	15000	Not Detected	60000	Not Detected



# Client Sample ID: DC-VMP-6-5' Lab ID#: 1508037A-05A

## **EPA METHOD TO-15 GC/MS**

File Name:	14081010	Date of Collection: 8/4/15 12:58:00 PM
Dil. Factor:	738	Date of Analysis: 8/10/15 12:08 PM

Dili i dotoi:	7 30	Date	Ol Allalysis. Olio	13 12.00 1 141
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	3700	Not Detected	31000	Not Detected
1,2-Dibromoethane (EDB)	3700	Not Detected	28000	Not Detected
Chlorobenzene	3700	Not Detected	17000	Not Detected
Ethyl Benzene	3700	Not Detected	16000	Not Detected
m,p-Xylene	3700	Not Detected	16000	Not Detected
o-Xylene	3700	Not Detected	16000	Not Detected
Styrene	3700	Not Detected	16000	Not Detected
Bromoform	3700	Not Detected	38000	Not Detected
Cumene	3700	Not Detected	18000	Not Detected
1,1,2,2-Tetrachloroethane	3700	Not Detected	25000	Not Detected
Propylbenzene	3700	Not Detected	18000	Not Detected
4-Ethyltoluene	3700	Not Detected	18000	Not Detected
1,3,5-Trimethylbenzene	3700	Not Detected	18000	Not Detected
1,2,4-Trimethylbenzene	3700	Not Detected	18000	Not Detected
1,3-Dichlorobenzene	3700	Not Detected	22000	Not Detected
1,4-Dichlorobenzene	3700	Not Detected	22000	Not Detected
alpha-Chlorotoluene	3700	Not Detected	19000	Not Detected
1,2-Dichlorobenzene	3700	Not Detected	22000	Not Detected
1,2,4-Trichlorobenzene	15000	Not Detected	110000	Not Detected
Hexachlorobutadiene	15000	Not Detected	160000	Not Detected

## Container Type: 1 Liter Summa Canister

Currentee	9/ Pagayany	Metnoa Limits
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130



# Client Sample ID: DC-VMP-7-5' Lab ID#: 1508037A-06A

# EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3081027	Date of Collection: 8/4/15 1:17:00 PM
Dil. Factor:	2.33	Date of Analysis: 8/11/15 01:10 AM

Dil. Factor:	2.33	Date of Analysis: 8/11/15 01:10 AM		
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	1.2	2.4	5.8	12
Freon 114	1.2	Not Detected	8.1	Not Detected
Chloromethane	12	Not Detected	24	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
Bromomethane	12	Not Detected	45	Not Detected
Chloroethane	4.7	Not Detected	12	Not Detected
Freon 11	1.2	Not Detected	6.5	Not Detected
Ethanol	4.7	9.2	8.8	17
Freon 113	1.2	Not Detected	8.9	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Acetone	12	22	28	53
2-Propanol	4.7	Not Detected	11	Not Detected
Carbon Disulfide	4.7	Not Detected	14	Not Detected
3-Chloropropene	4.7	Not Detected	14	Not Detected
Methylene Chloride	12	Not Detected	40	Not Detected
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Hexane	1.2	Not Detected	4.1	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.7	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected
Chloroform	1.2	33	5.7	160
1,1,1-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Cyclohexane	1.2	Not Detected	4.0	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.3	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.4	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Heptane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.4	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected
Bromodichloromethane	1.2	Not Detected	7.8	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected
Toluene	1.2	1.5	4.4	5.6
trans-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	21	7.9	140
2-Hexanone	4.7	Not Detected	19	Not Detected



# Client Sample ID: DC-VMP-7-5' Lab ID#: 1508037A-06A

## EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3081027	Date of Collection: 8/4/15 1:17:00 PM
Dil. Factor:	2.33	Date of Analysis: 8/11/15 01:10 AM

- m : 4010::	2.00 Date of Attacycle: 0,11,10 01:10 A			710 01.10 71.11
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	9.9	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.0	Not Detected
Chlorobenzene	1.2	Not Detected	5.4	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
Styrene	1.2	Not Detected	5.0	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Cumene	1.2	Not Detected	5.7	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.0	Not Detected
Propylbenzene	1.2	Not Detected	5.7	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.7	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.0	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,2,4-Trichlorobenzene	4.7	Not Detected	34	Not Detected
Hexachlorobutadiene	4.7	Not Detected	50	Not Detected

## Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	89	70-130
1,2-Dichloroethane-d4	119	70-130
4-Bromofluorobenzene	109	70-130



# Client Sample ID: DC-VMP-8-5' Lab ID#: 1508037A-07A

## EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	a080708 23.0	Date of Collection: 8/4/15 1:38:00 PM Date of Analysis: 8/7/15 02:24 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	12	670	57	3300
Freon 114	12	Not Detected	80	Not Detected
Chloromethane	120	Not Detected	240	Not Detected
Vinyl Chloride	12	2400	29	6100
1,3-Butadiene	12	Not Detected	25	Not Detected
Bromomethane	120	Not Detected	450	Not Detected
Chloroethane	46	Not Detected	120	Not Detected
Freon 11	12	Not Detected	65	Not Detected
Ethanol	46	Not Detected	87	Not Detected
Freon 113	12	Not Detected	88	Not Detected
1,1-Dichloroethene	12	14	46	55
Acetone	120	Not Detected	270	Not Detected
2-Propanol	46	Not Detected	110	Not Detected
Carbon Disulfide	46	Not Detected	140	Not Detected
3-Chloropropene	46	Not Detected	140	Not Detected
Methylene Chloride	120	Not Detected	400	Not Detected
Methyl tert-butyl ether	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	12	96	46	380
Hexane	12	25	40	89
1,1-Dichloroethane	12	Not Detected	46	Not Detected
2-Butanone (Methyl Ethyl Ketone)	46	Not Detected	140	Not Detected
cis-1,2-Dichloroethene	12	1900	46	7400
Tetrahydrofuran	12	Not Detected	34	Not Detected
Chloroform	12	Not Detected	56	Not Detected
1,1,1-Trichloroethane	12	Not Detected	63	Not Detected
Cyclohexane	12	27	40	93
Carbon Tetrachloride	12	Not Detected	72	Not Detected
2,2,4-Trimethylpentane	12	Not Detected	54	Not Detected
Benzene	12	Not Detected	37	Not Detected
1,2-Dichloroethane	12	Not Detected	46	Not Detected
Heptane	12	Not Detected	47	Not Detected
Trichloroethene	12	130	62	720
1,2-Dichloropropane	12	Not Detected	53	Not Detected
1,4-Dioxane	46	Not Detected	160	Not Detected
Bromodichloromethane	12	Not Detected	77	Not Detected
cis-1,3-Dichloropropene	12	Not Detected	52	Not Detected
4-Methyl-2-pentanone	12	Not Detected	47	Not Detected

Not Detected

Not Detected

Not Detected

56

Not Detected

Not Detected

Not Detected

Not Detected

380

Not Detected

43

52

63

78

190

12

12

12

12

46

Toluene

trans-1,3-Dichloropropene

1,1,2-Trichloroethane

Tetrachloroethene

2-Hexanone



# Client Sample ID: DC-VMP-8-5' Lab ID#: 1508037A-07A

## EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080708	Date of Collection: 8/4/15 1:38:00 PM
Dil. Factor:	23.0	Date of Analysis: 8/7/15 02:24 PM

Dili i dotoi:	23.0	Date of Analysis. 0/1/13 02.24 1 W		3 02.27 I W
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	12	Not Detected	98	Not Detected
1,2-Dibromoethane (EDB)	12	Not Detected	88	Not Detected
Chlorobenzene	12	Not Detected	53	Not Detected
Ethyl Benzene	12	Not Detected	50	Not Detected
m,p-Xylene	12	Not Detected	50	Not Detected
o-Xylene	12	Not Detected	50	Not Detected
Styrene	12	Not Detected	49	Not Detected
Bromoform	12	Not Detected	120	Not Detected
Cumene	12	Not Detected	56	Not Detected
1,1,2,2-Tetrachloroethane	12	Not Detected	79	Not Detected
Propylbenzene	12	Not Detected	56	Not Detected
4-Ethyltoluene	12	Not Detected	56	Not Detected
1,3,5-Trimethylbenzene	12	Not Detected	56	Not Detected
1,2,4-Trimethylbenzene	12	Not Detected	56	Not Detected
1,3-Dichlorobenzene	12	Not Detected	69	Not Detected
1,4-Dichlorobenzene	12	Not Detected	69	Not Detected
alpha-Chlorotoluene	12	Not Detected	60	Not Detected
1,2-Dichlorobenzene	12	Not Detected	69	Not Detected
1,2,4-Trichlorobenzene	46	Not Detected	340	Not Detected
Hexachlorobutadiene	46	Not Detected	490	Not Detected

## Container Type: 1 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	102	70-130	
1,2-Dichloroethane-d4	98	70-130	
4-Bromofluorobenzene	97	70-130	



# Client Sample ID: Lab Blank Lab ID#: 1508037A-08A

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	a080706 1.00		of Collection: NA of Analysis: 8/7/1	5 12:40 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected



# Client Sample ID: Lab Blank Lab ID#: 1508037A-08A

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080706	Date of Collection: NA			
Dil. Factor:	1.00	Date of Analysis: 8/7/15 12:40 PM			
•	Rpt. Limit	Amount	Rpt. Limit	Amount	

Dili i dotoi:	1.00	Date of Analysis. Off 13 12.40 1 W		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	103	70-130	
1,2-Dichloroethane-d4	104	70-130	
4-Bromofluorobenzene	96	70-130	



# Client Sample ID: Lab Blank Lab ID#: 1508037A-08B

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3081006	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/10/15 12:21 PM

Dil. Factor:	1.00	Date of Analysis: 8/10/15 12:21 PM		
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected



# Client Sample ID: Lab Blank Lab ID#: 1508037A-08B

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3081006	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/10/15 12:21 PM

Dili. I dotor.	1.00	Date of Analysis. Of 10/13 12.21 1 W		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

		Method
Surrogates	%Recovery	Limits
Toluene-d8	89	70-130
1,2-Dichloroethane-d4	117	70-130
4-Bromofluorobenzene	106	70-130



# Client Sample ID: Lab Blank Lab ID#: 1508037A-08C

### **EPA METHOD TO-15 GC/MS**

File Name: Dil. Factor:	14081005 1.00	Date of Collection: NA Date of Analysis: 8/10/15 09:58 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.0	Not Detected	25	Not Detected
Freon 114	5.0	Not Detected	35	Not Detected
Chloromethane	20	Not Detected	41	Not Detected
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,3-Butadiene	5.0	Not Detected	11	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	20	Not Detected	53	Not Detected
Freon 11	5.0	Not Detected	28	Not Detected
Ethanol	20	Not Detected	38	Not Detected
Freon 113	5.0	Not Detected	38	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
Acetone	20	Not Detected	48	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Carbon Disulfide	5.0	Not Detected	16	Not Detected
3-Chloropropene	20	Not Detected	63	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Hexane	5.0	Not Detected	18	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	59	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrahydrofuran	5.0	Not Detected	15	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Cyclohexane	5.0	Not Detected	17	Not Detected
Carbon Tetrachloride	5.0	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Heptane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
	5.0	Not Detected	23	Not Detected
1,2-Dichloropropane	20	Not Detected	72	Not Detected
1,4-Dioxane Bromodichloromethane	5.0	Not Detected	34	Not Detected
cis-1,3-Dichloropropene	5.0 5.0	Not Detected	23	Not Detected
4-Methyl-2-pentanone	5.0	Not Detected	20	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected
2-Hexanone	20	Not Detected	82	Not Detected



# Client Sample ID: Lab Blank Lab ID#: 1508037A-08C

### **EPA METHOD TO-15 GC/MS**

File Name:	14081005	Dat	e of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 8/10/15 09:58 AM		
•	Rnt Limit	Amount	Rnt. Limit	Amount

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	5.0	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Chlorobenzene	5.0	Not Detected	23	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Styrene	5.0	Not Detected	21	Not Detected
Bromoform	5.0	Not Detected	52	Not Detected
Cumene	5.0	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	5.0	Not Detected	34	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
4-Ethyltoluene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,3-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,4-Dichlorobenzene	5.0	Not Detected	30	Not Detected
alpha-Chlorotoluene	5.0	Not Detected	26	Not Detected
1,2-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected

		Wethod	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	104	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	99	70-130	



# Client Sample ID: CCV Lab ID#: 1508037A-09A

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: a080703 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/7/15 11:01 AM

Compound	%Recovery	
Freon 12	96	
Freon 114	94	
Chloromethane	95	
Vinyl Chloride	92	
1,3-Butadiene	91	
Bromomethane	92	
Chloroethane	93	
Freon 11	93	
Ethanol	87	
Freon 113	87	
1,1-Dichloroethene	86	
Acetone	108	
2-Propanol	86	
Carbon Disulfide	92	
3-Chloropropene	89	
Methylene Chloride	96	
Methyl tert-butyl ether	89	
trans-1,2-Dichloroethene	94	
Hexane	94	
1,1-Dichloroethane	97	
2-Butanone (Methyl Ethyl Ketone)	98	
cis-1,2-Dichloroethene	92	
Tetrahydrofuran	93	
Chloroform	96	
1,1,1-Trichloroethane	94	
Cyclohexane	96	
Carbon Tetrachloride	95	
2,2,4-Trimethylpentane	98	
Benzene	94	
1,2-Dichloroethane	97	
Heptane	98	
Trichloroethene	98	
1,2-Dichloropropane	98	
1,4-Dioxane	89	
Bromodichloromethane	97	
cis-1,3-Dichloropropene	99	
4-Methyl-2-pentanone	88	
Toluene	96	
trans-1,3-Dichloropropene	99	
1,1,2-Trichloroethane	98	
Tetrachloroethene	94	
2-Hexanone	76	



# Client Sample ID: CCV Lab ID#: 1508037A-09A

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: a080703 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/7/15 11:01 AM

Compound	%Recovery	
Dibromochloromethane	98	
1,2-Dibromoethane (EDB)	98	
Chlorobenzene	93	
Ethyl Benzene	94	
m,p-Xylene	100	
o-Xylene	97	
Styrene	91	
Bromoform	97	
Cumene	99	
1,1,2,2-Tetrachloroethane	102	
Propylbenzene	99	
4-Ethyltoluene	94	
1,3,5-Trimethylbenzene	94	
1,2,4-Trimethylbenzene	96	
1,3-Dichlorobenzene	98	
1,4-Dichlorobenzene	100	
alpha-Chlorotoluene	96	
1,2-Dichlorobenzene	100	
1,2,4-Trichlorobenzene	104	
Hexachlorobutadiene	103	

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	102	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	101	70-130	



# Client Sample ID: CCV Lab ID#: 1508037A-09B

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3081002 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 10:24 AM

Freon 12         119           Freon 114         107           Chloromethane         74           Vinyl Chloride         74           1,3-Butadiene         77           Bromomethane         102           Chloroethane         94           Freon 11         119           Ethanol         86           Freon 113         105           1,1-Dichloroethene         101           Acetone         91           2-Propanol         94           Carbon Disulfide         94           3-Chloropropene         94           Methylene Chloride         92           Methylene Chloride         92           Methyl tert-butyl ether         104           trans-1,2-Dichloroethene         92           Hexane         100           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           26-1,2-Dichloroethene         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         91           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Tri	Compound	%Recovery	
Chloromethane         74           Vinyl Chloride         74           1,3-Butadiene         77           Bromomethane         102           Chloroethane         94           Freon 11         119           Ethanol         86           Freon 113         105           1,1-Dichloroethene         101           Acetone         91           2-Propanol         94           Carbon Disulfide         94           3-Chloropropene         94           Methylene Chloride         92           Methylene Chloride         92           Methylene Chloride         92           Methyl tert-butyl ether         104           trans-1,2-Dichloroethene         100           Hexane         89           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           cis-1,2-Dichloroethene         94           Tetrahydroffuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Trimethylpentane         90 <t< td=""><td>Freon 12</td><td>119</td><td></td></t<>	Freon 12	119	
Vinyl Chloride         74           1,3-Butadiene         77           Bromomethane         102           Chloroethane         94           Freon 11         119           Ethanol         86           Freon 113         105           1,1-Dichloroethene         101           Acetone         91           2-Propanol         94           Carbon Disulfide         94           3-Chloropropene         94           Methyl tert-butyl ether         104           trans-1,2-Dichloroethene         100           Hexane         89           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           cis-1,2-Dichloroethene         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2-4-Trimethylpentane         90           Benzene         13           1,2-Dichloroethane         108           1,2-Dichloropropane         83           1,4-Dioxane         95           <	Freon 114	107	
1,3-Butadiene       77         Bromomethane       102         Chloroethane       94         Freon 11       119         Ethanol       86         Freon 113       105         1,1-Dichloroethene       101         Acetone       91         2-Propanol       94         Carbon Disulfide       94         3-Chloropropene       94         Methyle Chloride       92         Methyle Er-butyl ether       104         trans-1,2-Dichloroethene       100         Hexane       89         1,1-Dichloroethane       92         2-Butanone (Methyl Ethyl Ketone)       88         cis-1,2-Dichloroethene       94         Tetrahydrofuran       85         Chloroform       102         1,1,1-Trichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,4-Dioxane       95         Bromodichloromethane       104 <td>Chloromethane</td> <td>74</td> <td></td>	Chloromethane	74	
1,3-Butadiene       77         Bromomethane       102         Chloroethane       94         Freon 11       119         Ethanol       86         Freon 113       105         1,1-Dichloroethene       101         Acetone       91         2-Propanol       94         Carbon Disulfide       94         3-Chloropropene       94         Methyle Chloride       92         Methyle Er-butyl ether       104         trans-1,2-Dichloroethene       100         Hexane       89         1,1-Dichloroethane       92         2-Butanone (Methyl Ethyl Ketone)       88         cis-1,2-Dichloroethene       94         Tetrahydrofuran       85         Chloroform       102         1,1,1-Trichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,4-Dioxane       95         Bromodichloromethane       104 <td>Vinyl Chloride</td> <td>74</td> <td></td>	Vinyl Chloride	74	
Chloroethane         94           Freon 11         119           Ethanol         86           Freon 113         105           1,1-Dichloroethene         101           Acetone         91           2-Propanol         94           Carbon Disulfide         94           3-Chloropropene         94           Methylene Chloride         92           Methyl tert-butyl ether         104           trans-1,2-Dichloroethene         100           Hexane         89           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           cis-1,2-Dichloroethene         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Trimethylpentane         90           Benzene         93           1,2-Dichloroethane         108           1,2-Dichloropropane         83           1,4-Dioxane         95           Bromodichloromethane         104           cis-1,3-Dichloropropene         96 </td <td>-</td> <td>77</td> <td></td>	-	77	
Freon 11         119           Ethanol         86           Freon 113         105           1,1-Dichloroethene         101           Acetone         91           2-Propanol         94           Carbon Disulfide         94           3-Chloropropene         94           Methylene Chloride         92           Methylene Chloride         92           Methylert-butyl ether         104           trans-1,2-Dichloroethene         100           Hexane         89           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           cis-1,2-Dichloroethene         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Trimethylpentane         90           Benzene         93           1,2-Dichloroethane         108           1,2-Dichloropropane         83           1,4-Dioxane         95           Bromodichloromethane         104           cis-1,3-Dichloropropene         90	Bromomethane	102	
Ethanol         86           Freon 113         105           1,1-Dichloroethene         101           Acetone         91           2-Propanol         94           Carbon Disulfide         94           3-Chloropropene         94           Methylene Chloride         92           Methyl tert-butyl ether         104           trans-1,2-Dichloroethene         100           Hexane         89           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           cis-1,2-Dichloroethene         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Trimethylpentane         90           Benzene         93           1,2-Dichloroethane         120           Heptane         95           Trichloroethene         108           1,2-Dichloropropane         83           1,4-Dioxane         95           Bromodichloromethane         104           cis-1,3-Dichloropropone         90	Chloroethane	94	
Freon 113         105           1,1-Dichloroethene         101           Acetone         91           2-Propanol         94           Carbon Disulfide         94           3-Chloropropene         94           Methylene Chloride         92           Methyl tert-butyl ether         104           trans-1,2-Dichloroethene         100           Hexane         89           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           cis-1,2-Dichloroethene         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Trimethylpentane         90           Benzene         93           1,2-Dichloroethane         120           Heptane         95           Trichloroethene         108           1,2-Dichloropropane         83           1,4-Dioxane         95           Bromodichloromethane         104           cis-1,3-Dichloropropene         90           4-Methyl-2-pentanone <td< td=""><td>Freon 11</td><td>119</td><td></td></td<>	Freon 11	119	
1,1-Dichloroethene       101         Acetone       91         2-Propanol       94         Carbon Disulfide       94         3-Chloropropene       94         Methylene Chloride       92         Methyl tert-butyl ether       104         trans-1,2-Dichloroethene       100         Hexane       89         1,1-Dichloroethane       92         2-Butanone (Methyl Ethyl Ketone)       88         cis-1,2-Dichloroethene       94         Tetrahydrofuran       85         Chloroform       102         1,1,1-Trichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       40         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloroptopene       107 <tr< td=""><td>Ethanol</td><td>86</td><td></td></tr<>	Ethanol	86	
Acetone       91         2-Propanol       94         Carbon Disulfide       94         3-Chloropropene       94         Methylene Chloride       92         Methyl tert-butyl ether       104         trans-1,2-Dichloroethene       100         Hexane       89         1,1-Dichloroethane       92         2-Butanone (Methyl Ethyl Ketone)       88         cis-1,2-Dichloroethene       94         Tetrahydrofuran       85         Chloroform       102         1,1-1-Trichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloroptopene       107         1,1,2-Trichloroethane       100	Freon 113	105	
Acetone       91         2-Propanol       94         Carbon Disulfide       94         3-Chloropropene       94         Methylene Chloride       92         Methyl tert-butyl ether       104         trans-1,2-Dichloroethene       100         Hexane       89         1,1-Dichloroethane       92         2-Butanone (Methyl Ethyl Ketone)       88         cis-1,2-Dichloroethene       94         Tetrahydrofuran       85         Chloroform       102         1,1-1-Tichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloroethane       100         Tetrachloroethene       100	1,1-Dichloroethene	101	
Carbon Disulfide         94           3-Chloropropene         94           Methylene Chloride         92           Methyl tert-butyl ether         104           trans-1,2-Dichloroethene         100           Hexane         89           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           cis-1,2-Dichloroethane         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Trimethylpentane         90           Benzene         93           1,2-Dichloroethane         120           Heptane         95           Trichloroethene         108           1,2-Dichloropropane         83           1,4-Dioxane         95           Bromodichloromethane         104           cis-1,3-Dichloropropene         90           4-Methyl-2-pentanone         82           Toluene         84           trans-1,3-Dichloroptopene         107           1,1,2-Trichloroethane         100           Tetrachl		91	
Carbon Disulfide       94         3-Chloropropene       94         Methylene Chloride       92         Methyl tert-butyl ether       104         trans-1,2-Dichloroethene       100         Hexane       89         1,1-Dichloroethane       92         2-Butanone (Methyl Ethyl Ketone)       88         cis-1,2-Dichloroethene       94         Tetrahydrofuran       85         Chloroform       102         1,1,1-Trichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	2-Propanol	94	
3-Chloropropene         94           Methylene Chloride         92           Methyl tert-butyl ether         104           trans-1,2-Dichloroethene         100           Hexane         89           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           cis-1,2-Dichloroethene         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Trimethylpentane         90           Benzene         93           1,2-Dichloroethane         120           Heptane         95           Trichloroethene         108           1,2-Dichloropropane         83           1,4-Dioxane         95           Bromodichloromethane         104           cis-1,3-Dichloropropene         82           Toluene         84           trans-1,3-Dichloropropene         80           4-Methyl-2-pentanone         82           Toluene         84           trans-1,3-Dichloroptopene         107           1,1,2-Trichlor		94	
Methylene Chloride         92           Methyl tert-butyl ether         104           trans-1,2-Dichloroethene         100           Hexane         89           1,1-Dichloroethane         92           2-Butanone (Methyl Ethyl Ketone)         88           cis-1,2-Dichloroethene         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Trimethylpentane         90           Benzene         93           1,2-Dichloroethane         120           Heptane         95           Trichloroethene         108           1,2-Dichloropropane         83           1,4-Dioxane         95           Bromodichloromethane         104           cis-1,3-Dichloropropene         90           4-Methyl-2-pentanone         82           Toluene         84           trans-1,3-Dichloropropene         107           1,1,2-Trichloroethane         100           Tetrachloroethene         100	3-Chloropropene	94	
Methyl tert-butyl ether     104       trans-1,2-Dichloroethene     100       Hexane     89       1,1-Dichloroethane     92       2-Butanone (Methyl Ethyl Ketone)     88       cis-1,2-Dichloroethene     94       Tetrahydrofuran     85       Chloroform     102       1,1,1-Trichloroethane     111       Cyclohexane     94       Carbon Tetrachloride     115       2,2,4-Trimethylpentane     90       Benzene     93       1,2-Dichloroethane     120       Heptane     95       Trichloroethene     108       1,2-Dichloropropane     83       1,4-Dioxane     95       Bromodichloromethane     104       cis-1,3-Dichloropropene     90       4-Methyl-2-pentanone     82       Tolluene     84       trans-1,3-Dichloropropene     107       1,1,2-Trichloroethane     100       Tetrachloroethene     108		92	
trans-1,2-Dichloroethene 89 1,1-Dichloroethane 92 2-Butanone (Methyl Ethyl Ketone) 88 cis-1,2-Dichloroethene 94 Tetrahydrofuran 85 Chloroform 102 1,1,1-Trichloroethane 111 Cyclohexane 94 Carbon Tetrachloride 115 2,2,4-Trimethylpentane 90 Benzene 93 1,2-Dichloroethane 120 Heptane 95 Trichloroethene 108 1,2-Dichloropropane 83 1,4-Dioxane 95 Bromodichloromethane 104 cis-1,3-Dichloropropene 90 4-Methyl-2-pentanone 82 Toluene 84 trans-1,3-Dichloropropene 107 1,1,2-Trichloroethane 100 Tetrachloroethane 100 Tetrachloroethene 100 Tetrachloroethene 107 1,1,2-Trichloroethane 100 Tetrachloroethene 100 Tetrachloroethene 100 Tetrachloroethene 100 Tetrachloroethene 100		104	
1,1-Dichloroethane       92         2-Butanone (Methyl Ethyl Ketone)       88         cis-1,2-Dichloroethene       94         Tetrahydrofuran       85         Chloroform       102         1,1,1-Trichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108		100	
2-Butanone (Methyl Ethyl Ketone)	Hexane	89	
cis-1,2-Dichloroethene       94         Tetrahydrofuran       85         Chloroform       102         1,1,1-Trichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	1,1-Dichloroethane	92	
cis-1,2-Dichloroethene         94           Tetrahydrofuran         85           Chloroform         102           1,1,1-Trichloroethane         111           Cyclohexane         94           Carbon Tetrachloride         115           2,2,4-Trimethylpentane         90           Benzene         93           1,2-Dichloroethane         120           Heptane         95           Trichloroethene         108           1,2-Dichloropropane         83           1,4-Dioxane         95           Bromodichloromethane         104           cis-1,3-Dichloropropene         90           4-Methyl-2-pentanone         82           Toluene         84           trans-1,3-Dichloropropene         107           1,1,2-Trichloroethane         100           Tetrachloroethene         108	2-Butanone (Methyl Ethyl Ketone)	88	
Chloroform       102         1,1,1-Trichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	cis-1,2-Dichloroethene	94	
Chloroform       102         1,1,1-Trichloroethane       111         Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	Tetrahydrofuran	85	
Cyclohexane       94         Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	Chloroform	102	
Carbon Tetrachloride       115         2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	1,1,1-Trichloroethane	111	
2,2,4-Trimethylpentane       90         Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	Cyclohexane	94	
Benzene       93         1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	Carbon Tetrachloride	115	
1,2-Dichloroethane       120         Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	2,2,4-Trimethylpentane	90	
Heptane       95         Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	Benzene	93	
Trichloroethene       108         1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	1,2-Dichloroethane	120	
1,2-Dichloropropane       83         1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	Heptane	95	
1,4-Dioxane       95         Bromodichloromethane       104         cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	Trichloroethene	108	
Bromodichloromethane         104           cis-1,3-Dichloropropene         90           4-Methyl-2-pentanone         82           Toluene         84           trans-1,3-Dichloropropene         107           1,1,2-Trichloroethane         100           Tetrachloroethene         108	1,2-Dichloropropane	83	
cis-1,3-Dichloropropene       90         4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	1,4-Dioxane	95	
4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	Bromodichloromethane	104	
4-Methyl-2-pentanone       82         Toluene       84         trans-1,3-Dichloropropene       107         1,1,2-Trichloroethane       100         Tetrachloroethene       108	cis-1,3-Dichloropropene	90	
Toluene 84 trans-1,3-Dichloropropene 107 1,1,2-Trichloroethane 100 Tetrachloroethene 108		82	
1,1,2-Trichloroethane100Tetrachloroethene108			
1,1,2-Trichloroethane100Tetrachloroethene108	trans-1,3-Dichloropropene		
		100	
2-Hexanone 92	Tetrachloroethene		
	2-Hexanone	92	



