December 18, 2015

Mr. Mark Detterman
Hazardous Materials Specialist
Alameda County Environmental Health Services
Environmental Protection, Local Oversight Program
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Letter of Transmittal For Subsurface Investigation Report**
500 Grand Avenue
Oakland, California 94611
ACEH Fuel Leak Case No. RO0003175
GeoTracker Global ID No. T10000007707

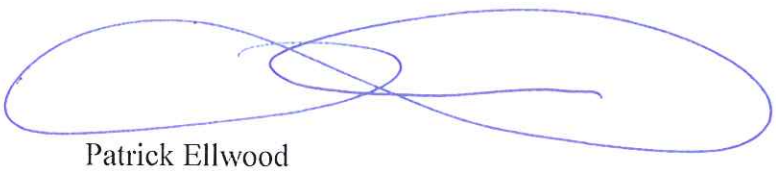
Dear Mr. Detterman:

As requested discussed at our meeting of September 25, 2015 regarding the above-referenced subject site, and proposed in our *Site Management Plan and Subsurface Investigation Workplan* dated October 22, 2015, we submit this transmittal letter and accompanying *Subsurface Investigation Report* for the subject site.

I declare under penalty of perjury, that the information contained in the attached documents or reports is true and correct to the best of my knowledge.

Sincerely,

Ellwood Commercial Real Estate



Patrick Ellwood

AllWest Environmental

SUBSURFACE INVESTIGATION REPORT

500 Grand Avenue, Oakland, CA 94610

Alameda County Environmental Health Case Number RO0003175
Geotracker Global ID Number T10000007707

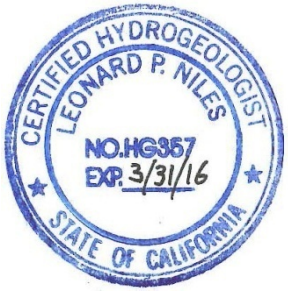
PREPARED FOR:

Mr. Patrick Ellwood
Ellwood Commercial Real Estate
1345 Grand Avenue
Oakland, CA 94610

ALLWEST PROJECT 15184.23
December 18, 2015

PREPARED BY:

Sara K. Bloom
Project Manager



REVIEWED BY:

Leonard P. Niles, PG/CHG
Senior Project Manager

2141 Mission Street, Suite 100 | San Francisco, CA 94110 | 415.391.2510
1520 Brookhollow Drive, Suite 30 | Santa Ana, CA 92705 | 714.541.5303
AllWest Environmental | AllWest1.com

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SUBSURFACE INVESTIGATION REPORT

500 Grand Avenue, Oakland, CA | Alameda County Environmental Health Case Number RO0003175

I. EXECUTIVE SUMMARY

This report describes a subsurface investigation performed by AllWest Environmental, Inc. (AllWest) at 500 Grand Avenue, Oakland, California ("the subject site", Figure 1) prior to site redevelopment activities. The subject site was previously a Leaking Underground Storage Tank (LUST) case that was closed by the Alameda County Health Care Services Agency, Environmental Health Services (ACEH) in September 2011. A new case was opened at the subject site by ACEH in their letter dated June 9, 2015 in response to a proposed site redevelopment and change of land use. A subsurface investigation to characterize current site conditions was proposed by AllWest in our *Site Management Plan and Subsurface Investigation Workplan* dated October 22, 2015.

This executive summary is provided solely for the purpose of overview. Any party who relies on this report must read the full report. The executive summary may omit details, any one of which could be crucial to the proper understanding and risk assessment of the subject matter.

A subsurface investigation was conducted at the subject property by AllWest on November 23, 2015, through December 2, 2015. The work consisted of the advancement of five (5) soil borings (SB-1 through SB-5) by Geoprobe® direct push technology (DPT); one (1) in the vicinity of the former waste oil tank, to approximately 4 feet below ground surface (bgs); and four (4) around the perimeter of the subject property to approximately 10 feet bgs. Following completion of the soil and/or groundwater sampling activities, if the depth to groundwater was greater than five feet bgs, a soil vapor probe was installed into the DPT borings; four (4) temporary soil vapor probes were installed at the subject property (SB-1/SVP-1, SB-2/SVP-2, SB-3/SVP-3, SB-5/SVP-4). However, only one soil vapor sample (SVP-3) was collected, due to groundwater rising within the other soil vapor probes after a 4 day interval following probe installation.

A total of 9 soil samples, one groundwater sample and one soil vapor sample were submitted for laboratory analysis. Selected soil and groundwater samples were analyzed for Total Petroleum Hydrocarbons as diesel (TPH-d) with silica gel cleanup by EPA 8015B; TPH as gasoline (TPH-g) and full-scan volatile organic compounds (VOCs) by EPA Method 8260B. The soil vapor sample was analyzed for VOCs including benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl-tertirary butyl ether (MTBE) by EPA Method TO-15, helium by ASTM D1946.

The primary constituents of concern (COCs) detected in soil samples were TPH-g, TPH-d, TPH-mo and naphthalene; however, TPH-g reported in SB-5 from 4-4.5 feet bgs, TPH-d reported in SB-5 from 4-4.5 feet bgs, TPH-mo reported in SB-1 from 8-8.5 feet bgs and SB-5 from 4-4.5 feet bgs, and naphthalene reported in SB-2 from 1-1.5 feet bgs and SB-5 from 4-4.5 feet bgs, were

the only COCs detected at concentrations above their respective residential land use Environmental Screening Levels (ESLs) of 100 milligrams per kilogram (mg/kg), 100 milligrams per kilogram (mg/kg), 100 mg/kg and 3.1 mg/kg, respectively. Only one COC, naphthalene in soil sample SB-5 from 4-4.5 feet bgs, exceed its applicable commercial/industrial land use ESL of 4.8 mg/kg. A summary of soil sample analytical results are included in Table 1.

The COCs detected in groundwater sample SB-4 included TPH-d, TPH-mo, ethylbenzene, total xylenes, MTBE, naphthalene and 1,2,4-trimethylbenzene; however, only TPH-mo was reported above the ESL of 640 micrograms per liter (µg/L), where groundwater is not a drinking water resource. A summary of groundwater sample analytical results are included in Table 2.

Multiple COCs were detected in the soil vapor sample analyzed from SVP-3, including benzene, 2-butanone, n-ethyl-benzene, sec-butyl benzene, carbon disulfide, ethylbenzene, 4-ethyltoluene, isopropanol, tetrachloroethene (PCE), toluene, 135-trimethylbenzene and total xylenes. The only detections above their respective residential land use ESLs of 42 micrograms per cubic meter (µg/m^3) and 490 µg/m^3 were benzene and ethylbenzene. A summary of soil vapor sample analytical results are included in Table 3.

AllWest concludes that although several detected COCs in soil, groundwater and/or soil vapor exceed applicable residential land use ESLs, none of them (except for naphthalene in one soil sample) exceed their applicable commercial/industrial land use ESLs. Since the first floor of the proposed development will be commercial use, no significant human health impact to proposed future building occupants is likely.

AllWest recommends case closure with no further action required, per the State Water Resources Control Board (SWRCB) *Low Threat Underground Storage Tank Closure Policy* (SWRCB, 2012).

II. PROJECT BACKGROUND

A. Site Location and Description

The subject property is located on the northeastern corner of the termination of Euclid Avenue at Grand Avenue, addressed as 500 Grand Avenue and 403 Euclid Avenue in Oakland, Alameda County, California. The site consists of a roughly trapezoidal parcel of land, approximately 0.31 acre (13,500 square feet) in size, developed with an asphalt-paved, unmanned public parking lot (500 Grand Avenue) and two-story residential structure (403 Euclid Avenue). A retaining wall extends the length and width of the 500 Grand Avenue property, just inside the northern and eastern property boundaries.

Located on a gently sloping lot, approximately 30 feet above mean sea level (msl) on the northern boundary and 17 feet above msl on the southern boundary, the subject property is sited on the northern side of Grand Avenue, the eastern side of Euclid Avenue and the southern side of Burk Street. Beyond the adjoining streets, the property is bound by residential developments to the north, open space and Lake Merritt to the south, commercial and mixed use (commercial/residential) developments to the west, and residential and mixed use (commercial/residential) developments to the east.

Historically, the site was developed with a service station from as early as 1946 until 1991. Facilities associated with the most recent station included a station building with three service bays. The service bays housed a sump and two hydraulic hoists. Additionally, three 10,000-gallon gasoline USTs, one 500-gallon waste oil UST, two fuel dispenser islands and associated product piping were present. The service station

structures, likely including documented utility lines beneath the site reported to have been associated with the former service station facilities, were removed and the station demolished in 1992. Between 1992 and the mid-1990s when the current parking lot was paved, the site existed as a vacant lot (CRA 2009).

