



AEI Consultants

Environmental & Engineering Services

February 15, 2016

LIMITED PHASE II SUBSURFACE INVESTIGATION

Property Identification:

Carlos Street at Sierra Street
Moss Beach, San Mateo County, California 94038

AEI Project No. 350428

Prepared for:

MidPen Housing Corporation
1970 Broadway, Suite 440
Oakland, California 94612

Prepared by:

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February 15, 2016

Ms. Jennifer Liu
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MidPen Housing Corporation
1970 Broadway, Suite 440
Oakland, California 94612

Subject: Limited Phase II Subsurface Investigation
Carlos Street at Sierra Street
Moss Beach, San Mateo County, California 94038
AEI Project No. 350428

Dear Ms. Liu:

AEI Consultants (AEI) is pleased to provide this report which presents the results of the Limited Phase II Subsurface Investigation (Phase II) performed at the above referenced subject property. This investigation was completed in general accordance with the authorized scope of services outlined in our proposal dated November 19, 2015 (AEI Proposal No. 44236), as well as in accordance with the findings presented in AEI's DRAFT Phase I Environmental Site Assessment Report dated November 10, 2015. The location of the subject property is shown on Figure 1.

The purpose of this investigation is to assess whether or not subsurface conditions (i.e., soil) beneath the property have been impacted by the historical onsite operations. Information regarding the site description, background, scope of work, findings, conclusions, and recommendations for this investigation is provided in the following sections of this report.

1.0 SITE DESCRIPTION

The subject property comprises approximately 10.4 acres of vacant land, located to the north-northeast of the intersection between Carlos Street and Sierra Street in Moss Beach, an unincorporated community within San Mateo County, California. As shown on Figure 2, the property is bounded by residential properties along 16th Street (in Montara), and vacant land to the north, residential properties along Carlos, Sierra, and Stetson Streets to the south, residential properties along Lincoln and Buena Vista Street to the east, and one residential property and vacant land along Carlos Street to the west. Numerous concrete slab-on-grade building foundations, along with foundation retaining walls having scattered areas of graffiti, are present within the western and southwestern portions of the property. In some areas, these foundations are covered by thick vegetation consisting of trees and shrubs. Heavy vegetation also covers the majority of the property outside the areas of the building foundations. Unpaved roadways extend northwest-southeast across the north and central portions of the property. As shown on an Old Republic Title Company Preliminary Title Report Map dated October 8, 2015,

easements for Montara Water and Sanitary District (MWSD) and Pacific Gas and Electric (PG&E) utilities extend along the unpaved roadways within the property. MWSD infrastructure consisting of water storage tanks, a booster pumping system, and distribution facilities are located within a small, fenced-in parcel of land (known as Schoolhouse) adjacent to and west of the intersection of Lincoln Street and Buena Vista Street near the eastern boundary of the property. Another MWSD easement also extends southward from this parcel to Sierra Street, as shown on the Preliminary Title Report Map.

Topographically, the property generally slopes to the west-southwest with the exception of a steeply inclined, north-facing slope along the northern property boundary. Localized, relatively flat areas or topographic benches are present near the west and southwest boundaries of the property, as well as adjacent to Lincoln Street along the northeast corner of the property. Surface elevations at the property generally range between approximately 100 and 200 feet above mean sea level. The closest surface water body includes an unnamed, east-west trending, ephemeral drainage which parallels 16th Street to the north of the property.

Based on our review of a United States Geological Survey (USGS) Open File Report 98-137 Map entitled *Geology of the Onshore Part of San Mateo County, California* (Brabb, et.al., 1998), the subject property is situated upon a marine terrace underlain by Quaternary-aged alluvial deposits, along with thin, scattered veneers of residual soils. These units are further underlain by Montara Mountain granitic bedrock of Cenozoic age. Artificial fill consisting of soils, construction debris, wood debris, and other miscellaneous materials were scattered along the ground surface across the property.

The current estimated depth to groundwater beneath the property is unknown; however, well yield report information associated with a water supply well installed on the property in 1986 showed a static water level of 168 feet below ground surface (bgs). Based on the local site topography, the direction of groundwater flow is inferred to generally flow to the west-southwest, but also is inferred to flow to the north into the drainage adjacent to 16th Street.

2.0 BACKGROUND

As described in AEI's Phase I ESA report, historical sources indicated that the subject property was part of a large World War II training area circa 1945. Numerous military buildings had been present on the subject property, as shown on a drawing entitled *Map of Anti-Aircraft Training Center, Point Montara, California, Twelfth Naval District, Showing Conditions on June 30, 1945*, which was presented in Appendix F of AEI's Phase I ESA report. These buildings included barracks, offices, a mess hall, a library, a garage, a boiler room, an incinerator, a "TDD hanger", and a "drill field". After the war was over, the mess hall building was converted into a grammar school, and was later abandoned after a new school site was built (date unknown). By the late 1960s, the property was used as a training ground for firefighters. During firefighter training, AEI assumed that accelerants, such as those containing gasoline, may have been used along concrete pad surfaces. Burned materials from the firefighter training may have been washed off the pads and into unpaved, surrounding areas. Between approximately 1968 and 1970, a controlled burn occurred, which resulted in the burning of the several remaining buildings, leaving only exposed concrete foundations. Since at least 1970, the property has been vacant with the exception of the scattered, older building foundations, as well as the

fenced area containing MWSD infrastructure to support current water storage and distribution operations.

Recognized environmental conditions (RECs) were identified during AEI's Phase I ESA. These included the potential presence of lead-based paint in soils surrounding the building foundations, the "drill field", which may have been used for weaponry or as a shooting range, concrete pad areas potentially used for firefighter training, and an incinerator. In addition, during the planning stages of this Phase II, a boiler room was noted and identified as a REC to be further investigated. Other environmental considerations included two (2) domestic water supply wells that were reportedly no longer in use. Prior to this investigation, the locations of these wells were unknown. It was also unknown if the wells were properly abandoned in accordance with local County regulations.

3.0 INVESTIGATION EFFORTS

The scope of work for this investigation focused on assessing the presence or absence of impacted subsurface conditions (i.e., soil) relative to the former historical operations. AEI's investigation efforts included a site reconnaissance and utility clearance to locate the water supply wells and to check for the presence of underground utilities around planned drilling locations, a drilling/soil sampling program, and laboratory analyses.

3.1 Pre-Field Activities

3.1.1 Health and Safety Plan

A site-specific health and safety plan was prepared, reviewed by onsite personnel, and kept onsite for the duration of the fieldwork.

3.1.2 Permitting and Utility Clearance

Based on the scope of work including only shallow soil sample collection, no drilling permit was required from San Mateo County Environmental Health Services (SMCEHS) for this investigation.

On December 17, 2015, the property was reconnoitered by AEI to attempt to locate the former water supply wells. In addition, planned boring locations were staked and marked with white paint. Upon marking the boring locations, Underground Services Alert (USA) North was contacted, who, in turn, notified subscribing utility companies in order for their underground utility locations to be marked along property boundaries and around planned boring locations.

On December 21, 2015, a limited geophysical survey and utility clearance was performed by Foresite Engineering Surveys (Foresite) of Pleasant Hill, California under subcontract to AEI. The geophysical survey was performed to support site reconnaissance efforts in locating the water supply wells. The utility clearance was performed to check for the presence of underground utilities around planned boring locations and to shift boring locations, as appropriate.

3.1.3 Review of Water Supply Well Information

During December 2015 and January 2016, SMCEHS was contacted on numerous occasions to gather more information about the former water supply wells at the subject property. To date, no

information regarding these wells has been provided by SMCEHS other than the information provided during AEI's Phase I ESA. However, one (1) of the wells appears to have been located during the investigation, as further discussed in Section 4.1.

3.2 Field Activities

3.2.1 Exploratory Borings

The drilling program for this investigation was conducted on December 22 and 23, 2015. Thirty-three exploratory borings (B-1 and B-3 through B-34) were advanced to depths between 2.0 and 9.5 feet bgs. Of these total borings, twenty-seven (27) borings were advanced to the 2.0-foot depth for the collection of soil samples at the 0.0- and 1.5-foot depths. These locations included Boring B-1, which was advanced around the former incinerator area, and Borings B-4 through B-11, B-14, B-16, and B-18 through B-34, which were advanced to the 2.0-foot depth around former concrete foundation areas and "drill field" area. The other five (5) borings were advanced to depths between 5.5 and 9.5 feet bgs with soil samples for laboratory analyses obtained at depths between 2.0 and 7.0 feet bgs. These locations included Boring B-3, which was advanced along the west side of the concrete foundation for the former boiler room, and Borings B-12, B-13, B-15, and B-17, which were advanced to the 9.5-foot depth around the former locations of concrete pads suspected of using accelerants during firefighter training. Four attempts were made to advance Boring B-2; however, this location was abandoned due to drilling refusal encountered just below the ground surface at each attempted location. The locations of these borings are shown on Figure 3.

The borings were drilled by a State of California C-57 licensed company, Environmental Control Associates, Inc. (ECA) of Aptos, California, under subcontract to AEI. Because of difficult, heavily-vegetated, soft terrain caused by recent rainy weather, the borings were advanced with a track-mounted drilling rig equipped with direct push technology. Upon completion of drilling, the borings were backfilled with soil cuttings generated during the drilling program.

The borings were continuously sampled throughout their entire depths for the purposes of lithologic logging, field screening (headspace testing), and selection of samples for laboratory analyses. Soil samples were obtained using a single-walled coring system approximately 2.25 inches in diameter and 4 feet in length containing plastic liners. The coring system was connected to 1-inch diameter, flush-jointed drill rod that was hydraulically driven (pushed) by the rig to each target sample depth. Upon retrieval from each sample depth interval, the coring system was opened, and the liners were removed and cut for preparing samples for laboratory analyses, as well as for visual inspection and lithologic logging purposes. Recovered soil samples were examined for soil classification and described on detailed boring logs in general conformance with the Unified Soil Classification System (USCS). Headspace tests were performed with a photo-ionization detector (PID) used for detecting the presence of volatile organic compounds (VOCs) in the soil samples. Headspace tests only were conducted in soil samples obtained from Borings B-3, B-12, B-13, B-15, and B-17, which were advanced around the former locations of concrete pads used for firefighter training and the former boiler room. The boring logs are presented in Appendix A.

Soil samples selected for laboratory analyses were sealed, labeled, and entered onto chain of custody documentation for transportation to a California state-certified laboratory for analyses.

Upon collection, the ends of the plastic tubes were covered with Teflon tape and capped. The samples were labeled with the project name, project number, boring number, sample depth, and sampling date/time of sampling. After labeling, the samples were placed into a chilled ice chest for transport to the analytical laboratory.

3.3.2 Headspace Testing

Headspace testing was performed during drilling activities with a photo-ionization detector (PID) for detecting the presence of VOCs in recovered soil samples. Headspace testing was generally performed at every 2-foot interval of the recovered sample cores from Borings B-3, B-12, B-13, B-15, and B-17. To initiate the headspace testing procedure, soil samples were removed from the liners, placed into labeled, plastic bags, and sealed for conducting the tests. After sufficient time elapsed for vapor build-up inside the bags, the bags were punctured with the probe tip of the PID to allow for measurement of the headspace. Measurements of the headspace were obtained in the parts per million (ppm) range for total VOCs. During this investigation, none of the headspace test measurements exceeded ambient air background concentrations, which were generally measured at 0.0 ppm.

3.3.3 Decontamination and Investigation-Derived Wastes

Drilling and sampling equipment were cleaned prior to and after drilling each boring. The equipment also was cleaned between core intervals using a triple rinse method. The initial rinse consisted of an Alconox and water solution, followed by two (2) tap water rinses (second and final rinses). No investigation-derived wastes were generated during this investigation.

3.4 Laboratory Analyses

Soil samples were submitted McCampbell Analytical, Inc. of Pittsburg, California for laboratory analyses. Additional samples also were submitted to the analytical laboratory and initially placed on hold. Additional laboratory analyses for lead were run on soil samples obtained from the 1.5-foot depth at Borings B-7, B-20, and B-21 on the basis of the initial analytical results.

The types and numbers of soil analyses included the following:

- Lead by United States Environmental Protection Agency (EPA) Method 6010.....27 samples
- Volatile Organic Compounds (VOCs) by EPA Method 8260B.....5 samples
- Total Petroleum Hydrocarbons as gasoline (TPH-g) by EPA Method 8015M.....5 samples
- TPH as diesel (TPH-d) and motor oil (TPH-mo) by EPA Method 8015M.....2 samples
- Polychlorinated Biphenyls (PCBs) by EPA Method SW8082 1 sample
- Dioxans and Furans by EPA Method 1613 1 sample
- California Assessment Manual (CAM) 17 Metals by EPA Method 6010..... 1 sample

The samples were analyzed over a standard turnaround time (TAT) except for the additional soil samples, which were analyzed over a 1-day TAT. Chain-of-custody documentation and certified analytical reports are provided in Appendix B.

4.0 FINDINGS

4.1 Water Supply Wells

During AEI's Phase I ESA, it was found that two (2) former domestic water supply wells were located on the property. To gather more information about these wells, AEI attempted to contact SMCEHS; however, no additional information regarding these wells has been provided to date.

Based upon our review of preliminary information appended to AEI's Phase I ESA report, it was noted that at least one (1) domestic well permit (Permit No. W-43-86) was issued to California School Employee Association by San Mateo County Department of Public Health & Welfare on May 28, 1986. On June 18, 1986, a well yield test was performed, which included the well depth, standing and static water levels, and time versus drawdown testing over an approximate 5-hour period of time. As shown on a Well Yield Report Information form dated June 19, 1986, the owner was identified as Farrallon Vista Association under Permit No. DRW #149554. The total depth of the well is 400 feet. Static and standing water levels were measured at depths of 168 and 35 feet bgs, respectively. No information was provided regarding the well construction details other than the recorded well depth. On July 9, 1986, water quality testing for bacteriology and chemistry purposes had been performed at this well. As described under some telephone notes dated December 19, 1990, shown on a County Septic and Well Check-Off List, it was stated that the two (2) wells were installed under one permit and that both wells "would be repaired so that the aquifers were adequately protected." In addition, on this same Check-Off List, it was stated that the "upper well has been sealed by welded steel; lower well has been sealed flush with pad with bolted steel plate."

On the basis of the information provided to date, it appears that information for only one (1) well and its approximate location, instead of two (2) wells, was shown on the well construction application. The locations of the well shown on the application appeared to be the "upper well". No information on the location of the lower well was shown on the application.

During the site reconnaissance, it is believed that the location of the "upper well" was found. It is located upslope and to the east of Boring B-1, as shown on Figure 3. The surface completion for this well consists of a rectangular-shaped concrete pad which surrounds rusted, welded steel cover. The lower well was not located during the site reconnaissance. It is unknown if either of these wells were properly abandoned (i.e., backfilled with a new cement grout using tremie methods) in accordance with local regulations.

4.2 Subsurface Conditions

The results from the drilling program show that the subject property is underlain by alluvial and residual soils primarily consisting of sandy clays and clayey sands to the depths explored. No groundwater was encountered during drilling operation. No visual or olfactory evidence (i.e., soil discoloration, odor) of impacted soils was observed in any of the recovered soil cores during drilling operations. No PID readings above background levels above 0.0 ppm were measured during headspace testing.

4.3 Soil Analytical Results

Soil analytical results are presented on Table 1. Chain-of-custody documentation and certified analytical reports are provided in Appendix B.

Analytical results for soil obtained during this investigation are as follows:

- Lead was detected at concentrations between 4.5 and 230 milligrams per kilogram (mg/kg) in surface soils at each of the borings advanced around the concrete foundation and "drill field" areas.
- No TPH-g or VOCs were detected at concentrations at or above the laboratory reporting limits in any of the soil samples obtained from borings advanced around concrete pad areas used for firefighting purposes.
- TPH-d was detected at a concentration of 1.3 mg/kg at the 2.0-foot depth in Boring B-3, located around the former boiler room. No TPH-d was detected at a concentration at or above the laboratory reporting limit at the 5.0-foot depth in Boring B-3. No TPH-mo was detected at concentrations at or above the laboratory reporting limits in Boring B-3.
- Metals, including arsenic, barium, chromium, cobalt, copper, molybdenum, nickel, vanadium, and zinc, were detected at concentrations between 1.0 and 44 mg/kg at the 1.5-foot depth in Boring B-1, which is located around the former incinerator. No other metals were detected at concentrations at or above the laboratory reporting limits at that location.
- Total hexafurans were detected at a concentration of 2.78 picograms per gram (which is equivalent to 2.78×10^{-6} mg/kg) at the 1.5-foot depth in Boring B-1. No other dioxins/furans were detected at concentrations at or above the laboratory reporting limits.
- No PCBs were detected at concentrations at or above the laboratory reporting limits in any of the soil sample obtained from the one boring advanced around the area of the former incinerator.

For the purpose of providing context to the data obtained during this investigation, analytical results for soil were compared to established regulatory screening levels, including California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region, Environmental Screening Levels (RWQCB ESLs) for residential land use for shallow soils (less than approximately 10 feet deep) assuming groundwater is a current or potential drinking water resource and USEPA Regional Screening Levels (RSLs) for resident soils. Of the chemical constituents analyzed, lead was found to exceed its RWQCB ESL within surface soils (0.0-foot depth) only at two (2) locations (Borings B-7 and B-21) adjacent to concrete foundation area. Subsequent analytical results for soils at the 1.5-foot depths at Borings B-7 and B-21 showed lead concentrations at one to two orders of magnitude below the RWQCB ESL. Arsenic was detected at a concentration slightly above its RWQCB ESL and USEPA RSL at the 1.5-foot depth in Boring B-1, located around the former incinerator area.

In summary, none of the detected chemical constituents in soil, including TPH-d and other metals, were found to exceed their respective RWQCB ESLs and USEPA RSLs. With respect to the low concentration of the total hexafurans, no regulatory screening levels are established for this constituent.