# Client Sample ID: CCV Lab ID#: 1508037A-09B

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3081002 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 10:24 AM

Compound	%Recovery	
Dibromochloromethane	116	
1,2-Dibromoethane (EDB)	104	
Chlorobenzene	102	
Ethyl Benzene	103	
m,p-Xylene	107	
o-Xylene	112	
Styrene	115	
Bromoform	115	
Cumene	116	
1,1,2,2-Tetrachloroethane	83	
Propylbenzene	107	
4-Ethyltoluene	115	
1,3,5-Trimethylbenzene	112	
1,2,4-Trimethylbenzene	112	
1,3-Dichlorobenzene	113	
1,4-Dichlorobenzene	114	
alpha-Chlorotoluene	101	
1,2-Dichlorobenzene	108	
1,2,4-Trichlorobenzene	102	
Hexachlorobutadiene	100	

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	93	70-130	
1,2-Dichloroethane-d4	110	70-130	
4-Bromofluorobenzene	108	70-130	



# Client Sample ID: CCV Lab ID#: 1508037A-09C

### **EPA METHOD TO-15 GC/MS**

File Name: 14081002 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 08:52 AM

Freon 12         105           Freon 114         106           Chloromethane         102           Vinyl Chloride         98           1,3-Butadiene         95           Bromomethane         84           Chloroethane         89           Freon 11         106           Ethanol         108           Freon 113         106           1,1-Dichloroethene         102           Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chioropropene         104           Methylene Chloride         101           Methylene Chloride         101           Methylene Chloride         101           Methylene Chloride         108           1,1-Dichloroethene         108           1,2-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           5:1-2-Dichloroethane         103           Tetrahydrofuran         117           Chloroform         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         106	Compound	%Recovery	
Chloromethane         102           Vinyl Chloride         98           1,3-Butadiene         95           Bromomethane         84           Chloroethane         89           Freon 11         106           Ethanol         108           Freon 113         106           1,1-Dichloroethene         102           Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chloropropene         104           Methylene Chloride         101           Methyl tert-butyl ether         118           trans-1,2-Dichloroethene         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         106           4,2-Dichloroethane         116           Heptane         116           1,2-Dichloropropane         107	Freon 12	105	
Vinyl Chloride         98           1,3-Butadiene         95           Bromomethane         84           Chloroethane         89           Freon 11         106           Ethanol         108           Freon 113         106           1,1-Dichloroethene         102           Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chloropropene         104           Methylene Chloride         101           Methylene Chloride         101           Methyl tert-butyl ether         118           trans-1,2-Dichloroethene         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2-4-Timethylpentane         106           Benzene         106           1,2-Dichloroethane         116           Heptane         113 <td>Freon 114</td> <td>106</td> <td></td>	Freon 114	106	
1,3-Butadiene         95           Bromomethane         84           Chloroethane         89           Freon 11         106           Ethanol         108           Freon 113         106           1,1-Dichloroethene         102           Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chicropropene         104           Methylere Chloride         101           Methylere Chloride         101           Methylere Chloride         108           1,2-Dichloroethene         108           1,2-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         106           1,2-Dichloroethane         116           Heptane         106           1,2-Dichloroethane         115           Trichloroethene         96 </td <td>Chloromethane</td> <td>102</td> <td></td>	Chloromethane	102	
Bromomethane	Vinyl Chloride	98	
Chloroethane         89           Freon 11         106           Ethanol         108           Freon 113         106           1,1-Dichloroethene         102           Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chioropropene         104           Methylene Chloride         101           Methylene Chloride         108           Hetvane         108           1,1-Dichloroethene         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           Tylokoexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethane         116           Heptane         116           Heptane         115           Bromodichloromethane         116           1,2-Di	1,3-Butadiene	95	
Freon 11         106           Ethanol         108           Freon 113         106           1,1-Dichloroethene         102           Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chloropropene         104           Methylene Chloride         101           Methylene Chloride         108           Hexane         108           Hexane         108           Hexane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1,1-Tichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         106           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Tricholoroethane         115           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromdichloromethane         115           1,4-Di	Bromomethane	84	
Ethanol         108           Freon 113         106           1,1-Dichloroethene         102           Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chloropropene         104           Methylene Chloride         101           Methyl tert-butyl ether         118           trans-1,2-Dichloroethene         108           Hexane         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Tricholoroethane         116           Heptane         113           Tricholoroethane         107           1,4-Dioxane         115           Bromodichloromethane         114	Chloroethane	89	
Freon 113         106           1,1-Dichloroethene         102           Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chloropropene         104           Methylene Chloride         101           Methylene Chloride         108           Hetxane         108           Hexane         108           Hexane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethene         96           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromodichloromethane         115           Bromodichloropropene         120           4-Methyl-2-pentanone         120	Freon 11	106	
1,1-Dichloroethene         102           Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chloropropene         104           Methylene Chloride         101           Methyl tert-butyl ether         118           trans-1,2-Dichloroethene         108           Hexane         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethene         106           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromodichloromethane         115           Bromodichloropropene         120           4-Methyl-2-pentanone         120           Toluene	Ethanol	108	
Acetone         100           2-Propanol         105           Carbon Disulfide         100           3-Chloropropene         104           Methylene Chloride         101           Methyl tert-butyl ether         118           trans-1,2-Dichloroethene         108           Hexane         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethene         96           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromodichloromethane         114           cis-1,3-Dichloropropene         120           4-Methyl-2-pentanone         120           Toluene         109           trans-1,3-Dichloroethan	Freon 113	106	
2-Propanol       105         Carbon Disulfide       100         3-Chloropropene       104         Methylene Chloride       101         Methylene Chloride       101         Methylene Chloride       108         Hexane       108         Hexane       107         2-Butanone (Methyl Ethyl Ketone)       106         cis-1,2-Dichloroethene       103         Tetrahydrofuran       117         Chloroform       112         1,1,1-Trichloroethane       112         Cyclohexane       108         Carbon Tetrachloride       119         2,2,4-Trimethylpentane       104         Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107	1,1-Dichloroethene	102	
Carbon Disulfide         100           3-Chloropropene         104           Methylene Chloride         101           Methyl tert-butyl ether         118           trans-1,2-Dichloroethene         108           Hexane         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2-4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethene         96           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromodichloromethane         114           cis-1,3-Dichloropropene         120           4-Methyl-2-pentanone         120           Toluene         109           trans-1,3-Dichloropropene         116           1,1,2-Trichloroethane         107	Acetone	100	
3-Chloropropene         104           Methylene Chloride         101           Methyl tert-butyl ether         118           trans-1,2-Dichloroethene         108           Hexane         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethene         96           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromodichloromethane         114           cis-1,3-Dichloropropene         120           4-Methyl-2-pentanone         120           Toluene         109           trans-1,3-Dichloropropene         116           1,1,2-Trichloroethane         107	2-Propanol	105	
Methylene Chloride         101           Methyl tert-butyl ether         118           trans-1,2-Dichloroethene         108           Hexane         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethene         96           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromodichloromethane         114           cis-1,3-Dichloropropene         120           4-Methyl-2-pentanone         120           Toluene         109           trans-1,3-Dichloropropene         116           1,2-Trichloroethane         107           Tetrachloroethene         107	Carbon Disulfide	100	
Methyl tert-butyl ether         118           trans-1,2-Dichloroethene         108           Hexane         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethene         96           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromodichloromethane         114           cis-1,3-Dichloropropene         120           4-Methyl-2-pentanone         120           Toluene         109           trans-1,3-Dichloropropene         116           1,1,2-Trichloroethane         107           Tetrachloroethene         107	3-Chloropropene	104	
trans-1,2-Dichloroethene         108           Hexane         108           1,1-Dichloroethane         107           2-Butanone (Methyl Ethyl Ketone)         106           cis-1,2-Dichloroethene         103           Tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethene         96           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromodichloromethane         114           cis-1,3-Dichloropropene         120           4-Methyl-2-pentanone         109           Toluene         109           trans-1,3-Dichloropropene         116           1,1,2-Trichloroethane         107           Tetrachloroethene         107	Methylene Chloride	101	
Hexane       108         1,1-Dichloroethane       107         2-Butanone (Methyl Ethyl Ketone)       106         cis-1,2-Dichloroethene       103         Tetrahydrofuran       117         Chloroform       112         1,1,1-Trichloroethane       112         Cyclohexane       108         Carbon Tetrachloride       119         2,2,4-Trimethylpentane       104         Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       109         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	Methyl tert-butyl ether	118	
1,1-Dichloroethane     107       2-Butanone (Methyl Ethyl Ketone)     106       cis-1,2-Dichloroethene     103       Tetrahydrofuran     117       Chloroform     112       1,1,1-Trichloroethane     112       Cyclohexane     108       Carbon Tetrachloride     119       2,2,4-Trimethylpentane     104       Benzene     106       1,2-Dichloroethane     116       Heptane     113       Trichloroethene     96       1,2-Dichloropropane     107       1,4-Dioxane     115       Bromodichloromethane     114       cis-1,3-Dichloropropene     120       4-Methyl-2-pentanone     109       Tolluene     109       trans-1,3-Dichloropropene     116       1,1,2-Trichloroethane     107       Tetrachloroethene     107	trans-1,2-Dichloroethene	108	
2-Butanone (Methyl Ethyl Ketone)       106         cis-1,2-Dichloroethene       103         Tetrahydrofuran       117         Chloroform       112         1,1,1-Trichloroethane       112         Cyclohexane       108         Carbon Tetrachloride       119         2,2,4-Trimethylpentane       104         Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	Hexane	108	
cis-1,2-Dichloroethene       103         Tetrahydrofuran       117         Chloroform       112         1,1,1-Trichloroethane       112         Cyclohexane       108         Carbon Tetrachloride       119         2,2,4-Trimethylpentane       104         Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	1,1-Dichloroethane	107	
Tetrahydrofuran         117           Chloroform         112           1,1,1-Trichloroethane         112           Cyclohexane         108           Carbon Tetrachloride         119           2,2,4-Trimethylpentane         104           Benzene         106           1,2-Dichloroethane         116           Heptane         113           Trichloroethene         96           1,2-Dichloropropane         107           1,4-Dioxane         115           Bromodichloromethane         114           cis-1,3-Dichloropropene         120           4-Methyl-2-pentanone         120           Toluene         109           trans-1,3-Dichloropropene         116           1,1,2-Trichloroethane         107           Tetrachloroethene         107	2-Butanone (Methyl Ethyl Ketone)	106	
Chloroform       112         1,1,1-Trichloroethane       112         Cyclohexane       108         Carbon Tetrachloride       119         2,2,4-Trimethylpentane       104         Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	cis-1,2-Dichloroethene	103	
1,1,1-Trichloroethane       112         Cyclohexane       108         Carbon Tetrachloride       119         2,2,4-Trimethylpentane       104         Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	Tetrahydrofuran	117	
Cyclohexane       108         Carbon Tetrachloride       119         2,2,4-Trimethylpentane       104         Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	Chloroform	112	
Carbon Tetrachloride       119         2,2,4-Trimethylpentane       104         Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	1,1,1-Trichloroethane	112	
2,2,4-Trimethylpentane       104         Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       109         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	Cyclohexane	108	
Benzene       106         1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Tolluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	Carbon Tetrachloride	119	
1,2-Dichloroethane       116         Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	2,2,4-Trimethylpentane		
Heptane       113         Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	Benzene		
Trichloroethene       96         1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	1,2-Dichloroethane	116	
1,2-Dichloropropane       107         1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	Heptane		
1,4-Dioxane       115         Bromodichloromethane       114         cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	Trichloroethene		
Bromodichloromethane         114           cis-1,3-Dichloropropene         120           4-Methyl-2-pentanone         120           Toluene         109           trans-1,3-Dichloropropene         116           1,1,2-Trichloroethane         107           Tetrachloroethene         107	1,2-Dichloropropane		
cis-1,3-Dichloropropene       120         4-Methyl-2-pentanone       120         Toluene       109         trans-1,3-Dichloropropene       116         1,1,2-Trichloroethane       107         Tetrachloroethene       107	1,4-Dioxane		
4-Methyl-2-pentanone 120 Toluene 109 trans-1,3-Dichloropropene 116 1,1,2-Trichloroethane 107 Tetrachloroethene 107	Bromodichloromethane	114	
Toluene 109 trans-1,3-Dichloropropene 116 1,1,2-Trichloroethane 107 Tetrachloroethene 107	cis-1,3-Dichloropropene		
trans-1,3-Dichloropropene 116 1,1,2-Trichloroethane 107 Tetrachloroethene 107			
1,1,2-Trichloroethane107Tetrachloroethene107	Toluene		
Tetrachloroethene 107	trans-1,3-Dichloropropene		
	1,1,2-Trichloroethane		
2-Hexanone 110	Tetrachloroethene		
	2-Hexanone	110	



# Client Sample ID: CCV Lab ID#: 1508037A-09C

### **EPA METHOD TO-15 GC/MS**

File Name: 14081002 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 08:52 AM

Compound	%Recovery	
Dibromochloromethane	111	
1,2-Dibromoethane (EDB)	112	
Chlorobenzene	108	
Ethyl Benzene	112	
m,p-Xylene	116	
o-Xylene	112	
Styrene	124	
Bromoform	120	
Cumene	118	
1,1,2,2-Tetrachloroethane	138 Q	
Propylbenzene	116	
4-Ethyltoluene	119	
1,3,5-Trimethylbenzene	119	
1,2,4-Trimethylbenzene	120	
1,3-Dichlorobenzene	113	
1,4-Dichlorobenzene	111	
alpha-Chlorotoluene	152 Q	
1,2-Dichlorobenzene	117	
1,2,4-Trichlorobenzene	108	
Hexachlorobutadiene	108	

#### Q = Exceeds Quality Control limits.

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	99	70-130	
Toluene-d8	102	70-130	
4-Bromofluorobenzene	100	70-130	



# Client Sample ID: LCS Lab ID#: 1508037A-10A

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: a080704 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/7/15 11:41 AM

		Method
Compound	%Recovery	Limits
Freon 12	103	70-130
Freon 114	104	70-130
Chloromethane	106	70-130
Vinyl Chloride	102	70-130
1,3-Butadiene	96	70-130
Bromomethane	99	70-130
Chloroethane	104	70-130
Freon 11	103	70-130
Ethanol	101	70-130
Freon 113	92	70-130
1,1-Dichloroethene	90	70-130
Acetone	94	70-130
2-Propanol	106	70-130
Carbon Disulfide	84	70-130
3-Chloropropene	92	70-130
Methylene Chloride	104	70-130
Methyl tert-butyl ether	94	70-130
trans-1,2-Dichloroethene	84	70-130
Hexane	100	70-130
1,1-Dichloroethane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	104	70-130
cis-1,2-Dichloroethene	109	70-130
Tetrahydrofuran	102	70-130
Chloroform	102	70-130
1,1,1-Trichloroethane	101	70-130
Cyclohexane	103	70-130
Carbon Tetrachloride	102	70-130
2,2,4-Trimethylpentane	109	70-130
Benzene	100	70-130
1,2-Dichloroethane	102	70-130
Heptane	100	70-130
Trichloroethene	98	70-130
1,2-Dichloropropane	103	70-130
1,4-Dioxane	99	70-130
Bromodichloromethane	104	70-130
cis-1,3-Dichloropropene	99	70-130
4-Methyl-2-pentanone	108	70-130
Toluene	103	70-130
trans-1,3-Dichloropropene	102	70-130
1,1,2-Trichloroethane	99	70-130
Tetrachloroethene	97	70-130
2-Hexanone	113	70-130



### Client Sample ID: LCS Lab ID#: 1508037A-10A

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: a080704 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/7/15 11:41 AM

		Method
Compound	%Recovery	Limits
Dibromochloromethane	102	70-130
1,2-Dibromoethane (EDB)	101	70-130
Chlorobenzene	96	70-130
Ethyl Benzene	99	70-130
m,p-Xylene	105	70-130
o-Xylene	102	70-130
Styrene	104	70-130
Bromoform	100	70-130
Cumene	103	70-130
1,1,2,2-Tetrachloroethane	106	70-130
Propylbenzene	107	70-130
4-Ethyltoluene	108	70-130
1,3,5-Trimethylbenzene	102	70-130
1,2,4-Trimethylbenzene	105	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	104	70-130
alpha-Chlorotoluene	109	70-130
1,2-Dichlorobenzene	102	70-130
1,2,4-Trichlorobenzene	97	70-130
Hexachlorobutadiene	98	70-130

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	103	70-130	
1,2-Dichloroethane-d4	102	70-130	
4-Bromofluorobenzene	101	70-130	



# Client Sample ID: LCSD Lab ID#: 1508037A-10AA

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: a080705 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/7/15 12:07 PM

		Method
Compound	%Recovery	Limits
Freon 12	100	70-130
Freon 114	100	70-130
Chloromethane	102	70-130
Vinyl Chloride	97	70-130
1,3-Butadiene	94	70-130
Bromomethane	96	70-130
Chloroethane	99	70-130
Freon 11	98	70-130
Ethanol	97	70-130
Freon 113	89	70-130
1,1-Dichloroethene	88	70-130
Acetone	91	70-130
2-Propanol	103	70-130
Carbon Disulfide	81	70-130
3-Chloropropene	88	70-130
Methylene Chloride	100	70-130
Methyl tert-butyl ether	90	70-130
trans-1,2-Dichloroethene	83	70-130
Hexane	95	70-130
1,1-Dichloroethane	100	70-130
2-Butanone (Methyl Ethyl Ketone)	100	70-130
cis-1,2-Dichloroethene	103	70-130
Tetrahydrofuran	98	70-130
Chloroform	99	70-130
1,1,1-Trichloroethane	97	70-130
Cyclohexane	99	70-130
Carbon Tetrachloride	98	70-130
2,2,4-Trimethylpentane	104	70-130
Benzene	99	70-130
1,2-Dichloroethane	100	70-130
Heptane	100	70-130
Trichloroethene	99	70-130
1,2-Dichloropropane	104	70-130
1,4-Dioxane	99	70-130
Bromodichloromethane	105	70-130
cis-1,3-Dichloropropene	98	70-130
4-Methyl-2-pentanone	108	70-130
Toluene	101	70-130
trans-1,3-Dichloropropene	101	70-130
1,1,2-Trichloroethane	98	70-130
Tetrachloroethene	94	70-130
2-Hexanone	111	70-130
2-HEXANUNE	111	70-130



### Client Sample ID: LCSD Lab ID#: 1508037A-10AA

#### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: a080705 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/7/15 12:07 PM