A site location map and a site plan showing the current and historical configuration are presented on Figures 1 and 2, respectively. A historical site configuration plan is presented in Appendix A as Figure A4.

B. Site Geology and Hydrogeology

The subject property lies within the Coast Ranges geomorphic province. The northern Coast Ranges are dominated by the irregular, knobby landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and Clear Lake volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault. The San Andreas is more than 600 miles long, extending from Point Arena to the Gulf of California. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands. Geologically, the area of the subject property is underlain by Mesozoic era Eugeosynclinal Deposits. Rock types within this zone are intermingled due to the sliding action between the tectonic plates. The oldest well-documented bedrock in the East Bay is the Franciscan assemblage. The unconsolidated fluvial gravels, sands, silts and clays deposited in the major northwest-southeast trending valleys are derived from younger rocks.

The majority of the native soils on the 500 Grand Avenue property were over-excavated during previous contaminant removal activities and replaced with imported material classified as clayey gravel in prior studies. Previous subsurface investigations on the 500 Grand Avenue property have documented native soils to include fine-grained materials such as clays and silts, along with varying amounts of coarser materials, including sands and gravels. A clayey-sand layer with a thickness of several feet has been documented approximately 10 to 15 feet beneath ground surface (bgs). Additional clayey-sand layers also were encountered at depths of approximately 5 feet bgs and 20 to 25 feet bgs in other borings. Geologic cross-sections are shown as Figures 5 and 6.

The site is located in the San Francisco Bay Hydrologic Region and lies in the Santa Clara Valley Groundwater Basin, East Bay Plain Subbasin located on the eastern shore of San Francisco Bay. The ground water basin consists of unconsolidated sediments of Quaternary age, including early-Pleistocene Santa Clara Formation, late-Pleistocene Alameda Formation, early-Holocene Temescal Formation and artificial fill. The average depth of the unconsolidated sediments is approximately 1,000 feet throughout the subbasin. Ground water underlying the site has been encountered at depths ranging from less than 1 foot to 16.5 feet bgs. During the period of ground water monitoring on the 500 Grand Avenue property, the depth to ground water reportedly was documented as fluctuating between 1 to 12 feet beneath the top of the well casings. The ground water flow direction has consistently been measured towards the south-southeast, towards Lake Merritt.

C. Previous Site Investigations

Elevated concentrations of petroleum hydrocarbons, VOCs and SVOCs were detected in soil, groundwater and soil gas samples during several subsurface investigations

conducted in 1988-1990 by HLA. Approximately 5,000 gallons of ground water were removed from the gasoline UST pit as an interim remediation measure in 1989.

During installation of spill containment devices on the waste oil UST at the 500 Grand Avenue service station facility in June 1990, free product was discovered in backfill surrounding the tank. The waste oil UST was removed in September 1990. Encountered during UST excavation activities, clay sewer pipes were subsequently removed from the western side of the former waste oil UST in January 1991. Total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), total oil and grease (TOG) and benzene, toluene, ethylbenzene and xylenes (BTEX) were detected in soil; chlorinated hydrocarbons were not detected. Free product was encountered in ground water within the tank excavation. TPHd, TPHg, TOG and BTEX were detected in the clay pipe trench samples. Naphthalene, 2-methylnaphthalene, phthalate and trichloroethane were reported at low concentrations in one soil sample from a boring adjoining the western end of the sewer pipes, but were not detected in soil samples collected from the trench; the location where the sample was collected subsequently was excavated (Cambria 2006; CRA 2009).

The three 10,000-gallon gasoline USTs were removed from the 500 Grand Avenue facility in April 1992; the two dispenser islands and associated piping also were removed at this time and over-excavation of the former USTs location was conducted during May 1992 and January 1993. TPHg, TPHd and BTEX were detected in soil and ground water around the gasoline tanks following initial UST removals (CRA 2009).

Over-excavation of the tank pits, area beneath the fuel islands, and the location of a former hydraulic hoist and sump was conducted. Between 1992 and 1993, approximately 2,400 cubic yards of soil were removed, to depths ranging from 4.5 to 10 feet bgs. The excavation extended to within 5 feet of the northern, southern and eastern property lines, where additional excavation was unable to be conducted due to the proximity of adjoining sidewalks/utilities and retaining walls; excavation on the western portion of the site was conducted to the limits of the detection of impacted soil. TPH-g and BTEX were not detected in confirmatory soil samples from the western, northern and eastern excavation sidewalls. Clean, imported crushed gravel and soil fill was used as backfill for the excavation pit (Cambria 2006; CRA 2009).

A total of 41,300 gallons of hydrocarbon-impacted ground water was removed from the gasoline and waste oil UST excavations following removal and during subsequent remedial activities. Additionally, between approximately 1996 and 2000 socks of oxygen releasing compound (ORC) were periodically placed and replaced into site ground water monitoring wells to enhance naturally-occurring biodegradation. Free product was observed on the ground water within the UST excavations during the tank removals, but subsequently was removed through ground water pumping. Free product was not reported in monitoring wells during any of the sampling events conducted on the site (CRA 2009).

Several subsurface investigations including soil borings, groundwater monitoring well installations and monitoring events, and soil vapor sampling were conducted between 1993 and 2008 by Converse, Cambria and CRA. Groundwater monitoring was conducted from 1992 to 2000, and again in 2009. Additional subsurface investigations including soil, groundwater and soil vapor sampling were conducted in 2006 and 2008 (CRA 2009). A summary of historical soil, groundwater and soil vapor analytical results, and excavation, sample, boring and well location maps are included in Appendix A.

Based on the available data, there were two primary sources of petroleum hydrocarbon-impact to soil and ground water at the 500 Grand Avenue property: 1) the former waste oil UST and clay pipes and, 2) the former gasoline USTs. With the exception of narrow strips of soil adjoining the southern property line which could not be excavated without damaging the integrity of the Grand Avenue sidewalk and adjoining the eastern property line which could not be excavated without damaging the integrity of the retaining wall, all significantly impacted soil was removed from the 500 Grand Avenue property via excavation. Constituents of concern (COCs) remaining in soil at the 500 Grand Avenue property at the time of the 2009 case closure were TPHg and BTEX along the western, southern and eastern margins of the site, with TPHd appearing to remaining in soil only along the south and southeastern property line. Historical COCs in groundwater on the 500 Grand Avenue property were TPHg, BTEX and, to a lesser extent, MTBE. The most recent soil, ground water and soil vapor quality data for the 500 Grand Avenue property prior to case closure in 2009 are summarized in Appendix A in Tables A1, A2 and A3. The historical extent and concentrations of residual petroleum hydrocarbons in soil and groundwater at the subject site are shown in Appendix A Figures A1 and A2.

III. PURPOSE AND SCOPE OF WORK

AllWest Environmental, Inc. has performed this subsurface investigation to characterize current site conditions following the reopening of the historical LUST case by ACEH in June 2015 prior to site redevelopment activities and change of land use. . This investigation was conducted in response to a request by the Alameda County Environmental Health Department (ACEH) under ACEH Case No. RO0003175. The cope of work for this investigation was proposed by AllWest in our *Site Management Plan and Subsurface Investigation Workplan* dated October 22, 2015.

Redevelopment of the subject property with a single, mixed-use building is proposed. The building footprint will overlay the entire surface of the property. Ground floor development is planned to include parking and retail space, as well as a space for building services and a lobby for the apartments above. The second through partial sixth floors will be apartment units, with a podium-level open courtyard on the eastern side of the second floor. An elevator shaft is included in the design, but no additional subgrade structures are planned other than utilities. The retaining wall along the northern and eastern sides of the 500 Grand Avenue property will be removed to facilitate the redevelopment. The sidewalk adjoining Grand Avenue to the south will be replaced.

The subject property, developed with a surface parking lot and an adjoining residential property at 403 Euclid Avenue, are proposed to be redeveloped with a single mixed-use commercial and residential building. Residual petroleum hydrocarbon impact remains present on the subject property from historical underground storage tank (UST) releases (Appendix A, Figures A1 and A2). Based on the proposed land use change, additional characterization was required by ACEH.