5.0 CONCLUSIONS AND RECOMMENDATIONS

AEI has completed a Phase II investigation at the subject property. The purpose of the Phase II at the subject property was to assess whether release(s) have occurred into the subsurface relative to the environmental concerns identified at the subject property. Thirty-three (33) exploratory soil borings were advanced the collection and analyses of soil samples during this investigation. Select samples were analyzed for one or more of the following: Lead, TPHs, VOCs, PCBs, CAM Metals, and Dioxins/Furans.

Detected concentrations of the various chemical constituents in soil were compared with their respective RWQCB ESLs and USEPA RSLs for those regulatory screening levels already established. None of the detected chemical constituents were found to exceed their respective RWQCB ESLs and USEPA RSLs except for lead detected within surface soils at two locations and arsenic detected at the 1.5-foot depth at one location. Additional laboratory analyses were run on soil samples obtained from the 1.5-foot depth to assess the vertical extent of lead-impacted soils at these two locations. Analytical results for the soil samples at the 1.5-foot depth showed lead concentrations below the RWQCB ESL and USEPA RSL. With respect to the presence of arsenic at the one location, its detected concentration is representative of naturally-occurring background conditions, which is within the range of arsenic concentrations found in soils within the San Francisco Bay Area (Bradford, et.al.).

Analytical results generated during this investigation suggest that the lead detected in soils may have originated from lead-based paint on former building exteriors. Furthermore, analytical results also suggest that lead concentrations, where elevated, are localized and appear to be restricted to surface soils at the two (2) identified locations. The vertical extent of lead-impacted soils at these two locations has been delineated on the basis of the lead concentrations not exceeding their RWQCB ESLs. The horizontal extent of lead-impacted soils at these two locations is undefined.

On the basis of the information, presented above, AEI recommends that a limited soil sampling program be performed to further assess the horizontal extent of lead-impacted surface soils around the two identified locations. AEI also recommends that the steel cover for the "upper well" be removed an experienced water well driller under subcontract to AEI to measure the well depth, as well as whether the well has been properly abandoned in accordance with County regulations.

6.0 REFERENCES

AEI Consultants, 2015, *Phase I Environmental Site Assessment, Carlos Street at Sierra Street, Moss Beach, San Mateo County, California 94038*, report prepared for MidPen Housing Corporation dated November 10, 2015.

Brabb, E.E., Graymer, R.W., and Jones, D.L., 1998, *Geology of the Onshore Part of San Mateo County, California: A digital database*, USGS Open-File Report 98-137

Bradford, G.R., Chang, A.C., Page, A.L., Bakhtar, D., Frampton, J.A., and Wright, H., 1996, *Background Concentrations of Trace and Major Elements in California Soils*, Kearney Foundation Special Report, Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California Riverside (UCR), dated March 1996.

California Regional Water Quality Control Board, San Francisco Bay Region, 2013, *User's Guide: Derivation and Application of Environmental Screening Levels and Detailed Lookup Tables*, Interim Final 2013.

Pampeyan, E.H., 1994, *Geologic Map of the Montara Mountain and San Mateo 7-1/2' Quadrangles, San Mateo County, California*, USGS Map I-2390.

7.0 REPORT LIMITATIONS AND RELIANCE

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, subject to scope of work for which AEI was retained and limitations inherent in this type of work, but it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the subject property. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation.

Any conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work. No other warranty, either expressed or implied, has been made.

This investigation was prepared for the sole use and benefit of MidPen Housing Corporation. All reports, both verbal and written, whether in draft or final, are for the benefit of Seagate Properties, Inc. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's Proposal and Standard Terms & Conditions executed by MidPen Housing Corporation. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

If there are any questions regarding our investigation, please do not hesitate to contact AEI at (408) 559-7600.

Sincerely,
AEI Consultants



Timothy G. Bodkin, PG (4706), CEG (EG-1551)
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Peter McIntyre, PG
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FIGURES



Site Location



Figure 1: TOPOGRAPHIC MAP
Carlos Street at Sierra Street, Moss Beach, California, 94038
Project Number: 350428





APPROXIMATE SCALE: 1" = 200'

Legend

- Estimated Groundwater Flow Direction
- Approximate Property Boundary
- Approximate Water Tank Parcel

- Water Well Location
- Approximate Drill Field Boundary
- Approximate Building Boundary
- Approximate Incinerator Location



Figure 2: SITE MAP

Carlos Street at Sierra Street, Moss Beach, California, 94038
 Project Number: 350428





APPROXIMATE SCALE: 1" = 200'

Legend

- Estimated Groundwater Flow Direction
- Approximate Property Boundary
- Approximate Water Tank Parcel

- Water Well Location
- Boring Location
- Approximate Drill Field Boundary
- Approximate Building Boundary
- Approximate Incinerator Location

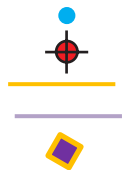


Figure 3: BORING LOCATION MAP

Carlos Street at Sierra Street, Moss Beach, California, 94038
Project Number: 350428



TABLES

TABLE 1: SOIL SAMPLE DATA SUMMARY
Carlos Street at Sierra Street, Moss Beach, CA

Location ID	Date	Depth (feet bgs)	Lead (mg/kg)	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	VOCs (mg/kg)	PCBs (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	Remaining Metals (mg/kg)	Total Hexafurans (mg/kg)	Other Dioxins/Furans (mg/kg)
B-1-1.5	12/22/2015	1.5	4.5	--	--	--	--	<MRL	2.3	44	15	3.9	2.2	1.0	13	36	29	<MRL	2.78 x 10 ⁻⁹	--
B-3-2.0	12/23/2015	2	--	--	1.3	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-3-5.0	12/23/2015	5	--	--	<1.0	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-4-0.0	12/23/2015	0	29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5-0.0	12/23/2015	0	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-6-0.0	12/23/2015	0	8.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7-0.0	12/23/2015	0	230	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-7-1.5	12/23/2015	1.5	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-8-0.0	12/23/2015	0	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-9-0.0	12/22/2015	0	6.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-10-0.0	12/22/2015	0	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-11-0.0	12/22/2015	0	6.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-12-5.0	12/23/2015	5	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-13-6.0	12/23/2015	6	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-14-2.0	12/23/2015	2	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-15-0.0	12/22/2015	0	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-15-7.0	12/23/2015	7	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-16-0.0	12/22/2015	0	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-17-4.0	12/22/2015	4	--	<1.0	--	--	<MRL	--	--	--	--	--	--	--	--	--	--	--	--	--
B-18-0.0	12/22/2015	0	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-19-0.0	12/22/2015	0	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-20-0.0	12/22/2015	0	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-20-1.5	12/22/2015	1.5	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21-0.0	12/22/2015	0	88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-21-1.5	12/22/2015	1.5	8.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-22-0.0	12/22/2015	0	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-23-0.0	12/22/2015	0	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-24-0.0	12/22/2015	0	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-25-0.0	12/22/2015	0	8.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-26-0.0	12/22/2015	0	7.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-27-0.0	12/22/2015	0	6.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-28-0.0	12/22/2015	0	9.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-29-0.0	12/22/2015	0	8.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-30-0.0	12/22/2015	0	9.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-31-0.0	12/22/2015	0	7.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-32-0.0	12/22/2015	0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-33-0.0	12/22/2015	0	39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-34-0.0	12/22/2015	0	34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Regulatory Screening Levels

RWQCB ESL _{residential}	80	100	100	100	100	varies	varies	0.39	750	750	23	230	40	150	200	600	N/A	N/A	N/A
USEPA RSL _{residential}	400	82 - 520	96 - 110	2500 - 230000	varies	varies	0.68	15,000	120,000	23	3,100	390	NE	390	23,000	N/A	N/A	N/A	

Notes:

- mg/kg milligrams per kilogram
- <MRL less than the method reporting limit
- bgs below ground surface
- TPH-g Total Petroleum Hydrocarbons as Gasoline
- TPH-d Total Petroleum hydrocarbons as Diesel
- VOCs Volatile Organic Compounds
- PCBs Polychlorinated biphenyls
- Bold** Result exceeds applicable Comparison Value
- Not analyzed
- N/A Not applicable
- NE Not established

Regulatory Screening Levels:

RWQCB ESL_{residential}: California Regional Water Quality Control Board Environmental Screening Level for residential land use for shallow soils (<3 meters bgs) assuming groundwater is a current or potential drinking water resource RWQCB, 2013, Table A-1).
 USEPA RSL_{residential}: United States Environmental Protection Agency (USEPA) Regional Screening Level for resident soil (USEPA, June 2015 revised)

APPENDIX A
BORING LOGS



AEI Consultants

CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/22/15 **COMPLETED** 12/22/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

AEI BORING - GINT STD US LAB.GDT - 1/19/16 08:11 - P:\COMPANYWIDE PROJECTS\350000 SERIES\350428 MOSS BEACH, CA\SMBORING LOGS\MOSS BEACH LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	B-1-0.0			1.0	YELLOW BROWN (10 YR 5/6) SILTY CLAY (CL) , soft, moist, no odor.	
	B-1-1.5			2.0	BROWNISH YELLOW (10YR 6/6) GRAVELLY CLAY (CL), medium stiff, moist, no odor.	
Bottom of boring at 2.0 feet.						



AEI Consultants

CLIENT MidPen Housing **PROJECT NAME** Carlos at Sierra Streets

PROJECT NUMBER 350428 **PROJECT LOCATION** Moss Beach, California

DATE STARTED 12/23/15 **COMPLETED** 12/23/15 **GROUND ELEVATION** _____ **HOLE SIZE** 2.25 inches

DRILLING CONTRACTOR Environmental Control Associates, Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Hand Auger **AT TIME OF DRILLING** ---

LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin **AT END OF DRILLING** ---

NOTES _____ **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
---------------	-----------------------	----------------	----------------	----------------	----------------------	------------

0.0 Hand auger refusal at ground surface (driller attempted hand augering at four locations)

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CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/23/15 **COMPLETED** 12/23/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

AEI BORING - GINT STD US LAB.GDT - 2/2/16 09:33 - P:\COMPANYWIDE PROJECTS\3500000 SERIES\350428 MOSS BEACH, CA\SMBORING LOGS\MOSS BEACH LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	B-3-0.0					
	B-3-1.5					
5						
	B-3-5.0					



1.0 VERY DARK BROWN (10YR 2/2) SILTY CLAY (CL), soft, moist, no odor.
 1.0 - 5.5 VERY DARK BROWN (10YR 2/2) CLAYEY SAND (SC), medium dense, moist, no odor.
 5.5

Bottom of boring at 5.5 feet.



AEI Consultants

CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/23/15</u> COMPLETED <u>12/23/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

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DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	B-4-0.0			1.0	YELLOWISH BROWN (10 YR 5/6) GRAVELLY CLAY (CL), medium stiff, moist, no odor, some fine gravel.	
	B-4-1.5			2.0	DARK BROWN (10YR 3/3/) SILTY CLAY (CL), soft, moist, no odor.	
Bottom of boring at 2.0 feet.						



AEI Consultants

CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/23/15 **COMPLETED** 12/23/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

AEI BORING - GINT STD US LAB.GDT - 2/2/16 09:33 - P:\COMPANYWIDE PROJECTS\3500000 SERIES\350428 MOSS BEACH, CA\SMBORING LOGS\MOSS BEACH LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	B-3-0.0				1.0 VERY DARK BROWN (10YR 2/2) SILTY CLAY (CL), soft, moist, no odor.	
	B-3-1.5				VERY DARK BROWN (10YR 2/2) CLAYEY SAND (SC), medium dense, moist, no odor.	
5						
	B-3-5.0				5.5	

Bottom of boring at 5.5 feet.



AEI Consultants

CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/23/15 **COMPLETED** 12/23/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

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DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	B-5-0.0			1.0	DARK BROWN (10YR 3/3) SILTY CLAY (CL), soft to medium stiff, moist, no odor.	
	B-5-1.5			2.0	YELLOWISH BROWN (10YR 5/6) SANDY CLAY (CL), medium stiff, moist, no odor, with fine to coarse sand. Bottom of boring at 2.0 feet.	



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CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/23/15</u> COMPLETED <u>12/23/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	B-6-0.0			/	DARK BROWN (10YR 3/3) SANDY SILTY CLAY (CL), soft to medium stiff, moist, no odor, trace of fine sand.	
	B-6-1.5			2.0		

Bottom of boring at 2.0 feet.

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AEI Consultants

Environmental & Engineering Services

CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/23/15</u> COMPLETED <u>12/23/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-7-0.0				YELLOWISH BROWN (10YR 5/6) SANDY CLAY (CL), medium stiff, moist, no odor.	
	⊗ B-7-1.5					
Bottom of boring at 2.0 feet.						

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AEI Consultants

CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/23/15 **COMPLETED** 12/23/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

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DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-8-0.0			1.0	DARK BROWN (10YR 4/3) SANDY CLAY (CL), medium stiff, moist, no odor.	
	⊗ B-8-1.5			2.0	YELLOWISH BROWN (10YR 5/6) SANDY CLAY (CL), medium stiff, moist, no odor.	
Bottom of boring at 2.0 feet.						



AEI Consultants

CLIENT MidPen Housing **PROJECT NAME** Carlos at Sierra Streets
PROJECT NUMBER 350428 **PROJECT LOCATION** Moss Beach, California
DATE STARTED 12/22/15 **COMPLETED** 12/22/15 **GROUND ELEVATION** _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc. **GROUND WATER LEVELS:**
DRILLING METHOD Direct Push **AT TIME OF DRILLING** ---
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin **AT END OF DRILLING** ---
NOTES _____ **AFTER DRILLING** --- No groundwater encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-9-0.0				DARK BROWN (10YR 3/3) SANDY CLAY (CL), medium stiff, moist, no odor.	
	⊗ B-9-1.5					
Bottom of boring at 2.0 feet.						

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CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-10-0.0			▨	DARK BROWN (7.5YR 3/2) CLAYEY SAND (SC), loose to medium dense, moist, no odor.	
	⊗ B-10-1.5			▨ 2.0		

Bottom of boring at 2.0 feet.

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Environmental & Engineering Services

CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	B-11-0.0			2.0	DARK BROWN (7.5YR 3/2) SANDY CLAY (CL) and CLAYEY SAND (SC), soft, moist, no odor.	
	B-11-1.5					

Bottom of boring at 2.0 feet.

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AEI Consultants

CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/22/15 **COMPLETED** 12/22/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

AEI BORING - GINT STD US LAB.GDT - 1/19/16 08:12 - P:\COMPANYWIDE PROJECTS\350000 SERIES\350428 MOSS BEACH, CA\BORING LOGS\MOSS BEACH LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-12-0.0			3.0 8.0 9.5	DARK BROWN (7.5YR 4/3) CLAYEY SAND (SC), loose, moist, no odor.	
	⊗ B-12-1.5				STRONG BROWN (7.5YR 5/6) SANDY CLAY (CL), soft to medium stiff, moist, no odor.	
5	⊗ B-12-5.0					
	⊗ B-12-9.0				STRONG BROWN (7.5YR 5/6) CLAYEY SAND (SC), medium dense, moist, no odor.	

Bottom of boring at 9.5 feet.



AEI Consultants

CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/23/15 **COMPLETED** 12/23/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

AEI BORING - GINT STD US LAB.GDT - 1/19/16 08:12 - P:\COMPANYWIDE PROJECTS\350000 SERIES\350428 MOSS BEACH, CA\BORING LOGS\MOSS BEACH LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
3.0	B-13-3.0			[Hatched Box]	STRONG BROWN (7.5YR 5/6) CLAYEY SAND (SC), medium dense, moist, no odor.	
6.0	B-13-6.0					
9.0	B-13-9.0			9.5		

Bottom of boring at 9.5 feet.



AEI Consultants

CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/23/15</u> COMPLETED <u>12/23/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-14-2.0			2.0	DARK BROWN (7.5YR 3/3) CLAYEY SILTY SAND (SM), loose, moist, no odor. Drilling refusal encountered at 2 feet.	

Bottom of boring at 2.0 feet.

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AEI Consultants

CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/23/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING ---
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING ---
NOTES _____	AFTER DRILLING --- No groundwater encountered

AEI BORING - GINT STD US LAB.GDT - 1/19/16 08:13 - P:\COMPANYWIDE PROJECTS\350000 SERIES\350428 MOSS BEACH, CA\BORING LOGS\MOSS BEACH LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-15-0.0			5.0	DARK BROWN (7.5YR 3/3/) SANDY CLAY (CL), medium stiff, moist, no odor. Color changes to STRONG BROWN at 1.0 feet.	
	⊗ B-15-1.5					
5	⊗ B-15-4.0				STRONG BROWN GRAVELLY CLAYEY SAND (SC), medium dense, moist, no odor, with occasional pockets of sandy clay.	
	⊗ B-15-9.0					

Bottom of boring at 9.5 feet.



AEI Consultants

CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-16-0.0				DARK BROWN (7.5YR 3/4) CLAYEY SAND (SC), medium dense, moist, no odor.	
	⊗ B-16-1.5					
Bottom of boring at 2.0 feet.						

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AEI Consultants

CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/22/15 **COMPLETED** 12/22/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

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DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
5	B-17-4.0			4.5	DARK BROWN (7.5YR 4/3) SANDY CLAY (CL), medium stiff, moist, no odor.	
	B-17-8.0			9.5	STRONG BROWN GRAVELLY CLAYEY SAND (SC), medium dense, moist, no odor, some fine to coarse gravel.	

Bottom of boring at 9.5 feet.



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PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-18-0.0				DARK BROWN (10YR 3/3) SILTY CLAY (CL), soft to medium stiff, moist, no odor.	
	<input checked="" type="checkbox"/> B-18-1.5					
				2.0		

Bottom of boring at 2.0 feet.