		Method
Compound	%Recovery	Limits
Dibromochloromethane	100	70-130
1,2-Dibromoethane (EDB)	99	70-130
Chlorobenzene	94	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	102	70-130
o-Xylene	102	70-130
Styrene	103	70-130
Bromoform	100	70-130
Cumene	102	70-130
1,1,2,2-Tetrachloroethane	105	70-130
Propylbenzene	105	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	106	70-130
1,2,4-Trimethylbenzene	105	70-130
1,3-Dichlorobenzene	101	70-130
1,4-Dichlorobenzene	103	70-130
alpha-Chlorotoluene	108	70-130
1,2-Dichlorobenzene	102	70-130
1,2,4-Trichlorobenzene	109	70-130
Hexachlorobutadiene	106	70-130

		Method Limits
Surrogates	%Recovery	
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	100	70-130



# Client Sample ID: LCS Lab ID#: 1508037A-10B

# EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3081003 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 10:48 AM

		Method
Compound	%Recovery	Limits
Freon 12	114	70-130
Freon 114	109	70-130
Chloromethane	68 Q	70-130
Vinyl Chloride	77	70-130
1,3-Butadiene	75	70-130
Bromomethane	97	70-130
Chloroethane	94	70-130
Freon 11	119	70-130
Ethanol	90	70-130
Freon 113	100	70-130
1,1-Dichloroethene	100	70-130
Acetone	91	70-130
2-Propanol	95	70-130
Carbon Disulfide	79	70-130
3-Chloropropene	88	70-130
Methylene Chloride	89	70-130
Methyl tert-butyl ether	98	70-130
trans-1,2-Dichloroethene	84	70-130
Hexane	89	70-130
1,1-Dichloroethane	91	70-130
2-Butanone (Methyl Ethyl Ketone)	90	70-130
cis-1,2-Dichloroethene	100	70-130
Tetrahydrofuran	82	70-130
Chloroform	99	70-130
1,1,1-Trichloroethane	107	70-130
Cyclohexane	92	70-130
Carbon Tetrachloride	112	70-130
2,2,4-Trimethylpentane	91	70-130
Benzene	90	70-130
1,2-Dichloroethane	114	70-130
Heptane	88	70-130
Trichloroethene	96	70-130
1,2-Dichloropropane	81	70-130
1,4-Dioxane	89	70-130
Bromodichloromethane	105	70-130
cis-1,3-Dichloropropene	83	70-130
4-Methyl-2-pentanone	78	70-130
Toluene	82	70-130
trans-1,3-Dichloropropene	102	70-130
1,1,2-Trichloroethane	95	70-130
Tetrachloroethene	103	70-130
2-Hexanone		



### Client Sample ID: LCS Lab ID#: 1508037A-10B

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3081003 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 10:48 AM

	%Recovery	Method Limits
Compound		
Dibromochloromethane	112	70-130
1,2-Dibromoethane (EDB)	100	70-130
Chlorobenzene	96	70-130
Ethyl Benzene	98	70-130
m,p-Xylene	100	70-130
o-Xylene	106	70-130
Styrene	104	70-130
Bromoform	111	70-130
Cumene	108	70-130
1,1,2,2-Tetrachloroethane	89	70-130
Propylbenzene	103	70-130
4-Ethyltoluene	111	70-130
1,3,5-Trimethylbenzene	102	70-130
1,2,4-Trimethylbenzene	104	70-130
1,3-Dichlorobenzene	108	70-130
1,4-Dichlorobenzene	109	70-130
alpha-Chlorotoluene	95	70-130
1,2-Dichlorobenzene	103	70-130
1,2,4-Trichlorobenzene	113	70-130
Hexachlorobutadiene	111	70-130

#### Q = Exceeds Quality Control limits.

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	108	70-130



# Client Sample ID: LCSD Lab ID#: 1508037A-10BB

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3081004 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 11:13 AM

Compound	9/ Doggyowy	Method Limits
Compound	%Recovery	
Freon 12	112	70-130
Freon 114	108	70-130
Chloromethane	66 Q	70-130
Vinyl Chloride	76	70-130
1,3-Butadiene	74	70-130
Bromomethane	97	70-130
Chloroethane	93	70-130
Freon 11	118	70-130
Ethanol	92	70-130
Freon 113	99	70-130
1,1-Dichloroethene	98	70-130
Acetone	93	70-130
2-Propanol	95	70-130
Carbon Disulfide	79	70-130
3-Chloropropene	88	70-130
Methylene Chloride	88	70-130
Methyl tert-butyl ether	98	70-130
trans-1,2-Dichloroethene	84	70-130
Hexane	89	70-130
1,1-Dichloroethane	91	70-130
2-Butanone (Methyl Ethyl Ketone)	89	70-130
cis-1,2-Dichloroethene	101	70-130
Tetrahydrofuran	84	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	106	70-130
Cyclohexane	92	70-130
Carbon Tetrachloride	110	70-130
2,2,4-Trimethylpentane	89	70-130
Benzene	90	70-130
1,2-Dichloroethane	113	70-130
Heptane	87	70-130
Trichloroethene	95	70-130
1,2-Dichloropropane	80	70-130
1,4-Dioxane	89	70-130
Bromodichloromethane	102	70-130
cis-1,3-Dichloropropene	83	70-130
4-Methyl-2-pentanone	78	70-130
Toluene	80	70-130
trans-1,3-Dichloropropene	101	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	100	70-130
	84	70-130 70-130
2-Hexanone	04	70-130



### Client Sample ID: LCSD Lab ID#: 1508037A-10BB

### EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3081004 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 11:13 AM

	%Recovery	Method Limits
Compound		
Dibromochloromethane	109	70-130
1,2-Dibromoethane (EDB)	99	70-130
Chlorobenzene	94	70-130
Ethyl Benzene	96	70-130
m,p-Xylene	99	70-130
o-Xylene	106	70-130
Styrene	102	70-130
Bromoform	109	70-130
Cumene	106	70-130
1,1,2,2-Tetrachloroethane	88	70-130
Propylbenzene	101	70-130
4-Ethyltoluene	108	70-130
1,3,5-Trimethylbenzene	101	70-130
1,2,4-Trimethylbenzene	103	70-130
1,3-Dichlorobenzene	106	70-130
1,4-Dichlorobenzene	107	70-130
alpha-Chlorotoluene	94	70-130
1,2-Dichlorobenzene	102	70-130
1,2,4-Trichlorobenzene	115	70-130
Hexachlorobutadiene	112	70-130

#### Q = Exceeds Quality Control limits.

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	108	70-130



# Client Sample ID: LCS Lab ID#: 1508037A-10C

### **EPA METHOD TO-15 GC/MS**

File Name: 14081003 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 09:21 AM

		Method
Compound	%Recovery	Limits
Freon 12	103	70-130
Freon 114	103	70-130
Chloromethane	95	70-130
Vinyl Chloride	96	70-130
1,3-Butadiene	83	70-130
Bromomethane	93	70-130
Chloroethane	105	70-130
Freon 11	106	70-130
Ethanol	86	70-130
Freon 113	99	70-130
1,1-Dichloroethene	98	70-130
Acetone	90	70-130
2-Propanol	97	70-130
Carbon Disulfide	82	70-130
3-Chloropropene	95	70-130
Methylene Chloride	96	70-130
Methyl tert-butyl ether	90	70-130
trans-1,2-Dichloroethene	85	70-130
Hexane	99	70-130
1,1-Dichloroethane	97	70-130
2-Butanone (Methyl Ethyl Ketone)	91	70-130
cis-1,2-Dichloroethene	104	70-130
Tetrahydrofuran	99	70-130
Chloroform	103	70-130
1,1,1-Trichloroethane	102	70-130
Cyclohexane	99	70-130
Carbon Tetrachloride	106	70-130
2,2,4-Trimethylpentane	96	70-130
Benzene	94	70-130
1,2-Dichloroethane	104	70-130
Heptane	93	70-130
Trichloroethene	94	70-130
1,2-Dichloropropane	96	70-130
1,4-Dioxane	94	70-130
Bromodichloromethane	102	70-130
cis-1,3-Dichloropropene	99	70-130
4-Methyl-2-pentanone	93	70-130
Toluene	96	70-130
trans-1,3-Dichloropropene	100	70-130
1,1,2-Trichloroethane	100	70-130
Tetrachloroethene	99	70-130
2-Hexanone	98	70-130



# Client Sample ID: LCS Lab ID#: 1508037A-10C

#### **EPA METHOD TO-15 GC/MS**

File Name: 14081003 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 09:21 AM

0	0/5	Method
Compound	%Recovery	Limits
Dibromochloromethane	100	70-130
1,2-Dibromoethane (EDB)	105	70-130
Chlorobenzene	101	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	103	70-130
o-Xylene	104	70-130
Styrene	105	70-130
Bromoform	107	70-130
Cumene	104	70-130
1,1,2,2-Tetrachloroethane	119	70-130
Propylbenzene	108	70-130
4-Ethyltoluene	106	70-130
1,3,5-Trimethylbenzene	113	70-130
1,2,4-Trimethylbenzene	108	70-130
1,3-Dichlorobenzene	108	70-130
1,4-Dichlorobenzene	108	70-130
alpha-Chlorotoluene	120	70-130
1,2-Dichlorobenzene	109	70-130
1,2,4-Trichlorobenzene	118	70-130
Hexachlorobutadiene	122	70-130

		Method	
Surrogates	%Recovery	Limits	
1,2-Dichloroethane-d4	102	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	104	70-130	



# Client Sample ID: LCSD Lab ID#: 1508037A-10CC EPA METHOD TO-15 GC/MS

File Name: 14081004 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 09:40 AM

		Method
Compound	%Recovery	Limits
Freon 12	105	70-130
Freon 114	104	70-130
Chloromethane	98	70-130
Vinyl Chloride	92	70-130
1,3-Butadiene	92	70-130
Bromomethane	88	70-130
Chloroethane	104	70-130
Freon 11	105	70-130
Ethanol	85	70-130
Freon 113	97	70-130
1,1-Dichloroethene	99	70-130
Acetone	94	70-130
2-Propanol	98	70-130
Carbon Disulfide	84	70-130
3-Chloropropene	96	70-130
Methylene Chloride	93	70-130
Methyl tert-butyl ether	90	70-130
trans-1,2-Dichloroethene	84	70-130
Hexane	101	70-130
1,1-Dichloroethane	100	70-130
2-Butanone (Methyl Ethyl Ketone)	96	70-130
cis-1,2-Dichloroethene	105	70-130
Tetrahydrofuran	100	70-130
Chloroform	101	70-130
1,1,1-Trichloroethane	101	70-130
Cyclohexane	101	70-130
Carbon Tetrachloride	111	70-130
2,2,4-Trimethylpentane	97	70-130
Benzene	94	70-130
1,2-Dichloroethane	104	70-130
Heptane	94	70-130
Trichloroethene	92	70-130
1,2-Dichloropropane	93	70-130
1,4-Dioxane	99	70-130
Bromodichloromethane	103	70-130
cis-1,3-Dichloropropene	101	70-130
4-Methyl-2-pentanone	108	70-130
Toluene	99	70-130
trans-1,3-Dichloropropene	98	70-130
1,1,2-Trichloroethane	99	70-130
Tetrachloroethene	100	70-130
2-Hexanone	95	70-130



# Client Sample ID: LCSD Lab ID#: 1508037A-10CC EPA METHOD TO-15 GC/MS

File Name: 14081004 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/10/15 09:40 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	101	70-130
1,2-Dibromoethane (EDB)	98	70-130
Chlorobenzene	101	70-130
Ethyl Benzene	100	70-130
m,p-Xylene	100	70-130
o-Xylene	106	70-130
Styrene	108	70-130
Bromoform	106	70-130
Cumene	106	70-130
1,1,2,2-Tetrachloroethane	120	70-130
Propylbenzene	106	70-130
4-Ethyltoluene	104	70-130
1,3,5-Trimethylbenzene	111	70-130
1,2,4-Trimethylbenzene	109	70-130
1,3-Dichlorobenzene	105	70-130
1,4-Dichlorobenzene	104	70-130
alpha-Chlorotoluene	124	70-130
1,2-Dichlorobenzene	107	70-130
1,2,4-Trichlorobenzene	118	70-130
Hexachlorobutadiene	115	70-130

Container Type: W. Not Applicable		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	101	70-130



8/12/2015 Mr. Garrett Kuhl Tetra Tech - GEO 2969 Prospect Park Suite 100 Rancho Cordova CA 95670

Project Name: TERRAMAR-5100 BROADWAY

Project #: 117-7429001.06 Workorder #: 1508037B

Dear Mr. Garrett Kuhl

The following report includes the data for the above referenced project for sample(s) received on 8/4/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

**Project Manager** 

July Butte



#### WORK ORDER #: 1508037B

Work Order Summary

CLIENT: Mr. Garrett Kuhl BILL TO: Mr. Garrett Kuhl

Tetra Tech - GEO

2969 Prospect Park
Suite 100

Tetra Tech - GEO

2969 Prospect Park
Suite 100

Suite 100

Rancho Cordova, CA 95670 Rancho Cordova, CA 95670

**PHONE:** 916-853-1800 **P.O.** #

FAX: 916-853-1860 PROJECT # 117-7429001.06 TERRAMAR-5100

**DATE RECEIVED:** 08/04/2015 CONTACT: BROADWAY Kelly Buettner 08/12/2015

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	<b>PRESSURE</b>
01A	DC-VMP-2-5'	Modified ASTM D-1946	2.4 "Hg	15 psi
02A	DC-VMP-3-5'	Modified ASTM D-1946	3.7 "Hg	15 psi
03A	DC-VMP-4-5'	Modified ASTM D-1946	3.9 "Hg	15 psi
04A	DC-VMP-5-5'	Modified ASTM D-1946	2.2 "Hg	15.3 psi
05A	DC-VMP-6-5'	Modified ASTM D-1946	4.3 "Hg	15 psi
06A	DC-VMP-7-5'	Modified ASTM D-1946	3.9 "Hg	15.1 psi
07A	DC-VMP-8-5'	Modified ASTM D-1946	3.7 "Hg	14.9 psi
08A	Lab Blank	Modified ASTM D-1946	NA	NA
09A	LCS	Modified ASTM D-1946	NA	NA
09AA	LCSD	Modified ASTM D-1946	NA	NA

	fleide layer	
CERTIFIED BY:	0 0	DATE: 08/12/15
CERTIFIED DIT		2.112.

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015. Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.



#### LABORATORY NARRATIVE Modified ASTM D-1946 Tetra Tech - GEO Workorder# 1508037B

Seven 1 Liter Summa Canister samples were received on August 04, 2015. The laboratory performed analysis via Modified ASTM Method D-1946 for Helium in air using GC/TCD. The method involves direct injection of 1.0 mL of sample.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	ASTM D-1946	ATL Modifications
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed.  Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

### **Receiving Notes**

There were no receiving discrepancies.

### **Analytical Notes**

There were no analytical discrepancies.



### **Definition of Data Qualifying Flags**

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B Compound present in laboratory blank greater than reporting limit.
- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the detection limit.
- M Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue



# Summary of Detected Compounds NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: DC-VMP-2-5'

Lab ID#: 1508037B-01A
No Detections Were Found.

Client Sample ID: DC-VMP-3-5'

Lab ID#: 1508037B-02A

	Rpt. Limit	Amount
Compound	(%)	(%)
Helium	0.12	5.4

**Client Sample ID: DC-VMP-4-5'** 

Lab ID#: 1508037B-03A
No Detections Were Found.

**Client Sample ID: DC-VMP-5-5'** 

Lab ID#: 1508037B-04A
No Detections Were Found.

**Client Sample ID: DC-VMP-6-5'** 

Lab ID#: 1508037B-05A
No Detections Were Found.

**Client Sample ID: DC-VMP-7-5'** 

Lab ID#: 1508037B-06A
No Detections Were Found.

**Client Sample ID: DC-VMP-8-5'** 

Lab ID#: 1508037B-07A
No Detections Were Found.



# Client Sample ID: DC-VMP-2-5' Lab ID#: 1508037B-01A

### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: Dil. Factor:	9081208b 2.20	Date of Collection: 8/4/15 11:35:0 Date of Analysis: 8/12/15 11:34 A	
		Rpt. Limit	Amount
Compound		(%)	(%)
Helium		0.11	Not Detected



# Client Sample ID: DC-VMP-3-5' Lab ID#: 1508037B-02A

### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: Dil. Factor:			ction: 8/4/15 11:53:00 AM sis: 8/12/15 11:57 AM	
		Rpt. Limit	Amount	
Compound		(%)	(%)	
Helium		0.12	5.4	



# Client Sample ID: DC-VMP-4-5' Lab ID#: 1508037B-03A

### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9081210b	Date of Colle	ction: 8/4/15 12:12:00 PM	
Dil. Factor:	2.32	Date of Analy	Date of Analysis: 8/12/15 12:33 PM	
		Rpt. Limit	Amount	
Compound		(%)	(%)	
Helium		0.12	Not Detected	



# Client Sample ID: DC-VMP-5-5' Lab ID#: 1508037B-04A

### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9081211b	Date of Colle	ction: 8/4/15 12:34:00 PM	
Dil. Factor:	Factor: 2.20		Date of Analysis: 8/12/15 01:05 PM	
		Rpt. Limit	Amount	
Compound		(%)	(%)	
Helium		0.11	Not Detected	



# Client Sample ID: DC-VMP-6-5' Lab ID#: 1508037B-05A

### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9081212b	Date of Collection: 8/4/15 12:58:00 PM	
Dil. Factor:	2.36	Date of Analysis: 8/12/15 01:53 PM	
	Rpt. Limit	Rpt. Limit	Amount
Compound		(%)	(%)
Helium		0.12	Not Detected



# Client Sample ID: DC-VMP-7-5' Lab ID#: 1508037B-06A

### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: Dil. Factor:	9081213b 2.91	Date of Collection: 8/4/15 1:17:00 PM Date of Analysis: 8/12/15 02:31 PM	
		Rpt. Limit	Amount
Compound		(%)	(%)
Helium		0.14	Not Detected



# Client Sample ID: DC-VMP-8-5' Lab ID#: 1508037B-07A

### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9081214b	Date of Collection: 8/4/15 1:38:00 PM	
Dil. Factor:	2.29	Date of Analysis: 8/12/15 02:55 PM	
		Rpt. Limit	Amount
Compound		(%)	(%)
Helium		0.11	Not Detected



### Client Sample ID: Lab Blank Lab ID#: 1508037B-08A

#### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9081203b	Date of Colle	ction: NA
Dil. Factor:	1.00	Date of Analy	rsis: 8/12/15 09:08 AM
		Rpt. Limit	Amount
Compound		(%)	(%)
Helium		0.050	Not Detected

Container Type: NA - Not Applicable



#### Client Sample ID: LCS Lab ID#: 1508037B-09A

#### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: 9081202b Date of Collection: NA

Dil. Factor: 1.00 Date of Analysis: 8/12/15 08:44 AM

		Method
Compound	%Recovery	Limits
Helium	102	85-115

**Container Type: NA - Not Applicable** 



### Client Sample ID: LCSD Lab ID#: 1508037B-09AA

#### NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name: 9081215b Date of Collection: NA

Dil. Factor: 1.00 Date of Analysis: 8/12/15 03:18 PM

		Method
Compound	%Recovery	Limits
Helium	102	85-115

**Container Type: NA - Not Applicable** 

### CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

September 16, 2015

CLS Work Order #: CYI0462 COC #:

Tim Costello Tetra Tech Geo 2969 Prospect Park Drive, Suite 100 Rancho Cordova, CA 95670

Project Name: Terramar 5100 Broadway

Enclosed are the results of analyses for samples received by the laboratory on 09/11/15 11:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D. Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

Page 1 of 102 09/16/15 10:53

Tetra Tech Geo

Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100

Project Number: [none]

CLS Work Order #: CYI0462

Rancho Cordova, CA 95670

Project Manager: Tim Costello

		Report To:				t Job Numb 7429001.00			AN	ALY	SIS I	REQU	ESTE	GEO	TR.	CKE	R		
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		Rancho Cordova,	CA 95670	)	⊠ CLS	2 4.4.2			Š					GLO				103	
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815	1040	DC-SB-16-08			SOIL	1	TUBE	3	X							X			ų
1815	1050	DC-SB-16-13			SOIL	1	TUBE	3	X							X			
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Tetra Tech Geo

Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100

Project Number: [none]

CLS Work Order #: CYI0462

Rancho Cordova, CA 95670

Project Manager: Tim Costello

		Report To:				t Job Num -7429001.0			AN	ALY	SIS I	REQUES	TED	GEOT	ΠRA	CKE	R		
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Page 3 of 102 09/16/15 10:53

Tetra Tech Geo

Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100

Project Number: [none]

CLS Work Order #: CYI0462

Rancho Cordova, CA 95670

Project Manager: Tim Costello

		Report To:			t Job Numbe -7429001.06			AN	ALY	SIS RI	EQUESTE	D GE	OTR/	CKE	R	
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Page 4 of 102 09/16/15 10:53

Tetra Tech Geo

Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100

Project Number: [none]

CLS Work Order #: CYI0462

Rancho Cordova, CA 95670

Project Manager: Tim Costello

		Report To:			nt Job Numb -7429001.00			ÀΝ	ALY	SIS F	EQ	UEST	ED	GEO	OTRA	CKE	R	
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Page 5 of 102 09/16/15 10:53

Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-15-12' (CYI0462-01) Soil Sampled	d: 09/08/15 08:39 R	eceived: 09/11	/15 11:00	)					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	120	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-15-12' (CYI0462-01) Soil	Sampled: 09/08/15 08:39	Received: 09/11	/15 11:00	)					
Bromoform	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	n	
Naphthalene	ND	5.0	"	"	"	"	"	n	
n-Butylbenzene	ND	5.0	"	"	"	"	"	n	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	ï	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	ï	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

Page 7 of 102 09/16/15 10:53

Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-15-12' (CYI0462-01) Soil	Sampled: 09/08/15 08:39	Received: 09/11	/15 11:00	)					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		125 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		112 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		93 %	62	-125	"	"	"	"	
DC-SB-15-17' (CYI0462-02) Soil	Sampled: 09/08/15 08:50	Received: 09/11	/15 11:00	)					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	e ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	,,	"	,,	,,	"	,,	
1,1-Dichloroethane	ND	5.0	"	"	"	,,	"	,,	
1,1-Dichloroethene	ND ND	5.0	,,	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	,,	"	"	"	"	,,	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-15-17' (CYI0462-02) Soil Sa	ampled: 09/08/15 08:50	Received: 09/11	/15 11:00	)					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	n	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	n	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	ï	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	ï	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	ï	"	
Dibromomethane	ND	5.0	"	"	"	"	ï	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-15-17' (CYI0462-02) Soil	Sampled: 09/08/15 08:50	Received: 09/11	/15 11:00	0					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	II .	
Surrogate: 1,2-Dichloroethane-d4		136 %	50	)-125	"	"	"	"	QS-HI
Surrogate: 4-Bromofluorobenzene		114 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		96 %	62	2-125	"	"	"	"	
DC-SB-16-08' (CYI0462-03) Soil	Sampled: 09/08/15 10:40	Received: 09/11	/15 11:00	0					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethand (Freon 113)	e ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene			,,	"	"	"	"	"	
1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND	5.0							
	ND ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene			"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