The scope of work as performed consisted of the following tasks:

1) Prepared a written work plan for conducting a subsurface investigation at the site. Submitted the work plan to the ACEH for review and concurrence;

2) Obtained a drilling permit from the Alameda County Public Works Agency (ACPWA). Prepared the Site Health and Safety Plan. Coordinated and scheduled field work with utility locating, drilling, equipment, analytical laboratory and waste disposal subcontractors, and site owners, tenants and contractors;

3) Engaged the services of Underground Service Alert (USA) and a private underground utility locator to locate and clear underground utilities within the proposed investigation area so the potential of accidental damage to underground utilities were reduced. Notified ACPWA, ACEH and site tenants 72 hours prior to the start of field work;

4) Retained the service of a C-57 licensed drilling contractor for the advancement by track and truck-mounted Geoprobe® DPT continuous coring methods of five (5) borings (SB-1 through SB-5) to approximately 10 feet bgs. Boring locations are shown on Figure 2;

   - Collected three (3) soil samples from each boring for potential laboratory analysis at depth intervals of approximately 1-1.5 feet bgs, 4.5-5 feet bgs, and 8-8.5 feet bgs or 9.5-10 feet bgs (with the exception of 1 samples collected from SB-4 at 1-1.5 feet bgs);
   - Collected one (1) groundwater sample from boiring SB-4;
   - Advanced and installed four (4) soil vapor probes (SVP-1 through SVP-4) to approximately 5 feet bgs;
   - Collected one (1) soil vapor sample from vapor probe SVP-3;

5) At the completion of drilling and sampling, removed Geoprobe® drive casings, soil vapor probes and sample casing and tubing, and backfill each boring with a "neat" cement grout slurry and restored the interior floor slabs by backfilling with a concrete slurry;

6) Maintained samples under chain-of-custody and transported the samples to a Department of Health Services (DHS) ELAP-certified analytical laboratory for chemical analyses;

   - Analyzed nine (9) discrete soil boring samples (two from each boring except one from SB-4), and one (1) grab groundwater sample, for TPH-d and TPH-mo by EPA Method 8015B with silica gel cleanup, TPH-g and VOCs by EPA Method 8260B;
   - Analyzed one (1) soil vapor sample for VOCs by EPA Method TO-15 and the leak detection agent helium by ASTM D1946;

8) Prepared a written *Subsurface Investigation Report* describing the field activities, summarizing the laboratory data, presenting investigation findings, and providing conclusions and recommendations. Submit the report to ACEH.

IV. INVESTIGATIVE ACTIVITIES

A. Permitting

AllWest prepared and submitted a drilling permit application and associated documentation to Alameda County Public Works Agency-Water Resources (ACPWA) for their review and approval. The approved ACPWA drilling permit is included in Appendix B.

B. Health and Safety Plan

AllWest prepared a site specific health and safety plan (HSP) for the subsurface investigation prior to mobilizing to the site. A tailgate safety meeting was conducted prior to commencing work. All site personnel were required to review the HSP.

C. Underground Utility Locating

To avoid damage to underground utility installations during the course of the subsurface investigation, AllWest contacted Underground Service Alert (USA), an organization for public utility information, a minimum of 72 working hours in advance of the pending subsurface investigation. USA then notifiedf public and private entities that maintain underground utilities within the site vicinity to locate and mark their installations for field identification. A private underground utility locator (Subtronic, Inc. of Martinex, California) was also employed by AllWest on November 18, 2015 to conduct a magnetometer and ground penetrating radar (GPR) sweep investigation to locate marked and unmarked underground utilities on the subject property and within the sidewalk areas adjacent to the property, in the vicinity of the proposed boring locations.

D. Geoprobe® DPT Boring Advancement

Five (5) borings (SB-1 through SB-5) were advanced at the subject site on November 23, 2015 by a California C57-licensed driller, Environmental Control Associates (ECA) of Aptos, California, to further characterize soil, soil vapor and groundwater quality. Two borings (SB-1 and SB-5) were located at the southern perimeter of the site, in the general vicinity of previous borings MW-8E and MW-8L. Two borings (SB-2 and SB-3) were located at the southeastern perimeter of the site, in the general vicinity of previous borings SV-7 and MW-8C. One boring (SB-4) was advanced in the general location of the former waste oil UST in the north east-central portion of the subject site. The borings were advanced by a C-57 licensed drilling contractor, using Geoprobe® direct push technology (DPT) continuous coring methods, to approximately 10 feet bgs. The boring locations are shown in Figure 2.

Continuous core soil samples were collected using a nominal 4-foot long, 2-inch outside diameter (OD) stainless steel core barrel drive probe and extension rods. The drive probe was equipped with nominal 1-1/2 inch inside diameter (ID) clear PVC plastic tubes that line the interior of the probe. The probe and insert tubes were both be driven using a hydraulic percussion hammer to the specified depth of 10 feet bgs. After the specified drive interval, the drive probe and rods were retrieved to the surface. The PVC tube containing subsurface soil was removed. The drive probe was then be cleaned, equipped with a new PVC tube and reinserted into the outer drive casing with extension rods as required. The apparatus was then be driven, following the above procedure, until the desired depth was obtained. Geoprobe® DPT soil sampling procedures are included in Appendix C.

E. Soil Sampling

An AllWest environmental professional oversaw field work and drilling activities. The recovered soil samples were inspected after each drive interval with lithologic and relevant drilling observations recorded. Soil samples were screened for organic vapors using a photo-ionization detector (PID), or other appropriate device, by taking readings of headspace vapor concentrations of the soil inside a zip-lock plastic bag. PID readings, soil staining and other relevant observations were recorded on the boring logs.

Continuous core soil samples were collected for lithologic characterization and chemical analysis. Selected soil sample intervals of approximately 6 inches in length were cut from the PVC tubes for analytical testing. The ends of the samples for possible analytical testing were sealed using Teflon® squares and plastic end caps. The samples were labeled and stored in an iced cooler. Three (3) soil samples from each of the perimeter borings (SB-1, SB-2, SB-3 and SB-5), and one (1) from the former waste oil UST location

(SB-4) were submitted for potential laboratory analysis. For the perimeter locations (SB-1, SB-2, SB-3 and SB-5), one sample from the fill material at approximately 1-1.5 feet bgs, and two from underlying native soil at approximately 4-4.5 feet bgs and 8-8.5 feet bgs or 9-9.5 feet bgs were collected; from the waste oil UST location (SB-4), only one sample from the shallow fill material at 1-1.5 feet bgs was collected due to lack of sample recovery at greater depths. Sample containers were labeled and immediately placed on ice to preserve the chemical characteristics of their contents. Geoprobe® DPT soil sampling procedures are included in Appendix C. Boring logs with sample collection intervals are included in Appendix D.

F. Groundwater Sampling

Groundwater was encountered during drilling only in boring, SB-4, at a shallow depth (approximately 1 feet bgs) beneath the subject property. Groundwater was not encountered in the other borings during drilling; therefore, a groundwater sample was collected only from SB-4. Groundwater levels in the borings were measured and "grab" groundwater samples was collected from boring SB-4 after the completion of soil coring to the designated depth. The rods and drive probe were removed from the borehole, and new, temporary nominal 0.5 to 0.75-inch ID PVC solid well casing with a 5-foot slotted screened interval was lowered into the borehole.

Prior to groundwater sampling, depth to water was measured using an electronic water level probe through the temporary PVC casing. Groundwater samples were then collected from the temporary PVC casing using a peristaltic pump fitted with disposable sample tubing. Geoprobe® DPT groundwater sampling procedures are included in Appendix C.

Upon retrieval of the groundwater samples, the retained water was transferred from the sampling device to appropriate sample bottles furnished by the analytical laboratory. Samples for TPHg, BTEX and VOC analyses were collected in three 40-milliliter (ml) glass volatile organic analysis (VOA) vials preserved with hydrochloric acid (HCl), for each sample. Samples for TPHd analysis were collected in one 1-liter (L) amber glass bottle preserved with HCl, for each sample. Sample bottles were labeled and immediately placed on ice to preserve the chemical characteristics of their contents.

G. Soil Vapor Sampling

Following completion of soil and ground water sampling activities on November 23, 2015, a soil vapor probe was installed into each of the four (4) DPT borings SB-1, SB-2, SB-3 and SB-5 located at the property perimeter, since groundwater was not encountered in these borings during drilling. A total of four (4) temporary soil vapor probe installations, SVP-1, SVP-2, SVP-3and SVP-4, were made in borings SB-1, SB-2, SB-3 and SB-5, respectively. A soil vapor probe installation was not made in boring SB-4 in the vicinity of the former waste oil UST, due to the presence of shallow groundwater at less than 1 feet bgs, Prior to the SVP-1 through SVP-4 vapor probe installations, the four (4) DPT borings SB-1, SB-2, SB-3 and SB-5 were backfilled to a depth of approximately 5 feet bgs with hydrated bentonite chips or pellets.