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AEI Consultants

CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	☒ B-19-0.0				DARK BROWN (10YR 3/3/) SANDY SILTY CLAY (CL), medium stiff, moist, no odor. grades to CLAYEY SAND at 1.8 feet.	
	☒ B-19-1.5					
Bottom of boring at 2.0 feet.						

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AEI Consultants

CLIENT MidPen Housing **PROJECT NAME** Carlos at Sierra Streets
PROJECT NUMBER 350428 **PROJECT LOCATION** Moss Beach, California
DATE STARTED 12/22/15 **COMPLETED** 12/22/15 **GROUND ELEVATION** _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc. **GROUND WATER LEVELS:**
DRILLING METHOD Direct Push **AT TIME OF DRILLING** ---
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin **AT END OF DRILLING** ---
NOTES _____ **AFTER DRILLING** --- No groundwater encountered

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DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-20-0.0			1.0	DARK BROWN (10YR 3/3) CLAYEY SAND (SC), medium dense, moist, no odor.	
	⊗ B-20-1.5			2.0	STRONG BROWN (7.5YR 5/6) SANDY CLAY (CL), medium stiff, moist.	
Bottom of boring at 2.0 feet.						



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CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/22/15 **COMPLETED** 12/22/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

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DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-21-0.0				DARK BROWN (7.5 3/4) SANDY SILTY CLAY (CL), medium stiff, moist, no odor. Color changes to STRONG BROWN (7.5YR 5/6) with increased sand content below 1.5 feet.	
	<input checked="" type="checkbox"/> B-21-1.5					
Bottom of boring at 2.0 feet.						



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PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-22-0.0			1.0	DARK BROWN (7.5YR 3/6) SILTY CLAY (CL), medium stiff, moist, no odor.	
	⊗ B-22-1.5			2.0	STRONG BROWN (7.5YR 5/6) SANDY CLAY (CL), medium stiff, moist, no odor.	
Bottom of boring at 2.0 feet.						

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AEI Consultants

CLIENT MidPen Housing **PROJECT NAME** Carlos at Sierra Streets
PROJECT NUMBER 350428 **PROJECT LOCATION** Moss Beach, California
DATE STARTED 12/22/15 **COMPLETED** 12/22/15 **GROUND ELEVATION** _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc. **GROUND WATER LEVELS:**
DRILLING METHOD Direct Push **AT TIME OF DRILLING** ---
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin **AT END OF DRILLING** ---
NOTES _____ **AFTER DRILLING** --- No groundwater encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-23-0.0				DARK BROWN (7.5 3/3) CLAYEY SAND (SC), loose to medium dense, moist, no odor, with STRONG BROWN mottling below 1.5 feet.	
	<input checked="" type="checkbox"/> B-23-1.5					

2.0

Bottom of boring at 2.0 feet.

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CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-24-0.0				DARK BROWN (7.5YR 3/3) SILTY CLAY (CL), soft to medium stiff, moist, no odor. Trace fine sand, color changed to BROWN (7.5YR 5/4), increased sand content.	
	<input checked="" type="checkbox"/> B-24-1.5					

Bottom of boring at 2.0 feet.

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CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
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DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-25-0.0				DARK BROWN (7.5YR 3/4) SILTY CLAY (CL), medium stiff, moist, no odor, trace fine sand.	
	<input checked="" type="checkbox"/> B-25-1.5					
Bottom of boring at 2.0 feet.						

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PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-26-0.0				DARK BROWN (7.5YR 3/4) CLAYEY SAND (SC), medium dense, moist, no odor. increased sand content with depth.	
	⊗ B-26-1.5			2.0		

Bottom of boring at 2.0 feet.

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CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-27-0.0				DARK BROWN (7.5YR 4/3) CLAYEY SAND (SC), loose to medium dense, moist, no odor, with fine to coarse sand.	
	⊗ B-27-1.5					

2.0

Bottom of boring at 2.0 feet.

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CLIENT MidPen Housing
PROJECT NUMBER 350428
DATE STARTED 12/22/15 **COMPLETED** 12/22/15
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin
NOTES _____

PROJECT NAME Carlos at Sierra Streets
PROJECT LOCATION Moss Beach, California
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
AFTER DRILLING --- No groundwater encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-28-0.0				STRONG BROWN (7.5 5/6) to DARK BROWN (7.5 4/4) CLAYEY SILTY SAND (SM), medium dense, moist, no odor.	
	<input checked="" type="checkbox"/> B-28-1.5			2.0		

Bottom of boring at 2.0 feet.

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AEI Consultants

CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-29-0.0				DARK BROWN (7.5YR 4/4) to STRONG BROWN (7.5YR 5/6) SILTY SAND (SM), medium dense, moist, no odor, fine to coarse sand.	
	<input checked="" type="checkbox"/> B-29-1.5			2.0		

Bottom of boring at 2.0 feet.

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CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-3-0.0				DARK BROWN (7.5YR 4/4) SANDY SILTY CLAY (CL), medium stiff, moist, no odor, at 1 foot, color change to STRONG BROWN (7.5YR 5/6), becomes stiff with increased sand content.	
	⊗ B-30-1.5					
Bottom of boring at 2.0 feet.						

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Environmental & Engineering Services

CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-31-0.0				DARK BROWN (7.5YR 4/4) CLAYEY SAND (SC), loose to medium dense, moist, no odor. Color changes to STRONG BROWN (7.5YR 5/6) at 1.0 feet, fine to coarse sand.	
	<input checked="" type="checkbox"/> B-31-1.5					
				2.0	Bottom of boring at 2.0 feet.	

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CLIENT MidPen Housing **PROJECT NAME** Carlos at Sierra Streets
PROJECT NUMBER 350428 **PROJECT LOCATION** Moss Beach, California
DATE STARTED 12/22/15 **COMPLETED** 12/22/15 **GROUND ELEVATION** _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc. **GROUND WATER LEVELS:**
DRILLING METHOD Direct Push **AT TIME OF DRILLING** ---
LOGGED BY Tim Bodkin **CHECKED BY** Tim Bodkin **AT END OF DRILLING** ---
NOTES _____ **AFTER DRILLING** --- No groundwater encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-32-0.0				DARK BROWN (7.5YR 4/3) to STRONG BROWN (7.5yr 5/6) SILTY SANDY CLAY (CL) with CLAYEY SAND (SC), medium stiff, moist, no odor.	
	<input checked="" type="checkbox"/> B-32-1.5					
Bottom of boring at 2.0 feet.						

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CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	<input checked="" type="checkbox"/> B-33-0.0				DARK BROWN (7.5YR 4/4) SANDY CLAY (CL), medium stiff, moist, stiff.	
	<input checked="" type="checkbox"/> B-33-1.5					
Bottom of boring at 2.0 feet.						

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CLIENT <u>MidPen Housing</u>	PROJECT NAME <u>Carlos at Sierra Streets</u>
PROJECT NUMBER <u>350428</u>	PROJECT LOCATION <u>Moss Beach, California</u>
DATE STARTED <u>12/22/15</u> COMPLETED <u>12/22/15</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.25 inches</u>
DRILLING CONTRACTOR <u>Environmental Control Associates, Inc.</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Direct Push</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Tim Bodkin</u> CHECKED BY <u>Tim Bodkin</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>--- No groundwater encountered</u>

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
	⊗ B-34-0.0				DARK BROWN (7.5YR) SANDY CLAY (CL), medium stiff, moist, no odor.	
	⊗ B34-1.5					
Bottom of boring at 2.0 feet.						

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APPENDIX B
LABORATORY ANALYTICAL REPORTS



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1512A77

Report Created for: AEI Consultants

3880 S. Bascom Ave, Suite 109
San Jose, CA 95124

Project Contact: Tim Bodkin

Project P.O.:

Project Name: 350428; Carlos & Sierra Streets, Moss Beach, CA

Project Received: 12/28/2015

Analytical Report reviewed & approved for release on 01/11/2016 by:

Angela Rydelius,
Laboratory Manager

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Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA
WorkOrder: 1512A77

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

S	spike recovery outside accepted recovery limits
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant



Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA
WorkOrder: 1512A77

Quality Control Qualifiers

F8 MS/MSD recovery and/or RPD was out of acceptance criteria; PDS validated the prep batch. If PDS recovery was out of acceptance criteria, DLT validated the prep batch.



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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** E1613
Date Prepared: 12/31/15 **Analytical Method:** E1613
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** pg/g

Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID			
B-1-1.5	1512A77-002A	Soil	12/22/2015 10:20	GC36	114978			
Analytes	TEF WHO '05	Result	RL	DF	Ion Ratio	RRT	TEQ	Date Analyzed
2,3,7,8-TCDD		ND	0.500	1				01/08/2016 14:29
1,2,3,7,8-PeCDD		ND	2.50	1				01/08/2016 14:29
1,2,3,4,7,8-HxCDD		ND	2.50	1				01/08/2016 14:29
1,2,3,6,7,8-HxCDD		ND	2.50	1				01/08/2016 14:29
1,2,3,7,8,9-HxCDD		ND	2.50	1				01/08/2016 14:29
1,2,3,4,6,7,8-HpCDD		ND	2.50	1				01/08/2016 14:29
OCDD		ND	5.00	1				01/08/2016 14:29
2,3,7,8-TCDF		ND	0.500	1				01/08/2016 14:29
1,2,3,7,8-PeCDF		ND	2.50	1				01/08/2016 14:29
2,3,4,7,8-PeCDF		ND	2.50	1				01/08/2016 14:29
1,2,3,4,7,8-HxCDF		ND	2.50	1				01/08/2016 14:29
1,2,3,6,7,8-HxCDF		ND	2.50	1				01/08/2016 14:29
2,3,4,6,7,8-HxCDF		ND	2.50	1				01/08/2016 14:29
1,2,3,7,8,9-HxCDF		ND	2.50	1				01/08/2016 14:29
1,2,3,4,6,7,8-HpCDF		ND	2.50	1				01/08/2016 14:29
1,2,3,4,7,8,9-HpCDF		ND	2.50	1				01/08/2016 14:29
OCDF		ND	5.00	1				01/08/2016 14:29
Total-Tetradoxins		ND	0.500	1				01/08/2016 14:29
Total-Heptadoxins		ND	2.50	1				01/08/2016 14:29
Total-Hexadoxins		ND	2.50	1				01/08/2016 14:29
Total-Pentadoxins		ND	2.50	1				01/08/2016 14:29
Total-Tetrafurans		ND	0.500	1				01/08/2016 14:29
Total-Heptafurans		ND	2.50	1				01/08/2016 14:29
Total-Hexafurans		2.78	2.50	1				01/08/2016 14:29
Total-Pentafurans		ND	2.50	1				01/08/2016 14:29

Total TEQ: 0

Cleanup Standard	REC (%)	Limits	
37Cl-2,3,7,8-TCDD	85	35-197	01/08/2016 14:29
Labeled Compound Recovery			
13C-2,3,7,8-TCDD	78	25-164	01/08/2016 14:29
13C-1,2,3,7,8-PeCDD	99	25-181	01/08/2016 14:29
13C-1,2,3,4,7,8-HxCDD	86	32-141	01/08/2016 14:29
13C-1,2,3,6,7,8-HxCDD	77	28-130	01/08/2016 14:29
13C-1,2,3,4,6,7,8-HpCDD	97	23-140	01/08/2016 14:29

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** E1613
Date Prepared: 12/31/15 **Analytical Method:** E1613
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** pg/g

Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	1512A77-002A	Soil	12/22/2015 10:20	GC36	114978

Analytes	TEF WHO '05	Result	RL	DF	Ion Ratio	RRT	TEQ	Date Analyzed
13C-OCDD		117	17-157					01/08/2016 14:29
13C-2,3,7,8-TCDF		74	24-169					01/08/2016 14:29
13C-1,2,3,7,8-PeCDF		88	24-185					01/08/2016 14:29
13C-2,3,4,7,8-PeCDF		92	21-178					01/08/2016 14:29
13C-1,2,3,4,7,8-HxCDF		76	26-152					01/08/2016 14:29
13C-1,2,3,6,7,8-HxCDF		71	26-123					01/08/2016 14:29
13C-2,3,4,6,7,8-HxCDF		73	28-136					01/08/2016 14:29
13C-1,2,3,7,8,9-HxCDF		78	29-147					01/08/2016 14:29
13C-1,2,3,4,6,7,8-HpCDF		88	28-143					01/08/2016 14:29
13C-1,2,3,4,7,8,9-HpCDF		94	26-138					01/08/2016 14:29

Analyst(s): MG



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Analytical Report

Client:	AEI Consultants	WorkOrder:	1512A77
Date Received:	12/28/15 17:55	Extraction Method:	SW3550B
Date Prepared:	12/28/15	Analytical Method:	SW8082
Project:	350428; Carlos & Sierra Streets, Moss Beach, CA	Unit:	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	1512A77-002A	Soil	12/22/2015 10:20	GC5A	114732

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.050	1	12/28/2015 23:35
Aroclor1221	ND	0.050	1	12/28/2015 23:35
Aroclor1232	ND	0.050	1	12/28/2015 23:35
Aroclor1242	ND	0.050	1	12/28/2015 23:35
Aroclor1248	ND	0.050	1	12/28/2015 23:35
Aroclor1254	ND	0.050	1	12/28/2015 23:35
Aroclor1260	ND	0.050	1	12/28/2015 23:35
PCBs, total	ND	0.050	1	12/28/2015 23:35
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Decachlorobiphenyl	90	70-130		12/28/2015 23:35

Analyst(s): SS



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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-12-5.0	1512A77-021A	Soil	12/23/2015 10:15	GC18	114716
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	12/31/2015 00:37	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/31/2015 00:37	
Benzene	ND	0.0050	1	12/31/2015 00:37	
Bromobenzene	ND	0.0050	1	12/31/2015 00:37	
Bromochloromethane	ND	0.0050	1	12/31/2015 00:37	
Bromodichloromethane	ND	0.0050	1	12/31/2015 00:37	
Bromoform	ND	0.0050	1	12/31/2015 00:37	
Bromomethane	ND	0.0050	1	12/31/2015 00:37	
2-Butanone (MEK)	ND	0.020	1	12/31/2015 00:37	
t-Butyl alcohol (TBA)	ND	0.050	1	12/31/2015 00:37	
n-Butyl benzene	ND	0.0050	1	12/31/2015 00:37	
sec-Butyl benzene	ND	0.0050	1	12/31/2015 00:37	
tert-Butyl benzene	ND	0.0050	1	12/31/2015 00:37	
Carbon Disulfide	ND	0.0050	1	12/31/2015 00:37	
Carbon Tetrachloride	ND	0.0050	1	12/31/2015 00:37	
Chlorobenzene	ND	0.0050	1	12/31/2015 00:37	
Chloroethane	ND	0.0050	1	12/31/2015 00:37	
Chloroform	ND	0.0050	1	12/31/2015 00:37	
Chloromethane	ND	0.0050	1	12/31/2015 00:37	
2-Chlorotoluene	ND	0.0050	1	12/31/2015 00:37	
4-Chlorotoluene	ND	0.0050	1	12/31/2015 00:37	
Dibromochloromethane	ND	0.0050	1	12/31/2015 00:37	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	12/31/2015 00:37	
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/31/2015 00:37	
Dibromomethane	ND	0.0050	1	12/31/2015 00:37	
1,2-Dichlorobenzene	ND	0.0050	1	12/31/2015 00:37	
1,3-Dichlorobenzene	ND	0.0050	1	12/31/2015 00:37	
1,4-Dichlorobenzene	ND	0.0050	1	12/31/2015 00:37	
Dichlorodifluoromethane	ND	0.0050	1	12/31/2015 00:37	
1,1-Dichloroethane	ND	0.0050	1	12/31/2015 00:37	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/31/2015 00:37	
1,1-Dichloroethene	ND	0.0050	1	12/31/2015 00:37	
cis-1,2-Dichloroethene	ND	0.0050	1	12/31/2015 00:37	
trans-1,2-Dichloroethene	ND	0.0050	1	12/31/2015 00:37	
1,2-Dichloropropane	ND	0.0050	1	12/31/2015 00:37	
1,3-Dichloropropane	ND	0.0050	1	12/31/2015 00:37	
2,2-Dichloropropane	ND	0.0050	1	12/31/2015 00:37	

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-12-5.0	1512A77-021A	Soil	12/23/2015 10:15	GC18	114716
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.0050	1	12/31/2015 00:37	
cis-1,3-Dichloropropene	ND	0.0050	1	12/31/2015 00:37	
trans-1,3-Dichloropropene	ND	0.0050	1	12/31/2015 00:37	
Diisopropyl ether (DIPE)	ND	0.0050	1	12/31/2015 00:37	
Ethylbenzene	ND	0.0050	1	12/31/2015 00:37	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/31/2015 00:37	
Freon 113	ND	0.0050	1	12/31/2015 00:37	
Hexachlorobutadiene	ND	0.0050	1	12/31/2015 00:37	
Hexachloroethane	ND	0.0050	1	12/31/2015 00:37	
2-Hexanone	ND	0.0050	1	12/31/2015 00:37	
Isopropylbenzene	ND	0.0050	1	12/31/2015 00:37	
4-Isopropyl toluene	ND	0.0050	1	12/31/2015 00:37	
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/31/2015 00:37	
Methylene chloride	ND	0.0050	1	12/31/2015 00:37	
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/31/2015 00:37	
Naphthalene	ND	0.0050	1	12/31/2015 00:37	
n-Propyl benzene	ND	0.0050	1	12/31/2015 00:37	
Styrene	ND	0.0050	1	12/31/2015 00:37	
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/31/2015 00:37	
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/31/2015 00:37	
Tetrachloroethene	ND	0.0050	1	12/31/2015 00:37	
Toluene	ND	0.0050	1	12/31/2015 00:37	
1,2,3-Trichlorobenzene	ND	0.0050	1	12/31/2015 00:37	
1,2,4-Trichlorobenzene	ND	0.0050	1	12/31/2015 00:37	
1,1,1-Trichloroethane	ND	0.0050	1	12/31/2015 00:37	
1,1,2-Trichloroethane	ND	0.0050	1	12/31/2015 00:37	
Trichloroethene	ND	0.0050	1	12/31/2015 00:37	
Trichlorofluoromethane	ND	0.0050	1	12/31/2015 00:37	
1,2,3-Trichloropropane	ND	0.0050	1	12/31/2015 00:37	
1,2,4-Trimethylbenzene	ND	0.0050	1	12/31/2015 00:37	
1,3,5-Trimethylbenzene	ND	0.0050	1	12/31/2015 00:37	
Vinyl Chloride	ND	0.0050	1	12/31/2015 00:37	
Xylenes, Total	ND	0.0050	1	12/31/2015 00:37	