DC-SB-16-08' (CYI0462-03) Soil Samp 1,2-Dibromo-3-chloropropane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,4-Dichlorobenzene 2,2-Dichloropropane 2-Butanone 2-Hexanone	ND N	10 5.0 5.0	l/ <b>15 11:00</b> μg/kg "	1	CY06276				
1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,4-Dichlorobenzene 2,2-Dichloropropane 2-Butanone	ND ND ND	5.0		1	CY06276				
1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,4-Dichlorobenzene 2,2-Dichloropropane 2-Butanone	ND ND		"		C 1 002/0	"	09/11/15	EPA 8260B	
1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,4-Dichlorobenzene 2,2-Dichloropropane 2-Butanone	ND	5.0		"	"	"	"	"	
1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,4-Dichlorobenzene 2,2-Dichloropropane 2-Butanone			"	"	"	"	"	"	
1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,4-Dichlorobenzene 2,2-Dichloropropane 2-Butanone	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene 1,3-Dichloropropane 1,4-Dichlorobenzene 2,2-Dichloropropane 2-Butanone	110	5.0	"	"	"	"	"	"	
1,3-Dichloropropane 1,4-Dichlorobenzene 2,2-Dichloropropane 2-Butanone	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene 2,2-Dichloropropane 2-Butanone	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane 2-Butanone	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	5.0	"	"	"	"	"	"	
	ND	5.0	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)									
Ethylbenzene	ND	10	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-16-08' (CYI0462-03) Soil	Sampled: 09/08/15 10:40	Received: 09/11	1/15 11:00	)					
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		131 %	50	-125	"	"	"	"	QS-HI
Surrogate: 4-Bromofluorobenzene		107 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		97 %	62	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-16-13' (CYI0462-04) Soil S	ampled: 09/08/15 10:50 Ro	eceived: 09/11	/15 11:00	)					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-16-13' (CYI0462-04) Soil	Sampled: 09/08/15 10:50	Received: 09/11	/15 11:00	)					
Bromoform	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-16-13' (CYI0462-04) Soil	Sampled: 09/08/15 10:50	Received: 09/11	/15 11:00	0					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		132 %	50	)-125	"	"	"	"	QS-Hi
Surrogate: 4-Bromofluorobenzene		118 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		96 %	62	2-125	"	"	"	"	
DC-SB-16-15' (CYI0462-05) Soil	Sampled: 09/08/15 10:57	Received: 09/11	/15 11:00	0					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	e ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	,,	"	,,	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	,,	,,	"	
1,1-Dichloroethene	ND	5.0	,,	"	"	,,	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	,,	"		
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-16-15' (CYI0462-05) Soil	Sampled: 09/08/15 10:57	Received: 09/11	/15 11:00	)					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	150	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-16-15' (CYI0462-05) Soil	Sampled: 09/08/15 10:57	Received: 09/11	/15 11:00	)					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	n .	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	n .	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	n .	
Vinyl chloride	ND	10	"	"	"	"	"	n .	
Xylenes (total)	ND	10	"	"	"	"	n	"	
Surrogate: 1,2-Dichloroethane-d4		138 %	50	-125	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		108 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		95 %	62	-125	"	"	"	"	
DC-SB-17-12' (CYI0462-06) Soil	Sampled: 09/08/15 13:18	Received: 09/11	/15 11:00	)					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dicilioroctilanc		<b>7</b> 0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0							
	ND ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene			"	"	"	"	"	"	
1,1-Dichloroethene 1,1-Dichloropropene	ND	5.0							
1,1-Dichloroethene 1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND ND	5.0 5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-17-12' (CYI0462-06) Soil	Sampled: 09/08/15 13:18	Received: 09/11	/15 11:00	)					
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-17-12' (CYI0462-06) Soil	Sampled: 09/08/15 13:18	Received: 09/11	/15 11:00	)					
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		129 %	50	-125	"	"	"	"	QS-I
Surrogate: 4-Bromofluorobenzene		107 %	50	-128	"	"	"	"	_
Surrogate: Toluene-d8		99 %	62	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-17-15' (CYI0462-07) Soil	Sampled: 09/08/15 13:21	Received: 09/11	1/15 11:00	)					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-17-15' (CYI0462-07) Soil	Sampled: 09/08/15 13:21	Received: 09/11	/15 11:00	)					
Bromoform	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

OC-SB-17-15' (CYI0462-07) Soil Crichlorofluoromethane	ND		1/15 11:00						
				0					
	3.775	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
/inyl chloride	ND	10	"	"	"	"	"	"	
Kylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		135 %	50	)-125	"	"	"	"	QS-Hi
Surrogate: 4-Bromofluorobenzene		116 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		98 %	62	2-125	"	"	"	"	
OC-SB-18-11.5' (CYI0462-08) Soi	Sampled: 09/08/15 14:52	Received: 09/	11/15 11:	00					
,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
,1,2-Trichloro-1,2,2-trifluoroethan	e ND	5.0	"	"	"	"	"	"	
Freon 113) ,1,2-Trichloroethane	ND	5.0	,,	,,	"	"	,,	,,	
,1-Dichloroethane	ND	5.0	,,	,,	"	"	"	"	
,1-Dichloroethene	ND	5.0	,,	,,	"	"	"	"	
,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-18-11.5' (CYI0462-08) Soil	Sampled: 09/08/15 14:52	Received: 09/	11/15 11:	00					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	n	
Bromomethane	ND	10	"	"	"	"	"	n	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	n	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	n	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	n	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	ï	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	n	
Dibromochloromethane	ND	5.0	"	"	"	"	"	n	
Dibromomethane	ND	5.0	"	"	"	"	"	n	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	ï	"	
Ethylbenzene	ND	5.0	"	"	"	"	ï	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-18-11.5' (CYI0462-08) Soil	Sampled: 09/08/15 14:52	Received: 09/	11/15 11:	00					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	n .	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		132 %	50	1-125	"	"	"	"	QS-HI
Surrogate: 4-Bromofluorobenzene		115 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		98 %	62	-125	"	"	"	"	
DC-SB-18-17' (CYI0462-09) Soil S	Sampled: 09/08/15 15:00	Received: 09/11	/15 11:00	)					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1.1.D: 11 //	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane				,,	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"						
1,1-Dichloroethene	ND ND	5.0 5.0	"	"	"	"	"	"	
				"	"	"	"	"	
1,1-Dichloroethene 1,1-Dichloropropene	ND	5.0	"						
1,1-Dichloroethene 1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND ND	5.0 5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-18-17' (CYI0462-09) Soil	Sampled: 09/08/15 15:00	Received: 09/11	/15 11:00	)					
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	130	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-18-17' (CYI0462-09) Soil	Sampled: 09/08/15 15:00	Received: 09/11	/15 11:00	)					
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	5.3	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	ï	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		131 %	50	-125	"	"	"	"	QS-
Surrogate: 4-Bromofluorobenzene		123 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		99 %	62	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

1,1-Trichloroethane	Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1-Trichloroethane	DC-SB-25-19' (CYI0462-10) Soil	Sampled: 09/10/15 11:50	Received: 09/11	1/15 11:00	)					
1,1,2-Trichloro-1,2,2-trifluorethane	1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,2-Trichloro-1,2,2-trifluoroethane   ND	1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Treen 113   1,12-Trichlorocthane   ND   5.0   " " " " " " " " " " " " " " " " " "	1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,12-Frichloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	e ND	5.0	"	"	"	"	"	"	
1,1-	(Freon 113)		- 0		_					
1,1-Dichloroethene										
1,1-Dichloropropene										
1,2,3-Trichlorobenzene	,									
1,2,3-Trichloropropane       ND       5.0       "<							"			
1,2,4-Trichlorobenzene       ND       5.0       "<							"			
1,2,4-Trimethylbenzene       ND       5.0       "<				"			"	"		
1,2-Dibromo-3-chloropropane       ND       10       " <t< td=""><td>1,2,4-Trichlorobenzene</td><td>ND</td><td>5.0</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td><td></td></t<>	1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)       ND       5.0       "	1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene       ND       5.0       " <td>1,2-Dibromo-3-chloropropane</td> <td>ND</td> <td>10</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>	1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dichloroethane 1,2-Dichloropropane ND 5.0 """""""""""""""""""""""""""""""""""	1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane   ND   5.0   "   "   "   "   "   "   "   "   "	1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene ND 5.0 " " " " " " " " " " " " " " " " " " "	1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene 1,3-Dichloropropane ND 5.0 """""""""""""""""""""""""""""""""""	1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane 1,4-Dichlorobenzene ND 5.0 """""""""""""""""""""""""""""""""""	1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene 1,4-Dichlorobenzene 2,2-Dichloropropane ND 5.0 " " " " " " " " " " " " " " " " " " "	1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane ND 5.0 " " " " " " " " " " " " " " " " " " "	1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone ND 100 " " " " " " " " " " 2-Hexanone ND 50 " " " " " " " " " " " " " " " " " "	1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2-Hexanone ND 50 " " " " " " " " " " 4-Methyl-2-pentanone ND 50 " " " " " " " " " " " " " " " " " "	2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
4-Methyl-2-pentanone ND 50 " " " " " " " " " " " " Acetone ND 100 " " " " " " " " " " " " " " " " " "	2-Butanone	ND	100	"	"	"	"	"	"	
Acetone         ND         100         "	2-Hexanone	ND	50	"	"	"	"	"	"	
Acetone         ND         100         "	4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
ND   5.0	Acetone	ND	100	"	"	"	"	"	"	
Bromochloromethane ND 5.0 " " " " " "	Benzene	ND	5.0	"	"	"	"	"	"	
	Bromobenzene	ND	5.0	"	"	"	"	"	"	
	Bromochloromethane	ND	5.0	"	"	"	"	"	"	
	Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-19' (CYI0462-10) Soil	Sampled: 09/10/15 11:50	Received: 09/11	/15 11:00	)					
Bromoform	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	n	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	n	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	n	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	n	
Styrene	ND	5.0	"	"	"	"	"	n	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-19' (CYI0462-10) Soil	Sampled: 09/10/15 11:50	Received: 09/11	/15 11:00	0					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		123 %	50	)-125	"		"	"	
Surrogate: 4-Bromofluorobenzene		123 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		98 %	62	2-125	"	"	"	"	
DC-SB-20-06' (CYI0462-11) Soil	Sampled: 09/09/15 08:32	Received: 09/11	/15 11:00	0					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
$1,1,2\hbox{-}Trichloro\hbox{-}1,2,2\hbox{-}trifluoroethane$	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	,,	,,	"	"	,,	"	
1,1-Dichloroethane	ND	5.0	"	"	"	,,	"	"	
1,1-Dichloroethene	ND	5.0	,,	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-20-06' (CYI0462-11) Soil Sa	mpled: 09/09/15 08:32	Received: 09/11	/15 11:00	)					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	n	
2-Hexanone	ND	50	"	"	"	"	"	n	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	n	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	ï	"	
Bromomethane	ND	10	"	"	"	"	ï	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	ï	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	ï,	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	ï,	"	
Dibromochloromethane	ND	5.0	"	"	"	"	ï,	"	
Dibromomethane	ND	5.0	"	"	"	"	ï,	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

### Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-20-06' (CYI0462-11) Soil Sa	ampled: 09/09/15 08:32	Received: 09/11	1/15 11:00	0					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		137 %	50	)-125	"	"	"	"	QS-HI
Surrogate: 4-Bromofluorobenzene		105 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		94 %	62	2-125	"	"	"	"	
DC-SB-20-10' (CYI0462-12) Soil Sa	ampled: 09/09/15 08:36	Received: 09/11	1/15 11:00	0					
1,1,1,2-Tetrachloroethane	ND	5.0	$\mu g/kg$	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"	"	"	"	"	II	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
		5.0	,,	,,	,,	,,	,,	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"			

CA DOHS ELAP Accreditation/Registration Number 1233

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

DC-SB-20-10' (CY10462-12) Soil Sa 1,2-Dibromo-3-chloropropane 1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,4-Dichlorobenzene 1,4-Dichlorobenzene	MP ND	10 5.0 5.0 5.0 5.0 5.0 5.0	/15 11:00 μg/kg " " "	1 "	CY06276	"	09/11/15	EPA 8260B "	
1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane	ND ND ND ND ND ND ND	5.0 5.0 5.0 5.0 5.0 5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane	ND ND ND ND ND	5.0 5.0 5.0 5.0 5.0	"	"	"	"	"		
1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane	ND ND ND ND	5.0 5.0 5.0 5.0	"	"				"	
1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane	ND ND ND ND	5.0 5.0 5.0	"		"	"			
1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane	ND ND ND	5.0 5.0		"			"	"	
1,3-Dichlorobenzene 1,3-Dichloropropane	ND ND	5.0	"		"	"	"	"	
1,3-Dichloropropane	ND			"	"	"	"	n .	
			"	"	"	"	"	n .	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
		5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	,,	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-20-10' (CYI0462-12) Soil	Sampled: 09/09/15 08:36	Received: 09/11	/15 11:00	)					
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		135 %	50	-125	"	"	"	"	QS-HI
Surrogate: 4-Bromofluorobenzene		106 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		96 %	62	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-20-17' (CYI0462-13) Soil Sampled: 0	09/09/15 08:50 Rec	eived: 09/11	/15 11:00	)					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)			,,	,,	,,		,,	,,	
1,1,2-Trichloroethane	ND	5.0				"			
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	n	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	,,	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Promomethane   ND   10   10   10   10   10   10   10   1	Analyte	Result		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromomethane         ND         10         "	DC-SB-20-17' (CYI0462-13) Soil	Sampled: 09/09/15 08:50	Received: 09/11	/15 11:00	)					
Carbon tetrachloride         ND         5,0         "	Bromoform	ND	5.0	$\mu g/kg$	1	CY06276	"	09/11/15	EPA 8260B	
Chlorobenzene ND 5.0 " " " " " " " " " " " " " " " " " " "	Bromomethane	ND	10	"	"	"	"	"	"	
Chloroethane	Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chloroform	Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloromethane   ND   10   10   10   10   10   10   10   1	Chloroethane	ND	5.0	"	"	"	"	"	"	
Second   S	Chloroform	ND	5.0	"	"	"	"	"	"	
Solution   Solution	Chloromethane	ND	10	"	"	"	"	"	"	
Dibromochloromethane         ND         5.0         "	cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
Dibromomethane         ND         5.0         "	cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	n	
Dichlorodifluoromethane (Freon 12)   ND   10   "   "   "   "   "   "   "   "   "	Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Ethylbenzene         ND         5.0         "	Dibromomethane	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene         ND         5.0         "	Dichlorodifluoromethane (Freon 12)	) ND	10	"	"	"	"	"	"	
Isopropylbenzene         ND         5.0         "	Ethylbenzene	ND	5.0	"	"	"	"	"	n	
Methyl tert-butyl ether         ND         5.0         " </td <td>Hexachlorobutadiene</td> <td>ND</td> <td>5.0</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>	Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Methylene chloride         ND         20         "	Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Naphthalene         ND         5.0         "	Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene         ND         5.0         """"""""""""""""""""""""""""""""""""	Methylene chloride	ND	20	"	"	"	"	"	"	
n-Propylbenzene         ND         5.0         "	Naphthalene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene p-Isopropyltoluene ND 5.0 """""""""""""""""""""""""""""""""""	n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene ND 5.0 " " " " " " " " " " " " " " " " " " "	o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
ND   Styrene   ND   Storene   Styrene   ND   Storene   ND   ND   Storene   ND   ND   Storene   ND   ND   Storene   ND   ND   ND   ND   ND   ND   ND   N	p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Styrene         ND         5.0         "	p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene ND 5.0 " " " " " " " " " " " " " " " " " " "	sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene         ND         5.0         "	Styrene	ND	5.0	"	"	"	"	"	"	
Toluene         ND         5.0         "	tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene ND 5.0 " " " " " " " " " " " " " " " " " " "	Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene ND 5.0 " " " " " " "	Toluene	ND	5.0	"	"	"	"	"	"	
	trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
Trichloroethene ND 5.0 " " " " " "	trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
	Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-20-17' (CYI0462-13) Soil	Sampled: 09/09/15 08:50	Received: 09/11	/15 11:00	0					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		133 %	50	)-125	"	"	"	"	QS-HI
Surrogate: 4-Bromofluorobenzene		154 %	50	)- <i>128</i>	"	"	"	"	QS-Hi
Surrogate: Toluene-d8		97 %	62	2-125	"	"	"	"	
DC-SB-21-07' (CYI0462-14) Soil	Sampled: 09/09/15 10:46	Received: 09/11	/15 11:00	0					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	,,	"		"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-21-07' (CYI0462-14) Soil S	Sampled: 09/09/15 10:46 F	Received: 09/11	/15 11:00	)					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-21-07' (CYI0462-14) Soil Sa	ampled: 09/09/15 10:46	Received: 09/11	/15 11:00	)					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		131 %	50	1-125	"	"	"	"	QS-HI
Surrogate: 4-Bromofluorobenzene		122 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		94 %	62	-125	"	"	"	"	
DC-SB-21-13.5' (CYI0462-15) Soil	Sampled: 09/09/15 10:5	4 Received: 09/	11/15 11:	00					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene				,,	,,	"	"	"	
1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND	5.0	"	"					
	ND ND	5.0 5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene						"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-21-13.5' (CYI0462-15) Soil	Sampled: 09/09/15 10:54	Received: 09/	11/15 11:	00					
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-21-13.5' (CYI0462-15) Soil	Sampled: 09/09/15 10:54	Received: 09/	11/15 11:	00					
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		139 %	50	-125	"	"	"	"	QS-HI
Surrogate: 4-Bromofluorobenzene		107 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		96 %	62	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-21-17' (CYI0462-16) Soil	Sampled: 09/09/15 11:03	Received: 09/11	/15 11:00	)					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	, ND	5.0	"	"	"	"	"	"	
(Freon 113)		- 0	_	,,			,,		
1,1,2-Trichloroethane	ND	5.0	"		"	"		"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-21-17' (CYI0462-16) Soil	Sampled: 09/09/15 11:03	Received: 09/11	/15 11:00	)					
Bromoform	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-21-17' (CYI0462-16) Soil Sampled	: 09/09/15 11:03 Re	eceived: 09/11	/15 11:00	0					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	n	"	"	
Surrogate: 1,2-Dichloroethane-d4		136 %	50	)-125	"	"	"	"	QS-H
Surrogate: 4-Bromofluorobenzene		119 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		95 %	62	?-125	"	"	"	"	
DC-SB-23-7.5' (CYI0462-17) Soil Sampled	l: 09/10/15 07:41 R	eceived: 09/1	1/15 11:0	00					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06276	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	ND	<b>5</b> 0	"	,,	"		,,	"	
1,1,2-Trichloroethane	ND	5.0	,,		,,	"	,,	"	
1,1-Dichloroethane	ND	5.0			,,	"	,	,,	
1,1-Dichloroethene	ND	5.0	"		,,	"	,		
1,1-Dichloropropene	ND ND	5.0 5.0	,,		,,	"	,		
1,2,3-Trichlorobenzene	ND ND	5.0	"	,,	,,	"	,,		
1,2,3-Trichloropropane				,,		"	,,		
1,2,4-Trichlorobenzene	ND	5.0	,,		,,	"	,,	"	
1,2,4-Trimethylbenzene	ND	5.0	"		,,	"	,,		
1,2-Dibromo-3-chloropropane	ND	10		,,	,,	"	,		
1,2-Dibromoethane (EDB)	ND	5.0 5.0	,,		,,	"	,,		
1,2-Dichlorobenzene	ND ND	5.0	"		,,	"	,,	"	
1,2-Dichloroethane	ND ND	5.0	,,		,,	"	,,		
1,2-Dichloropropane	ND ND			,,	,,	"	,,	"	
1,3,5-Trimethylbenzene	ND ND	5.0	,,		,,	"	,		
1,3-Dichlorobenzene	ND ND	5.0			,,	"	,		
1,3-Dichloropropane 1,4-Dichlorobenzene	ND ND	5.0 5.0	"	"	,,	"	,,	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-23-7.5' (CYI0462-17) Soil S	Sampled: 09/10/15 07:41	Received: 09/1	1/15 11:0	0					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	ï	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	ï	"	
Bromomethane	ND	10	"	"	"	"	ï	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	ï	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	ï	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	ï	"	
Dibromochloromethane	ND	5.0	"	"	"	"	ï	"	
Dibromomethane	ND	5.0	"	"	"	"	ï	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	,,	"	,,		,,	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-23-7.5' (CYI0462-17) Soil S	Sampled: 09/10/15 07:41	Received: 09/1	1/15 11:0	0					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY06276	"	09/11/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	20	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		129 %	50	1-125	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		123 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		96 %	62	-125	"	"	"	"	
DC-SB-23-14.5' (CYI0462-18) Soil	Sampled: 09/10/15 07:55	Received: 09/	11/15 11:	00					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06305	09/14/15	09/14/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
104511	ND	5.0	"	,,	"	,,	,,	"	
1,2,4-Trichlorobenzene	ND	5.0							