Plastic or stainless steel soil vapor probes, ½-inch diameter by 2-inches long and tipped with porous plastic membranes, weres inserted to the bottom of each backfilled 2.25-inch diameter borehole at 5 feet bgs. The probe tips were attached to 7-foot lengths of 0.25-inch OD Teflon™ tubing extending to above the top of the pavement. A fine sand filter pack approximately 1-foot thick was placed in the borehole annulus around each probe. A 1-foot layer of non-hydrated granular bentonite was then used to fill the annular space above the

filter pack, and hydrated granular bentonite was used to fill the annular space above the non-hydrated bentonite to the top of the pavement. The bentonite was allowed to hydrate and the borehole conditions to equalize for at least 2 hours prior to sampling activities, per DTSC vapor sampling guidelines. Temporary soil vapor probe installation procedures were performed in general accordance with guidelines presented in the DTSC *Advisory – Active Soil Gas Investigations*, April, 2012. Soil vapor probe installation procedures and schamtic diagrams are included in Appendix D.The soil vapor sampling of the newly installed probes was not conducted by AllWest until November 27, 4 days after the installation. During that time groundwater levels, although not encountered during the initial borehole drilling, rose in the tubing of probes SVP-1, SVP-2 and SVP-4 to less than 5 feet bgs, making soil vapor sample collection impossible, although it was attempted. Groundwater was apparently not present within vapor probe SVP-3; therefore AllWest collected a soil vapor sample from that probe.

Soil vapor sampling procedures were performed in general accordance with State of California Department of Toxic Substances Control (DTSC) Final, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance, October 2011 (DTSC, October 2011) and the DTSC Advisory, Active Soil Gas Investigations, April 2012 (DTSC, April 2012). Soil vapor sampling was performed after no significant (greater than ½-inch) precipitation hadoccurred within the previous five days. AllWest collected the soil vapor sample from SVP-3 in a laboratory prepared 1-liter capacity SUMMA canister. Prior to vapor purging and sample collection, a vacuum leak test of the flow-controller/gauge manifold assembly was performed for a minimum of 5 minutes. Prior to sample collection, approximately three system volumes, approximately 675 milliliters of soil vapor were purged at a flow rate not exceeding approximately 150-200 milliliters per minute (ml/min) from each soil vapor probe using a dedicated 6-liter capacity SUMMA purge canister. Average actual purge rate in SVP-3 was approximately 48 milliliters per minute due to the low permeability clay formation.

During vapor sample collection, a vacuum leak test of the flow-controller/gauge manifold assembly was performed using helium as a leak tracer inside an airtight shroud. The ambient helium concentration within the shroud was monitored using a helium gas detection meter, and was kept at approximately 15-20% per DTSC vapor sampling guidance. A maximum flow regulator rate of approximately 150-200 ml/min was used to fill the canisters; however, due to the low permeability formation, actual flow rates were much less. Sample collection was performed over a 7 hour period, at which point sampling of SVP-3 was terminated with 20.5 inches of mercury vacuum remaining in the Summa canister, averaging only approximately 0.75 ml/min flow rate . All pertinent field observations, pressure, times and readings were recorded. Sample containers were labeled, placed in a dark container and transported under chain-of-custody control to the analytical laboratory. Geoprobe® DPT soil vapor probe installation and sampling procedures and schematic diagrams are included in Appendix D. Soil vapor sampling field logs are included in Appendix E.

H. Borehole Backfilling

At the completion of drilling and sampling activities and removal of all drive rods, sample probes, temporary PVC well casings, sample tubing and soil vapor probes, the borings were backfilled level to the parking lot surface with a “neat” Portland Type I or II cement grout slurry tremied into the borehole through a PVC pipe. The level of grout will be checked to ascertain if any settling has occurred and will be “topped off” if required. A grout inspector from Balance Hydrologics, Inc., representing ACPWA, was present during the borehole backfilling.

I. Investigative Derived Waste Containment and Disposal

Investigative derived waste (IDW), including soil cores, purged groundwater and decontamination rinseate, were contained on-site in 5-gallon pails pending analytical results, profiling and transport to an appropriate disposal facility.

J. Sample Storage and Handling Quality Assurance/Quality Control Program

To prevent the loss of constituents of interest, all soil and groundwater samples were preserved in an ice chest cooled to 4°C with crushed ice immediately after their collection and during transportation to the laboratory. Samples will be stored within the cooler in separate zip-lock plastic bags to avoid cross-contamination. All SUMMA canisters containing soil vapor samples were removed from their manifolds, capped, labeled with sampling information, including initial and final vacuum pressures, and placed in a dark container for transport to the analytical laboratory. Samples will be submitted to the analytical laboratory within 24 hours of collection.

All samples collected for this project were transported under chain-of-custody protocol. The chain-of-custody program allows for the tracing of possession and handling of individual samples from the time of field collection through laboratory analysis. The document includes the signature of the collector, date and time of collection, sample number, number and type of sample containers including preservatives, parameters requested for analysis, signatures of persons and inclusive dates involved in the chain of possession. Upon delivery to the laboratory, the document also included the name of the person receiving the samples and date and time the samples were received.

V. ASSESSMENT FINDINGS

A. Subsurface Conditions

Soil

Asphalt pavement covered all borings advanced during this investigation to depths of approximately 3 inches bgs.

Soils encountered beneath the pavement were generally silty sands, sandy silts, and clayey silts, and were encountered to depths ranging from less than 1 feet bgs to approximately 12 feet bgs, which is consistent with historical reports. Boring logs are provided in Appendix D.

Groundwater

Groundwater was not encountered during drilling activities in soil borings SB-1, SB-2, SB-3 and SB-5. However, during sampling of soil vapor probes installed near SB-1, SB-2 and SB-5, on November 27, 2015, water was observed in the tubing of the 5-foot soil vapor probes. Groundwater was encountered in soil boring SB-4, which is located in the former excavation pit; groundwater was encountered at approximately 1 foot bgs.

Historically groundwater has been identified on the subject property, fluctuating in depths from 1 foot to 12 feet bgs.

B. Laboratory Analyses and Sampling Data

All soil and groundwater samples selected for analysis were analyzed by a State of California DHS ELAP-certified independent analytical laboratory, McCampbell Analytical, of Pittsburg, California. All samples were analyzed on standard 5-day turn-around time. All soil vapor samples selected for analysis were analyzed by a State of California DHS ELAP-certified independent analytical laboratory, Eurofins/Calscience (Calscience), of Garden Grove, California. All samples were analyzed on standard 10-day turn-around time.

Soil Samples

- Analyzed nine (9) soil samples, two (2) collected from each perimeter boring (SB-1, SB-2, SB-3 and SB-5) and one (1) collected from the waste oil UST boring SB-4, for TPH-d and TPH-mo by EPA Method 8015B with silica gel cleanup, and TPH-g and VOCs by EPA Method 8260B.

- Analyzed one (1) groundwater sample collected from the waste oil UST boring SB-4 for TPH-d and TPH-mo by EPA Method 8015B with silica gel cleanup, and TPH-g and VOCs by EPA Method 8260B.

- Analyzed one (1) soil vapor sample collected from the perimeter probe SVP-3 for VOCs by EPA Method TO-15 and helium (leak detection gas) by ASTM D1946.

Maximum concentrations of the following analytes were detected in soil samples:

- TPH-g was detected in two of the nine soil samples analyzed, in SB-1 from 8-8.5 feet bgs and SB-2 from 1-1.5 feet bgs, at concentrations of 2.5 milligrams per kilogram (mg/kg) and 110 mg/kg, respectively. Both concentrations were reported below the ESL of 200 mg/kg.

- TPH-d was detected in 4 soil samples analyzed during this investigation at a maximum concentration of 30 mg/kg in SB-2 from 1-1.5 feet bgs, however all concentrations were below the ESL of 170 mg/kg.

- TPH-mo was detected in 5 of the soil samples analyzed during this investigation. The greatest concentration was detected in SB-1, from 8-8.5 feet bgs, at a concentration of 390 mg/kg, which exceeds the ESL of 230 mg/kg; the remaining reported detections were below the ESL.