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-12-5.0	1512A77-021A	Soil	12/23/2015 10:15	GC18	114716

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	89	70-130		12/31/2015 00:37
Toluene-d8	89	70-130		12/31/2015 00:37
4-BFB	81	70-130		12/31/2015 00:37
Benzene-d6	83	60-140		12/31/2015 00:37
Ethylbenzene-d10	86	60-140		12/31/2015 00:37
1,2-DCB-d4	85	60-140		12/31/2015 00:37

Analyst(s): KF

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-13-6.0	1512A77-026A	Soil	12/23/2015 10:43	GC16	114716
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	12/31/2015 01:30	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/31/2015 01:30	
Benzene	ND	0.0050	1	12/31/2015 01:30	
Bromobenzene	ND	0.0050	1	12/31/2015 01:30	
Bromochloromethane	ND	0.0050	1	12/31/2015 01:30	
Bromodichloromethane	ND	0.0050	1	12/31/2015 01:30	
Bromoform	ND	0.0050	1	12/31/2015 01:30	
Bromomethane	ND	0.0050	1	12/31/2015 01:30	
2-Butanone (MEK)	ND	0.020	1	12/31/2015 01:30	
t-Butyl alcohol (TBA)	ND	0.050	1	12/31/2015 01:30	
n-Butyl benzene	ND	0.0050	1	12/31/2015 01:30	
sec-Butyl benzene	ND	0.0050	1	12/31/2015 01:30	
tert-Butyl benzene	ND	0.0050	1	12/31/2015 01:30	
Carbon Disulfide	ND	0.0050	1	12/31/2015 01:30	
Carbon Tetrachloride	ND	0.0050	1	12/31/2015 01:30	
Chlorobenzene	ND	0.0050	1	12/31/2015 01:30	
Chloroethane	ND	0.0050	1	12/31/2015 01:30	
Chloroform	ND	0.0050	1	12/31/2015 01:30	
Chloromethane	ND	0.0050	1	12/31/2015 01:30	
2-Chlorotoluene	ND	0.0050	1	12/31/2015 01:30	
4-Chlorotoluene	ND	0.0050	1	12/31/2015 01:30	
Dibromochloromethane	ND	0.0050	1	12/31/2015 01:30	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	12/31/2015 01:30	
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/31/2015 01:30	
Dibromomethane	ND	0.0050	1	12/31/2015 01:30	
1,2-Dichlorobenzene	ND	0.0050	1	12/31/2015 01:30	
1,3-Dichlorobenzene	ND	0.0050	1	12/31/2015 01:30	
1,4-Dichlorobenzene	ND	0.0050	1	12/31/2015 01:30	
Dichlorodifluoromethane	ND	0.0050	1	12/31/2015 01:30	
1,1-Dichloroethane	ND	0.0050	1	12/31/2015 01:30	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/31/2015 01:30	
1,1-Dichloroethene	ND	0.0050	1	12/31/2015 01:30	
cis-1,2-Dichloroethene	ND	0.0050	1	12/31/2015 01:30	
trans-1,2-Dichloroethene	ND	0.0050	1	12/31/2015 01:30	
1,2-Dichloropropane	ND	0.0050	1	12/31/2015 01:30	
1,3-Dichloropropane	ND	0.0050	1	12/31/2015 01:30	
2,2-Dichloropropane	ND	0.0050	1	12/31/2015 01:30	

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-13-6.0	1512A77-026A	Soil	12/23/2015 10:43	GC16	114716
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.0050	1	12/31/2015 01:30	
cis-1,3-Dichloropropene	ND	0.0050	1	12/31/2015 01:30	
trans-1,3-Dichloropropene	ND	0.0050	1	12/31/2015 01:30	
Diisopropyl ether (DIPE)	ND	0.0050	1	12/31/2015 01:30	
Ethylbenzene	ND	0.0050	1	12/31/2015 01:30	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/31/2015 01:30	
Freon 113	ND	0.0050	1	12/31/2015 01:30	
Hexachlorobutadiene	ND	0.0050	1	12/31/2015 01:30	
Hexachloroethane	ND	0.0050	1	12/31/2015 01:30	
2-Hexanone	ND	0.0050	1	12/31/2015 01:30	
Isopropylbenzene	ND	0.0050	1	12/31/2015 01:30	
4-Isopropyl toluene	ND	0.0050	1	12/31/2015 01:30	
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/31/2015 01:30	
Methylene chloride	ND	0.0050	1	12/31/2015 01:30	
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/31/2015 01:30	
Naphthalene	ND	0.0050	1	12/31/2015 01:30	
n-Propyl benzene	ND	0.0050	1	12/31/2015 01:30	
Styrene	ND	0.0050	1	12/31/2015 01:30	
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/31/2015 01:30	
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/31/2015 01:30	
Tetrachloroethene	ND	0.0050	1	12/31/2015 01:30	
Toluene	ND	0.0050	1	12/31/2015 01:30	
1,2,3-Trichlorobenzene	ND	0.0050	1	12/31/2015 01:30	
1,2,4-Trichlorobenzene	ND	0.0050	1	12/31/2015 01:30	
1,1,1-Trichloroethane	ND	0.0050	1	12/31/2015 01:30	
1,1,2-Trichloroethane	ND	0.0050	1	12/31/2015 01:30	
Trichloroethene	ND	0.0050	1	12/31/2015 01:30	
Trichlorofluoromethane	ND	0.0050	1	12/31/2015 01:30	
1,2,3-Trichloropropane	ND	0.0050	1	12/31/2015 01:30	
1,2,4-Trimethylbenzene	ND	0.0050	1	12/31/2015 01:30	
1,3,5-Trimethylbenzene	ND	0.0050	1	12/31/2015 01:30	
Vinyl Chloride	ND	0.0050	1	12/31/2015 01:30	
Xylenes, Total	ND	0.0050	1	12/31/2015 01:30	

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-13-6.0	1512A77-026A	Soil	12/23/2015 10:43	GC16	114716

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	81	70-130		12/31/2015 01:30
Toluene-d8	80	70-130		12/31/2015 01:30
4-BFB	80	70-130		12/31/2015 01:30
Benzene-d6	69	60-140		12/31/2015 01:30
Ethylbenzene-d10	76	60-140		12/31/2015 01:30
1,2-DCB-d4	60	60-140		12/31/2015 01:30

Analyst(s): KF

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-14-2.0	1512A77-028A	Soil	12/23/2015 11:50	GC18	114716
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	12/31/2015 01:53	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/31/2015 01:53	
Benzene	ND	0.0050	1	12/31/2015 01:53	
Bromobenzene	ND	0.0050	1	12/31/2015 01:53	
Bromochloromethane	ND	0.0050	1	12/31/2015 01:53	
Bromodichloromethane	ND	0.0050	1	12/31/2015 01:53	
Bromoform	ND	0.0050	1	12/31/2015 01:53	
Bromomethane	ND	0.0050	1	12/31/2015 01:53	
2-Butanone (MEK)	ND	0.020	1	12/31/2015 01:53	
t-Butyl alcohol (TBA)	ND	0.050	1	12/31/2015 01:53	
n-Butyl benzene	ND	0.0050	1	12/31/2015 01:53	
sec-Butyl benzene	ND	0.0050	1	12/31/2015 01:53	
tert-Butyl benzene	ND	0.0050	1	12/31/2015 01:53	
Carbon Disulfide	ND	0.0050	1	12/31/2015 01:53	
Carbon Tetrachloride	ND	0.0050	1	12/31/2015 01:53	
Chlorobenzene	ND	0.0050	1	12/31/2015 01:53	
Chloroethane	ND	0.0050	1	12/31/2015 01:53	
Chloroform	ND	0.0050	1	12/31/2015 01:53	
Chloromethane	ND	0.0050	1	12/31/2015 01:53	
2-Chlorotoluene	ND	0.0050	1	12/31/2015 01:53	
4-Chlorotoluene	ND	0.0050	1	12/31/2015 01:53	
Dibromochloromethane	ND	0.0050	1	12/31/2015 01:53	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	12/31/2015 01:53	
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/31/2015 01:53	
Dibromomethane	ND	0.0050	1	12/31/2015 01:53	
1,2-Dichlorobenzene	ND	0.0050	1	12/31/2015 01:53	
1,3-Dichlorobenzene	ND	0.0050	1	12/31/2015 01:53	
1,4-Dichlorobenzene	ND	0.0050	1	12/31/2015 01:53	
Dichlorodifluoromethane	ND	0.0050	1	12/31/2015 01:53	
1,1-Dichloroethane	ND	0.0050	1	12/31/2015 01:53	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/31/2015 01:53	
1,1-Dichloroethene	ND	0.0050	1	12/31/2015 01:53	
cis-1,2-Dichloroethene	ND	0.0050	1	12/31/2015 01:53	
trans-1,2-Dichloroethene	ND	0.0050	1	12/31/2015 01:53	
1,2-Dichloropropane	ND	0.0050	1	12/31/2015 01:53	
1,3-Dichloropropane	ND	0.0050	1	12/31/2015 01:53	
2,2-Dichloropropane	ND	0.0050	1	12/31/2015 01:53	

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-14-2.0	1512A77-028A	Soil	12/23/2015 11:50	GC18	114716
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.0050	1	12/31/2015 01:53	
cis-1,3-Dichloropropene	ND	0.0050	1	12/31/2015 01:53	
trans-1,3-Dichloropropene	ND	0.0050	1	12/31/2015 01:53	
Diisopropyl ether (DIPE)	ND	0.0050	1	12/31/2015 01:53	
Ethylbenzene	ND	0.0050	1	12/31/2015 01:53	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/31/2015 01:53	
Freon 113	ND	0.0050	1	12/31/2015 01:53	
Hexachlorobutadiene	ND	0.0050	1	12/31/2015 01:53	
Hexachloroethane	ND	0.0050	1	12/31/2015 01:53	
2-Hexanone	ND	0.0050	1	12/31/2015 01:53	
Isopropylbenzene	ND	0.0050	1	12/31/2015 01:53	
4-Isopropyl toluene	ND	0.0050	1	12/31/2015 01:53	
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/31/2015 01:53	
Methylene chloride	ND	0.0050	1	12/31/2015 01:53	
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/31/2015 01:53	
Naphthalene	ND	0.0050	1	12/31/2015 01:53	
n-Propyl benzene	ND	0.0050	1	12/31/2015 01:53	
Styrene	ND	0.0050	1	12/31/2015 01:53	
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/31/2015 01:53	
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/31/2015 01:53	
Tetrachloroethene	ND	0.0050	1	12/31/2015 01:53	
Toluene	ND	0.0050	1	12/31/2015 01:53	
1,2,3-Trichlorobenzene	ND	0.0050	1	12/31/2015 01:53	
1,2,4-Trichlorobenzene	ND	0.0050	1	12/31/2015 01:53	
1,1,1-Trichloroethane	ND	0.0050	1	12/31/2015 01:53	
1,1,2-Trichloroethane	ND	0.0050	1	12/31/2015 01:53	
Trichloroethene	ND	0.0050	1	12/31/2015 01:53	
Trichlorofluoromethane	ND	0.0050	1	12/31/2015 01:53	
1,2,3-Trichloropropane	ND	0.0050	1	12/31/2015 01:53	
1,2,4-Trimethylbenzene	ND	0.0050	1	12/31/2015 01:53	
1,3,5-Trimethylbenzene	ND	0.0050	1	12/31/2015 01:53	
Vinyl Chloride	ND	0.0050	1	12/31/2015 01:53	
Xylenes, Total	ND	0.0050	1	12/31/2015 01:53	

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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW5030B
Date Prepared: 12/28/15	Analytical Method: SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-14-2.0	1512A77-028A	Soil	12/23/2015 11:50	GC18	114716

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	89	70-130		12/31/2015 01:53
Toluene-d8	89	70-130		12/31/2015 01:53
4-BFB	80	70-130		12/31/2015 01:53
Benzene-d6	92	60-140		12/31/2015 01:53
Ethylbenzene-d10	95	60-140		12/31/2015 01:53
1,2-DCB-d4	92	60-140		12/31/2015 01:53

Analyst(s): KF

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-15-7.0	1512A77-032A	Soil	12/23/2015 09:50	GC18	114716
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	12/31/2015 01:15	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/31/2015 01:15	
Benzene	ND	0.0050	1	12/31/2015 01:15	
Bromobenzene	ND	0.0050	1	12/31/2015 01:15	
Bromochloromethane	ND	0.0050	1	12/31/2015 01:15	
Bromodichloromethane	ND	0.0050	1	12/31/2015 01:15	
Bromoform	ND	0.0050	1	12/31/2015 01:15	
Bromomethane	ND	0.0050	1	12/31/2015 01:15	
2-Butanone (MEK)	ND	0.020	1	12/31/2015 01:15	
t-Butyl alcohol (TBA)	ND	0.050	1	12/31/2015 01:15	
n-Butyl benzene	ND	0.0050	1	12/31/2015 01:15	
sec-Butyl benzene	ND	0.0050	1	12/31/2015 01:15	
tert-Butyl benzene	ND	0.0050	1	12/31/2015 01:15	
Carbon Disulfide	ND	0.0050	1	12/31/2015 01:15	
Carbon Tetrachloride	ND	0.0050	1	12/31/2015 01:15	
Chlorobenzene	ND	0.0050	1	12/31/2015 01:15	
Chloroethane	ND	0.0050	1	12/31/2015 01:15	
Chloroform	ND	0.0050	1	12/31/2015 01:15	
Chloromethane	ND	0.0050	1	12/31/2015 01:15	
2-Chlorotoluene	ND	0.0050	1	12/31/2015 01:15	
4-Chlorotoluene	ND	0.0050	1	12/31/2015 01:15	
Dibromochloromethane	ND	0.0050	1	12/31/2015 01:15	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	12/31/2015 01:15	
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/31/2015 01:15	
Dibromomethane	ND	0.0050	1	12/31/2015 01:15	
1,2-Dichlorobenzene	ND	0.0050	1	12/31/2015 01:15	
1,3-Dichlorobenzene	ND	0.0050	1	12/31/2015 01:15	
1,4-Dichlorobenzene	ND	0.0050	1	12/31/2015 01:15	
Dichlorodifluoromethane	ND	0.0050	1	12/31/2015 01:15	
1,1-Dichloroethane	ND	0.0050	1	12/31/2015 01:15	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/31/2015 01:15	
1,1-Dichloroethene	ND	0.0050	1	12/31/2015 01:15	
cis-1,2-Dichloroethene	ND	0.0050	1	12/31/2015 01:15	
trans-1,2-Dichloroethene	ND	0.0050	1	12/31/2015 01:15	
1,2-Dichloropropane	ND	0.0050	1	12/31/2015 01:15	
1,3-Dichloropropane	ND	0.0050	1	12/31/2015 01:15	
2,2-Dichloropropane	ND	0.0050	1	12/31/2015 01:15	

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-15-7.0	1512A77-032A	Soil	12/23/2015 09:50	GC18	114716
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.0050	1	12/31/2015 01:15	
cis-1,3-Dichloropropene	ND	0.0050	1	12/31/2015 01:15	
trans-1,3-Dichloropropene	ND	0.0050	1	12/31/2015 01:15	
Diisopropyl ether (DIPE)	ND	0.0050	1	12/31/2015 01:15	
Ethylbenzene	ND	0.0050	1	12/31/2015 01:15	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/31/2015 01:15	
Freon 113	ND	0.0050	1	12/31/2015 01:15	
Hexachlorobutadiene	ND	0.0050	1	12/31/2015 01:15	
Hexachloroethane	ND	0.0050	1	12/31/2015 01:15	
2-Hexanone	ND	0.0050	1	12/31/2015 01:15	
Isopropylbenzene	ND	0.0050	1	12/31/2015 01:15	
4-Isopropyl toluene	ND	0.0050	1	12/31/2015 01:15	
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/31/2015 01:15	
Methylene chloride	ND	0.0050	1	12/31/2015 01:15	
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/31/2015 01:15	
Naphthalene	ND	0.0050	1	12/31/2015 01:15	
n-Propyl benzene	ND	0.0050	1	12/31/2015 01:15	
Styrene	ND	0.0050	1	12/31/2015 01:15	
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/31/2015 01:15	
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/31/2015 01:15	
Tetrachloroethene	ND	0.0050	1	12/31/2015 01:15	
Toluene	ND	0.0050	1	12/31/2015 01:15	
1,2,3-Trichlorobenzene	ND	0.0050	1	12/31/2015 01:15	
1,2,4-Trichlorobenzene	ND	0.0050	1	12/31/2015 01:15	
1,1,1-Trichloroethane	ND	0.0050	1	12/31/2015 01:15	
1,1,2-Trichloroethane	ND	0.0050	1	12/31/2015 01:15	
Trichloroethene	ND	0.0050	1	12/31/2015 01:15	
Trichlorofluoromethane	ND	0.0050	1	12/31/2015 01:15	
1,2,3-Trichloropropane	ND	0.0050	1	12/31/2015 01:15	
1,2,4-Trimethylbenzene	ND	0.0050	1	12/31/2015 01:15	
1,3,5-Trimethylbenzene	ND	0.0050	1	12/31/2015 01:15	
Vinyl Chloride	ND	0.0050	1	12/31/2015 01:15	
Xylenes, Total	ND	0.0050	1	12/31/2015 01:15	