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-23-14.5' (CYI0462-18) Soil	Sampled: 09/10/15 07:55	Received: 09/	11/15 11:	00					
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-23-14.5' (CYI0462-18) Soil	Sampled: 09/10/15 07:55	Received: 09/	11/15 11:	00					
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	11	
Surrogate: 1,2-Dichloroethane-d4		124 %	50	-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		93 %	62	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-9.5' (CYI0462-19) Soil	Sampled: 09/10/15 09:25	Received: 09/1	1/15 11:0	0					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06305	09/14/15	09/14/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	ND	5.0	,,	,,	"	,,	"	"	
1,1,2-Trichloroethane		5.0	"	,,	,	,	,,	,,	
1,1-Dichloroethane 1,1-Dichloroethene	ND ND	5.0	,,	"	,,	"	,,	,,	
<i>'</i>			,,	"	,,	"	,,	"	
1,1-Dichloropropene	ND	5.0	"	"	,,		"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	,	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	,,	"	,,	"	
1,2,4-Trichlorobenzene	ND	5.0	"		,,		,,	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	,,	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	,,		"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	,	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	,,	"	"	"	
1,2-Dichloroethane	ND	5.0				"			
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"		"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	650	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-9.5' (CYI0462-19) Soil	Sampled: 09/10/15 09:25	Received: 09/1	1/15 11:0	0					
Bromoform	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-9.5' (CYI0462-19) Soil	Sampled: 09/10/15 09:25	Received: 09/1	1/15 11:0	00					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		131 %	50	)-125	"	"	"	"	QS-
Surrogate: 4-Bromofluorobenzene		137 %	50	0-128	"	"	"	"	QS-4
Surrogate: Toluene-d8		94 %	62	2-125	"	"	"	"	
DC-SB-24-13.5' (CYI0462-20) Soil	Sampled: 09/10/15 09:31	Received: 09/	11/15 11:	:00					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06305	09/14/15	09/14/15	EPA 8260B	<u> </u>
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	ND	5.0	"	,,	"		,,	"	
1,1,2-Trichloroethane	ND	5.0	,,		,,	"	,,	"	
1,1-Dichloroethane	ND	5.0			,,	"	,	,,	
1,1-Dichloroethene	ND	5.0	"		,,	"	,,		
1,1-Dichloropropene	ND ND	5.0			,,	"	,,		
1,2,3-Trichlorobenzene		5.0	,,		,,	"	,		
1,2,3-Trichloropropane 1,2,4-Trichlorobenzene	ND ND	5.0	"	,,	,,	,	,,		
1,2,4-Trimethylbenzene	ND ND	5.0 5.0	,,	,,	,,	"	,,		
	ND ND	10	"	,,	,,	"	,,		
1,2-Dibromo-3-chloropropane	ND ND	5.0	"	,,	,,	,	,,	,,	
1,2-Dibromoethane (EDB)	ND ND	5.0	"	,,	,,	,,	,,		
1,2-Dichlorobenzene 1,2-Dichloroethane	ND ND	5.0	,,	,,	,,	"	,,		
1,2-Dichloropropane	ND ND	5.0	,,		,,	"	,,		
1,3,5-Trimethylbenzene	ND ND	5.0	"	,,	,,	,	,,	,,	
1,3-Dichlorobenzene	ND ND	5.0	"		,,	"	,,		
1,3-Dichloropropane	ND ND	5.0	"		,,	"	,,	"	
, 1 1			,,	,,	,,	"	,,		
1,4-Dichlorobenzene	ND	5.0				"		*	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-13.5' (CYI0462-20) Soil	Sampled: 09/10/15 09:31	Received: 09/	11/15 11:	00					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	170	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	II .	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	II .	
Chloroethane	ND	5.0	"	"	"	"	"	II .	
Chloroform	ND	5.0	"	"	"	"	"	II .	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	II .	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	II .	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	II .	
Methylene chloride	ND	20	"	"	"	"	"	II .	
Naphthalene	ND	5.0	"	"	"	"	"	II .	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-13.5' (CYI0462-20) Soil	Sampled: 09/10/15 09:31	Received: 09/	11/15 11:	00					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		128 %	50	-125	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		122 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		92 %	62	-125	"	"	"	"	
DC-SB-24-17' (CYI0462-21) Soil	Sampled: 09/10/15 09:37	Received: 09/11	/15 11:00	)					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06305	09/14/15	09/14/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
	ND ND	5.0 5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane									
1,1,2-Trichloroethane 1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	ND ND	5.0 5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene	ND ND ND	5.0 5.0 5.0	"	"	" "	" "	"	" "	
1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND ND ND ND	5.0 5.0 5.0 5.0	" " "	" "	" "	" " "	" " "	" " " " " " " " " " " " " " " " " " " "	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-17' (CYI0462-21) Soil	Sampled: 09/10/15 09:37	Received: 09/11	/15 11:00	)					
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	ï,	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	ï,	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	200	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	ï,	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	ï,	"	
Bromoform	ND	5.0	"	"	"	"	ï,	"	
Bromomethane	ND	10	"	"	"	"	ï,	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-17' (CYI0462-21) Soil	Sampled: 09/10/15 09:37	Received: 09/11	/15 11:00	)					
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	11	"	
Surrogate: 1,2-Dichloroethane-d4		126 %	50	1-125	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		141 %	50	128	"	"	"	"	QS-4
Surrogate: Toluene-d8		96 %	62	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resu		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-9' (CYI0462-22) Soil Samp	pled: 09/10/15 11:38	Received: 09/11/	15 11:00						
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06305	09/14/15	09/14/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	ND	5.0	,,	,,	,,		"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	,	"	"	"	
1,1-Dichloroethane	ND	5.0		"	"	"		"	
1,1-Dichloroethene	ND	5.0	"			"	"		
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	220	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Resul	Reporting It Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-9' (CYI0462-22) Soil	Sampled: 09/10/15 11:38	Received: 09/11/	15 11:00						
Bromoform	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12	) ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	n	
Naphthalene	ND	5.0	"	"	"	"	"	n	
n-Butylbenzene	ND	5.0	"	"	"	"	"	n	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-9' (CYI0462-22) Soil Sa	mpled: 09/10/15 11:38 R	eceived: 09/11/	15 11:00						
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		130 %	50	)-125	"		"	"	QS-4
Surrogate: 4-Bromofluorobenzene		122 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		91 %	62	?-125	"	"	"	"	
DC-SB-25-11.5' (CYI0462-23) Soil	Sampled: 09/10/15 11:42	Received: 09/	11/15 11:	:00					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06305	09/14/15	09/14/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	,,	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	,,	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-11.5' (CYI0462-23) Soil	Sampled: 09/10/15 11:42	Received: 09/	11/15 11:	:00					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	130	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	ï,	n .	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	ï,	n .	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	ï,	n .	
Ethylbenzene	ND	5.0	"	"	"	"	ï,	n .	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-11.5' (CYI0462-23) Soil	Sampled: 09/10/15 11:42	Received: 09/	11/15 11:	00					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		130 %	50	)-125	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		112 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		92 %	62	2-125	"	"	"	"	
DC-SB-25-16.5' (CYI0462-24) Soil	Sampled: 09/10/15 11:44	Received: 09/	11/15 11:	00					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06305	09/14/15	09/14/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND								
1,2,3-Trichloropropane 1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-16.5' (CYI0462-24) Soil	Sampled: 09/10/15 11:44	Received: 09/	11/15 11:	00					
1,2-Dibromo-3-chloropropane	ND	10	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	n	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	n	
2-Butanone	ND	100	"	"	"	"	"	n	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	220	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	n	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	n	
Bromodichloromethane	ND	5.0	"	"	"	"	"	n	
Bromoform	ND	5.0	"	"	"	"	"	n	
Bromomethane	ND	10	"	"	"	"	"	n	
Carbon tetrachloride	ND	5.0	"	"	"	"	ï	"	
Chlorobenzene	ND	5.0	"	"	"	"	ï	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-16.5' (CYI0462-24) Soil	Sampled: 09/10/15 11:44	Received: 09/	11/15 11:	00					
Hexachlorobutadiene	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		133 %	50	1-125	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		131 %	50	-128	"	"	"	"	QS-4
Surrogate: Toluene-d8		91 %	62	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-26-9.5' (CYI0462-25) Soil	Sampled: 09/10/15 14:05	Received: 09/1	1/15 11:0	0					
1,1,1,2-Tetrachloroethane	ND	5.0	$\mu g/kg$	1	CY06305	09/14/15	09/14/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	ND	5.0	,,	,,	"	,,	"	"	
1,1,2-Trichloroethane			,,		,,		"		
1,1-Dichloroethane	ND	5.0	,,		,,	"	"		
1,1-Dichloroethene	ND	5.0	,,		,,		"	"	
1,1-Dichloropropene	ND	5.0		,,	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"		"			
1,2,4-Trichlorobenzene	ND	5.0	"		"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	140	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-26-9.5' (CYI0462-25) Soil	Sampled: 09/10/15 14:05	Received: 09/1	1/15 11:0	0					
Bromoform	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	n	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	n	
Dibromomethane	ND	5.0	"	"	"	"	"	n	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	n	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	n	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	n	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	n	
n-Propylbenzene	ND	5.0	"	"	"	"	"	n	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-26-9.5' (CYI0462-25) Soil	Sampled: 09/10/15 14:05	Received: 09/1	1/15 11:0	0					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		133 %	50	)-125	"	"	"	"	QS-
Surrogate: 4-Bromofluorobenzene		102 %	50	)-128	"	"	"	"	
Surrogate: Toluene-d8		92 %	62	2-125	"	"	"	"	
DC-SB-26-14.5' (CYI0462-26) Soil	Sampled: 09/10/15 14:14	Received: 09/	11/15 11:	00					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06305	09/14/15	09/14/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	,,	,,	,,	,,	"	
1,1-Dichloroethane	ND ND	5.0	,,	"	"	,,	"	"	
1,1-Dichloroethene	ND ND	5.0	,,	,,	"	,,	,,	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-26-14.5' (CYI0462-26) Soil	Sampled: 09/10/15 14:14	Received: 09/	11/15 11:	00					
2,2-Dichloropropane	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	110	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-26-14.5' (CYI0462-26) Soil	Sampled: 09/10/15 14:14	Received: 09/	11/15 11:	00					
p-Isopropyltoluene	ND	5.0	μg/kg	1	CY06305	"	09/14/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	n	
Surrogate: 1,2-Dichloroethane-d4		140 %	50	-125	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		105 %	50	-128	"	"	"	"	
Surrogate: Toluene-d8		94 %	62	-125	"	"	"	"	
DC-SB-15-GW (CYI0462-27) Water	r Sampled: 09/08/15 09:1	0 Received: 0	9/11/15 1	1:00					ORL-4
•									QILD-
1,1,1,2-Tetrachloroethane	ND	5.0	μg/L	10	CY06279	09/11/15	09/11/15	EPA 8260B	QILL
1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane	ND ND	5.0 5.0	μg/L "		CY06279	09/11/15	09/11/15	EPA 8260B	QNE
, , ,				10					QNL
1,1,1-Trichloroethane	ND	5.0	"	10	"	"	"	"	- AVE
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	ND ND	5.0 5.0	"	10	"	"	"	"	QILL
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND ND ND	5.0 5.0 5.0	"	10	" "	" "	" "	" "	(AL
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) 1,1,2-Trichloroethane	ND ND ND	5.0 5.0 5.0 5.0	"	10	" "	" "	" "	n n n	(AL
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) 1,1,2-Trichloroethane 1,1-Dichloroethane	ND ND ND ND	5.0 5.0 5.0 5.0 5.0	" " " " " " " " " " " " " " " " " " " "	10	11 11 11	" " " " " " " " " " " " " " " " " " " "	n n n	" " " " " " " " " " " " " " " " " " " "	(AL)
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	ND ND ND ND ND	5.0 5.0 5.0 5.0 5.0 5.0	" " " " " " " " " " " " " " " " " " " "	10	" " " " " " " " " " " " " " " " " " " "		" " " " " " " " " " " " " " " " " " " "	" " " " "	QAD
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene	ND ND ND ND ND ND	5.0 5.0 5.0 5.0 5.0 5.0 5.0	" " " " " " " " " " " " " " " " " " " "	10	" " " " " " " " " " " " " " " " " " " "		" " " " " " " " " " " " " " " " " " " "	" " " " " "	QAL
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene 1,2,3-Trichlorobenzene	ND	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	" " " " " " " " " " " " " " " " " " " "	10	" " " " " " " " " " " " " " " " " " " "	" " " " " " " "	" " " " " " "	" " " " " " " "	QAL

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-15-GW (CYI0462-27) Water	Sampled: 09/08/15 09:10	Received: (	09/11/15 1	1:00					QRL-4
1,2-Dibromo-3-chloropropane	ND	10	μg/L	10	CY06279	"	09/11/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	17	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-15-GW (CYI0462-27) Water	Sampled: 09/08/15 09:10	Received: 0	9/11/15 1	1:00					QRL-4
Hexachlorobutadiene	ND	5.0	μg/L	10	CY06279	"	09/11/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		142 %	66	í-135	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		117 %	73	3-125	"	"	"	"	
Surrogate: Toluene-d8		100 %	72	2-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-16-GW (CYI0462-28) Water	Sampled: 09/08/15 11:30	Received: (	09/11/15 1	1:00					QRL-4
1,1,1,2-Tetrachloroethane	ND	5.0	$\mu g/L$	10	CY06279	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	ND	5.0	"	,,	"	,,	,,	"	
1,1,2-Trichloroethane			"	,,	,,		,,		
1,1-Dichloroethane	ND	5.0	,,	,,	,,	"	,,		
1,1-Dichloroethene	ND	5.0	,,	,,	,,		,,	"	
1,1-Dichloropropene	ND	5.0		,	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"		"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"			"			
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-16-GW (CYI0462-28) Water	Sampled: 09/08/15 11:30	Received: (	)9/11/15 1	1:00					QRL-4
Bromoform	ND	5.0	$\mu g/L$	10	CY06279	"	09/11/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	47	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-16-GW (CYI0462-28) Water	Sampled: 09/08/15 11:30	Received: 0	9/11/15 1	11:00					QRL-4
Trichlorofluoromethane	ND	5.0	μg/L	10	CY06279	"	09/11/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		145 %	66	5-135	"		"	"	QS-
Surrogate: 4-Bromofluorobenzene		111 %	73	3-125	"	"	"	"	
Surrogate: Toluene-d8		102 %	72	2-125	"	"	"	"	
DC-SB-17-GW (CYI0462-29) Water	Sampled: 09/08/15 13:55	Received: 0	9/11/15 1	11:00					QRL-4
1,1,1,2-Tetrachloroethane	ND	5.0	μg/L	10	CY06320	09/15/15	09/15/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	"	"	"	,,	"	"	
1,1-Dichloroethane	ND	5.0	,,	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	,,	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	,,	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-17-GW (CYI0462-29) Water	Sampled: 09/08/15 13:55	Received: (	09/11/15 1	1:00					QRL-4
2,2-Dichloropropane	ND	5.0	$\mu g/L$	10	CY06320	"	09/15/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	n .	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-17-GW (CYI0462-29) Water	Sampled: 09/08/15 13:55	Received: 0	9/11/15 1	1:00					QRL-4
p-Isopropyltoluene	ND	5.0	μg/L	10	CY06320	"	09/15/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		102 %	66	5-135	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86 %	73	2-125	"	"	"	"	
Surrogate: Toluene-d8		95 %	72	2-125	"	"	"	"	
DC-SB-18-GW (CYI0462-30) Water	Sampled: 09/08/15 15:23	Received: 0	9/11/15 1	1:00					QRL-4
1,1,1,2-Tetrachloroethane	ND	5.0	μg/L	10	CY06279	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)									
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

1,2-Dibromo-3-chloropropane 1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane	ND N	10 5.0 5.0 5.0 5.0 5.0 5.0 5.0	μg/L " " "	1:00	CY06279	" " " " " " " " " " " " " " " " " " " "	09/11/15	EPA 8260B " " " "	QRL-4
1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	ND	5.0 5.0 5.0 5.0 5.0 5.0 5.0	" " " "	" " " " " " " " " " " " " " " " " " " "	" "	" " "	" "	" "	
1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	ND ND ND ND ND ND ND	5.0 5.0 5.0 5.0 5.0 5.0	n n n	" "	" "	" "	" "	"	
1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	ND ND ND ND ND	5.0 5.0 5.0 5.0 5.0	" " "	"	"	"	"	"	
1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	ND ND ND ND	5.0 5.0 5.0 5.0	"	"	"	"	"		
1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	ND ND ND ND	5.0 5.0 5.0	"	"				"	
1,3-Dichlorobenzene	ND ND ND	5.0 5.0	"		"	"	"		
	ND ND	5.0		"				"	
1 3-Dichloropropane	ND				"	"	"	"	
1,5 Diemoropropune			"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	עאו	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	21	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-18-GW (CYI0462-30) Water	Sampled: 09/08/15 15:23	Received: 0	9/11/15 1	1:00					QRL-4
Hexachlorobutadiene	ND	5.0	μg/L	10	CY06279	"	09/11/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	n .	
Tetrachloroethene	ND	5.0	"	"	"	"	"	n .	
Toluene	ND	5.0	"	"	"	"	"	n .	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	n .	
Trichloroethene	ND	5.0	"	"	"	"	"	n .	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	n .	
Vinyl chloride	ND	10	"	"	"	"	"	n .	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		155 %	66	-135	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		112 %	73	-125	"	"	"	"	
Surrogate: Toluene-d8		106 %	72	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-20-GW (CYI0462-31) Water	Sampled: 09/09/15 09:13	Received: 0	9/11/15 1	1:00					QRL-4
1,1,1,2-Tetrachloroethane	ND	5.0	μg/L	10	CY06279	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)				,,	"			,,	
1,1,2-Trichloroethane	ND	5.0	"			"	"		
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	,,	"	"	
Bromodichloromethane	ND	5.0	,,	"	"	,,	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-20-GW (CYI0462-31) Water	Sampled: 09/09/15 09:13	Received: (	)9/11/15 1	1:00					QRL-4
Bromoform	ND	5.0	$\mu g/L$	10	CY06279	"	09/11/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	47	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-20-GW (CYI0462-31) Water	Sampled: 09/09/15 09:13	Received: 0	9/11/15 1	11:00					QRL-4
Trichlorofluoromethane	ND	5.0	μg/L	10	CY06279	"	09/11/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		163 %	66	5-135	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		113 %	73	3-125	"	"	"	"	
Surrogate: Toluene-d8		103 %	72	2-125	"	"	"	"	
DC-SB-21-GW (CYI0462-32) Water	Sampled: 09/09/15 11:24	Received: 0	9/11/15 1	11:00					QRL-4
1,1,1,2-Tetrachloroethane	ND	5.0	μg/L	10	CY06320	09/15/15	09/15/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)		<b>~</b> ^		,,	,,			"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	,,	
1,1-Dichloroethene	ND	5.0	"	"	"	"		"	
1,1-Dichloropropene	ND	5.0		"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"			"			
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-21-GW (CYI0462-32) Water	Sampled: 09/09/15 11:24	Received: (	)9/11/15 1	1:00					QRL-4
2,2-Dichloropropane	ND	5.0	$\mu g/L$	10	CY06320	"	09/15/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	39	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-21-GW (CYI0462-32) Water	Sampled: 09/09/15 11:24	Received: 0	9/11/15 1	1:00					QRL-4
p-Isopropyltoluene	ND	5.0	μg/L	10	CY06320	"	09/15/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	11	II .	
Surrogate: 1,2-Dichloroethane-d4		102 %	66	-135	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88 %	73	-125	"	"	"	"	
Surrogate: Toluene-d8		95 %	72	-125	"	"	"	"	
DC-SB-23-GW (CYI0462-33) Water	Sampled: 09/10/15 08:18	Received: 0	9/11/15 1	1:00					QRL-4
1,1,1,2-Tetrachloroethane	ND	5.0	$\mu g/L$	10	CY06279	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND								
1,2,3-Trichlorobenzene 1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
		5.0 5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-23-GW (CYI0462-33) Water	Sampled: 09/10/15 08:18	Received: (	09/11/15 1	1:00					QRL-4
1,2-Dibromo-3-chloropropane	ND	10	μg/L	10	CY06279	"	09/11/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	24	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-23-GW (CYI0462-33) Water	Sampled: 09/10/15 08:18	Received: 0	9/11/15 1	1:00					QRL-4
Hexachlorobutadiene	ND	5.0	μg/L	10	CY06279	"	09/11/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		164 %	66	-135	"	"	"	"	QS-4
Surrogate: 4-Bromofluorobenzene		115 %	73	-125	"	"	"	"	
Surrogate: Toluene-d8		106 %	72	-125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-GW (CYI0462-34) Water	Sampled: 09/10/15 10:15	Received: (	)9/11/15 1	1:00					QRL-4
1,1,1,2-Tetrachloroethane	ND	5.0	$\mu g/L$	10	CY06320	09/15/15	09/15/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	ND	5.0	,,	,,	"	,,	,,	"	
1,1,2-Trichloroethane			"	,,	,,		,,		
1,1-Dichloroethane	ND	5.0	,,	,,	,,	"	,,		
1,1-Dichloroethene	ND	5.0	"	,	"		"	"	
1,1-Dichloropropene	ND	5.0		,	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"		"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"		"			
1,2,4-Trichlorobenzene	ND	5.0	"		"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-GW (CYI0462-34) Water	Sampled: 09/10/15 10:15	Received: (	09/11/15 1	1:00					QRL-4
Bromoform	ND	5.0	$\mu g/L$	10	CY06320	"	09/15/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-24-GW (CYI0462-34) Water	Sampled: 09/10/15 10:15	Received: 0	9/11/15 1	11:00					QRL-4
Trichlorofluoromethane	ND	5.0	μg/L	10	CY06320	"	09/15/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		102 %	66	5-135	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87 %	73	3-125	"	"	"	"	
Surrogate: Toluene-d8		96 %	72	2-125	"	"	"	"	
DC-SB-25-GW (CYI0462-35) Water	Sampled: 09/10/15 12:54	Received: 0	9/11/15 1	11:00					QRL-4
1,1,1,2-Tetrachloroethane	ND	5.0	μg/L	10	CY06320	09/15/15	09/15/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	).ID	<b>7.0</b>	"	"	"		,,	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	,,	"	
1,1-Dichloroethane	ND	5.0	"	"	,	"	"	,,	
1,1-Dichloroethene	ND	5.0		"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"		
1,2,3-Trichlorobenzene	ND	5.0	"			"		"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-GW (CYI0462-35) Water	Sampled: 09/10/15 12:54	Received: (	09/11/15 1	1:00					QRL-4
2,2-Dichloropropane	ND	5.0	$\mu g/L$	10	CY06320	"	09/15/15	EPA 8260B	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-25-GW (CYI0462-35) Water	Sampled: 09/10/15 12:54	Received: 0	9/11/15 1	1:00					QRL-4
p-Isopropyltoluene	ND	5.0	μg/L	10	CY06320	"	09/15/15	EPA 8260B	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		101 %	66	5-135	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90 %	73	3-125	"	"	"	"	
Surrogate: Toluene-d8		95 %	72	2-125	"	"	"	"	
DC-SB-26-GW (CYI0462-36) Water	Sampled: 09/10/15 14:35	Received: 0	9/11/15 1	1:00					QRL-4
1,1,1,2-Tetrachloroethane	ND	5.0	$\mu g/L$	10	CY06279	09/11/15	09/11/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113) 1,1,2-Trichloroethane	ND	5.0	,,	,,	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
	ND								
, 1 1	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene		5.0 5.0	"	"	"	"	"	"	
, 1 1	ND								

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-26-GW (CYI0462-36) Water	Sampled: 09/10/15 14:35	Received: 0	9/11/15 1	1:00					QRL-4
1,2-Dibromo-3-chloropropane	ND	10	μg/L	10	CY06279	"	09/11/15	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	75	10	"	"	"	"	n .	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SB-26-GW (CYI0462-36) Water	Sampled: 09/10/15 14:35	Received: 0	9/11/15 1	1:00					QRL-4
Hexachlorobutadiene	ND	5.0	μg/L	10	CY06279	"	09/11/15	EPA 8260B	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	H .	"	
Surrogate: 1,2-Dichloroethane-d4		116 %	66	5-135	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	73	3-125	"	"	"	"	
Surrogate: Toluene-d8		144 %	72	2-125	"	"	"	"	QS-4

### CALIFORNIA LABORATORY SERVICES

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch CY06276 - EPA 5030 Soil MS

Blank (CY06276-BLK1)				Prepared & Analyzed: 09/11/15
Acetone	ND	100	μg/kg	
Benzene	ND	5.0	"	
Bromobenzene	ND	5.0	"	
Bromochloromethane	ND	5.0	"	
Bromodichloromethane	ND	5.0	"	
Bromoform	ND	5.0	"	
Bromomethane	ND	10	"	
2-Butanone	ND	100	"	
n-Butylbenzene	ND	5.0	"	
sec-Butylbenzene	ND	5.0	"	
tert-Butylbenzene	ND	5.0	"	
Carbon tetrachloride	ND	5.0	"	
Chlorobenzene	ND	5.0	"	
Chloroethane	ND	5.0	"	
Chloroform	ND	5.0	"	
Chloromethane	ND	10	"	
o-Chlorotoluene	ND	5.0	"	
p-Chlorotoluene	ND	5.0	"	
Dibromochloromethane	ND	5.0	"	
1,2-Dibromo-3-chloropropane	ND	10	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	
Dibromomethane	ND	5.0	"	
1,2-Dichlorobenzene	ND	5.0	"	
1,3-Dichlorobenzene	ND	5.0	"	
1,4-Dichlorobenzene	ND	5.0	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	
1,1-Dichloroethane	ND	5.0	"	
1,2-Dichloroethane	ND	5.0	"	
1,1-Dichloroethene	ND	5.0	"	
cis-1,2-Dichloroethene	ND	5.0	"	
trans-1,2-Dichloroethene	ND	5.0	"	

### CALIFORNIA LABORATORY SERVICES

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Tetra Tech Geo Project: Terramar 5100 Broadway

Result

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Reporting

Limit

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Units

Spike

Level

Source

Result

%REC

Allaryte	Result	Lillit	Omis	LCVCI	Result	/orch	Lillits	KI D	Lillit	Notes
Batch CY06276 - EPA 5030 Soil MS										
Blank (CY06276-BLK1)				Prepared &	& Analyzed:	09/11/15				
1,2-Dichloropropane	ND	5.0	μg/kg							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
2-Hexanone	ND	50	"							
Isopropylbenzene	ND	5.0	"							
p-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	20	"							
4-Methyl-2-pentanone	ND	50	"							
Methyl tert-butyl ether	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
Toluene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							