- Ethylbenzene, total xylenes, naphthalene, n-butyl benzene, isopropylbenzene, n-propylbenzene, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene were detected in the sample from SB-5 at 4-4.5 feet bgs at respective concentrations of 3.0 mg/kg, 6.6 mg/kg, 6.5 mg/kg, 0.96 mg/kg, 0.26 mg/kg, 1.1 mg/kg, 7.0 mg/kg. and 2.1 mg/kg. The only other VOCs detected during this investigation were naphthalene and 1,2,4-trimethylbenzene in the soil sample from SB-2 at 1-1.5 feet bgs at 3.7 mg/kg and 1.5 mg/kg, respectively. Naphthalene concentrations in SB-5 and SB-2 exceeded the ESL of 3.1 mg/kg.

Groundwater Samples

Maximum concentrations of the following analytes were detected in the groundwater sample from SB-4:

- TPH-d was detected in the groundwater sample analyzed at 200 micrograms per liter (µg/L), but was below the ESL of 640 µg/L.

- TPH-mo was detected in the groundwater sample analyzed at a concentration of 4,400 µg/L, which exceeds the ESL of 640 µg/L.

- Ethylbenzene, total xylenes, naphthalene and 1,2,4-trimethylbenzene were detected at respective concentrations of 1.0 µg/L, 1.6 µg/L, 0.73 µg/L and 2.8 µg/L, but none were above their respective ESLs. No other VOCs were detected above the laboratory report limits.

A summary of soil sample analytical data is presented in Table 1. Soil sample locations are shown on Figure 2. Summaries of soil, groundwater and soil vapor analytical data of the primary constituents of concern are shown in Figures 3, 4 and 5. Laboratory analytical reports are included in Appendix F.

Soil Vapor Samples

- Multiple COCs were detected in the only soil vapor sample (SVP-3) analyzed, including benzene, 2-butanone, n-ethyl-benzene, sec-butyl benzene, carbon disulfide, ethylbenzene, 4-ethyltoluene, isopropanol, tetrachloroethene (PCE), toluene, 135-trimethylbenzene and total xylenes. The only detections above their respective ESLs were benzene at 120 micrograms per cubic meter (µg/m^3) and ethylbenzene at 730 µg/m^3, which exceeded their applicable ESLs of 42 µg/m^3 and 490 µg/m^3, respectively. A summary of soil vapor sample analytical results are included in Table 3.

C. Laboratory QA/QC

A review of laboratory internal quality assurance/quality control (QA/QC) report indicates the method blank and sample spike data for all analyses were within the laboratory recovery limits. The samples were also analyzed within the acceptable EPA holding times. The data from McCampbell Analytical are considered to be of good quality. Laboratory QA/QC reports and chain-of-custody records are included in Appendix F.

VI. DISCUSSION

A. Subsurface Conditions

The interior portions of the subject property have been excavated, and replaced with a fill material, consisting of gravelly sands. Soils encountered along the exterior of the subject property appeared to be native soils, consisting of silty sands, sandy silts, and clayey silts.

B. Soil Screening Levels

To assess concentrations of COCs identified in site soils, AllWest compared soil sample analytical data generated during this and the previous assessment to RWQCB ESLs for commercial and residential land use where groundwater is not a potential drinking water resource. AllWest compared soil sample analytical data to ESLs for commercial land use compiled by the RWQCB in *User's Guide: Derivation and Application of Environmental*

Screening Levels, Interim Final – December 2013), and listed in Table B – *ESLs for Shallow Soils where Groundwater Is Not a Current or Potential Source of Drinking Water.*

ESLs were developed by the RWQCB to address environmental protection goals. These goals include protection of human health, drinking water resources, aquatic and terrestrial biota and adverse nuisance conditions. Under most conditions, the presence of chemicals at concentrations below the corresponding ESLs can be assumed not to pose a significant threat to human health and the environment. Concentrations of chemicals above ESLs do not necessarily indicate that impacts to human health or the environment exist or that remedial measures are required, only that further evaluation is required. ESLs are not intended to be used as a "clean-up" standard.

AllWest selected both commercial and residential land use ESLs because the future use of the subject property is planned for commercial and residential mixed use.

The following COCs were detected at concentrations exceeding commercial or residential ESLs in the following soil samples collected during this investigation:

- TPH-g was detected in one sample from SB-5 at 4-4.5 feet bgs, at a concentration of 200 mg/kg, which exceeds the residential ESL of 100 mg/kg, but not the commercial/industrial ESL of 500 mg/kg.

- TPH-d was detected in one sample from SB-5 at 4-4.5 feet bgs, at a concentration of 170 mg/kg, which exceeds the residential ESL of 100 mg/kg, but not the commercial/industrial ESL of 110 mg/kg.

- TPH-mo was detected in two samples from SB-1 at 8-8.5 feet bgs and SB-5 at 4-4.5 feet bgs, at respective concentrations of 390 mg/kg and 230 mg/kg, which exceeds the residential ESL of 100 mg/kg, but not the commercial/industrial ESL of 5,000 mg/kg.

- Naphthalene was detected in two samples from SB-2 at 1-1.5 feet bgs and SB-5 at 4-4.5 feet bgs, at a respective concentrations of 3.7 mg/kg and 6.5 mg/kg,, both of which exceeds the residential ESL of 3.1 mg/kg, while SB-5 exceeds the commercial/industrial ESL of 4.8 mg/kg.

- No other COCs were detected at concentrations exceeding commercial or residential ESLs in any of the soil samples collected during this investigation.

C. Groundwater Screening Levels

To assess concentrations of COCs identified in site groundwater, AllWest compared groundwater sample analytical data generated during this and the previous assessment to RWQCB ESLs for commercial and residential land use where groundwater is not a potential drinking water resource. AllWest compared soil sample analytical data to ESLs for commercial land use compiled by the RWQCB in *User's Guide: Derivation and Application of Environmental Screening Levels*, Interim Final – December 2013), and listed in Table B – *ESLs for Shallow Soils where Groundwater Is Not a Current or Potential Source of Drinking Water.*

AllWest selected ESLs for groundwater that is not a potential drinking water resource since the subject site is located adjacent to a tidal estuary (Lake Merritt) that is presumably non-potable brackish or saline water.

The following COCs were detected at concentrations exceeding non-drinking ESLs in the groundwater sample SB-4 collected during this investigation:

- TPH-mo was detected in the groundwater sample SB-4 analyzed at a concentration of 4,400 µg/L, which exceeds the ESL of 640 µg/L.

- TPH-g, TPH-d and VOCs were not detected above applicable ESLs. A summary of groundwater sample analytical results are included in Table 2.

D. Soil Vapor Screening Levels

To assess concentrations of COCs identified in site soil vapor, AllWest compared soil vapor sample analytical data generated during this and the previous assessment to RWQCB ESLs for commercial and residential land use. AllWest compared soil vapor sample analytical data to ESLs for commercial land use compiled by the RWQCB in *User's Guide: Derivation and Application of Environmental Screening Levels*, Interim Final – December 2013), and listed in Table E – *Environmental Screening Levels (ESLs). Indoor Air and Soil Gas (Vapor Intrusion Concerns).*

The following COCs were detected at concentrations exceeding commercial or residential ESLs in the soil vapor sample SVP-3 collected during this investigation:

- Multiple COCs were detected in the only soil vapor sample (SVP-3) analyzed, including benzene, 2-butanone, n-ethyl-benzene, sec-butyl benzene, carbon disulfide, ethylbenzene, 4-ethyltoluene, isopropanol, tetrachloroethene (PCE), toluene, 135-trimethylbenzene and total xylenes. The only detections above their respective residential ESLs were benzene at 120 micrograms per cubic meter (µg/m^3) and ethylbenzene at 730 µg/m^3, which exceeded their applicable ESLs of 42 µg/m^3 and 490 µg/m^3, respectively. None of the detected COCs exceeded their applicable commercial/industrial ESLs.

- No other COCs were detected at concentrations exceeding commercial or residential ESLs in any of the soil samples collected during this investigation. A summary of soil vapor sample analytical results are included in Table 3.

VII. CONCLUSIONS AND RECOMMENDATIONS

AllWest conducted a subsurface investigation at the subject site to additionally characterize site soil, groundwater and soil vapor prior to proposed site redevelopment activities.

AllWest concludes that although several detected COCs in soil, groundwater and/or soil vapor exceed applicable residential land use ESLs, none of them exceed their applicable commercial/industrial land use ESLs except for naphthalene in one soil sample. Since the first floor of the proposed development will be commercial use, no significant human health impact to proposed future building occupants is likely.