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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW5030B
Date Prepared: 12/28/15	Analytical Method: SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-15-7.0	1512A77-032A	Soil	12/23/2015 09:50	GC18	114716

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	90	70-130		12/31/2015 01:15
Toluene-d8	89	70-130		12/31/2015 01:15
4-BFB	80	70-130		12/31/2015 01:15
Benzene-d6	86	60-140		12/31/2015 01:15
Ethylbenzene-d10	89	60-140		12/31/2015 01:15
1,2-DCB-d4	88	60-140		12/31/2015 01:15

Analyst(s): KF

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-17-4.0	1512A77-036A	Soil	12/22/2015 15:25	GC18	114716
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	12/30/2015 20:10	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/30/2015 20:10	
Benzene	ND	0.0050	1	12/30/2015 20:10	
Bromobenzene	ND	0.0050	1	12/30/2015 20:10	
Bromochloromethane	ND	0.0050	1	12/30/2015 20:10	
Bromodichloromethane	ND	0.0050	1	12/30/2015 20:10	
Bromoform	ND	0.0050	1	12/30/2015 20:10	
Bromomethane	ND	0.0050	1	12/30/2015 20:10	
2-Butanone (MEK)	ND	0.020	1	12/30/2015 20:10	
t-Butyl alcohol (TBA)	ND	0.050	1	12/30/2015 20:10	
n-Butyl benzene	ND	0.0050	1	12/30/2015 20:10	
sec-Butyl benzene	ND	0.0050	1	12/30/2015 20:10	
tert-Butyl benzene	ND	0.0050	1	12/30/2015 20:10	
Carbon Disulfide	ND	0.0050	1	12/30/2015 20:10	
Carbon Tetrachloride	ND	0.0050	1	12/30/2015 20:10	
Chlorobenzene	ND	0.0050	1	12/30/2015 20:10	
Chloroethane	ND	0.0050	1	12/30/2015 20:10	
Chloroform	ND	0.0050	1	12/30/2015 20:10	
Chloromethane	ND	0.0050	1	12/30/2015 20:10	
2-Chlorotoluene	ND	0.0050	1	12/30/2015 20:10	
4-Chlorotoluene	ND	0.0050	1	12/30/2015 20:10	
Dibromochloromethane	ND	0.0050	1	12/30/2015 20:10	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	12/30/2015 20:10	
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/30/2015 20:10	
Dibromomethane	ND	0.0050	1	12/30/2015 20:10	
1,2-Dichlorobenzene	ND	0.0050	1	12/30/2015 20:10	
1,3-Dichlorobenzene	ND	0.0050	1	12/30/2015 20:10	
1,4-Dichlorobenzene	ND	0.0050	1	12/30/2015 20:10	
Dichlorodifluoromethane	ND	0.0050	1	12/30/2015 20:10	
1,1-Dichloroethane	ND	0.0050	1	12/30/2015 20:10	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/30/2015 20:10	
1,1-Dichloroethene	ND	0.0050	1	12/30/2015 20:10	
cis-1,2-Dichloroethene	ND	0.0050	1	12/30/2015 20:10	
trans-1,2-Dichloroethene	ND	0.0050	1	12/30/2015 20:10	
1,2-Dichloropropane	ND	0.0050	1	12/30/2015 20:10	
1,3-Dichloropropane	ND	0.0050	1	12/30/2015 20:10	
2,2-Dichloropropane	ND	0.0050	1	12/30/2015 20:10	

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-17-4.0	1512A77-036A	Soil	12/22/2015 15:25	GC18	114716
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.0050	1	12/30/2015 20:10	
cis-1,3-Dichloropropene	ND	0.0050	1	12/30/2015 20:10	
trans-1,3-Dichloropropene	ND	0.0050	1	12/30/2015 20:10	
Diisopropyl ether (DIPE)	ND	0.0050	1	12/30/2015 20:10	
Ethylbenzene	ND	0.0050	1	12/30/2015 20:10	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/30/2015 20:10	
Freon 113	ND	0.0050	1	12/30/2015 20:10	
Hexachlorobutadiene	ND	0.0050	1	12/30/2015 20:10	
Hexachloroethane	ND	0.0050	1	12/30/2015 20:10	
2-Hexanone	ND	0.0050	1	12/30/2015 20:10	
Isopropylbenzene	ND	0.0050	1	12/30/2015 20:10	
4-Isopropyl toluene	ND	0.0050	1	12/30/2015 20:10	
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/30/2015 20:10	
Methylene chloride	ND	0.0050	1	12/30/2015 20:10	
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/30/2015 20:10	
Naphthalene	ND	0.0050	1	12/30/2015 20:10	
n-Propyl benzene	ND	0.0050	1	12/30/2015 20:10	
Styrene	ND	0.0050	1	12/30/2015 20:10	
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/30/2015 20:10	
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/30/2015 20:10	
Tetrachloroethene	ND	0.0050	1	12/30/2015 20:10	
Toluene	ND	0.0050	1	12/30/2015 20:10	
1,2,3-Trichlorobenzene	ND	0.0050	1	12/30/2015 20:10	
1,2,4-Trichlorobenzene	ND	0.0050	1	12/30/2015 20:10	
1,1,1-Trichloroethane	ND	0.0050	1	12/30/2015 20:10	
1,1,2-Trichloroethane	ND	0.0050	1	12/30/2015 20:10	
Trichloroethene	ND	0.0050	1	12/30/2015 20:10	
Trichlorofluoromethane	ND	0.0050	1	12/30/2015 20:10	
1,2,3-Trichloropropane	ND	0.0050	1	12/30/2015 20:10	
1,2,4-Trimethylbenzene	ND	0.0050	1	12/30/2015 20:10	
1,3,5-Trimethylbenzene	ND	0.0050	1	12/30/2015 20:10	
Vinyl Chloride	ND	0.0050	1	12/30/2015 20:10	
Xylenes, Total	ND	0.0050	1	12/30/2015 20:10	

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15 **Analytical Method:** SW8260B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-17-4.0	1512A77-036A	Soil	12/22/2015 15:25	GC18	114716

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	89	70-130		12/30/2015 20:10
Toluene-d8	90	70-130		12/30/2015 20:10
4-BFB	82	70-130		12/30/2015 20:10
Benzene-d6	85	60-140		12/30/2015 20:10
Ethylbenzene-d10	87	60-140		12/30/2015 20:10
1,2-DCB-d4	85	60-140		12/30/2015 20:10

Analyst(s): KF



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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3050B
Date Prepared: 12/28/15	Analytical Method: SW6020
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	1512A77-002A	Soil	12/22/2015 10:20	ICP-MS2	114719
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Antimony	ND		0.50	1	12/29/2015 12:32
Arsenic	2.3		0.50	1	12/29/2015 12:32
Barium	44		5.0	1	12/29/2015 12:32
Beryllium	ND		0.50	1	12/29/2015 12:32
Cadmium	ND		0.25	1	12/29/2015 12:32
Chromium	15		0.50	1	12/29/2015 12:32
Cobalt	3.9		0.50	1	12/29/2015 12:32
Copper	2.2		0.50	1	12/29/2015 12:32
Lead	4.5		0.50	1	12/29/2015 12:32
Mercury	ND		0.050	1	12/29/2015 12:32
Molybdenum	1.0		0.50	1	12/29/2015 12:32
Nickel	13		0.50	1	12/29/2015 12:32
Selenium	ND		0.50	1	12/29/2015 12:32
Silver	ND		0.50	1	12/29/2015 12:32
Thallium	ND		0.50	1	12/29/2015 12:32
Vanadium	36		0.50	1	12/29/2015 12:32
Zinc	29		5.0	1	12/29/2015 12:32
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Terbium	103		70-130		12/29/2015 12:32
<u>Analyst(s):</u> DVH					



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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW5030B
Date Prepared: 12/28/15-12/30/15	Analytical Method: SW8021B/8015Bm
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-12-5.0	1512A77-021A	Soil	12/23/2015 10:15	GC19	114731

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	12/29/2015 19:08
MTBE	---	0.050	1	12/29/2015 19:08
Benzene	---	0.0050	1	12/29/2015 19:08
Toluene	---	0.0050	1	12/29/2015 19:08
Ethylbenzene	---	0.0050	1	12/29/2015 19:08
Xylenes	---	0.015	1	12/29/2015 19:08
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	114	70-130		12/29/2015 19:08

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-13-6.0	1512A77-026A	Soil	12/23/2015 10:43	GC19	114731

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	12/29/2015 19:38
MTBE	---	0.050	1	12/29/2015 19:38
Benzene	---	0.0050	1	12/29/2015 19:38
Toluene	---	0.0050	1	12/29/2015 19:38
Ethylbenzene	---	0.0050	1	12/29/2015 19:38
Xylenes	---	0.015	1	12/29/2015 19:38
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	118	70-130		12/29/2015 19:38

Analyst(s): IA

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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW5030B
Date Prepared: 12/28/15-12/30/15	Analytical Method: SW8021B/8015Bm
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-14-2.0	1512A77-028A	Soil	12/23/2015 11:50	GC19	114790

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	12/30/2015 22:50
MTBE	---	0.050	1	12/30/2015 22:50
Benzene	---	0.0050	1	12/30/2015 22:50
Toluene	---	0.0050	1	12/30/2015 22:50
Ethylbenzene	---	0.0050	1	12/30/2015 22:50
Xylenes	---	0.015	1	12/30/2015 22:50
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	120	70-130		12/30/2015 22:50

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-15-7.0	1512A77-032A	Soil	12/23/2015 09:50	GC19	114731

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	12/29/2015 22:07
MTBE	---	0.050	1	12/29/2015 22:07
Benzene	---	0.0050	1	12/29/2015 22:07
Toluene	---	0.0050	1	12/29/2015 22:07
Ethylbenzene	---	0.0050	1	12/29/2015 22:07
Xylenes	---	0.015	1	12/29/2015 22:07
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	118	70-130		12/29/2015 22:07

Analyst(s): IA

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Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW5030B
Date Prepared: 12/28/15-12/30/15 **Analytical Method:** SW8021B/8015Bm
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-17-4.0	1512A77-036A	Soil	12/22/2015 15:25	GC19	114731

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	12/29/2015 22:37
MTBE	---	0.050	1	12/29/2015 22:37
Benzene	---	0.0050	1	12/29/2015 22:37
Toluene	---	0.0050	1	12/29/2015 22:37
Ethylbenzene	---	0.0050	1	12/29/2015 22:37
Xylenes	---	0.015	1	12/29/2015 22:37

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	119	70-130	12/29/2015 22:37

Analyst(s): IA



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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3050B
Date Prepared: 12/28/15	Analytical Method: SW6010B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4-0.0	1512A77-005A	Soil	12/23/2015 11:30	ICP-JY	114733
<u>Analytes</u>					
Lead	29		RL 5.0	DF 1	Date Analyzed 12/31/2015 12:24
<u>Surrogates</u>					
Terbium	108		Limits 70-130		Date Analyzed 12/31/2015 12:24
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5-0.0	1512A77-007A	Soil	12/23/2015 11:45	ICP-JY	114733
<u>Analytes</u>					
Lead	54		RL 5.0	DF 1	Date Analyzed 12/31/2015 13:01
<u>Surrogates</u>					
Terbium	116		Limits 70-130		Date Analyzed 12/31/2015 13:01
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6-0.0	1512A77-009A	Soil	12/23/2015 11:18	ICP-JY	114733
<u>Analytes</u>					
Lead	8.4		RL 5.0	DF 1	Date Analyzed 12/31/2015 12:02
<u>Surrogates</u>					
Terbium	118		Limits 70-130		Date Analyzed 12/31/2015 12:02
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-8-0.0	1512A77-011A	Soil	12/23/2015 11:00	ICP-JY	114733
<u>Analytes</u>					
Lead	23		RL 5.0	DF 1	Date Analyzed 12/31/2015 12:10
<u>Surrogates</u>					
Terbium	115		Limits 70-130		Date Analyzed 12/31/2015 12:10
Analyst(s): DB					

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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3050B
Date Prepared: 12/28/15	Analytical Method: SW6010B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-9-0.0	1512A77-013A	Soil	12/22/2015 13:00	ICP-JY	114733

Analytes	Result	RL	DF	Date Analyzed
Lead	6.5	5.0	1	12/31/2015 12:58
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	109	70-130		12/31/2015 12:58

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-10-0.0	1512A77-015A	Soil	12/22/2015 13:08	ICP-JY	114733

Analytes	Result	RL	DF	Date Analyzed
Lead	45	5.0	1	12/31/2015 11:52
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	110	70-130		12/31/2015 11:52

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-11-0.0	1512A77-017A	Soil	12/22/2015 13:17	ICP-JY	114733

Analytes	Result	RL	DF	Date Analyzed
Lead	6.2	5.0	1	12/31/2015 12:56
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	123	70-130		12/31/2015 12:56

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7-0.0	1512A77-023A	Soil	12/23/2015 10:55	ICP-JY	114733

Analytes	Result	RL	DF	Date Analyzed
Lead	230	5.0	1	12/31/2015 11:55
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Terbium	112	70-130		12/31/2015 11:55

Analyst(s): DB

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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3050B
Date Prepared: 12/28/15	Analytical Method: SW6010B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-15-0.0	1512A77-029A	Soil	12/22/2015 15:10	ICP-JY	114733
<u>Analytes</u>					
Lead	25		RL 5.0	DF 1	Date Analyzed 12/31/2015 12:12
<u>Surrogates</u>					
Terbium	113		Limits 70-130		Date Analyzed 12/31/2015 12:12
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-16-0.0	1512A77-034A	Soil	12/22/2015 15:00	ICP-JY	114733
<u>Analytes</u>					
Lead	15		RL 5.0	DF 1	Date Analyzed 12/31/2015 11:57
<u>Surrogates</u>					
Terbium	126		Limits 70-130		Date Analyzed 12/31/2015 11:57
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-18-0.0	1512A77-038A	Soil	12/22/2015 14:30	ICP-JY	114733
<u>Analytes</u>					
Lead	12		RL 5.0	DF 1	Date Analyzed 12/31/2015 12:34
<u>Surrogates</u>					
Terbium	119		Limits 70-130		Date Analyzed 12/31/2015 12:34
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-19-0.0	1512A77-040A	Soil	12/22/2015 16:00	ICP-JY	114733
<u>Analytes</u>					
Lead	7.9		RL 5.0	DF 1	Date Analyzed 12/31/2015 12:22
<u>Surrogates</u>					
Terbium	111		Limits 70-130		Date Analyzed 12/31/2015 12:22
Analyst(s): DB					

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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3050B
Date Prepared: 12/28/15	Analytical Method: SW6010B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-20-0.0	1512A77-042A	Soil	12/22/2015 13:35	ICP-JY	114733
<u>Analytes</u>					
Lead	41		5.0	1	Date Analyzed
					12/31/2015 12:29
<u>Surrogates</u>					
Terbium	104		70-130		Date Analyzed
					12/31/2015 12:29
<u>Analyst(s):</u> DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-21-0.0	1512A77-044A	Soil	12/22/2015 13:55	ICP-JY	114733
<u>Analytes</u>					
Lead	88		5.0	1	Date Analyzed
					12/31/2015 12:41
<u>Surrogates</u>					
Terbium	110		70-130		Date Analyzed
					12/31/2015 12:41
<u>Analyst(s):</u> DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-22-0.0	1512A77-046A	Soil	12/22/2015 16:38	ICP-JY	114733
<u>Analytes</u>					
Lead	19		5.0	1	Date Analyzed
					12/31/2015 12:14
<u>Surrogates</u>					
Terbium	115		70-130		Date Analyzed
					12/31/2015 12:14
<u>Analyst(s):</u> DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-23-0.0	1512A77-048A	Soil	12/22/2015 16:20	ICP-JY	114733
<u>Analytes</u>					
Lead	15		5.0	1	Date Analyzed
					12/31/2015 12:00
<u>Surrogates</u>					
Terbium	119		70-130		Date Analyzed
					12/31/2015 12:00
<u>Analyst(s):</u> DB					

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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3050B
Date Prepared: 12/28/15	Analytical Method: SW6010B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-24-0.0	1512A77-050A	Soil	12/22/2015 16:30	ICP-JY	114733
<u>Analytes</u>					
Lead	Result		RL	DF	Date Analyzed
	16		5.0	1	12/31/2015 12:39
<u>Surrogates</u>					
Terbium	REC (%)		Limits		
	106		70-130		12/31/2015 12:39
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-25-0.0	1512A77-052A	Soil	12/22/2015 17:00	ICP-JY	114733
<u>Analytes</u>					
Lead	Result		RL	DF	Date Analyzed
	8.9		5.0	1	12/31/2015 12:31
<u>Surrogates</u>					
Terbium	REC (%)		Limits		
	110		70-130		12/31/2015 12:31
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-26-0.0	1512A77-054A	Soil	12/22/2015 16:47	ICP-JY	114733
<u>Analytes</u>					
Lead	Result		RL	DF	Date Analyzed
	7.4		5.0	1	12/31/2015 12:05
<u>Surrogates</u>					
Terbium	REC (%)		Limits		
	102		70-130		12/31/2015 12:05
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-27-0.0	1512A77-056A	Soil	12/22/2015 09:15	ICP-JY	114733
<u>Analytes</u>					
Lead	Result		RL	DF	Date Analyzed
	6.3		5.0	1	12/29/2015 11:48
<u>Surrogates</u>					
Terbium	REC (%)		Limits		
	108		70-130		12/29/2015 11:48
Analyst(s): BBO					

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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3050B
Date Prepared: 12/28/15	Analytical Method: SW6010B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-28-0.0	1512A77-058A	Soil	12/22/2015 08:45	ICP-JY	114734
<u>Analytes</u>					
Lead	9.7		5.0	1	Date Analyzed
					12/31/2015 12:07
<u>Surrogates</u>					
Terbium	105		70-130		Date Analyzed
					12/31/2015 12:07
<u>Analyst(s):</u> DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-29-0.0	1512A77-060A	Soil	12/22/2015 08:30	ICP-JY	114734
<u>Analytes</u>					
Lead	8.7		5.0	1	Date Analyzed
					12/31/2015 12:51
<u>Surrogates</u>					
Terbium	117		70-130		Date Analyzed
					12/31/2015 12:51
<u>Analyst(s):</u> DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-30-0.0	1512A77-062A	Soil	12/22/2015 08:15	ICP-JY	114734
<u>Analytes</u>					
Lead	9.1		5.0	1	Date Analyzed
					12/31/2015 12:44
<u>Surrogates</u>					
Terbium	104		70-130		Date Analyzed
					12/31/2015 12:44
<u>Analyst(s):</u> DB					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-31-0.0	1512A77-064A	Soil	12/22/2015 09:30	ICP-JY	114734
<u>Analytes</u>					
Lead	7.8		5.0	1	Date Analyzed
					12/31/2015 12:53
<u>Surrogates</u>					
Terbium	112		70-130		Date Analyzed
					12/31/2015 12:53
<u>Analyst(s):</u> DB					

(Cont.)