Analyte

%REC

Limits

RPD

RPD

Limit

Notes

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY06276 - EPA 5030 Soil MS										
Blank (CY06276-BLK1)				Prepared &	Analyzed:	09/11/15				
1,2,4-Trimethylbenzene	ND	5.0	μg/kg							
Vinyl chloride	ND	10	"							
Xylenes (total)	ND	10	"							
Surrogate: 1,2-Dichloroethane-d4	34.4		"	30.0		115	50-125			
Surrogate: Toluene-d8	27.9		"	30.0		93	62-125			
Surrogate: 4-Bromofluorobenzene	33.4		"	30.0		111	50-128			
LCS (CY06276-BS1)				Prepared &	Analyzed:	09/11/15				
Benzene	17.6	5.0	μg/kg	20.0		88	64-135			
Chlorobenzene	18.0	5.0	"	20.0		90	67-133			
1,1-Dichloroethene	17.8	5.0	"	20.0		89	53-137			
Toluene	17.1	5.0	"	20.0		86	61-138			
Trichloroethene	18.3	5.0	"	20.0		91	64-130			
Surrogate: 1,2-Dichloroethane-d4	32.8		"	30.0		109	50-125			
Surrogate: Toluene-d8	32.0		"	30.0		107	62-125			
Surrogate: 4-Bromofluorobenzene	30.3		"	30.0		101	50-128			
LCS Dup (CY06276-BSD1)				Prepared &	Analyzed:	09/11/15				
Benzene	17.3	5.0	μg/kg	20.0		86	64-135	2	30	
Chlorobenzene	17.9	5.0	"	20.0		89	67-133	0.4	30	
1,1-Dichloroethene	18.6	5.0	"	20.0		93	53-137	5	30	
Toluene	17.1	5.0	"	20.0		85	61-138	0.5	30	
Trichloroethene	17.5	5.0	"	20.0		87	64-130	4	30	
Surrogate: 1,2-Dichloroethane-d4	33.3		"	30.0		111	50-125			
Surrogate: Toluene-d8	31.3		"	30.0		104	62-125			
Surrogate: 4-Bromofluorobenzene	30.5		"	30.0		102	50-128			
Matrix Spike (CY06276-MS1)	Sour	ce: CYI0462	-01	Prepared: (	09/11/15 A	nalyzed: 09	/12/15			
Benzene	14.4	5.0	μg/kg	20.0	ND	72	58-139			
Chlorobenzene	12.6	5.0	"	20.0	ND	63	62-134			
1,1-Dichloroethene	16.2	5.0	"	20.0	ND	81	53-152			
Toluene	13.5	5.0	"	20.0	ND	67	58-139			

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Tetra Tech Geo Terramar 5100 Broadway Project:

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CY06276 - EPA 5030 Soil MS										
Matrix Spike (CY06276-MS1)	Sou	rce: CYI0462-	-01	Prepared: (	)9/11/15 Aı	nalyzed: 09	/12/15			
Trichloroethene	14.5	5.0	μg/kg	20.0	ND	72	55-138			
Surrogate: 1,2-Dichloroethane-d4	36.0		"	30.0		120	50-125			
Surrogate: Toluene-d8	33.6		"	30.0		112	62-125			
Surrogate: 4-Bromofluorobenzene	33.7		"	30.0		112	50-128			
Matrix Spike Dup (CY06276-MSD1)	Sou	rce: CYI0462-	-01	Prepared: (	)9/11/15 Aı	nalyzed: 09	/12/15			
Benzene	15.6	5.0	μg/kg	20.0	ND	78	58-139	8	30	
Chlorobenzene	14.8	5.0	"	20.0	ND	74	62-134	16	30	
1,1-Dichloroethene	17.7	5.0	"	20.0	ND	88	53-152	9	30	
Γoluene	15.1	5.0	"	20.0	ND	76	58-139	12	30	
Trichloroethene	17.2	5.0	"	20.0	ND	86	55-138	17	30	
Surrogate: 1,2-Dichloroethane-d4	36.2		"	30.0		121	50-125			
	33.7		"	30.0		112	62-125			
urrogate: Toluene-d8	33./									
	31.7		"	30.0		106	50-128			
Surrogate: 4-Bromofluorobenzene			"	30.0		106	50-128			
Surrogate: 4-Bromofluorobenzene  Batch CY06279 - EPA 5030 Water MS			"		: Analyzed:		50-128			
Surrogate: 4-Bromofluorobenzene  Batch CY06279 - EPA 5030 Water MS  Blank (CY06279-BLK1)		10	μg/L		Analyzed:		50-128			
Surrogate: 4-Bromofluorobenzene  Batch CY06279 - EPA 5030 Water MS  Blank (CY06279-BLK1)  Acetone	31.7	10 0.50			z Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Acetone Benzene	31.7 ND		μg/L		Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Acetone Benzene Bromobenzene	ND ND	0.50	μg/L "		z Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Acetone Benzene Bromobenzene Bromochloromethane	ND ND ND	0.50 0.50	μg/L " "		z Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Acetone Benzene Bromochloromethane Bromodichloromethane	ND ND ND ND	0.50 0.50 0.50	μg/L " "		Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Acetone Benzene Bromobenzene Bromodichloromethane Bromodichloromethane Bromoform	ND ND ND ND ND ND	0.50 0.50 0.50 0.50	μg/L " " "		z Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Acetone Benzene Bromobenzene Bromodichloromethane Bromoform Bromomethane	ND	0.50 0.50 0.50 0.50 0.50	μg/L " " "		z Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Acetone Benzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane Bromomethane Bromomethane Bromomethane	ND N	0.50 0.50 0.50 0.50 0.50 1.0 10	μg/L " " " " " "		z Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Acetone Benzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane Bromomethane Bromomethane Bromomethane Bromomethane Bromomethane Bromoform Bromomethane	ND N	0.50 0.50 0.50 0.50 0.50 1.0	μg/L " " " " "		z Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Accetone Benzene Bromobenzene Bromochloromethane Bromoform Bromomethane Bromomethane Bromomethane Bromomethane Bromomethane Bromoethane Bromoform Bromomethane Bromomethane Bromomethane Bromoethane Bromoform Bromomethane Bromoform	ND N	0.50 0.50 0.50 0.50 0.50 1.0 10	μg/L " " " " " "		z Analyzed:		50-128			
Batch CY06279 - EPA 5030 Water MS Blank (CY06279-BLK1) Acetone Benzene Bromobenzene Bromochloromethane Bromoform Bromomethane B-Butanone B-Butylbenzene Ber-Butylbenzene Ber-Butylbenzene Ber-Butylbenzene Ber-Butylbenzene Ber-Butylbenzene Ber-Butylbenzene	ND N	0.50 0.50 0.50 0.50 0.50 1.0 10 0.50 0.50	μg/L " " " " " " "		Analyzed:		50-128			
Surrogate: Toluene-d8 Surrogate: 4-Bromofluorobenzene  Batch CY06279 - EPA 5030 Water MS  Blank (CY06279-BLK1) Acetone Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane 2-Butanone n-Butylbenzene sec-Butylbenzene tert-Butylbenzene Carbon tetrachloride Chlorobenzene	ND N	0.50 0.50 0.50 0.50 0.50 1.0 10 0.50 0.50 0.50	μg/L " " " " " " " " " " " "		z Analyzed:		50-128			

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY06279 - EPA 5030 Water MS										

Blank (CY06279-BLK1)				Prepared & Analyzed: 09/11/15
Chloroform	ND	0.50	μg/L	
Chloromethane	ND	1.0	"	
o-Chlorotoluene	ND	0.50	"	
p-Chlorotoluene	ND	0.50	"	
Dibromochloromethane	ND	0.50	"	
,2-Dibromo-3-chloropropane	ND	1.0	"	
,2-Dibromoethane (EDB)	ND	0.50	"	
Dibromomethane	ND	0.50	"	
,2-Dichlorobenzene	ND	0.50	"	
,3-Dichlorobenzene	ND	0.50	"	
,4-Dichlorobenzene	ND	0.50	"	
Dichlorodifluoromethane (Freon 12)	ND	1.0	"	
,1-Dichloroethane	ND	0.50	"	
,2-Dichloroethane	ND	0.50	"	
,1-Dichloroethene	ND	0.50	"	
is-1,2-Dichloroethene	ND	0.50	"	
rans-1,2-Dichloroethene	ND	0.50	"	
,2-Dichloropropane	ND	0.50	"	
,3-Dichloropropane	ND	0.50	"	
,2-Dichloropropane	ND	0.50	"	
,1-Dichloropropene	ND	0.50	"	
is-1,3-Dichloropropene	ND	0.50	"	
rans-1,3-Dichloropropene	ND	0.50	"	
thylbenzene	ND	0.50	"	
,1,2-Trichloro-1,2,2-trifluoroethane (Freon 13)	ND	0.50	"	
Hexachlorobutadiene	ND	0.50	"	
-Hexanone	ND	10	"	
sopropylbenzene	ND	0.50	"	
o-Isopropyltoluene	ND	0.50	"	
Methylene chloride	ND	0.50	"	

CA DOHS ELAP Accreditation/Registration Number 1233

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Reporting

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Spike

Source

		Reporting		Spike	Bource		/OICLC		ICI D	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY06279 - EPA 5030 Water MS			·					·		
Blank (CY06279-BLK1)				Prepared &	Analyzed:	09/11/15				
l-Methyl-2-pentanone	ND	10	μg/L							
Methyl tert-butyl ether	ND	0.50	"							
Naphthalene	ND	0.50	"							
n-Propylbenzene	ND	0.50	"							
Styrene	ND	0.50	"							
,1,1,2-Tetrachloroethane	ND	0.50	"							
,1,2,2-Tetrachloroethane	ND	0.50	"							
Tetrachloroethene	ND	0.50	"							
Toluene	ND	0.50	"							
,2,3-Trichlorobenzene	ND	0.50	"							
,2,4-Trichlorobenzene	ND	0.50	"							
,1,1-Trichloroethane	ND	0.50	"							
,1,2-Trichloroethane	ND	0.50	"							
Trichloroethene	ND	0.50	"							
Trichlorofluoromethane	ND	0.50	"							
,2,3-Trichloropropane	ND	0.50	"							
,2,4-Trimethylbenzene	ND	0.50	"							
,3,5-Trimethylbenzene	ND	0.50	"							
/inyl chloride	ND	1.0	"							
Kylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	11.7		"	10.0		117	66-135			
Surrogate: Toluene-d8	9.94		"	10.0		99	72-125			
Surrogate: 4-Bromofluorobenzene	11.3		"	10.0		113	73-125			
LCS (CY06279-BS1)				Prepared &	Analyzed:	09/11/15				
Benzene	24.2	0.50	μg/L	20.0		121	60-135			
Chlorobenzene	18.8	0.50	"	20.0		94	60-133			
,1-Dichloroethene	22.0	0.50	"	20.0		110	42-150			
Toluene	23.8	0.50	"	20.0		119	60-137			
Trichloroethene	24.0	0.50	"	20.0		120	62-140			
Surrogate: 1,2-Dichloroethane-d4	8.66		"	10.0		87	66-135			

%REC

RPD

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Satch CY06279 - EPA 5030 Water MS										
LCS (CY06279-BS1)				Prepared &	: Analyzed:	09/11/15				
Surrogate: Toluene-d8	9.87		μg/L	10.0		99	72-125			
Surrogate: 4-Bromofluorobenzene	10.5		"	10.0		105	73-125			
LCS Dup (CY06279-BSD1)				Prepared &	Analyzed:	09/11/15				
Benzene	24.8	0.50	μg/L	20.0		124	60-135	2	25	
Chlorobenzene	20.5	0.50	"	20.0		103	60-133	9	25	
,1-Dichloroethene	23.5	0.50	"	20.0		118	42-150	7	25	
Toluene	24.2	0.50	"	20.0		121	60-137	1	25	
richloroethene	24.2	0.50	"	20.0		121	62-140	0.9	25	
urrogate: 1,2-Dichloroethane-d4	7.97		"	10.0		80	66-135			
urrogate: Toluene-d8	9.76		"	10.0		98	72-125			
urrogate: 4-Bromofluorobenzene	9.85		"	10.0		98	73-125			
Batch CY06305 - EPA 5030 Soil MS										
Blank (CY06305-BLK1)				Prepared &	: Analyzed:	09/14/15				
Acetone	ND	100	μg/kg							
Benzene	ND	5.0	"							
Bromobenzene										
Stomodenzene	ND	5.0	"							
	ND ND	5.0 5.0	"							
Bromochloromethane										
Bromochloromethane Bromodichloromethane	ND	5.0	"							
Bromochloromethane Bromodichloromethane Bromoform	ND ND	5.0 5.0	"							
Bromochloromethane Bromodichloromethane Bromoform Bromomethane	ND ND ND	5.0 5.0 5.0	"							
Bromochloromethane Bromodichloromethane Bromoform Bromomethane -Butanone	ND ND ND ND	5.0 5.0 5.0 10	" "							
Bromochloromethane Bromodichloromethane Bromoform Bromomethane -Butanone -Butylbenzene	ND ND ND ND	5.0 5.0 5.0 10	" " "							
Bromochloromethane Bromodichloromethane Bromoform BromomethaneButanoneButylbenzene ec-Butylbenzene	ND ND ND ND ND	5.0 5.0 5.0 10 100 5.0	" " " " "							
Bromochloromethane Bromodichloromethane Bromoform BromomethaneButanoneButylbenzene ec-Butylbenzene ert-Butylbenzene	ND ND ND ND ND ND ND ND	5.0 5.0 5.0 10 100 5.0 5.0	" " " " " " " " " " " " " " " " " " " "							
stromochloromethane stromodichloromethane stromoform stromomethane -Butanone -Butylbenzene ec-Butylbenzene ert-Butylbenzene carbon tetrachloride	ND	5.0 5.0 5.0 10 100 5.0 5.0 5.0	" " " " " " " " " " " " " " " " " " " "							
Bromochloromethane Bromodichloromethane Bromoform Bromomethane B-Butanone B-Butylbenzene Bec-Butylbenzene Bert-Butylbenzene Bert-Butylbenzene Bert-Butylbenzene Bert-Butylbenzene Bert-Butylbenzene Bert-Butylbenzene Bert-Butylbenzene Bert-Butylbenzene	ND N	5.0 5.0 10 100 5.0 5.0 5.0 5.0	"" "" "" "" "" "" "" "" "" "" "" "" ""							
Bromochloromethane Bromodichloromethane Bromodichloromethane Bromoform Bromomethane P-Butanone n-Butylbenzene sec-Butylbenzene ert-Butylbenzene Carbon tetrachloride Chlorobenzene Chloroethane Chloroform	ND N	5.0 5.0 10 100 5.0 5.0 5.0 5.0	"" "" "" "" "" "" "" "" "" "" "" "" ""							

### CALIFORNIA LABORATORY SERVICES

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Tetra Tech Geo Project: Terramar 5100 Broadway

Result

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Reporting

Limit

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Units

Spike

Level

Source

Result

%REC

Allalyte	Result	LIIIII	Omis	Level	Kesuit	/0KEC	Lillits	KFD	Lillit	Notes
Batch CY06305 - EPA 5030 Soil MS										
Blank (CY06305-BLK1)				Prepared &	Analyzed:	09/14/15				
o-Chlorotoluene	ND	5.0	μg/kg							
o-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
,2-Dibromo-3-chloropropane	ND	10	"							
,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
,2-Dichlorobenzene	ND	5.0	"							
,3-Dichlorobenzene	ND	5.0	"							
,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane (Freon 12)	ND	10	"							
,1-Dichloroethane	ND	5.0	"							
,2-Dichloroethane	ND	5.0	"							
1-Dichloroethene	ND	5.0	"							
is-1,2-Dichloroethene	ND	5.0	"							
ans-1,2-Dichloroethene	ND	5.0	"							
,2-Dichloropropane	ND	5.0	"							
,3-Dichloropropane	ND	5.0	"							
,2-Dichloropropane	ND	5.0	"							
,1-Dichloropropene	ND	5.0	"							
is-1,3-Dichloropropene	ND	5.0	"							
rans-1,3-Dichloropropene	ND	5.0	"							
thylbenzene	ND	5.0	"							
,1,2-Trichloro-1,2,2-trifluoroethane (Freon 13)	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
-Hexanone	ND	50	"							
sopropylbenzene	ND	5.0	"							
-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	20	"							
-Methyl-2-pentanone	ND	50	"							
Methyl tert-butyl ether	ND	5.0	"							

Analyte

%REC

Limits

RPD

RPD

Limit

Notes

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Reporting

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Spike

Source

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY06305 - EPA 5030 Soil MS										
Blank (CY06305-BLK1)				Prepared &	Analyzed:	09/14/15				
Naphthalene	ND	5.0	μg/kg							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
Γoluene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	10	"							
Xylenes (total)	ND	10	"							
Surrogate: 1,2-Dichloroethane-d4	34.6		"	30.0		115	50-125			
Surrogate: Toluene-d8	28.0		"	30.0		93	62-125			
Surrogate: 4-Bromofluorobenzene	34.3		"	30.0		114	50-128			
LCS (CY06305-BS1)				Prepared &	Analyzed:	09/14/15				
Benzene	16.3	5.0	μg/kg	20.0		82	64-135			
Chlorobenzene	17.7	5.0	"	20.0		89	67-133			
1,1-Dichloroethene	16.5	5.0	"	20.0		82	53-137			
Toluene	17.5	5.0	"	20.0		88	61-138			
Trichloroethene	16.8	5.0	"	20.0		84	64-130			
Surrogate: 1,2-Dichloroethane-d4	34.8		"	30.0		116	50-125			
Surrogate: Toluene-d8	32.5		"	30.0		108	62-125			
Surrogate: 4-Bromofluorobenzene	37.8		"	30.0		126	50-128			

%REC

RPD

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CY06305 - EPA 5030 Soil MS										
LCS Dup (CY06305-BSD1)				Prepared &	k Analyzed	: 09/14/15				
Benzene	16.6	5.0	μg/kg	20.0		83	64-135	2	30	
Chlorobenzene	17.4	5.0	"	20.0		87	67-133	2	30	
1,1-Dichloroethene	18.0	5.0	"	20.0		90	53-137	9	30	
Toluene	17.3	5.0	"	20.0		87	61-138	0.9	30	
Trichloroethene	17.1	5.0	"	20.0		86	64-130	2	30	
Surrogate: 1,2-Dichloroethane-d4	36.0		"	30.0		120	50-125			
Surrogate: Toluene-d8	32.3		"	30.0		108	62-125			
Surrogate: 4-Bromofluorobenzene	30.1		"	30.0		100	50-128			
Matrix Spike (CY06305-MS1)	Source	ce: CYI0462-	-26	Prepared &	& Analyzed	: 09/14/15				
Benzene	18.2	5.0	μg/kg	20.0	ND	91	58-139			
Chlorobenzene	17.9	5.0	"	20.0	ND	90	62-134			
1,1-Dichloroethene	19.6	5.0	"	20.0	ND	98	53-152			
Toluene	18.2	5.0	"	20.0	ND	91	58-139			
Trichloroethene	17.9	5.0	"	20.0	ND	89	55-138			
Surrogate: 1,2-Dichloroethane-d4	38.0		"	30.0		127	50-125			QM-7
Surrogate: Toluene-d8	34.8		"	30.0		116	62-125			
Surrogate: 4-Bromofluorobenzene	31.4		"	30.0		105	50-128			
Matrix Spike Dup (CY06305-MSD1)	Source	ce: CYI0462-	-26	Prepared &	& Analyzed	: 09/14/15				
Benzene	16.5	5.0	μg/kg	20.0	ND	82	58-139	10	30	
Chlorobenzene	16.8	5.0	"	20.0	ND	84	62-134	6	30	
1,1-Dichloroethene	17.1	5.0	"	20.0	ND	86	53-152	13	30	
Toluene	16.0	5.0	"	20.0	ND	80	58-139	13	30	
Trichloroethene	16.4	5.0	"	20.0	ND	82	55-138	9	30	
Surrogate: 1,2-Dichloroethane-d4	36.2		"	30.0		121	50-125			
Surrogate: Toluene-d8	32.2		"	30.0		107	62-125			
Surrogate: 4-Bromofluorobenzene	30.1		"	30.0		100	50-128			

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Tetra Tech Geo Terramar 5100 Broadway Project:

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 COC #: Project Manager: Tim Costello

Reporting

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Spike

Source

		Reporting		Spike	Source		70KEC		KPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY06320 - EPA 5030 Water MS										
Blank (CY06320-BLK1)				Prepared &	Analyzed:	09/15/15				
Acetone	ND	10	μg/L							
Benzene	ND	0.50	"							
Bromobenzene	ND	0.50	"							
Bromochloromethane	ND	0.50	"							
Bromodichloromethane	ND	0.50	"							
Bromoform	ND	0.50	"							
Bromomethane	ND	1.0	"							
-Butanone	ND	10	"							
-Butylbenzene	ND	0.50	"							
ec-Butylbenzene	ND	0.50	"							
rt-Butylbenzene	ND	0.50	"							
arbon tetrachloride	ND	0.50	"							
hlorobenzene	ND	0.50	"							
hloroethane	ND	0.50	"							
hloroform	ND	0.50	"							
hloromethane	ND	1.0	"							
-Chlorotoluene	ND	0.50	"							
-Chlorotoluene	ND	0.50	"							
ibromochloromethane	ND	0.50	"							
,2-Dibromo-3-chloropropane	ND	1.0	"							
2-Dibromoethane (EDB)	ND	0.50	"							
ibromomethane	ND	0.50	"							
,2-Dichlorobenzene	ND	0.50	"							
3-Dichlorobenzene	ND	0.50	"							
4-Dichlorobenzene	ND	0.50	"							
ichlorodifluoromethane (Freon 12)	ND	1.0	"							
1-Dichloroethane	ND	0.50	"							
2-Dichloroethane	ND	0.50	"							
1-Dichloroethene	ND	0.50	"							
is-1,2-Dichloroethene	ND	0.50	"							
ans-1,2-Dichloroethene	ND	0.50	"							

%REC

RPD

### CALIFORNIA LABORATORY SERVICES

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

Reporting

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Spike

Source

		Reporting		Spike	Source		70KEC		KPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY06320 - EPA 5030 Water MS										
Blank (CY06320-BLK1)				Prepared &	Analyzed:	09/15/15				
,2-Dichloropropane	ND	0.50	μg/L							
,3-Dichloropropane	ND	0.50	"							
,2-Dichloropropane	ND	0.50	"							
,1-Dichloropropene	ND	0.50	"							
is-1,3-Dichloropropene	ND	0.50	"							
rans-1,3-Dichloropropene	ND	0.50	"							
thylbenzene	ND	0.50	"							
,1,2-Trichloro-1,2,2-trifluoroethane (Freon 13)	ND	0.50	"							
Iexachlorobutadiene	ND	0.50	"							
-Hexanone	ND	10	"							
opropylbenzene	ND	0.50	"							
Isopropyltoluene	ND	0.50	"							
lethylene chloride	ND	0.50	"							
Methyl-2-pentanone	ND	10	"							
lethyl tert-butyl ether	ND	0.50	"							
aphthalene	ND	0.50	"							
-Propylbenzene	ND	0.50	"							
tyrene	ND	0.50	"							
1,1,2-Tetrachloroethane	ND	0.50	"							
1,2,2-Tetrachloroethane	ND	0.50	"							
etrachloroethene	ND	0.50	"							
oluene	ND	0.50	"							
2,3-Trichlorobenzene	ND	0.50	"							
2,4-Trichlorobenzene	ND	0.50	"							
1,1-Trichloroethane	ND	0.50	"							
1,2-Trichloroethane	ND	0.50	"							
richloroethene	ND	0.50	"							
richlorofluoromethane	ND	0.50	"							
2,3-Trichloropropane	ND	0.50	"							
2,4-Trimethylbenzene	ND	0.50	"							

RPD

%REC

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Tetra Tech Geo Terramar 5100 Broadway Project:

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CYI0462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CY06320 - EPA 5030 Water MS										
Blank (CY06320-BLK1)				Prepared &	Analyzed:	09/15/15				
1,3,5-Trimethylbenzene	ND	0.50	μg/L	-						
Vinyl chloride	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	9.08		"	10.0		91	66-135			
Surrogate: Toluene-d8	9.39		"	10.0		94	72-125			
Surrogate: 4-Bromofluorobenzene	9.04		"	10.0		90	73-125			
LCS (CY06320-BS1)				Prepared &	Analyzed:	09/15/15				
Benzene	17.7	0.50	μg/L	20.0		89	60-135			
Chlorobenzene	17.7	0.50	"	20.0		88	60-133			
1,1-Dichloroethene	17.0	0.50	"	20.0		85	42-150			
Toluene	17.9	0.50	"	20.0		89	60-137			
Trichloroethene	17.9	0.50	"	20.0		89	62-140			
Surrogate: 1,2-Dichloroethane-d4	9.72		"	10.0		97	66-135			
Surrogate: Toluene-d8	9.85		"	10.0		98	72-125			
Surrogate: 4-Bromofluorobenzene	11.9		"	10.0		119	73-125			
LCS Dup (CY06320-BSD1)				Prepared &	Analyzed:	09/15/15				
Benzene	17.8	0.50	μg/L	20.0		89	60-135	0.6	25	
Chlorobenzene	17.7	0.50	"	20.0		89	60-133	0.4	25	
1,1-Dichloroethene	16.7	0.50	"	20.0		84	42-150	2	25	
Toluene	18.1	0.50	"	20.0		90	60-137	0.9	25	
Trichloroethene	18.7	0.50	"	20.0		94	62-140	5	25	
Surrogate: 1,2-Dichloroethane-d4	8.70		"	10.0		87	66-135			
Surrogate: Toluene-d8	9.75		"	10.0		98	72-125			
Surrogate: 4-Bromofluorobenzene	11.4		"	10.0		114	73-125			

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: [none] CLS Work Order #: CY10462

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### **Notes and Definitions**

QS-HI Surrogate recovery was greater than the upper control limit. A reanalysis was not performed since the analytes associated with the surrogate were not detected.