AllWest recommends case closure with no further action required, per the State Water Resources Control Board (SWRCB) *Low Threat Underground Storage Tank Closure Policy* (SWRCB, 2012).

VIII. LIMITATIONS

AllWest has prepared this report for the exclusive use of Ellwood Commercial Real Estate, LLC (Client) for this particular project and in accordance with generally accepted practices at the time of the work. No other warranties, certifications or representations, either expressed or implied, are made as to the professional advice offered.

The services provided for the Client were limited to their specific requirements; the limited scope allows for AllWest to form no more than an opinion of the actual site conditions. No matter how much research and sampling may be performed, the only way to know about the actual composition and condition of the subsurface of a site is through excavation. The conclusions and recommendations contained in this report are made based on observed conditions existing at the site, laboratory test results of the submitted samples, and interpretation of a limited data set. It must be recognized that changes can occur in subsurface conditions due to site use or other reasons. Furthermore, the distribution of chemical concentrations in the subsurface can vary spatially and over time. The results of chemical analysis are valid as of the date and at the sampling location only. AllWest is not responsible for the accuracy of the test data from an independent laboratory or for any analyte quantities falling below the recognized standard detection limits or for the method utilized by the independent laboratories.

Background information that AllWest has used in preparing this report, including but not limited to previous field measurements, analytical results, site plans, and other data, has been furnished to AllWest by the Client, its previous consultants, and/or third parties. AllWest has relied on this information as furnished. AllWest is not responsible for nor has it confirmed the accuracy of this information.

IX. REFERENCES

AllWest Environmental, Inc. (AllWest), *Site Conceptual Model, 500 Grand Avenue, Oakland, California 94610*, October 22, 2015.

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State of California San Francisco Regional Water Quality Control Board (RWQCB), *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan),* June 29, 2013.

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TABLES

TABLE 1
Summary of Soil Analytical Data
500 Grand Avenue
Oakland, California
AllWest Project No. 15184.23

Sample Name and Depth (feet bgs)	Date Sampled	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Naphthalene (mg/kg)	Other VOCs (mg/kg)
SB-1@1'-1.5'	11/23/2015	ND <0.25	ND <1.0	ND <5.0	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND (varies)
SB-1@8'-8.5' qualifiers	11/23/2015	2.5	16 e7,e2	**390** e7,e2	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND (varies)
SB-2@1'-1.5' qualifiers	11/23/2015	110	30 e11,e7,e2	5.4 e11,e7,e2	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	**3.7**	1.5 - 1,2,4-trimethylbenzene, others - ND (varies)
SB-2@9.5'-10' qualifiers	11/23/2015 11/23/2015	ND <0.25	ND <1.0	ND <5.0	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND (varies)
SB-3@1'-1.5' qualifiers	11/23/2015 11/23/2015	ND <0.25	ND <1.0	11 e7	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND (varies)
SB-3@9.5'-10'	11/23/2015	ND <0.25	ND <1.0	ND <5.0	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND (varies)
SB-4@1'-1.5' qualifiers	11/23/2015 11/23/2015	ND <0.25	1.1 e7,e2	5.5 e7,e2	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND (varies)
SB-5@1'-1.5' qualifiers	11/23/2015 11/23/2015	ND <0.25	1.5 e7,e2	36 e7,e2	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND (varies)
SB-5@4'-4.5' qualifiers	11/23/2015	**200**	**170** e11,e7,e2,c1,c2	**230** e11,e7,e2,c1,c2	ND <0.005	ND <0.005	3.0 / 2.4*	6.6 / 6.0*	ND <0.005	**6.5**	0.96 - n-butyl benzene, 0.26 - isopropylbenzene, 1.1 - n-propylbenzene, 7.0 - 1,2,4-trimethylbenzene, 2.1 - 1,3,5-trimethylbenzene, others - ND (varies)
RWQCB Residential ESLs, ≤3 m (9.9 feet) bgs, non-drinking water		**100**	**100**	**100**	**0.74**	**9.3**	**4.7**	**11**	**8.4**	**3.1**	**Varies or NE**

TABLE 1
Summary of Soil Analytical Data
500 Grand Avenue
Oakland, California
AllWest Project No. 15184.23

Sample Name and Depth (feet bgs)	Date Sampled	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Naphthalene (mg/kg)	Other VOCs (mg/kg)
RWQCB Commercial/Industrial ESLs, ≤3 m (9.9 feet) bgs, non-drinking water		**500**	**110**	**5,000**	**1.2**	**9.3**	**4.7**	**11**	**8.4**	**4.8**	**Varies or NE**

Notes:

All samples analyzed by McCampbell Analytical, Inc., Pittsburg, California
All results are reported in milligrams per kilogram (mg/kg)

TPH-g	Total petroleum hydrocarbons gasoline range (C6-C12), Analytical Method SW8260B.
TPH-d	Total petroleum hydrocarbons as diesel (C10-C23), Analytical Method SW8015B with silica gel cleanup
TPH-mo	Total petroleum hydrocarbons as motor oil (C18-C36), Analytical Method SW8015B with silica gel cleanup
MTBE	Methyl tertiary butyl ether, Analytical Method SW8260B.
BTEX	Benzene, Toluene, Ethylbenze and Total Xylenes by Analytical Method 8260B.
VOCs	Volatile organic compounds, Analytical Method SW8260B.
ND <1.0	Not detected at or above listed reporting limit
NE	Not established
*	BTEX analyzed separately from full VOC scan.

San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential or commercial/industrial land use where groundwater is not a potential drinking water resource from Table B, *User's Guide: Derivation and Application of Environmental Screening Levels,* RWQCB. Interim Final - December 2013.

Laboratory Qualifiers:
c1 - surrogate recovery outside of the control limits due to the dilution of the sample
c2 - surrogate recovery outside of the control limits due to matrix interference
e2 - diesel range compounds are significant; no recognizable pattern
e7 - oil-range compounds are significant
e11 - stoddard solvent/mineral spirit (?)

TABLE 2
Summary of Groundwater Analytical Data
500 Grand Avenue
Oakland, California
AllWest Project No. 15184.23

Sample Name and Depth (feet bgs)	Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Other VOCs (µg/L)
SB-4	11/23/2015	ND <50	200	**4,400**	ND <0.50	ND <0.50	1.0	1.6	ND <0.50	0.73	2.8 - 1,2,4-trimethylbenzene, others - ND (varies)
qualifiers			e7,e2,e8	e7,e2,e8							
RWQCB ESLs, non-drinking water		**500**	**640**	**640**	**27**	**130**	**430**	**100**	**1,800**	**24.0**	**Varies or NE**

Notes:

All samples analyzed by McCampbell Analytical, Inc., Pittsburg, California
All results are reported in milligrams per kilogram (mg/kg)

TPH-g	Total petroleum hydrocarbons gasoline range (C6-C12), Analytical Method SW8260B.
TPH-d	Total petroleum hydrocarbons as diesel (C10-C23), Analytical Method SW8015B with silica gel cleanup
TPH-mo	Total petroleum hydrocarbons as motor oil (C18-C36), Analytical Method SW8015B with silica gel cleanup
MTBE	Methyl tertiary butyl ether, Analytical Method SW8260B.
BTEX	Benzene, Toluene, Ethylbenze and Total Xylenes by Analytical Method 8260B.
VOCs	Volatile organic compounds, Analytical Method SW8260B.
ND <1.0	Not detected at or above listed reporting limit
NE	Not established
*	BTEX analyzed separately from full VOC scan.

San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential or commercial/industrial land use where groundwater is not a potential drinking water resource from Table B, *User's Guide: Derivation and Application of Environmental Screening Levels,* RWQCB. Interim Final - December 2013.