McC Campbell Analytical, Inc.
 "When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
 http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3050B
Date Prepared: 12/28/15	Analytical Method: SW6010B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-32-0.0	1512A77-066A	Soil	12/22/2015 09:45	ICP-JY	114734

Analytes	Result	RL	DF	Date Analyzed
Lead	7.0	5.0	1	12/31/2015 12:36
Surrogates	REC (%)	Limits		Date Analyzed
Terbium	112	70-130		12/31/2015 12:36

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-33-0.0	1512A77-068A	Soil	12/22/2015 10:00	ICP-JY	114734

Analytes	Result	RL	DF	Date Analyzed
Lead	39	5.0	1	12/31/2015 12:27
Surrogates	REC (%)	Limits		Date Analyzed
Terbium	108	70-130		12/31/2015 12:27

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-34-0.0	1512A77-070A	Soil	12/22/2015 14:10	ICP-JY	114734

Analytes	Result	RL	DF	Date Analyzed
Lead	34	5.0	1	12/29/2015 11:31
Surrogates	REC (%)	Limits		Date Analyzed
Terbium	96	70-130		12/29/2015 11:31

Analyst(s): BBO



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Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3550B
Date Prepared: 12/28/15	Analytical Method: SW8015B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-3-2.0	1512A77-003A	Soil	12/23/2015 09:00	GC39B	114721
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1.3		1.0	1	12/29/2015 17:37
TPH-Motor Oil (C18-C36)	ND		5.0	1	12/29/2015 17:37
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	100		70-130		12/29/2015 17:37
<u>Analyst(s):</u> RB			<u>Analytical Comments:</u> e7,e2		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-3-5.0	1512A77-004A	Soil	12/23/2015 09:15	GC39B	114721
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		1.0	1	12/29/2015 18:55
TPH-Motor Oil (C18-C36)	ND		5.0	1	12/29/2015 18:55
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	100		70-130		12/29/2015 18:55
<u>Analyst(s):</u> RB			<u>Analytical Comments:</u> e7,e2		

McC Campbell Analytical, Inc.

CLIENT: AEI Consultants

Work Order: 1512A77

Project: 350428; Carlos & Sierra Streets, Moss Beach, CA

ANALYTICAL QC SUMMARY REPORT

BatchID: 114978

SampleID MB-114978	TestCode: 1613_FULL_S	Units: pg/g	Prep Date: 12/31/2015
Batch ID: 114978	TestNo: E1613	Run ID: GC36_160111A	Analysis Date: 1/8/2016
Analyte	Result	PQL SPKValue SPKRefVal %REC Limits	RPDRefVal %RPD RPDLimit Qual

2,3,7,8-TCDD	ND	0.500	-						
1,2,3,7,8-PeCDD	ND	2.50	-						
1,2,3,4,7,8-HxCDD	ND	2.50	-						
1,2,3,6,7,8-HxCDD	ND	2.50	-						
1,2,3,7,8,9-HxCDD	ND	2.50	-						
1,2,3,4,6,7,8-HpCDD	ND	2.50	-						
OCDD	ND	5.00	-						
2,3,7,8-TCDF	ND	0.500	-						
1,2,3,7,8-PeCDF	ND	2.50	-						
2,3,4,7,8-PeCDF	ND	2.50	-						
1,2,3,4,7,8-HxCDF	ND	2.50	-						
1,2,3,6,7,8-HxCDF	ND	2.50	-						
2,3,4,6,7,8-HxCDF	ND	2.50	-						
1,2,3,7,8,9-HxCDF	ND	2.50	-						
1,2,3,4,6,7,8-HpCDF	ND	2.50	-						
1,2,3,4,7,8,9-HpCDF	ND	2.50	-						
OCDF	ND	5.00	-						

Cleanup Standard

37Cl-2,3,7,8-TCDD	8.08	10	81	35 - 197
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Labeled Compound Recovery

13C-2,3,7,8-TCDD	76.6	100	77	25 - 164
13C-1,2,3,7,8-PeCDD	96.1	100	96	25 - 181
13C-1,2,3,4,7,8-HxCDD	80.1	100	80	32 - 141
13C-1,2,3,6,7,8-HxCDD	72.1	100	72	28 - 130
13C-1,2,3,4,6,7,8-HpCDD	91.9	100	92	23 - 140
13C-OCDD	225	200	112	17 - 157
13C-2,3,7,8-TCDF	71.9	100	72	24 - 169
13C-1,2,3,7,8-PeCDF	83.5	100	84	24 - 185
13C-2,3,4,7,8-PeCDF	86.7	100	87	21 - 178
13C-1,2,3,4,7,8-HxCDF	68.8	100	69	26 - 152
13C-1,2,3,6,7,8-HxCDF	64.4	100	64	26 - 123
13C-2,3,4,6,7,8-HxCDF	69.6	100	70	28 - 136
13C-1,2,3,7,8,9-HxCDF	74.9	100	75	29 - 147
13C-1,2,3,4,6,7,8-HpCDF	82.7	100	83	28 - 143
13C-1,2,3,4,7,8,9-HpCDF	86.4	100	86	26 - 138

CLIENT: AEI Consultants

ANALYTICAL QC SUMMARY REPORT

Work Order: 1512A77

Project: 350428; Carlos & Sierra Streets, Moss Beach, CA

BatchID: 114978

SampleID LCS-114978	TestCode: 1613_FULL_S	Units: pg/g	Prep Date: 12/31/2015
Batch ID: 114978	TestNo: E1613	Run ID: GC36_160111B	Analysis Date: 1/8/2016

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
2,3,7,8-TCDD	12.4	0.500	10	0	124	67 - 158				
1,2,3,7,8-PeCDD	55.2	2.50	50	1.14	110	70 - 142				
1,2,3,4,7,8-HxCDD	47.8	2.50	50	1.04	96	70 - 164				
1,2,3,6,7,8-HxCDD	48.7	2.50	50	1.04	97	76 - 134				
1,2,3,7,8,9-HxCDD	50.5	2.50	50	0.96	101	64 - 162				
1,2,3,4,6,7,8-HpCDD	47.1	2.50	50	0.68	94	70 - 140				
OCDD	85.5	5.00	100	0.48	86	78 - 144				
2,3,7,8-TCDF	12.6	0.500	10	0	126	75 - 158				
1,2,3,7,8-PeCDF	47.3	2.50	50	0.94	95	80 - 134				
2,3,4,7,8-PeCDF	50.0	2.50	50	0.86	100	68 - 160				
1,2,3,4,7,8-HxCDF	48.9	2.50	50	1.08	98	72 - 134				
1,2,3,6,7,8-HxCDF	50.3	2.50	50	1.14	101	84 - 130				
2,3,4,6,7,8-HxCDF	51.9	2.50	50	1.08	104	70 - 156				
1,2,3,7,8,9-HxCDF	47.3	2.50	50	0.56	95	78 - 130				
1,2,3,4,6,7,8-HpCDF	67.5	2.50	50	0.68	135	82 - 122				S
1,2,3,4,7,8,9-HpCDF	51.9	2.50	50	0.48	104	78 - 138				
OCDF	63.1	5.00	100	0.36	63	63 - 170				

Cleanup Standard

37Cl-2,3,7,8-TCDD	8.28		10		83	31 - 191
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Labeled Compound Recovery

13C-2,3,7,8-TCDD	71.1		100		71	20 - 175
13C-1,2,3,7,8-PeCDD	93.2		100		93	21 - 227
13C-1,2,3,4,7,8-HxCDD	55.6		100		56	21 - 193
13C-1,2,3,6,7,8-HxCDD	52.7		100		53	25 - 163
13C-1,2,3,4,6,7,8-HpCDD	69.3		100		69	26 - 166
13C-OCDD	122		200		61	13 - 199
13C-2,3,7,8-TCDF	63.9		100		64	22 - 152
13C-1,2,3,7,8-PeCDF	94.6		100		95	21 - 192
13C-2,3,4,7,8-PeCDF	79.1		100		79	13 - 328
13C-1,2,3,4,7,8-HxCDF	55.2		100		55	19 - 202
13C-1,2,3,6,7,8-HxCDF	54.9		100		55	21 - 159
13C-2,3,4,6,7,8-HxCDF	50.3		100		50	22 - 176
13C-1,2,3,7,8,9-HxCDF	36.0		100		36	17 - 205
13C-1,2,3,4,6,7,8-HpCDF	51.3		100		51	21 - 158
13C-1,2,3,4,7,8,9-HpCDF	40.3		100		40	20 - 186

CLIENT: AEI Consultants

ANALYTICAL QC SUMMARY REPORT

Work Order: 1512A77

Project: 350428; Carlos & Sierra Streets, Moss Beach, CA

BatchID: 114978

SampleID 1512747-001AMS	TestCode: 1613_FULL_S	Units: pg/g	Prep Date: 12/31/2015
Batch ID: 114978	TestNo: E1613	Run ID: GC36_160111A	Analysis Date: 1/8/2016

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
2,3,7,8-TCDD	94.2	5.00	100	0	94	67 - 158				
1,2,3,7,8-PeCDD	484	25.0	500	5.8	96	70 - 142				
1,2,3,4,7,8-HxCDD	476	25.0	500	8.2	94	70 - 164				
1,2,3,6,7,8-HxCDD	486	25.0	500	9	95	76 - 134				
1,2,3,7,8,9-HxCDD	497	25.0	500	7.4	98	64 - 162				
1,2,3,4,6,7,8-HpCDD	509	25.0	500	20.6	98	70 - 140				
OCDD	1090	50.0	1000	127.4	97	78 - 144				
2,3,7,8-TCDF	97.4	5.00	100	0	97	75 - 158				
1,2,3,7,8-PeCDF	457	25.0	500	5	90	80 - 134				
2,3,4,7,8-PeCDF	464	25.0	500	3.8	92	68 - 160				
1,2,3,4,7,8-HxCDF	464	25.0	500	7.8	91	72 - 134				
1,2,3,6,7,8-HxCDF	482	25.0	500	8.2	95	84 - 130				
2,3,4,6,7,8-HxCDF	488	25.0	500	8	96	70 - 156				
1,2,3,7,8,9-HxCDF	469	25.0	500	5	93	78 - 130				
1,2,3,4,6,7,8-HpCDF	470	25.0	500	8.4	92	82 - 122				
1,2,3,4,7,8,9-HpCDF	491	25.0	500	4.8	97	78 - 138				
OCDF	894	50.0	1000	14.2	88	63 - 170				

Cleanup Standard

37Cl-2,3,7,8-TCDD	84.0	100	84	31 - 191
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Labeled Compound Recovery

13C-2,3,7,8-TCDD	777	1000	78	20 - 175
13C-1,2,3,7,8-PeCDD	1050	1000	105	21 - 227
13C-1,2,3,4,7,8-HxCDD	856	1000	86	21 - 193
13C-1,2,3,6,7,8-HxCDD	762	1000	76	25 - 163
13C-1,2,3,4,6,7,8-HpCDD	994	1000	99	26 - 166
13C-OCDD	2240	2000	112	13 - 199
13C-2,3,7,8-TCDF	761	1000	76	22 - 152
13C-1,2,3,7,8-PeCDF	934	1000	93	21 - 192
13C-2,3,4,7,8-PeCDF	984	1000	98	13 - 328
13C-1,2,3,4,7,8-HxCDF	748	1000	75	19 - 202
13C-1,2,3,6,7,8-HxCDF	696	1000	70	21 - 159
13C-2,3,4,6,7,8-HxCDF	769	1000	77	22 - 176
13C-1,2,3,7,8,9-HxCDF	800	1000	80	17 - 205
13C-1,2,3,4,6,7,8-HpCDF	850	1000	85	21 - 158
13C-1,2,3,4,7,8,9-HpCDF	933	1000	93	20 - 186

CLIENT: AEI Consultants

ANALYTICAL QC SUMMARY REPORT

Work Order: 1512A77

Project: 350428; Carlos & Sierra Streets, Moss Beach, CA

BatchID: 114978

SampleID 1512747-001AMSD	TestCode: 1613_FULL_S	Units: pg/g	Prep Date: 12/31/2015
Batch ID: 114978	TestNo: E1613	Run ID: GC36_160111A	Analysis Date: 1/8/2016

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
2,3,7,8-TCDD	103	5.00	100	0	103	67 - 158	94.2	9.31	20	
1,2,3,7,8-PeCDD	482	25.0	500	5.8	95	70 - 142	483.6	0.373	20	
1,2,3,4,7,8-HxCDD	482	25.0	500	8.2	95	70 - 164	476.2	1.29	20	
1,2,3,6,7,8-HxCDD	478	25.0	500	9	94	76 - 134	485.6	1.58	20	
1,2,3,7,8,9-HxCDD	499	25.0	500	7.4	98	64 - 162	497	0.362	20	
1,2,3,4,6,7,8-HpCDD	489	25.0	500	20.6	94	70 - 140	509.2	4.01	20	
OCDD	958	50.0	1000	127.4	83	78 - 144	1093.2	13.1	20	
2,3,7,8-TCDF	98.0	5.00	100	0	98	75 - 158	97.4	0.614	20	
1,2,3,7,8-PeCDF	467	25.0	500	5	92	80 - 134	457	2.25	20	
2,3,4,7,8-PeCDF	488	25.0	500	3.8	97	68 - 160	464.2	5.00	20	
1,2,3,4,7,8-HxCDF	482	25.0	500	7.8	95	72 - 134	463.6	3.97	20	
1,2,3,6,7,8-HxCDF	501	25.0	500	8.2	98	84 - 130	482.2	3.74	20	
2,3,4,6,7,8-HxCDF	494	25.0	500	8	97	70 - 156	487.8	1.26	20	
1,2,3,7,8,9-HxCDF	468	25.0	500	5	93	78 - 130	469.4	0.213	20	
1,2,3,4,6,7,8-HpCDF	464	25.0	500	8.4	91	82 - 122	470.2	1.24	20	
1,2,3,4,7,8,9-HpCDF	501	25.0	500	4.8	99	78 - 138	491.2	1.94	20	
OCDF	861	50.0	1000	14.2	85	63 - 170	893.8	3.69	20	

Cleanup Standard

37Cl-2,3,7,8-TCDD	82.2	100	82	31 - 191
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Labeled Compound Recovery

13C-2,3,7,8-TCDD	756	1000	76	20 - 175
13C-1,2,3,7,8-PeCDD	1020	1000	102	21 - 227
13C-1,2,3,4,7,8-HxCDD	855	1000	86	21 - 193
13C-1,2,3,6,7,8-HxCDD	767	1000	77	25 - 163
13C-1,2,3,4,6,7,8-HpCDD	974	1000	97	26 - 166
13C-OCDD	2220	2000	111	13 - 199
13C-2,3,7,8-TCDF	759	1000	76	22 - 152
13C-1,2,3,7,8-PeCDF	919	1000	92	21 - 192
13C-2,3,4,7,8-PeCDF	943	1000	94	13 - 328
13C-1,2,3,4,7,8-HxCDF	721	1000	72	19 - 202
13C-1,2,3,6,7,8-HxCDF	669	1000	67	21 - 159
13C-2,3,4,6,7,8-HxCDF	755	1000	75	22 - 176
13C-1,2,3,7,8,9-HxCDF	784	1000	78	17 - 205
13C-1,2,3,4,6,7,8-HpCDF	845	1000	84	21 - 158
13C-1,2,3,4,7,8,9-HpCDF	940	1000	94	20 - 186



Quality Control Report

Client:	AEI Consultants	WorkOrder:	1512A77
Date Prepared:	12/28/15	BatchID:	114716
Date Analyzed:	12/28/15	Extraction Method:	SW5030B
Instrument:	GC18	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/Kg
Project:	350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID:	MB/LCS-114716 1512A04-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0468	0.0050	0.050	-	94	53-116
Benzene	ND	0.0494	0.0050	0.050	-	99	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.181	0.050	0.20	-	90	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0474	0.0050	0.050	-	95	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0457	0.0040	0.050	-	91	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0440	0.0040	0.050	-	88	58-135
1,1-Dichloroethene	ND	0.0441	0.0050	0.050	-	88	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-

(Cont.)



Quality Control Report

Client:	AEI Consultants	WorkOrder:	1512A77
Date Prepared:	12/28/15	BatchID:	114716
Date Analyzed:	12/28/15	Extraction Method:	SW5030B
Instrument:	GC18	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/Kg
Project:	350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID:	MB/LCS-114716 1512A04-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Diisopropyl ether (DIPE)	ND	0.0485	0.0050	0.050	-	97	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0475	0.0050	0.050	-	95	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0463	0.0050	0.050	-	93	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0472	0.0050	0.050	-	94	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0489	0.0050	0.050	-	98	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

(Cont.)