QS-4 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

QRL-4 The reporting limits for this analysis are elevated due to sample foaming.

QM-7 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable

LCS/LCSD recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

### CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

September 18, 2015

CLS Work Order #: CYI0463 COC #:

Tim Costello Tetra Tech Geo 2969 Prospect Park Drive, Suite 100 Rancho Cordova, CA 95670

Project Name: Terramar 5100 Broadway

Enclosed are the results of analyses for samples received by the laboratory on 09/11/15 11:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D. Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

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Project Manager: Tim Costello

Tetra Tech Geo Project: Terramar 5100 Broadway

Rancho Cordova, CA 95670

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CY10463

CLS ID. NO. CYLCHG CALIFORNIA 

¶ABORATORY 

¶ERVICES CHAIN OF CUSTODY (\_1\_of\_1\_) Report To: ANALYSIS REQUESTED GEOTRACKER 117-7429001.06 Destination Laboratory Tetra Tech Inc. 2969 Prospect Park Dr. TPH-d TPH-g / VOCs Full Scan (8260B) YES NO LUFT 5 Metals (6010) EDF REPORT Rancho Cordova, CA 95670 GLOBAL ID. CLS (916) 638-7301 / mo (8015M w/ SGT) Project Manager 3249 Fitzgerald Road Tim Costello (timothy.costello@tetratech.com) PRESERVATIVES Rancho Cordova, CA FIELD CONDITIONS Project Name 95742 Terramar - 5100 Broadway www.californialab.com Sampled By Keith Hoofard/Brian Strand OTHER Job Description 5100 Broadway - Soil Cuttings Profiling from DC-SB-15 thru DC-SB-26 August 31, 2015 Addendum Work Plan Site Location 5100 Broadway Oakland, CA TURNAROUND SPECIAL INSTRUCTIONS TIME IN DAYS CONTAINER SAMPLE FIELD DATE TIME 2 3 5 IDENTIFICATION ID. TYPE MATRIX NO. 9-10-15 1500 DC-SOILPILE-1 3 X XX SOIL 1 JAR Х INVOICE TO PO# QUOTE# SUSPECTED CONSTITUENTS (3) = COLD (4)= H2SO4 SAMPLE RETENTION TIME PRESERVATIVES (I) HCL. (2) HNO<sub>3</sub> RELINQUISHED BY (Signature) PRINT NAME/COMPANY DATE/TIME RECEIVED BY (Signature) PRINT NAME/COMPANY Lett Harris Keith Hoofard/Tetra Tech 9/11/15 089 3:11 Schonzerer Tetral do Tela DATE/TIME: 9-11-15 /190 CONDITIONS/COMMENTS: RECEIVED AT LAB BY: TOTHER HAND DELIVERED SHIPPED BY: ☐ FED EX AIR BILL#

COC #:

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### **Extractable Petroleum Hydrocarbons by EPA Method 8015M**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SOILPILE-1 (CYI0463-01) Soil	Sampled: 09/10/15 15:00	Received: 09	0/11/15 11	:00					EXT-3
Diesel	ND	1.0	mg/kg	1	CY06299	09/14/15	09/14/15	EPA 8015M	
Motor Oil	1.2	1.0	"	"	"	"	"	"	
Surrogate: o-Terphenyl		%	65	-135	"	"	"	"	QS-4

CA DOHS ELAP Accreditation/Registration Number 1233

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SOILPILE-1 (CYI0463-01) Soil	Sampled: 09/10/15 15:00	Received: 09	0/11/15 11	:00					
Cadmium	ND	1.0	mg/kg	1	CY06322	09/15/15	09/15/15	EPA 6010B	
Chromium	74	5.0	"	"	"	"	"	"	
Lead	13	10	"	"	"	"	"	"	
Nickel	100	10	"	"	"	"	"	"	
Zinc	59	5.0	"	"	"	"	"	"	

CA DOHS ELAP Accreditation/Registration Number 1233

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### **TPH-Gasoline by GC/MS**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SOILPILE-1 (CYI0463-01) Soil S	Sampled: 09/10/15 15:00	Received: 09	0/11/15 11:	00					
Gasoline	ND	0.20	mg/kg	1	CY06319	09/14/15	09/14/15	EPA 8260M	
Surrogate: Toluene-d8		88 %	65-	135	"	"	"	"	

CA DOHS ELAP Accreditation/Registration Number 1233

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SOILPILE-1 (CYI0463-01) Soil	Sampled: 09/10/15 15:00	Received: 09	9/11/15 11	1:00					
1,1,1,2-Tetrachloroethane	ND	5.0	μg/kg	1	CY06319	"	09/14/15	EPA 8260B	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	"	"	"	"	"	"	
(Freon 113)	MD	5.0	,,	,,	,,	,,	,,	"	
1,1,2-Trichloroethane	ND	5.0		"	"		"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"			"			
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
2-Hexanone	ND	50	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	50	"	"	"	"	"	"	
Acetone	ND	100	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SOILPILE-1 (CYI0463-01) Soil	Sampled: 09/10/15 15:00	Received: 09	9/11/15 11	1:00					
Bromoform	ND	5.0	μg/kg	1	CY06319	"	09/14/15	EPA 8260B	
Bromomethane	ND	10	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	20	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
o-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DC-SOILPILE-1 (CYI0463-01) Soil	Sampled: 09/10/15 15:00	Received: 09	9/11/15 11:	00					
Trichlorofluoromethane	ND	5.0	μg/kg	1	CY06319	"	09/14/15	EPA 8260B	
Vinyl chloride	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		129 %	50-	125	"	"	"	"	QS-HI
Surrogate: 4-Bromofluorobenzene		107 %	50-	128	"	"	"	"	
Surrogate: Toluene-d8		88 %	62-	125	"	"	"	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### **Extractable Petroleum Hydrocarbons by EPA Method 8015M - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CY06299 - CA LUFT - orb shaker										
Blank (CY06299-BLK1)				Prepared &	: Analyzed:	09/14/15				
Diesel	ND	1.0	mg/kg							
Motor Oil	ND	1.0	"							
Mineral Oil	ND	1.0	"							
Surrogate: o-Terphenyl	0.432		"	0.500		86	65-135			
LCS (CY06299-BS1)				Prepared &	: Analyzed:	09/14/15				
Diesel	54.5	1.0	mg/kg	50.0		109	65-135			
Surrogate: o-Terphenyl	0.480		"	0.500		96	65-135			
LCS Dup (CY06299-BSD1)				Prepared &	: Analyzed:	09/14/15				
Diesel	54.3	1.0	mg/kg	50.0		109	65-135	0.3	30	
Surrogate: o-Terphenyl	0.474		"	0.500		95	65-135			
Matrix Spike (CY06299-MS1)	Sou	rce: CYI0463-	-01	Prepared &	: Analyzed:	09/14/15				
Diesel	58.2	1.0	mg/kg	50.0	ND	116	59-138			
Surrogate: o-Terphenyl	0.419		"	0.500		84	65-135			
Matrix Spike Dup (CY06299-MSD1)	Sou	rce: CYI0463-	-01	Prepared &	: Analyzed:	09/14/15				
Diesel	60.5	1.0	mg/kg	50.0	ND	121	59-138	4	37	
Surrogate: o-Terphenyl	0.467		"	0.500		93	65-135			

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Metals by EPA 6000/7000 Series Methods - Quality Control

	D 1	Reporting	TT '4	Spike	Source	0/DEC	%REC	DDD	RPD	NI 4
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY06322 - EPA 3050B										
Blank (CY06322-BLK1)				Prepared &	Analyzed:	09/15/15				
Cadmium	ND	1.0	mg/kg							
Chromium	ND	5.0	"							
Lead	ND	10	"							
Nickel	ND	10	"							
Zinc	ND	5.0	"							
LCS (CY06322-BS1)				Prepared &	: Analyzed:	09/15/15				
Cadmium	97.9	1.0	mg/kg	100		98	75-125			
Chromium	98.5	5.0	"	100		98	75-125			
Lead	95.1	10	"	100		95	75-125			
Nickel	91.7	10	"	100		92	75-125			
Zinc	95.2	5.0	"	100		95	75-125			
Matrix Spike (CY06322-MS1)	Sour	ce: CYI0536	-01	Prepared &	Analyzed:	09/15/15				
Cadmium	94.3	1.0	mg/kg	100	2.23	92	75-125			
Chromium	127	5.0	"	100	41.4	86	75-125			
Lead	759	10	"	100	715	45	75-125			QM-42
Nickel	111	10	"	100	24.9	86	75-125			
Zinc	673	5.0	"	100	555	118	75-125			
Matrix Spike Dup (CY06322-MSD1)	Sour	rce: CYI0536	-01	Prepared &	: Analyzed:	09/15/15				
Cadmium	91.5	1.0	mg/kg	100	2.23	89	75-125	3	30	
Chromium	132	5.0	"	100	41.4	90	75-125	4	30	
Lead	759	10	"	100	715	44	75-125	0.06	30	QM-42
Nickel	110	10	"	100	24.9	85	75-125	0.8	30	
Zinc	647	5.0	"	100	555	92	75-125	4	30	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### TPH-Gasoline by GC/MS - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY06319 - EPA 5030 Soil MS										
Blank (CY06319-BLK1)				Prepared &	Analyzed:	09/14/15				
Gasoline	ND	0.20	mg/kg							
Surrogate: Toluene-d8	0.0275		"	0.0300		92	65-135			
LCS (CY06319-BS1)				Prepared &	Analyzed:	09/14/15				
Gasoline	2.02	0.20	mg/kg	2.00		101	65-135			
Surrogate: Toluene-d8	0.0320		"	0.0300		107	65-135			
LCS Dup (CY06319-BSD1)				Prepared &	Analyzed:	09/14/15				
Gasoline	2.11	0.20	mg/kg	2.00		105	65-135	4	30	
Surrogate: Toluene-d8	0.0335		"	0.0300		112	65-135			
Matrix Spike (CY06319-MS1)	Source	ce: CYI0536	-01	Prepared: (	09/14/15 A	nalyzed: 09	9/15/15			
Gasoline	2.19	0.20	mg/kg	2.00	0.229	98	63-124			
Surrogate: Toluene-d8	0.0292		"	0.0300		97	65-135			
Matrix Spike Dup (CY06319-MSD1)	Source	ce: CYI0536	-01	Prepared: (	)9/14/15 A	nalyzed: 09	9/15/15			
Gasoline	1.80	0.20	mg/kg	2.00	0.229	78	63-124	20	35	
Surrogate: Toluene-d8	0.0294		"	0.0300		98	65-135			

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch CY06319 - EPA 5030 Soil MS

Blank (CY06319-BLK1)				Prepared & Analyzed: 09/14/15
Acetone	ND	100	μg/kg	
Benzene	ND	5.0	"	
Bromobenzene	ND	5.0	"	
Bromochloromethane	ND	5.0	"	
Bromodichloromethane	ND	5.0	"	
Bromoform	ND	5.0	"	
Bromomethane	ND	10	"	
2-Butanone	ND	100	"	
n-Butylbenzene	ND	5.0	"	
sec-Butylbenzene	ND	5.0	"	
tert-Butylbenzene	ND	5.0	"	
Carbon tetrachloride	ND	5.0	"	
Chlorobenzene	ND	5.0	"	
Chloroethane	ND	5.0	"	
Chloroform	ND	5.0	"	
Chloromethane	ND	10	"	
o-Chlorotoluene	ND	5.0	"	
p-Chlorotoluene	ND	5.0	"	
Dibromochloromethane	ND	5.0	"	
1,2-Dibromo-3-chloropropane	ND	10	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	
Dibromomethane	ND	5.0	"	
1,2-Dichlorobenzene	ND	5.0	"	
1,3-Dichlorobenzene	ND	5.0	"	
1,4-Dichlorobenzene	ND	5.0	"	
Dichlorodifluoromethane (Freon 12)	ND	10	"	
1,1-Dichloroethane	ND	5.0	"	
1,2-Dichloroethane	ND	5.0	"	
1,1-Dichloroethene	ND	5.0	"	
cis-1,2-Dichloroethene	ND	5.0	"	
trans-1,2-Dichloroethene	ND	5.0	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CY06319 - EPA 5030 Soil MS										
Blank (CY06319-BLK1)				Prepared &	Analyzed:	09/14/15				

2,2-Dichloropropane         ND         5.0         "           1,1-Dichloropropene         ND         5.0         "           cis-1,3-Dichloropropene         ND         5.0         "           Ethylbenzene         ND         5.0         "           Li),1,2-Trichloro-1,2,2-trifluoroethane (Freon         ND         5.0         "           11,12-Trichloro-1,2,2-trifluoroethane (Freon         ND         5.0         "           13)         "         "           Hexachlorobutadiene         ND         5.0         "           2-Hexanone         ND         5.0         "           Isopropylbenzene         ND         5.0         "           Pisopropylbenzene         ND         5.0         "           Methylere-chloride         ND         5.0         "           Methylere-phantone         ND         5.0         "           Naphthalene         ND         5.0         "           Naphthalene         ND         5.0         "           NP         5.0         "         "           Styrene         ND         5.0         "           Tetrachloroethane         ND         5.0         "	Blank (CY06319-BLK1)				Prepared & Analyzed: 09/14/15
	1,2-Dichloropropane	ND	5.0	μg/kg	
	1,3-Dichloropropane	ND	5.0	"	
cis-1,3-Dichloropropene         ND         5,0         "           Ethylbenzene         ND         5,0         "           L1,2-Trichloro-1,2,2-trifluorethane (Freon         ND         5,0         "           Hexachlorobutadiene         ND         5,0         "           Lebeanne         ND         5,0         "           Isopropylbenzene         ND         5,0         "           p-Isopropylbutene         ND         5,0         "           Methylen chloride         ND         5,0         "           4-Methyl-2-pentanoe         ND         5,0         "           Methylen chloride         ND         5,0         "           Nphthalene         ND         5,0         "           Nphthalene         ND         5,0         "           Nprene         ND         5,0         "           Nprene         ND         5,0         "           1,1,2-Tetrachloroethane         ND         5,0         "           1,1,2-Tetrachloroethane         ND         5,0         "           1,1,2-Trichloroetzae         ND         5,0         "           1,1,2-Trichloroetzae         ND         5,0         "	2,2-Dichloropropane	ND	5.0	"	
trans-1,3-Dichloropropene ND 5.0 " Ethylbenzene ND 5.0 " 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon ND 5.0 " Hexachlorobutadiene ND 5.0 " Hexachlorobutadiene ND 5.0 " Sopropylbenzene ND 5.0 " Isopropylbenzene ND 5.0 " Inj.2-Tetrachloroethane ND 5.0 " Inj.2-Tetrachloroethane ND 5.0 " Inj.2-Tetrachloroethane ND 5.0 " Itolane ND 5.0 " Itol	1,1-Dichloropropene	ND	5.0	"	
Ethylbenzene         ND         5.0         "           1,1,2-Trichloro-1,2,2-trifluoroethane (Freon         ND         5.0         "           113         ND         5.0         "           2-Hexanone         ND         5.0         "           1-sopropylbenzene         ND         5.0         "           p-Isopropyltoluene         ND         5.0         "           Methylen chloride         ND         5.0         "           4-Methyl-2-pentanone         ND         5.0         "           Methyl tert-butyl ether         ND         5.0         "           Naphthalene         ND         5.0         "           n-Propylbenzene         ND         5.0         "           1,1,2-Tetrachloroethane         ND         5.0         "           1,1,2-Tetrachloroethane         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichlorobenzene         ND         5.0         "           1,1,4-Trichloroethane         ND         5.0         "           1,2,4-Trichloroethane         ND	cis-1,3-Dichloropropene	ND	5.0	"	
1,1,2-Trichloro-1,2,2-trifluorechane (Freon         ND         5.0         "           1130         Hexachlorobutdiene         ND         5.0         "           2-Hexanone         ND         50         "           Isopropylbenzene         ND         5.0         "           p-Isopropylbulene         ND         5.0         "           Methylene chloride         ND         20         "           4-Methyl-2-pentanone         ND         5.0         "           Naphthalene         ND         5.0         "           Naphthalene         ND         5.0         "           n-Propylbenzene         ND         5.0         "           Styrene         ND         5.0         "           1,1,2-Tetrachloroethane         ND         5.0         "           Totluene         ND         5.0         "           Totluene         ND         5.0         "           1,2,4-Trichloroethane         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0 <td>trans-1,3-Dichloropropene</td> <td>ND</td> <td>5.0</td> <td>"</td> <td></td>	trans-1,3-Dichloropropene	ND	5.0	"	
Hexachlorobutadiene	Ethylbenzene	ND	5.0	"	
2-Hexanone         ND         50         "           Isopropylbenzene         ND         5.0         "           p-Isopropyltoluene         ND         5.0         "           Methylene chloride         ND         20         "           4-Methyl-2-pentanone         ND         5.0         "           Methyl tert-butyl ether         ND         5.0         "           Naphthalene         ND         5.0         "           N-Propylbenzene         ND         5.0         "           Styrene         ND         5.0         "           1,1,2,2-Tetrachloroethane         ND         5.0         "           1,1,1,2-Tetrachloroethane         ND         5.0         "           Tetrachloroethane         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         <	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"	
Isopropylbenzene         ND         5.0         "           p-Isopropylbulene         ND         5.0         "           Methylene chloride         ND         20         "           4-Methyl-2-pentanone         ND         5.0         "           Methyl tert-butyl ether         ND         5.0         "           Naphthalene         ND         5.0         "           Naphthalene         ND         5.0         "           Styrene         ND         5.0         "           Styrene         ND         5.0         "           1,1,2-7-Etrachloroethane         ND         5.0         "           Tetrachloroethane         ND         5.0         "           Toluene         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "	Hexachlorobutadiene	ND	5.0	"	
p-Isopropyloluene         ND         5.0         "           Methylene chloride         ND         20         "           4-Methyl-2-pentanone         ND         50         "           Methyl tert-butyl ether         ND         5.0         "           Naphthalene         ND         5.0         "           n-Propylbenzene         ND         5.0         "           Styrene         ND         5.0         "           1,1,2-Tetrachloroethane         ND         5.0         "           1,1,1,2-Tetrachloroethane         ND         5.0         "           Toluene         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichlorobenzene         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0	2-Hexanone	ND	50	"	
Methylene chloride         ND         20         "           4-Methyl-2-pentanone         ND         50         "           Methyl tert-butyl ether         ND         5.0         "           Naphthalene         ND         5.0         "           n-Propylbenzene         ND         5.0         "           Styrene         ND         5.0         "           1,1,2,2-Tetrachloroethane         ND         5.0         "           1,1,1,2-Tetrachloroethane         ND         5.0         "           Toluene         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichlorobenzene         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0	Isopropylbenzene	ND	5.0	"	
4-Methyl-2-pentanone ND 50 " Methyl tert-butyl ether ND 5.0 " Naphthalene ND 5.0 " n-Propylbenzene ND 5.0 " Styrene ND 5.0 " 1,1,2,2-Tetrachloroethane ND 5.0 " 1,1,1,2-Tetrachloroethane ND 5.0 " Tetrachloroethene ND 5.0 " Toluene ND 5.0 " 1,2,3-Trichlorobenzene ND 5.0 " 1,2,3-Trichlorobenzene ND 5.0 " 1,2,4-Trichloroethane ND 5.0 " 1,1,2-Trichloroethane ND 5.0 " 1,1,2-Trichloroethane ND 5.0 " 1,2,3-Trichloroethane ND 5.0 " 1,1,1-Trichloroethane ND 5.0 "	p-Isopropyltoluene	ND	5.0	"	
Methyl tert-butyl ether         ND         5.0         "           Naphthalene         ND         5.0         "           n-Propylbenzene         ND         5.0         "           Styrene         ND         5.0         "           1,1,2-Tetrachloroethane         ND         5.0         "           Tetrachloroethane         ND         5.0         "           Toluene         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "      <	Methylene chloride	ND	20	"	
Naphthalene         ND         5.0         "           n-Propylbenzene         ND         5.0         "           Styrene         ND         5.0         "           1,1,2,2-Tetrachloroethane         ND         5.0         "           1,1,1,2-Tetrachloroethane         ND         5.0         "           Tetrachloroethane         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichloropropane         ND         5.0         "	4-Methyl-2-pentanone	ND	50	"	
n-Propylbenzene         ND         5.0         "           Styrene         ND         5.0         "           1,1,2,2-Tetrachloroethane         ND         5.0         "           1,1,1,2-Tetrachloroethane         ND         5.0         "           Tetrachloroethene         ND         5.0         "           10luene         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichlorofluoromethane         ND         5.0         "           Trichloropropane         ND         5.0         "	Methyl tert-butyl ether	ND	5.0	"	
Styrene         ND         5.0         "           1,1,2,2-Tetrachloroethane         ND         5.0         "           1,1,1,2-Tetrachloroethane         ND         5.0         "           Tetrachloroethane         ND         5.0         "           Toluene         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichloroptopomethane         ND         5.0         "           Trichloroptopomethane         ND         5.0         "	Naphthalene	ND	5.0	"	
1,1,2,2-Tetrachloroethane       ND       5.0       "         1,1,1,2-Tetrachloroethane       ND       5.0       "         Tetrachloroethane       ND       5.0       "         Toluene       ND       5.0       "         1,2,3-Trichlorobenzene       ND       5.0       "         1,2,4-Trichloroethane       ND       5.0       "         1,1,1-Trichloroethane       ND       5.0       "         1,1,1-Trichloroethane       ND       5.0       "         Trichloroethane       ND       5.0       "         Trichlorofluoromethane       ND       5.0       "         1,2,3-Trichloropropane       ND       5.0       "	n-Propylbenzene	ND	5.0	"	
1,1,1,2-Tetrachloroethane         ND         5.0         "           Tetrachloroethene         ND         5.0         "           Toluene         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichlorobenzene         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethene         ND         5.0         "           Trichloromethane         ND         5.0         "           1,2,3-Trichloropropane         ND         5.0         "	Styrene	ND	5.0	"	
Tetrachloroethene         ND         5.0         "           Toluene         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichlorobenzene         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethene         ND         5.0         "           Trichlorofluoromethane         ND         5.0         "           1,2,3-Trichloropropane         ND         5.0         "	1,1,2,2-Tetrachloroethane	ND	5.0	"	
Toluene         ND         5.0         "           1,2,3-Trichlorobenzene         ND         5.0         "           1,2,4-Trichlorobenzene         ND         5.0         "           1,1,2-Trichloroethane         ND         5.0         "           1,1,1-Trichloroethane         ND         5.0         "           Trichloroethane         ND         5.0         "           Trichlorofluoromethane         ND         5.0         "           1,2,3-Trichloropropane         ND         5.0         "	1,1,1,2-Tetrachloroethane	ND	5.0	"	
1,2,3-Trichlorobenzene       ND       5.0       "         1,2,4-Trichlorobenzene       ND       5.0       "         1,1,2-Trichloroethane       ND       5.0       "         1,1,1-Trichloroethane       ND       5.0       "         Trichloroethene       ND       5.0       "         Trichlorofluoromethane       ND       5.0       "         1,2,3-Trichloropropane       ND       5.0       "	Tetrachloroethene	ND	5.0	"	
1,2,4-Trichlorobenzene       ND       5.0       "         1,1,2-Trichloroethane       ND       5.0       "         1,1,1-Trichloroethane       ND       5.0       "         Trichloroethene       ND       5.0       "         Trichlorofluoromethane       ND       5.0       "         1,2,3-Trichloropropane       ND       5.0       "	Toluene	ND	5.0	"	
1,1,2-Trichloroethane       ND       5.0       "         1,1,1-Trichloroethane       ND       5.0       "         Trichloroethene       ND       5.0       "         Trichlorofluoromethane       ND       5.0       "         1,2,3-Trichloropropane       ND       5.0       "	1,2,3-Trichlorobenzene	ND	5.0	"	
1,1,1-TrichloroethaneND5.0"TrichloroetheneND5.0"TrichlorofluoromethaneND5.0"1,2,3-TrichloropropaneND5.0"	1,2,4-Trichlorobenzene	ND	5.0	"	
Trichloroethene ND 5.0 " Trichlorofluoromethane ND 5.0 " 1,2,3-Trichloropropane ND 5.0 "	1,1,2-Trichloroethane	ND	5.0	"	
Trichlorofluoromethane ND 5.0 " 1,2,3-Trichloropropane ND 5.0 "	1,1,1-Trichloroethane	ND	5.0	"	
1,2,3-Trichloropropane ND 5.0 "	Trichloroethene	ND	5.0	"	
	Trichlorofluoromethane	ND	5.0	"	
1,3,5-Trimethylbenzene ND 5.0 "	1,2,3-Trichloropropane	ND	5.0	"	
	1,3,5-Trimethylbenzene	ND	5.0	"	