Laboratory Qualifiers:

e2 - diesel range compounds are significant; no recognizable pattern
e7 - oil-range compounds are significant
e8 - kerosene/kerosene range/jet fuel range

TABLE 3

SUMMARY OF SOIL VAPOR SAMPLE ANALYTICAL DATA
500 GRAND AVENUE
OAKLAND, CALIFORNIA
AllWest Project No. 15184.23

Sample Number	Date	Sample Depth feet bgs	Benzene µg/m^3	2-Butanone µg/m^3	n-Butyl benzene µg/m^3	sec-Butyl benzene µg/m^3	Carbon Disulfide µg/m^3	Ethyl-benzene µg/m^3	4-Ethyltoluene µg/m^3	Helium** (Leak detect gas) (% v/v)	Isopropanol µg/m^3	Tetra-chloroethene µg/m^3	Toluene µg/m^3	1,3,5-Trimethyl-benzene µg/m^3	Xylenes (Total)* µg/m^3	Other VOCs µg/m^3
SVP-3	11/27/2015	5	**120**	38	68	57	610	**730**	56	0.52	160	150	180	13	235	ND (varies)
ESL	Residential Soil Gas		**42**	NL	NL	NL	NL	**490**	NL	NL	NL	**210**	**160,000**	NL	**52,000**	**varies or NL**
ESL	Commercial Soil Gas		**420**	NL	NL	NL	NL	**4,900**	NL	NL	NL	**2,100**	**1,300,000**	NL	**440,000**	**varies or NL**

Notes:

VOCs = Volatile Organic Compounds by EPA Method TO-15, Eurofins/Calscience, Inc., Garden Grove, CA
µg/m^3 = Micrograms per cubic meter = 0.001 micrograms per liter
ND = Not detected at or below laboratory reporting limit
NA = Not Analyzed
NL = Not Listed
* = Quantified as o- and p/m-xylenes
** = Leak detection gas or agent
Bold Font = Detected values exceed regulatory screening levels.
ESL = Environmental Screening Level (User's Guide: Derivation and Application of Environmental Screening Levels, California Regional Water Quality Control Board, San Francisco Bay, INTERIM FINAL, December 2013. Table E, Shallow Soil Gas Screening Levels, For Evaluation Of Potential Vapor Intrusion Concerns, Residential and Commercial/Industrial Land Use).

FIGURES

N

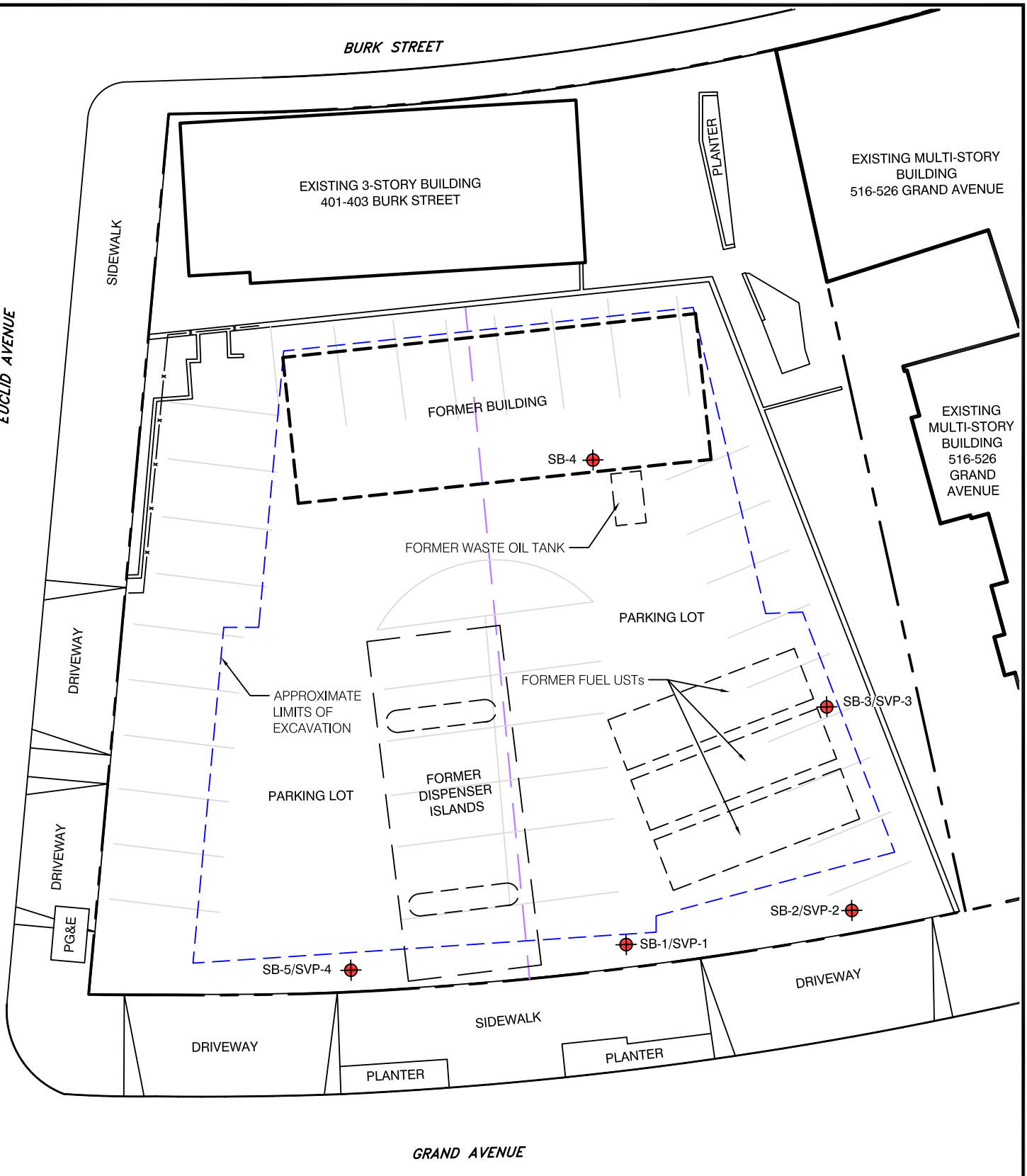
NOT TO SCALE

AllWest

PROJECT NO. 15184.23

SITE LOCATION MAP
FIGURE 1
500 GRAND AVENUE
OAKLAND, CA 94610
SOURCE: GOOGLE EARTH
PREPARED BY: B. BLACKIE / D. CAMACHO
DATE: 12/18/15

C:\Drawing Files\AllWest Environmental\15184.23\15184.23 Fig 2. Site Plan - 12/17/2015



LEGEND

SB-5/SVP-4 Soil Boring and Soil Vapor Probe Location

Fence

Lot Line

Property Boundary

NOTE:
Base Map Sources:
Google Earth

N

0 10 20

APPROXIMATE SCALE (FEET)