Quality Control Report

Client:	AEI Consultants	WorkOrder:	1512A77
Date Prepared:	12/28/15	BatchID:	114716
Date Analyzed:	12/28/15	Extraction Method:	SW5030B
Instrument:	GC18	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/Kg
Project:	350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID:	MB/LCS-114716 1512A04-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.110	0.110		0.12	88	88	70-130
Toluene-d8	0.131	0.120		0.12	105	96	70-130
4-BFB	0.00919	0.0111		0.012	74	89	70-130
Benzene-d6	0.103	0.105		0.10	103	105	60-140
Ethylbenzene-d10	0.101	0.104		0.10	101	104	60-140
1,2-DCB-d4	0.0989	0.105		0.10	99	105	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0433	0.0441	0.050	ND	87	88	70-130	1.83	20
Benzene	0.0439	0.0445	0.050	ND	88	89	70-130	1.36	20
t-Butyl alcohol (TBA)	0.166	0.166	0.20	ND	83	83	70-130	0	20
Chlorobenzene	0.0424	0.0433	0.050	ND	85	87	70-130	1.95	20
1,2-Dibromoethane (EDB)	0.0430	0.0432	0.050	ND	86	86	70-130	0	20
1,2-Dichloroethane (1,2-DCA)	0.0401	0.0410	0.050	ND	80	82	70-130	2.18	20
1,1-Dichloroethene	0.0396	0.0402	0.050	ND	79	80	70-130	1.49	20
Diisopropyl ether (DIPE)	0.0437	0.0444	0.050	ND	87	89	70-130	1.58	20
Ethyl tert-butyl ether (ETBE)	0.0434	0.0445	0.050	ND	87	89	70-130	2.52	20
Methyl-t-butyl ether (MTBE)	0.0426	0.0433	0.050	ND	85	87	70-130	1.55	20
Toluene	0.0413	0.0424	0.050	ND	83	85	70-130	2.60	20
Trichloroethene	0.0434	0.0439	0.050	ND	87	88	70-130	1.22	20

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Surrogate Recovery									
Dibromofluoromethane	0.112	0.110	0.12		89	88	70-130	1.09	20
Toluene-d8	0.119	0.120	0.12		95	96	70-130	0.570	20
4-BFB	0.0106	0.0107	0.012		85	85	70-130	0	20
Benzene-d6	0.0930	0.0943	0.10		93	94	60-140	1.37	20
Ethylbenzene-d10	0.0916	0.0931	0.10		92	93	60-140	1.67	20
1,2-DCB-d4	0.0979	0.0985	0.10		98	99	60-140	0.625	20

(Cont.)

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QA/QC Officer



Quality Control Report

Client:	AEI Consultants	WorkOrder:	1512A77
Date Prepared:	12/28/15	BatchID:	114719
Date Analyzed:	12/29/15	Extraction Method:	SW3050B
Instrument:	ICP-MS2	Analytical Method:	SW6020
Matrix:	Soil	Unit:	mg/Kg
Project:	350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID:	MB/LCS-114719 1512A70-001AMS/MSD 1512A70-001APDS

QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	54.3	0.50	50	-	109	75-125
Arsenic	ND	52.3	0.50	50	-	105	75-125
Barium	ND	534	5.0	500	-	107	75-125
Beryllium	ND	52.5	0.50	50	-	105	75-125
Cadmium	ND	52.2	0.25	50	-	104	75-125
Chromium	ND	53.1	0.50	50	-	106	75-125
Cobalt	ND	52.3	0.50	50	-	105	75-125
Copper	ND	55.2	0.50	50	-	110	75-125
Lead	ND	53.4	0.50	50	-	107	75-125
Mercury	ND	1.33	0.050	1.25	-	106	75-125
Molybdenum	ND	53.0	0.50	50	-	106	75-125
Nickel	ND	55.0	0.50	50	-	110	75-125
Selenium	ND	52.8	0.50	50	-	106	75-125
Silver	ND	55.3	0.50	50	-	111	75-125
Thallium	ND	50.3	0.50	50	-	101	75-125
Vanadium	ND	52.9	0.50	50	-	106	75-125
Zinc	ND	547	5.0	500	-	109	75-125
Surrogate Recovery							
Terbium	535	531		500	107	106	70-130

(Cont.)

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QA/QC Officer



Quality Control Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Prepared: 12/28/15	BatchID: 114719
Date Analyzed: 12/29/15	Extraction Method: SW3050B
Instrument: ICP-MS2	Analytical Method: SW6020
Matrix: Soil	Unit: mg/Kg
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID: MB/LCS-114719 1512A70-001AMS/MSD 1512A70-001APDS

QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	54.0	53.6	50	0.6766	107	106	75-125	0.763	20
Arsenic	53.6	56.0	50	3.241	101	105	75-125	4.27	20
Barium	647	669	500	84.53	113	117	75-125	3.25	20
Beryllium	52.5	52.4	50	ND	104	104	75-125	0	20
Cadmium	51.8	52.8	50	0.3813	103	105	75-125	2.06	20
Chromium	95.2	99.0	50	32.66	125	133,F8	75-125	3.92	20
Cobalt	57.5	57.0	50	10.72	94	93	75-125	0.890	20
Copper	89.2	92.4	50	29.55	119	126,F8	75-125	3.62	20
Lead	238	258	50	177.9	119	160,F8	75-125	8.24	20
Mercury	1.44	1.49	1.25	0.1659	102	106	75-125	3.89	20
Molybdenum	52.6	52.2	50	0.6537	104	103	75-125	0.725	20
Nickel	81.0	84.1	50	23.98	114	120	75-125	3.74	20
Selenium	50.6	52.2	50	ND	101	104	75-125	3.09	20
Silver	54.5	54.7	50	ND	108	109	75-125	0.403	20
Thallium	48.1	48.6	50	ND	96	97	75-125	0.972	20
Vanadium	130	112	50	60.27	139,F8	104	75-125	14.2	20
Zinc	646	664	500	91.55	111	115	75-125	2.86	20

Surrogate Recovery

Terbium	532	532	500		106	106	70-130	0	20
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Analyte	PDS Result	SPK Val	SPKRef Val	PDS %REC	PDS Limits
Chromium	84.7	50	32.66	104	80-120
Copper	85.2	50	29.55	111	80-120
Lead	251	50	177.9	146	80-120
Vanadium	114	50	60.27	108	80-120

Analyte	DLT Result	DLTRef Val	RPD	RPD Limit
Lead	172	177.9	3.43	10

(Cont.)



Quality Control Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Prepared: 12/28/15	BatchID: 114721
Date Analyzed: 12/29/15	Extraction Method: SW3550B
Instrument: GC39A, GC39B	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID: MB/LCS-114721 1512A70-001AMS/MSD

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	34.5	1.0	40	-	86	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	25.0	23.8		25	100	95	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		110	NR	NR	-	NR	
Surrogate Recovery									
C9	NR	NR			NR	NR	-	NR	



Quality Control Report

Client:	AEI Consultants	WorkOrder:	1512A77
Date Prepared:	12/28/15	BatchID:	114731
Date Analyzed:	12/29/15	Extraction Method:	SW5030B
Instrument:	GC19	Analytical Method:	SW8021B/8015Bm
Matrix:	Soil	Unit:	mg/Kg
Project:	350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID:	MB/LCS-114731 1512A83-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.619	0.40	0.60	-	103	70-130
MTBE	ND	0.0913	0.050	0.10	-	91	70-130
Benzene	ND	0.111	0.0050	0.10	-	111	70-130
Toluene	ND	0.113	0.0050	0.10	-	113	70-130
Ethylbenzene	ND	0.116	0.0050	0.10	-	116	70-130
Xylenes	ND	0.373	0.015	0.30	-	124	70-130

Surrogate Recovery

2-Fluorotoluene	0.104	0.126		0.10	104	126	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.575	0.591	0.60	ND	96	99	70-130	2.85	20
MTBE	0.0811	0.0789	0.10	ND	81	79	70-130	2.69	20
Benzene	0.0993	0.106	0.10	ND	99	106	70-130	6.68	20
Toluene	0.102	0.109	0.10	ND	100	107	70-130	6.50	20
Ethylbenzene	0.106	0.116	0.10	ND	106	116	70-130	9.02	20
Xylenes	0.340	0.382	0.30	ND	113	127	70-130	11.6	20

Surrogate Recovery

2-Fluorotoluene	0.118	0.127	0.10		118	127	70-130	7.09	20
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CDPH ELAP 1644 ♦ NELAP 4033ORELAP

 QA/QC Officer



Quality Control Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Prepared: 12/28/15	BatchID: 114732
Date Analyzed: 12/28/15	Extraction Method: SW3550B
Instrument: GC5A	Analytical Method: SW8082
Matrix: Soil	Unit: mg/kg
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID: MB/LCS-114732 1512A77-002AMS/MSD

QC Summary Report for SW8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	0.173	0.050	0.15	-	115	70-130
PCBs, total	ND	-	0.050	-	-	-	-

Surrogate Recovery

Decachlorobiphenyl	0.0458	0.0462		0.050	92	92	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aroclor1260	0.173	0.164	0.15	ND	115	109	70-130	5.26	30

Surrogate Recovery

Decachlorobiphenyl	0.0457	0.0469	0.050		91	94	70-130	2.56	30
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Quality Control Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Prepared: 12/29/15	BatchID: 114790
Date Analyzed: 12/30/15	Extraction Method: SW5030B
Instrument: GC19	Analytical Method: SW8021B/8015Bm
Matrix: Soil	Unit: mg/Kg
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID: MB/LCS-114790 1512B46-011AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.600	0.40	0.60	-	100	70-130
MTBE	ND	0.0813	0.050	0.10	-	81	70-130
Benzene	ND	0.109	0.0050	0.10	-	109	70-130
Toluene	ND	0.111	0.0050	0.10	-	111	70-130
Ethylbenzene	ND	0.115	0.0050	0.10	-	115	70-130
Xylenes	ND	0.368	0.015	0.30	-	123	70-130

Surrogate Recovery

2-Fluorotoluene	0.128	0.129		0.10	128	129	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.459	0.482	0.60	ND	76	80	70-130	4.89	20
MTBE	0.0906	0.0967	0.10	ND	91	97	70-130	6.56	20
Benzene	0.0962	0.0941	0.10	ND	96	94	70-130	2.31	20
Toluene	0.0947	0.0926	0.10	ND	95	93	70-130	2.19	20
Ethylbenzene	0.0965	0.0940	0.10	ND	97	94	70-130	2.69	20
Xylenes	0.295	0.297	0.30	ND	98	99	70-130	0.597	20

Surrogate Recovery

2-Fluorotoluene	0.112	0.109	0.10		112	109	70-130	2.62	20
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Quality Control Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Prepared: 12/28/15	BatchID: 114733
Date Analyzed: 12/29/15	Extraction Method: SW3050B
Instrument: ICP-JY	Analytical Method: SW6010B
Matrix: Soil	Unit: mg/Kg
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID: MB/LCS-114733 1512A77-056AMS/MSD

QC Summary Report for Lead

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Lead	ND	51.0	5.0	50	-	102	75-125
Surrogate Recovery							
Terbium	526	542		500	105	108	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	54.9	55.1	50	6.260	97	98	75-125	0.318	25
Surrogate Recovery									
Terbium	521	503	500		104	101	70-130	3.42	20



Quality Control Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Prepared: 12/28/15	BatchID: 114734
Date Analyzed: 12/29/15	Extraction Method: SW3050B
Instrument: ICP-JY	Analytical Method: SW6010B
Matrix: Soil	Unit: mg/Kg
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID: MB/LCS-114734 1512A77-070AMS/MSD

QC Summary Report for Lead

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Lead	ND	51.1	5.0	50	-	102	75-125
Surrogate Recovery							
Terbium	495	504		500	99	101	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	74.8	81.3	50	33.95	82	95	75-125	8.39	25
Surrogate Recovery									
Terbium	534	544	500		107	109	70-130	1.99	20



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1512A77

ClientCode: AELS

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Tim Bodkin
AEI Consultants
3880 S. Bascom Ave, Suite 109
San Jose, CA 95124
408-559-7600 FAX:

Email: tbodkin@aeiconsultants.com
cc/3rd Party:
PO:
ProjectNo: 350428; Carlos & Sierra Streets, Moss Beach, CA

Bill to:

Accounts Payable
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
AccountsPayable@AEIConsultants.com

Requested TATs: 15 days;
5 days;

Date Received: 12/28/2015

Date Logged: 12/28/2015

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1512A77-002	B-1-1.5	Soil	12/22/2015 10:20	<input type="checkbox"/>	A	A		A									
1512A77-003	B-3-2.0	Soil	12/23/2015 9:00	<input type="checkbox"/>								A					
1512A77-004	B-3-5.0	Soil	12/23/2015 9:15	<input type="checkbox"/>								A					
1512A77-005	B-4-0.0	Soil	12/23/2015 11:30	<input type="checkbox"/>							A						
1512A77-007	B-5-0.0	Soil	12/23/2015 11:45	<input type="checkbox"/>							A						
1512A77-009	B-6-0.0	Soil	12/23/2015 11:18	<input type="checkbox"/>							A						
1512A77-011	B-8-0.0	Soil	12/23/2015 11:00	<input type="checkbox"/>							A						
1512A77-013	B-9-0.0	Soil	12/22/2015 13:00	<input type="checkbox"/>							A						
1512A77-015	B-10-0.0	Soil	12/22/2015 13:08	<input type="checkbox"/>							A						
1512A77-017	B-11-0.0	Soil	12/22/2015 13:17	<input type="checkbox"/>							A						
1512A77-021	B-12-5.0	Soil	12/23/2015 10:15	<input type="checkbox"/>			A		A								
1512A77-023	B-7-0.0	Soil	12/23/2015 10:55	<input type="checkbox"/>							A						
1512A77-026	B-13-6.0	Soil	12/23/2015 10:43	<input type="checkbox"/>			A		A								
1512A77-028	B-14-2.0	Soil	12/23/2015 11:50	<input type="checkbox"/>			A		A								
1512A77-029	B-15-0.0	Soil	12/22/2015 15:10	<input type="checkbox"/>							A						

Test Legend:

1	1613_FULL_S	2	8082_PCB_S	3	8260B_S	4	CAM17MS_TTLC_S
5	G-MBTX_S	6	PB_TTLC_S	7	TPH(DMO)_S	8	
9		10		11		12	

Prepared by: Agustina Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1512A77

ClientCode: AELS

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Report to:

Tim Bodkin
AEI Consultants
3880 S. Bascom Ave, Suite 109
San Jose, CA 95124
408-559-7600 FAX:

Email: tbodkin@aeiconsultants.com
cc/3rd Party:
PO:
ProjectNo: 350428; Carlos & Sierra Streets, Moss Beach, CA

Bill to:

Accounts Payable
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
AccountsPayable@AEIConsultants.com

**Requested TATs: 15 days;
5 days;**

Date Received: 12/28/2015
Date Logged: 12/28/2015

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1512A77-032	B-15-7.0	Soil	12/23/2015 9:50	<input type="checkbox"/>			A		A							
1512A77-034	B-16-0.0	Soil	12/22/2015 15:00	<input type="checkbox"/>						A						
1512A77-036	B-17-4.0	Soil	12/22/2015 15:25	<input type="checkbox"/>			A		A							
1512A77-038	B-18-0.0	Soil	12/22/2015 14:30	<input type="checkbox"/>						A						
1512A77-040	B-19-0.0	Soil	12/22/2015 16:00	<input type="checkbox"/>						A						
1512A77-042	B-20-0.0	Soil	12/22/2015 13:35	<input type="checkbox"/>						A						
1512A77-044	B-21-0.0	Soil	12/22/2015 13:55	<input type="checkbox"/>						A						
1512A77-046	B-22-0.0	Soil	12/22/2015 16:38	<input type="checkbox"/>						A						
1512A77-048	B-23-0.0	Soil	12/22/2015 16:20	<input type="checkbox"/>						A						
1512A77-050	B-24-0.0	Soil	12/22/2015 16:30	<input type="checkbox"/>						A						
1512A77-052	B-25-0.0	Soil	12/22/2015 17:00	<input type="checkbox"/>						A						
1512A77-054	B-26-0.0	Soil	12/22/2015 16:47	<input type="checkbox"/>						A						
1512A77-056	B-27-0.0	Soil	12/22/2015 9:15	<input type="checkbox"/>						A						
1512A77-058	B-28-0.0	Soil	12/22/2015 8:45	<input type="checkbox"/>						A						
1512A77-060	B-29-0.0	Soil	12/22/2015 8:30	<input type="checkbox"/>						A						

Test Legend:

1	1613_FULL_S	2	8082_PCB_S	3	8260B_S	4	CAM17MS_TTLC_S
5	G-MBTX_S	6	PB_TTLC_S	7	TPH(DMO)_S	8	
9		10		11		12	

Prepared by: Agustina Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1512A77

ClientCode: AELS

WaterTrax
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 EDF
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 EQUS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Tim Bodkin
AEI Consultants
3880 S. Bascom Ave, Suite 109
San Jose, CA 95124
408-559-7600 FAX:

Email: tbodkin@aeiconsultants.com
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AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
AccountsPayable@AEIConsultants.com

**Requested TATs: 15 days;
5 days;**

Date Received: 12/28/2015

Date Logged: 12/28/2015

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1512A77-062	B-30-0.0	Soil	12/22/2015 8:15	<input type="checkbox"/>							A					
1512A77-064	B-31-0.0	Soil	12/22/2015 9:30	<input type="checkbox"/>							A					
1512A77-066	B-32-0.0	Soil	12/22/2015 9:45	<input type="checkbox"/>							A					
1512A77-068	B-33-0.0	Soil	12/22/2015 10:00	<input type="checkbox"/>							A					
1512A77-070	B-34-0.0	Soil	12/22/2015 14:10	<input type="checkbox"/>							A					