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analys	D1	Reporting	T.Tid.	Spike	Source	0/DEC	%REC	DDD	RPD	Nata
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch CY06319 - EPA 5030 Soil MS										
Blank (CY06319-BLK1)				Prepared &	t Analyzed	: 09/14/15				
1,2,4-Trimethylbenzene	ND	5.0	μg/kg							
Vinyl chloride	ND	10	"							
Xylenes (total)	ND	10	"							
Surrogate: 1,2-Dichloroethane-d4	35.4		"	30.0		118	50-125			
Surrogate: Toluene-d8	27.5		"	30.0		92	62-125			
Surrogate: 4-Bromofluorobenzene	30.9		"	30.0		103	50-128			
LCS (CY06319-BS1)				Prepared &	λ Analyzed	: 09/14/15				
Benzene	17.6	5.0	μg/kg	20.0		88	64-135			
Chlorobenzene	17.7	5.0	"	20.0		89	67-133			
1,1-Dichloroethene	17.3	5.0	"	20.0		86	53-137			
Toluene	17.0	5.0	"	20.0		85	61-138			
Trichloroethene	18.1	5.0	"	20.0		90	64-130			
Surrogate: 1,2-Dichloroethane-d4	33.8		"	30.0		113	50-125			
Surrogate: Toluene-d8	32.0		"	30.0		107	62-125			
Surrogate: 4-Bromofluorobenzene	29.8		"	30.0		99	50-128			
LCS Dup (CY06319-BSD1)				Prepared &	λ Analyzed	: 09/14/15				
Benzene	18.1	5.0	μg/kg	20.0		90	64-135	3	30	
Chlorobenzene	18.1	5.0	"	20.0		91	67-133	2	30	
1,1-Dichloroethene	18.8	5.0	"	20.0		94	53-137	8	30	
Toluene	18.3	5.0	"	20.0		91	61-138	7	30	
Trichloroethene	17.7	5.0	"	20.0		89	64-130	2	30	
Surrogate: 1,2-Dichloroethane-d4	34.3		"	30.0		114	50-125			
Surrogate: Toluene-d8	33.5		"	30.0		112	62-125			
Surrogate: 4-Bromofluorobenzene	28.1		"	30.0		94	50-128			
Matrix Spike (CY06319-MS1)	<b>Source: CYI0536-01</b> Prepared: 09/14/15 Analyzed: 09/15/15									
Benzene	9.02	5.0	μg/kg	20.0	ND	45	58-139			QM-
Chlorobenzene	5.34	5.0	"	20.0	ND	27	62-134			QM-
1,1-Dichloroethene	10.7	5.0	"	20.0	ND	53	53-152			
Toluene	6.43	5.0	"	20.0	ND	32	58-139			QM-

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Tetra Tech Geo Terramar 5100 Broadway Project:

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CY06319 - EPA 5030 Soil MS										
Matrix Spike (CY06319-MS1)	Sourc	Prepared: (	nalyzed: 09							
Trichloroethene	7.35	5.0	μg/kg	20.0	ND	37	55-138			QM-
Surrogate: 1,2-Dichloroethane-d4	33.8		"	30.0		113	50-125			
Surrogate: Toluene-d8	29.2		"	30.0		97	62-125			
Surrogate: 4-Bromofluorobenzene	35.5		"	30.0		118	50-128			
Matrix Spike Dup (CY06319-MSD1)	Matrix Spike Dup (CY06319-MSD1) Source: CY10536-01				Prepared: 09/14/15 Analyzed: 09/15/15					
Benzene	11.3	5.0	μg/kg	20.0	ND	56	58-139	22	30	QM-
Chlorobenzene	9.21	5.0	"	20.0	ND	46	62-134	53	30	QM-7, QR-
1,1-Dichloroethene	13.5	5.0	"	20.0	ND	67	53-152	23	30	
Toluene	9.50	5.0	"	20.0	ND	48	58-139	39	30	QM-7, QR-
Trichloroethene	10.2	5.0	"	20.0	ND	51	55-138	32	30	QM-7, QR-
Surrogate: 1,2-Dichloroethane-d4	35.0		"	30.0		117	50-125			
Surrogate: Toluene-d8	29.4		"	30.0		98	62-125			
Surrogate: 4-Bromofluorobenzene	35.8		"	30.0		119	50-128			

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Tetra Tech Geo Project: Terramar 5100 Broadway

2969 Prospect Park Drive, Suite 100 Project Number: 117-7429001.06 CLS Work Order #: CYI0463

Rancho Cordova, CA 95670 Project Manager: Tim Costello COC #:

#### **Notes and Definitions**

QS-HI	Surrogate recovery was greater than the upper control limit. A reanalysis was not performed since the analytes associated with the surrogate were not detected.
QS-4	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-1	The RPD value for the sample duplicate or MS/MSD was outside of the QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery.
QM-7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
EXT-3	The sample extract has undergone silica-gel clean-up, EPA Method 3630, which is specific to polar compound contamination.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported

Sample results reported on a dry weight basis

Relative Percent Difference

dry

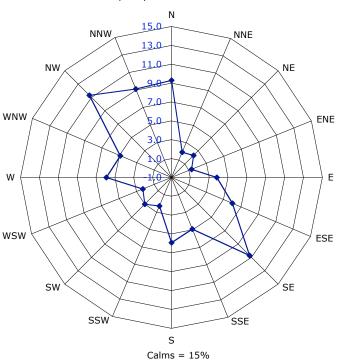
RPD

APPENDIX F
Wind Direction References

# Background Information: Wind and Rainfall Climatology for the Lake Merritt Area of Oakland, CA: Period 1950-1970

#### **Winter Composite**

% Frequency of Wind Directions



Report Prepared by John P. Monteverdi, PhD, CCM

for

Mayacamas Weather Consultants

# Report on Wind and Rainfall Climatology for the Lake Merritt Area of Oakland, CA: Period 1950-1970

#### A. Assignment

The consultant was given the task of reporting on the general wind conditions and rainfall conditions in the area of Lake Merritt, Oakland, CA for the period 1950-1970. In particular, he was asked to obtain general wind directions and wind speeds and monthly rainfall on the basis of techniques used by meteorologists to estimate such conditions if site observations are not available.

#### B. Location of Property and Data Limitations

The site for which climatological information was to be estimated is near the western side of Lake Merritt in Oakland, CA (see Fig. 1 for locations). During the period 1950-1970, there was no official National Weather Service recording site located at or near the property, although there is more recent rainfall information for Oakland Museum. Although there is long term wind and rainfall information for Oakland International Airport (KOAK), Alameda Naval Air Station (KNGZ) is located much closer, only about 3 miles WSW of the site, and does have summarized wind information for the period.

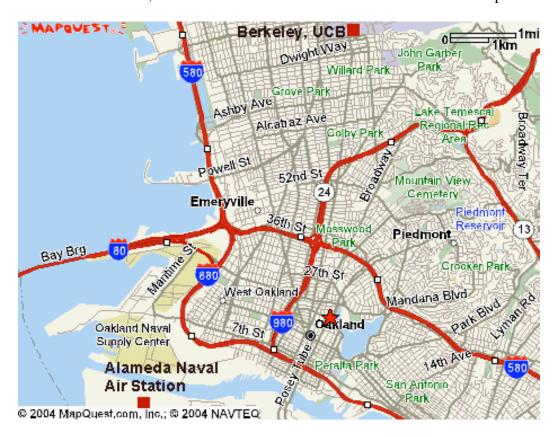


Figure 1: Location Map. Star marks approximate location of site for which information is estimated. Location of nearest long term wind site (Alameda Naval Air station) and rainfall information (Berkeley, UCB) shown by read squares.

In addition, KNGZ is situated at the same latitude as the site with respect to the Golden Gate, and could be expected to experience similar wind directions and wind speeds, although speeds at KNGZ would be slightly greater due to its greater open exposure. Influence of the buildings around Lake Merritt could lead to either greater or lesser wind speeds in the vicinity of the site than at KNGZ, depending upon the point of estimation and would be impossible to estimate without a site study. With all these factors considered, the consultant makes the judgment that the wind information for KNGZ is most representative of conditions at the site during the period in question.

Also, although long term rainfall information is available for KOAK, its average annual rainfall (as well as monthly totals and sequencing of daily rainfall amounts) would be less representative of those on the site than the totals from the National Weather Service cooperative observing point at University of California, Berkeley. Moreover, the consultant was the actual weather observer at UC Berkeley during the late 1960s and 1970s and can vouch for the accuracy of those totals. Moreover, the mean annual rainfall at UC Berkeley is roughly the same as that at the site as estimated from annual precipitation maps (around 23 inches) whereas the mean annual rainfall at KOAK is slightly less than 18 inches. With all these factors considered, the consultant makes the judgment that the rainfall information for the UC Berkeley site is most representative of conditions at the site during the period in question.

#### C. Sources of Information Used in this Report

The consultant used the following information (either included in report or as an attachment) in arriving at his opinions regarding the wind conditions at the accident site:

- Weather information at official NWS observation sites at Berkeley, and KOAK [archived and available from Western Regional Climate Center (www.wrcc.dri.edu) and the National Climatic Data Center (http://lwf.ncdc.noaa.gov/oa/ncdc.html)]
- Summarized wind information for Alameda Naval Air Station from California Air Resources Board, 1984: California Surface Wind Climatology

#### D. Qualifications of Consultant

The consultant is a Professor of Meteorology at San Francisco State University and has taught there since 1979. He holds the BA, MA and PhD degrees and also has been certified by the American Meteorological Society (AMS) by oral and written exams as competent to serve as consultant in the area of meteorology and has been awarded the status of Certified Consulting Meteorologist (CCM). The consultant's research area is in severe and unusual weather in California and he has authored many refereed publications in the meteorological literature and several technical memoranda. He has served as Co-Editor of the AMS journal *Weather and Forecasting*, as a member of the AMS Committee on Severe Local Storms, and as Chair of the Department of Geosciences at San Francisco State University. My rates for consulting are \$275 per hour of my time

with a minimum of 3 hours for expert witness testimony and 1 hour minimum plus expenses for deposition.

#### E. Interpretation of the Wind Information

#### i. Wind roses and average speed histograms

Meteorologists often array wind information not in tabular form, which is difficult to visualize, but in a circular table called a "wind rose". The wind rose is a way of portraying the frequency (usually as a percentage of the total number of observations) that the wind direction lies on one of the 16 compass points.

Each of the points in the 16-point circular display is labeled with the wind direction (as the direction from which the wind is coming). The circular rings within this circular display represent the percentage frequency that each of the shown wind directions was observed during the period of record.

For the purposes of this study, the period of record (1945-1968) is broken into seasonal quarters, as follows: (a) Winter – December, January, February; (b) Spring – March, April, May; (c) Summer – June, July, August; (d) Fall – September, October, November. The wind rose for winter, for example, would show the frequency (based upon the total number of observations during all Decembers, Januarys, and Februarys in the period 1945-1968) that the given wind direction occurred as a percentage of the total number of observations. In the case of KNGZ, observations were available for each hour of the day.

Although some wind roses have the average wind speed for each of the wind directions also shown, the consultant chose to display those on a separate histogram chart, placed directly under the corresponding wind rose.

#### ii. Summer Wind Information

Summer wind information at the site during the period can be estimated from Fig. 2(a) and 2(b), the summer wind rose and wind speed histogram for KNGZ. The dominant wind (prevailing wind) is clearly westerly. Note that the average wind speed of westerly winds is over 12 mph. Only the spring wind pattern has an average wind speed that is that great. The fact that winds are almost uniformly from a westerly quadrant during the summer is indicated by the fact that nearly 72% of all observations during the summer are either SW, WSW, W, or WNW.

This is consistent with the meteorology of the region, in which onshore (from the ocean) flow occurs nearly incessantly from the offshore Pacific High pressure area to the California Thermal Low to our east. These circulation features begin dominating the weather of the region in late Spring and continue through early Fall.

#### **Summer Composite**

% Frequency of Wind Directions

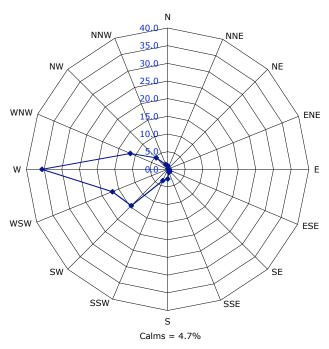


Figure 2(a): Summer Composite (June, July and August) Wind Rose. Wind direction defined as the direction from which wind is blowing (e.g., W = west wind...wind moving from west to east). Wind rose shows number of observations of a given wind direction as a percentage of the total hourly observations in 24 hours for each day of 3 month period.

Average Summer Speeds

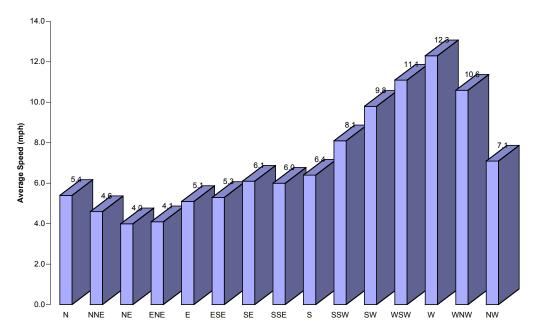


Figure 2(b): Summer Average Wind Speeds (mph) for each direction shown in Fig 2(a)

#### iii. Winter Wind Information

Winter wind information at the site during the period can be estimated from Fig. 3(a) and 3(b), the winter wind rose and wind speed histogram for KNGZ. The dominance of the westerly wind in the summer is no longer apparent. Two factors explain the double prevailing wind direction (northwest and southeast). First, the part of the pressure pattern dominated by heating/cooling effects of the continent and the oceans is reversed from summer to winter, so that high pressure lies on the continent and lower pressures offshore, particularly at night. This results in southeasterly flow.

During the day, a weak onshore pressure gradient returns as the continent warms, resulting in a tendency for northwest winds to be observed. But also, winter storms that approach the coast often have southerly or southeasterly winds ahead of them, and northwest winds behind. All these factors together account for the marked difference in the winter wind rose for the summer wind rose.

Since winter storms often have strong winds just ahead (in the southeast flow) and behind (in the northwest flow), the strongest wind speeds in Fig. 3 (b) are associated with these two wind directions.

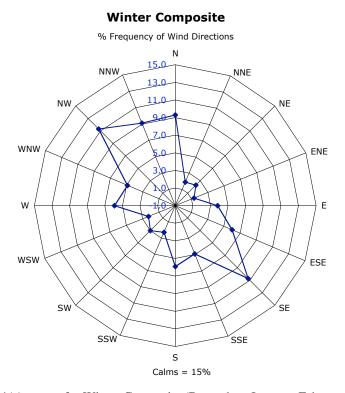


Figure 3(a): As in Fig 1(a) except for Winter Composite (December, January, February) Wind Rose.

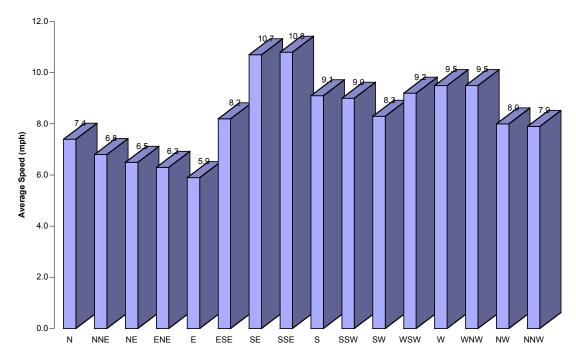


Figure 3(b): Winter Average Wind Speeds (mph) for each direction shown in Fig 3(a)

#### iii. Spring and Fall Wind Information

Spring wind information at the site during the period can be estimated from Fig. 4(a) and 4(b) and 5(a) and 5(b), the spring and fall wind roses and wind speed histogram sfor KNGZ. While cool season storm systems still bring a good frequency of southeast winds to the area early in the spring and late in the fall, the dominance of the summer pattern begins to emerge in April and May and still are persistent in September and the early part of October. This is reflected in the return to dominance of the westerly winds (in Figs. 4(a) and 5(a)) but the appearance of relatively strong speeds in the east-southeast, southeast and south-southeast directions. Another maximum in wind speeds and in direction frequency occurs in the north direction, probably due to the occasional occurrences of offshore (Diablo) winds in the late spring, and, particularly, early fall.

#### **Spring Composite**

% Frequency of Wind Directions

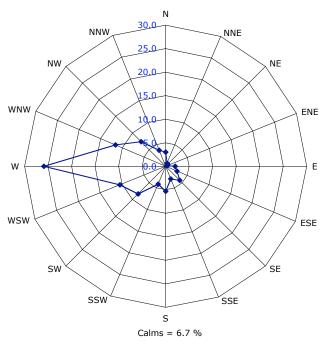


Figure 4(a): As in Fig 1(a) except for Spring Composite (March, April, May) Wind Rose.

Average Spring Speeds

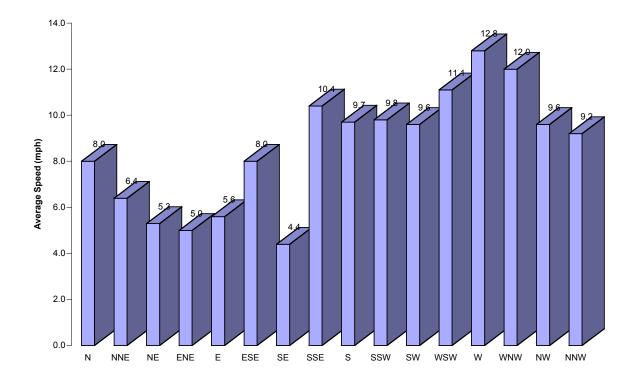


Figure 4(b): Spring Average Wind Speeds (mph) for each direction shown in Fig 4(a)

#### **Fall Composite**

% Frequency of Wind Directions

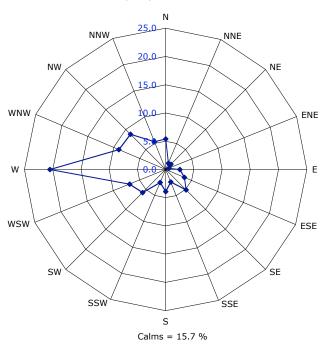


Figure 5(a): As in Fig 1(a) except for Fall Composite (September, October, November) Wind Rose.

Average Fall Speeds

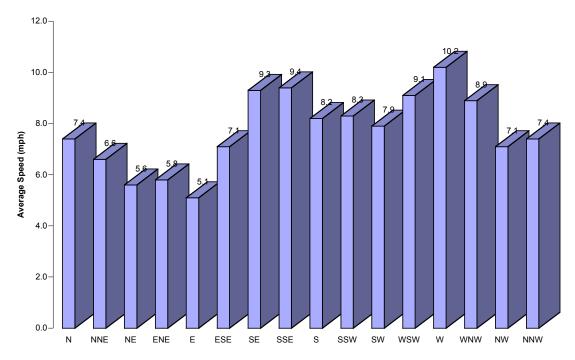


Figure 5(b): Spring Average Wind Speeds (mph) for each direction shown in Fig 5(a)

#### F. Rainfall Information

The monthly rainfall information for the site can be assumed to be similar to the rainfall for the Berkeley site, as explained above. This information is included in Table 1.

Table 1 gives the monthly rainfall for each month in the calender year for the period 1950-1970. The consultant has also included the annual total and the monthly and annual averages for this period for comparsion purposes.

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
1950	8.73	2.93	3.00	1.01	0.50	0.02	0.01	0.00	0.00	3.28	7.42	6.67	33.57
1951	5.03	2.58	1.53	1.24	0.94	0.02	0.00	0.48	0.06	1.70	4.82	9.58	27.98
1952	8.92	2.47	4.81	1.27	0.25	0.74	0.00	0.00	0.00	0.07	2.34	9.28	30.15
1953	4.70	0.00	2.80	2.91	0.53	0.34	0.00	0.08	0.00	0.49	2.16	0.71	14.72
1954	3.67	2.95	4.20	1.18	0.13	0.25	0.00	0.27	0.00	0.14	2.98	6.07	21.84
1955	5.46	1.24	0.43	1.84	0.20	0.00	0.00	0.00	0.03	0.05	2.23	15.04	26.52
1956	7.23	3.54	0.03	1.90	1.06	0.00	0.00	0.00	0.25	2.48	0.05	0.26	16.80
1957	2.81	4.06	3.34	1.65	3.56	0.06	0.00	0.00	1.64	2.94	0.52	3.78	24.36
1958	5.48	9.14	7.06	6.06	0.29	0.24	0.00	0.04	0.10	0.31	0.16	1.42	30.30
1959	4.69	4.63	0.58	0.36	0.03	0.00	0.00	0.00	2.62	0.04	0.00	1.54	14.49
1960	3.96	3.56	2.44	1.05	1.00	0.00	0.00	0.00	0.00	0.33	3.89	1.39	17.62
1961	2.73	1.38	3.14	1.11	0.76	0.00	0.00	0.12	0.36	0.12	4.50	2.45	16.67
1962	1.92	8.83	2.92	0.66	0.00	0.00	0.00	0.12	0.41	7.05	0.94	3.50	26.35
1963	4.84	3.10	3.51	5.97	0.53	0.08	0.00	0.06	0.10	1.61	3.38	0.60	23.78
1964	4.96	0.16	2.21	0.05	0.32	0.76	0.00	0.01	0.00	1.28	3.63	8.27	21.65
1965	4.53	0.88	2.10	3.79	0.00	0.00	0.02	0.18	0.00	0.17	5.77	3.56	21.00
1966	4.76	3.38	0.67	0.73	0.16	0.12	0.09	0.17	0.13	0.00	4.92	4.48	19.61
1967	10.34	0.35	5.60	5.73	0.07	1.21	0.00	0.00	0.02	0.56	1.56	2.23	27.67
1968	6.16	3.04	3.84	0.44	0.23	0.00	0.00	0.55	0.00	0.81	2.89	5.13	23.09
1969	9.22	8.76	1.44	2.46	0.00	0.03	0.00	0.00	0.00	2.12	1.43	8.47	33.93
1970	11.14	1.85	1.71	0.00	0.00	0.56	0.00	0.00	0.00	0.94	7.79	7.52	31.51
Mean	5.78	3.28	2.73	1.97	0.50	0.21	0.01	0.10	0.27	1.26	3.02	4.85	23.98

Table 1. Monthly and Annual Rainfall, 1950-1970, for Berkeley, CA (Earth Sciences Building, UCB)