Test Legend:

1	1613_FULL_S
5	G-MBTX_S
9	

2	8082_PCB_S
6	PB_TTLC_S
10	

3	8260B_S
7	TPH(DMO)_S
11	

4	CAM17MS_TTLC_S
8	
12	

Prepared by: Agustina Venegas

Comments:

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WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS

QC Level: LEVEL 2

Work Order: 1512A77

Project: 350428; Carlos & Sierra Streets, Moss Beach, CA

Client Contact: Tim Bodkin

Date Logged: 12/28/2015

Comments:

Contact's Email: tbodkin@aeiconsultants.com

WaterTrax
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 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1512A77-001A	B-1-0.0	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 10:20			<input checked="" type="checkbox"/>	
1512A77-002A	B-1-1.5	Soil	SW6020 (CAM 17)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 10:20	5 days		<input type="checkbox"/>	
			SW8082 (PCBs Only)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			E1613 (PCDDs & PCDFs)			<input type="checkbox"/>		15 days		<input type="checkbox"/>	
1512A77-003A	B-3-2.0	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 9:00	5 days		<input type="checkbox"/>	
1512A77-004A	B-3-5.0	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 9:15	5 days		<input type="checkbox"/>	
1512A77-005A	B-4-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:30	5 days		<input type="checkbox"/>	
1512A77-006A	B-4-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:30			<input checked="" type="checkbox"/>	
1512A77-007A	B-5-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:45	5 days		<input type="checkbox"/>	
1512A77-008A	B-5-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:45			<input checked="" type="checkbox"/>	
1512A77-009A	B-6-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:18	5 days		<input type="checkbox"/>	
1512A77-010A	B-6-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:18			<input checked="" type="checkbox"/>	
1512A77-011A	B-8-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:00	5 days		<input type="checkbox"/>	
1512A77-012A	B-8-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:00			<input checked="" type="checkbox"/>	
1512A77-013A	B-9-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:00	5 days		<input type="checkbox"/>	
1512A77-014A	B-9-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:00			<input checked="" type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



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QC Level: LEVEL 2

Work Order: 1512A77

Project: 350428; Carlos & Sierra Streets, Moss Beach, CA

Client Contact: Tim Bodkin

Date Logged: 12/28/2015

Comments:

Contact's Email: tbodkin@aeiconsultants.com

WaterTrax
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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1512A77-015A	B-10-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:08	5 days		<input type="checkbox"/>	
1512A77-016A	B-10-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:08			<input checked="" type="checkbox"/>	
1512A77-017A	B-11-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:17	5 days		<input type="checkbox"/>	
1512A77-018A	B-11-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:17			<input checked="" type="checkbox"/>	
1512A77-019A	B-12-0.0	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:20			<input checked="" type="checkbox"/>	
1512A77-020A	B-12-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:20			<input checked="" type="checkbox"/>	
1512A77-021A	B-12-5.0	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 10:15	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1512A77-022A	B-12-9.0	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 10:22			<input checked="" type="checkbox"/>	
1512A77-023A	B-7-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 10:55	5 days		<input type="checkbox"/>	
1512A77-024A	B-7-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 10:55			<input checked="" type="checkbox"/>	
1512A77-025A	B-13-3.0	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 10:35			<input checked="" type="checkbox"/>	
1512A77-026A	B-13-6.0	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 10:43	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1512A77-027A	B-13-9.0	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 10:55			<input checked="" type="checkbox"/>	
1512A77-028A	B-14-2.0	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:50	5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
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Comments:

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 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1512A77-028A	B-14-2.0	Soil	SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 11:50	5 days		<input type="checkbox"/>	
1512A77-029A	B-15-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 15:10	5 days		<input type="checkbox"/>	
1512A77-030A	B-15-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 15:10			<input checked="" type="checkbox"/>	
1512A77-031A	B-15-4.0	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 9:35			<input checked="" type="checkbox"/>	
1512A77-032A	B-15-7.0	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	12/23/2015 9:50	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1512A77-033A	B-15-9.0	Soil		1	Acetate Liner	<input type="checkbox"/>	12/23/2015 10:00			<input checked="" type="checkbox"/>	
1512A77-034A	B-16-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 15:00	5 days		<input type="checkbox"/>	
1512A77-035A	B-16-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 15:00			<input checked="" type="checkbox"/>	
1512A77-036A	B-17-4.0	Soil	SW8021B/8015Bm (G/MBTEX)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 15:25	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1512A77-037A	B-17-8.0	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 15:35			<input checked="" type="checkbox"/>	
1512A77-038A	B-18-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 14:30	5 days		<input type="checkbox"/>	
1512A77-039A	B-18-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 14:30			<input checked="" type="checkbox"/>	
1512A77-040A	B-19-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:00	5 days		<input type="checkbox"/>	
1512A77-041A	B-19-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:00			<input checked="" type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1512A77-042A	B-20-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:35	5 days		<input type="checkbox"/>	
1512A77-043A	B-20-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:35			<input checked="" type="checkbox"/>	
1512A77-044A	B-21-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:55	5 days		<input type="checkbox"/>	
1512A77-045A	B-21-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 13:55			<input checked="" type="checkbox"/>	
1512A77-046A	B-22-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:38	5 days		<input type="checkbox"/>	
1512A77-047A	B-22-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:38			<input checked="" type="checkbox"/>	
1512A77-048A	B-23-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:20	5 days		<input type="checkbox"/>	
1512A77-049A	B-23-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:20			<input checked="" type="checkbox"/>	
1512A77-050A	B-24-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:30	5 days		<input type="checkbox"/>	
1512A77-051A	B-24-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:30			<input checked="" type="checkbox"/>	
1512A77-052A	B-25-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 17:00	5 days		<input type="checkbox"/>	
1512A77-053A	B-25-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 17:00			<input checked="" type="checkbox"/>	
1512A77-054A	B-26-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:47	5 days		<input type="checkbox"/>	
1512A77-055A	B-26-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 16:47			<input checked="" type="checkbox"/>	
1512A77-056A	B-27-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 9:15	5 days		<input type="checkbox"/>	
1512A77-057A	B-27-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 9:15			<input checked="" type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1512A77-058A	B-28-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 8:45	5 days		<input type="checkbox"/>	
1512A77-059A	B-28-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 8:45			<input checked="" type="checkbox"/>	
1512A77-060A	B-29-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 8:30	5 days		<input type="checkbox"/>	
1512A77-061A	B-29-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 8:30			<input checked="" type="checkbox"/>	
1512A77-062A	B-30-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 8:15	5 days		<input type="checkbox"/>	
1512A77-063A	B-30-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 8:15			<input checked="" type="checkbox"/>	
1512A77-064A	B-31-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 9:30	5 days		<input type="checkbox"/>	
1512A77-065A	B-31-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 9:30			<input checked="" type="checkbox"/>	
1512A77-066A	B-32-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 9:45	5 days		<input type="checkbox"/>	
1512A77-067A	B-32-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 9:45			<input checked="" type="checkbox"/>	
1512A77-068A	B-33-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 10:00	5 days		<input type="checkbox"/>	
1512A77-069A	B-33-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 10:00			<input checked="" type="checkbox"/>	
1512A77-070A	B-34-0.0	Soil	SW6010B (Lead)	1	Acetate Liner	<input type="checkbox"/>	12/22/2015 14:10	5 days		<input type="checkbox"/>	
1512A77-071A	B-34-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	12/22/2015 14:10			<input checked="" type="checkbox"/>	

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McC Campbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701
www.mcccampbell.com / main@mcccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

County Review Draft

TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY
GeoTracker EDF PDF EDD Write On (DW) EQuIS 10 DAY
Effluent Sample Requiring "J" flag UST Clean Up Fund Project ; Claim # _____

Report To: TIM BODKIN Bill To: _____
Company: AFI CONSULTANTS SAME
3880 S. BIRCHM AVE STE. 109
SAN JOSE CA 95124 E-Mail: tim@afi-consultants.com
Tele: (408) 559-7600 Fax: () _____
Project #: 370428 Project Name: CHURCH & S. EIGHT STREET
Project Location: MOSP, 3500 CA Purchase Order# _____
Sampler Signature: T. BODKIN

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING		# Containers	MATRIX										METHOD PRESERVED	Analysis Request		
		Date	Time		Ground Water	Waste Water	Drinking Water	Sea / Water	Soil	Air	Sludge	Other	HCL	HNO ₃	Other			
B-32-1.5		12/23/15	9:45	1					X									TPH as Gas (8015) <u>ADD NOT FOR BIL</u>
B-33-0.0			10:00															Total Petroleum Oil & Grease (1664 / 5520 E/B&F)
B-33-1.5																		Total Petroleum Hydrocarbons (418.1)
B-34-0.0			14:10															MTBE / BTEX ONLY (EPA 8260/8021)
B-34-1.5																		EPA 505/ 608 / 8081 (CI Pesticides)
																		EPA 608 / 8082 PCB's; Aroclors / Congeners
																		EPA 507 / 8141 (NP Pesticides)
																		EPA 515 / 8151 (Acidic CI Herbicides)
																		EPA 524.2 / 6247 8260 (VOCs)
																		EPA 525.2 / 625 / 8270 (SVOCs)
																		EPA 8270 SIM / 8310 (PAHs / PNAAs)
																		<u>CAM 17 Metals (200.8 / 6020)</u>
																		LUFT 5 Metals (200.8 / 6020)
																		Metals (200.8 / 6020)
																		Filter sample for DISSOLVED metals analysis
																		<u>LEAD (EPA 8010)</u>
																		<u>INOX 10 AZO DIBENZO (EPA 1613)</u>
																		<u>HOLD FOR FUTURE ANALYSIS</u>

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: <u>[Signature]</u>	Date: <u>12/23/15</u> Time: <u>13:22</u>	Received By: <u>[Signature]</u>
Relinquished By: <u>[Signature]</u>	Date: <u>12/28/15</u> Time: <u>15:10</u>	Received By: <u>ADRIANA V.</u>
Relinquished By: _____	Date: _____ Time: _____	Received By: _____

ICE/# _____
 GOOD CONDITION _____
 HEAD SPACE ABSENT _____
 DECHLORINATED IN LAB _____
 APPROPRIATE CONTAINERS _____
 PRESERVED IN LAB _____

VOAS O&G METALS OTHER HAZARDOUS:
 PRESERVATION _____ pH-2 _____

COMMENTS: PAGE 7 OF 7



Sample Receipt Checklist

Client Name: AEI Consultants	Date and Time Received: 12/28/2015 15:10
Project Name: 350428; Carlos & Sierra Streets, Moss Beach, CA	Date Logged: 12/28/2015
WorkOrder No: 1512A77 Matrix: <u>Soil</u>	Received by: Agustina Venegas
Carrier: <u>Bernie Cummins (MAI Courier)</u>	Logged by: Agustina Venegas

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample/Temp Blank temperature		Temp: 5°C	NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

* NOTE: If the "No" box is checked, see comments below.

 Comments:



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"When Quality Counts"

Analytical Report

WorkOrder: 1512A77 A

Report Created for: AEI Consultants

3880 S. Bascom Ave, Suite 109
San Jose, CA 95124

Project Contact: Tim Bodkin

Project P.O.:

Project Name: 350428; Carlos & Sierra Streets, Moss Beach, CA

Project Received: 12/28/2015

Analytical Report reviewed & approved for release on 01/15/2016 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA
WorkOrder: 1512A77

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

S	spike recovery outside accepted recovery limits
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant



Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA
WorkOrder: 1512A77

Quality Control Qualifiers

F8 MS/MSD recovery and/or RPD was out of acceptance criteria; PDS validated the prep batch. If PDS recovery was out of acceptance criteria, DLT validated the prep batch.



McC Campbell Analytical, Inc.
 "When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
 http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Received: 12/28/15 17:55	Extraction Method: SW3050B
Date Prepared: 1/14/16	Analytical Method: SW6010B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Unit: mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7-1.5	1512A77-024A	Soil	12/23/2015 10:55	ICP-JY	115395

Analytes	Result	RL	DF	Date Analyzed
Lead	7.0	5.0	1	01/15/2016 11:55

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	125	70-130	01/15/2016 11:55

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-20-1.5	1512A77-043A	Soil	12/22/2015 13:35	ICP-JY	115395

Analytes	Result	RL	DF	Date Analyzed
Lead	8.1	5.0	1	01/15/2016 11:45

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	106	70-130	01/15/2016 11:45

Analyst(s): BBO



Quality Control Report

Client:	AEI Consultants	WorkOrder:	1512A77
Date Prepared:	1/14/16	BatchID:	115395
Date Analyzed:	1/15/16	Extraction Method:	SW3050B
Instrument:	ICP-JY	Analytical Method:	SW6010B
Matrix:	Soil	Unit:	mg/Kg
Project:	350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID:	MB/LCS-115395 1512A77-043AMS/MSD

QC Summary Report for Lead

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Lead	ND	54.7	5.0	50	-	109	75-125
Surrogate Recovery							
Terbium	533	536		500	107	107	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	60.9	63.2	50	8.090	106	110	75-125	3.63	25
Surrogate Recovery									
Terbium	596	640	500		119	128	70-130	7.04	20



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

WorkOrder: 1512A77 A **ClientCode: AELS**

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
Tim Bodkin
AEI Consultants
3880 S. Bascom Ave, Suite 109
San Jose, CA 95124
408-559-7600 FAX:

Email: tbodkin@aeiconsultants.com
cc/3rd Party:
PO:
ProjectNo: 350428; Carlos & Sierra Streets, Moss Beach, CA

Bill to:
Accounts Payable
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
AccountsPayable@AEIConsultants.com

Requested TAT: 1 day;

Date Received: 12/28/2015
Date Logged: 12/28/2015
Date Add-On: 01/14/2016

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)													
					1	2	3	4	5	6	7	8	9	10	11	12		
1512A77-024	B-7-1.5	Soil	12/23/2015 10:55	<input type="checkbox"/>	A													
1512A77-043	B-20-1.5	Soil	12/22/2015 13:35	<input type="checkbox"/>	A													

Test Legend:

1 PB_S	2	3	4
5	6	7	8
9	10	11	12

Prepared by: Agustina Venegas

Add-On Prepared By: Maria Venegas

Comments: TTLc Pb added to 024 & 043 1/14/16 1day TAT.

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS

QC Level: LEVEL 2

Work Order: 1512A77

Project: 350428; Carlos & Sierra Streets, Moss Beach, CA

Client Contact: Tim Bodkin

Date Logged: 12/28/2015

Comments: TTLC Pb added to 024 & 043 1/14/16 1day TAT.

Contact's Email: tbodkin@aeiconsultants.com

Date Add-On: 1/14/2016

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1512A77-024A	B-7-1.5	Soil	SW6010B (Lead)	1	Acetate Liner	12/23/2015 10:55	1 day		<input type="checkbox"/>	
1512A77-043A	B-20-1.5	Soil	SW6010B (Lead)	1	Acetate Liner	12/22/2015 13:35	1 day		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1512A77 B

Report Created for: AEI Consultants

3880 S. Bascom Ave, Suite 109
San Jose, CA 95124

Project Contact: Tim Bodkin

Project P.O.:

Project Name: 350428; Carlos & Sierra Streets, Moss Beach, CA

Project Received: 12/28/2015

Analytical Report reviewed & approved for release on 01/19/2016 by:

Angela Rydelius,
Laboratory Manager

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Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA
WorkOrder: 1512A77

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

S	spike recovery outside accepted recovery limits
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant



Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA
WorkOrder: 1512A77

Quality Control Qualifiers

F8 MS/MSD recovery and/or RPD was out of acceptance criteria; PDS validated the prep batch. If PDS recovery was out of acceptance criteria, DLT validated the prep batch.



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 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
 http://www.mcccampbell.com / E-mail: main@mcccampbell.com

Analytical Report

Client: AEI Consultants **WorkOrder:** 1512A77
Date Received: 12/28/15 17:55 **Extraction Method:** SW3050B
Date Prepared: 1/15/16 **Analytical Method:** SW6010B
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA **Unit:** mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-21-1.5	1512A77-045A	Soil	12/22/2015 13:55	ICP-JY	115442
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Lead	8.8		5.0	1	01/19/2016 09:47
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Terbium	116		70-130		01/19/2016 09:47
<u>Analyst(s):</u> BBO					



Quality Control Report

Client: AEI Consultants	WorkOrder: 1512A77
Date Prepared: 1/15/16	BatchID: 115442
Date Analyzed: 1/19/16	Extraction Method: SW3050B
Instrument: ICP-JY	Analytical Method: SW6010B
Matrix: Soil	Unit: mg/Kg
Project: 350428; Carlos & Sierra Streets, Moss Beach, CA	Sample ID: MB/LCS-115442 1512A77-045AMS/MSD

QC Summary Report for Lead

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Lead	ND	47.5	5.0	50	-	95	75-125
Surrogate Recovery							
Terbium	518	508		500	103	102	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	55.0	54.6	50	8.755	92	92	75-125	0	25
Surrogate Recovery									
Terbium	546	509	500		109	102	70-130	7.06	20



WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS

QC Level: LEVEL 2

Work Order: 1512A77

Project: 350428; Carlos & Sierra Streets, Moss Beach, CA

Client Contact: Tim Bodkin

Date Logged: 12/28/2015

Comments: TTLC Pb added to 024 & 043 1/14/16 1day TAT. TTLC Pb added 045, no charge since 043 was setup by mistake.

Contact's Email: tbodkin@aeiconsultants.com

Date Add-On: 1/15/2016

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1512A77-045A	B-21-1.5	Soil	SW6010B (Lead)	1	Acetate Liner	12/22/2015 13:55	1 day		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