AllWest

PROJECT NO. 15184.23

FIGURE 2
SITE PLAN WITH BORING AND VAPOR PROBE LOCATIONS

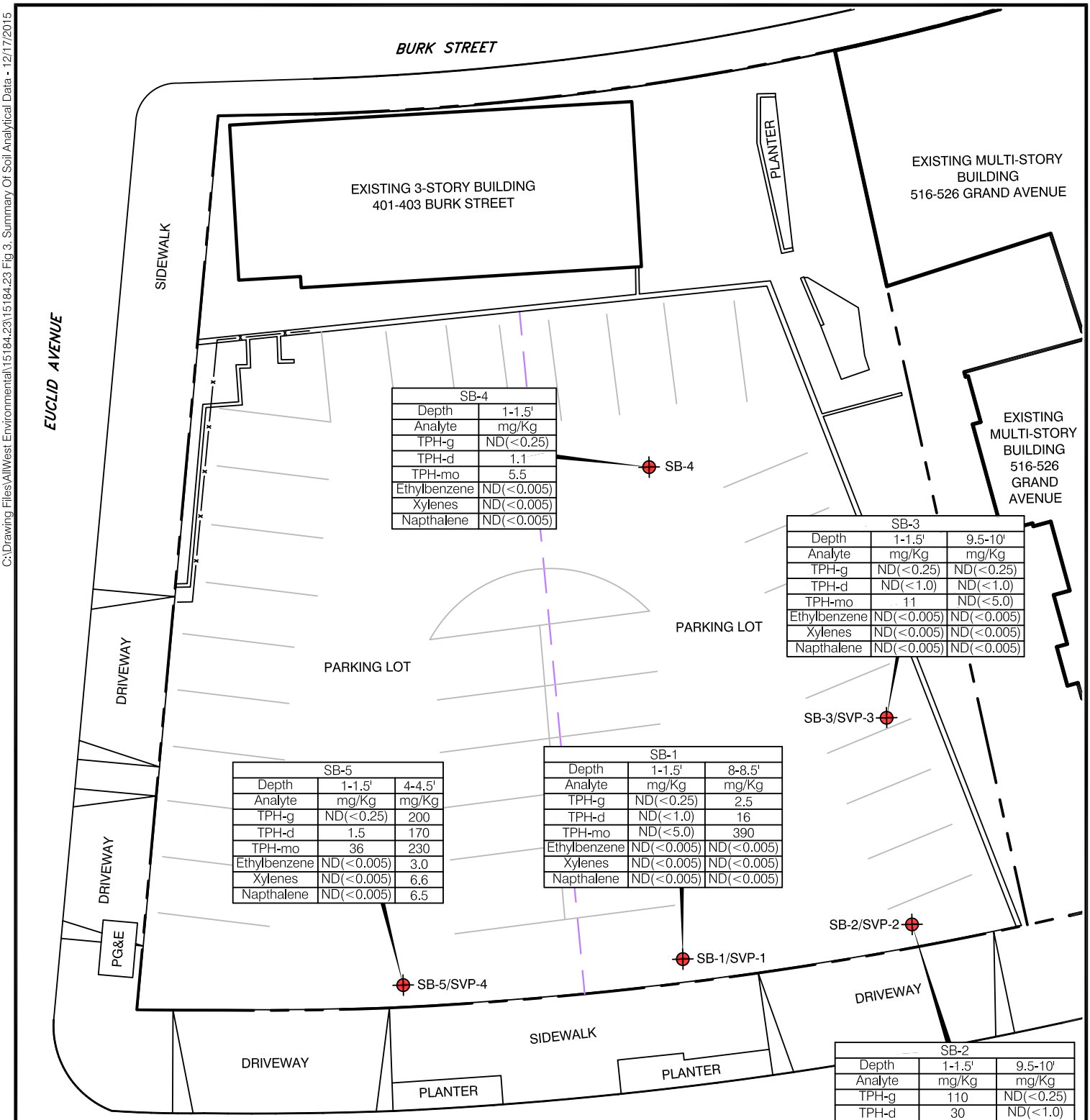
500 Grand Avenue

Oakland, California

SOURCE: AllWest, Donald Vegvary

DRAWN BY: CM (12/17/2015)

C:\Drawing Files\AllWest Environmental\15184.23\15184.23 Fig 3, Summary Of Soil Analytical Data - 12/17/2015



SB-4	
Depth	1-1.5'
Analyte	mg/Kg
TPH-g	ND(<0.25)
TPH-d	1.1
TPH-mo	5.5
Ethylbenzene	ND(<0.005)
Xylenes	ND(<0.005)
Napthalene	ND(<0.005)

SB-3		
Depth	1-1.5'	9.5-10'
Analyte	mg/Kg	mg/Kg
TPH-g	ND(<0.25)	ND(<0.25)
TPH-d	ND(<1.0)	ND(<1.0)
TPH-mo	11	ND(<5.0)
Ethylbenzene	ND(<0.005)	ND(<0.005)
Xylenes	ND(<0.005)	ND(<0.005)
Napthalene	ND(<0.005)	ND(<0.005)

SB-5		
Depth	1-1.5'	4-4.5'
Analyte	mg/Kg	mg/Kg
TPH-g	ND(<0.25)	200
TPH-d	1.5	170
TPH-mo	36	230
Ethylbenzene	ND(<0.005)	3.0
Xylenes	ND(<0.005)	6.6
Napthalene	ND(<0.005)	6.5

SB-1		
Depth	1-1.5'	8-8.5'
Analyte	mg/Kg	mg/Kg
TPH-g	ND(<0.25)	2.5
TPH-d	ND(<1.0)	16
TPH-mo	ND(<5.0)	390
Ethylbenzene	ND(<0.005)	ND(<0.005)
Xylenes	ND(<0.005)	ND(<0.005)
Napthalene	ND(<0.005)	ND(<0.005)

SB-2		
Depth	1-1.5'	9.5-10'
Analyte	mg/Kg	mg/Kg
TPH-g	110	ND(<0.25)
TPH-d	30	ND(<1.0)
TPH-mo	5.4	ND(<5.0)
Ethylbenzene	ND(<0.005)	ND(<0.005)
Xylenes	ND(<0.005)	ND(<0.005)
Napthalene	3.7	ND(<0.005)

LEGEND

SB-5/SVP-4 Soil Boring and Soil Vapor Probe Location

Fence

Lot Line

Property Boundary

NOTE:
- mg/Kg - Milligrams per Kilogram
- ND - Not Detected
- 1-1.5' - Depth in feet below ground surface (bgs)
- TPH-g - Total Petroleum Hydrocarbons as Gasoline
- TPH-d - Total Petroleum Hydrocarbons as Diesel
- TPH-mo - Total Petroleum Hydrocarbons as Motor Oil

Base Map Sources:
Google Earth

N

0 10 20

APPROXIMATE SCALE (FEET)

AllWest

PROJECT NO. 15184.23

FIGURE 3

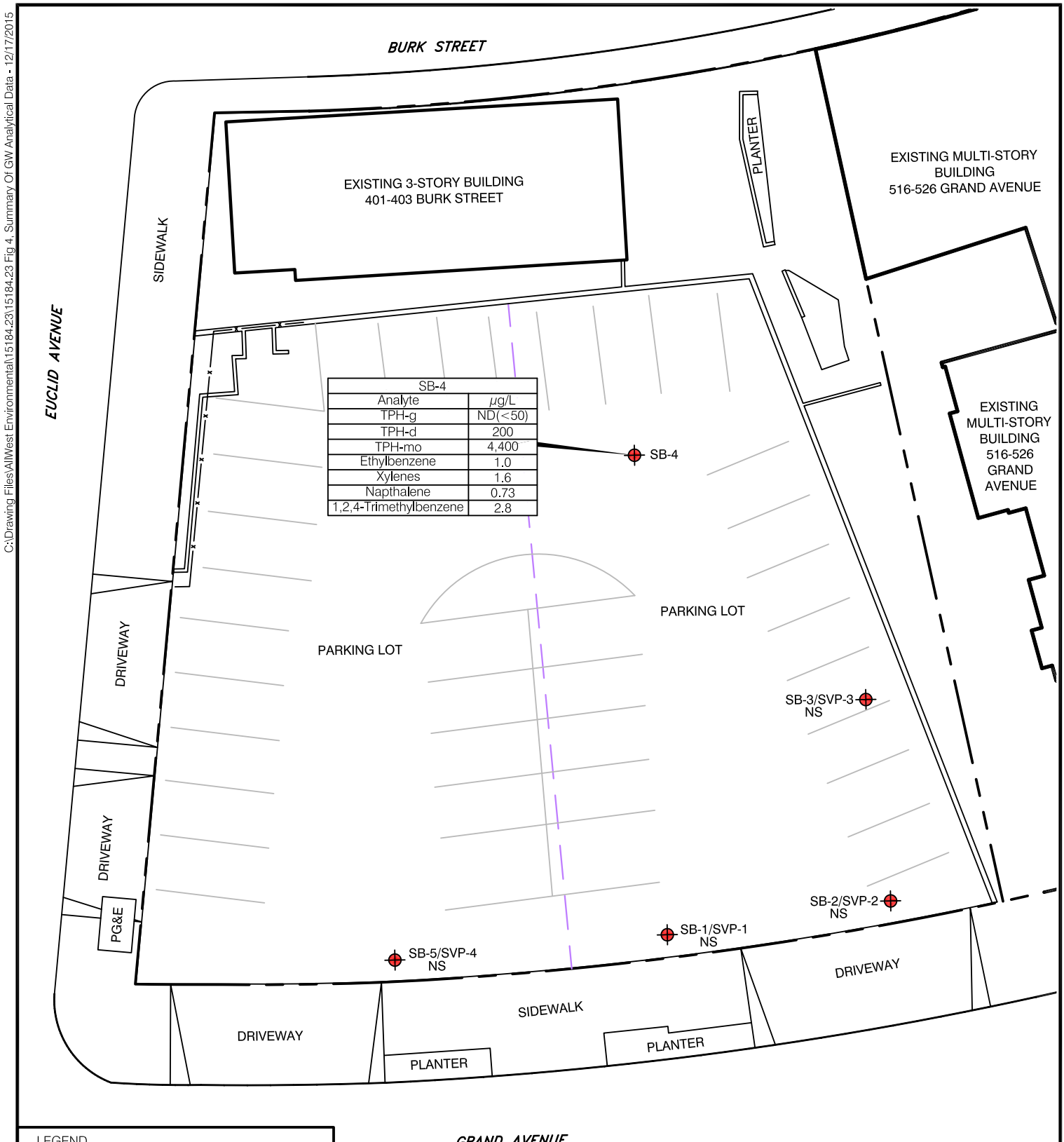
SUMMARY OF SOIL ANALYTICAL DATA

500 Grand Avenue

Oakland, California

SOURCE: AllWest, Donald Vegvary

DRAWN BY: CM (12/17/2015)



C:\Drawing Files\AllWest Environmental\15184.23\15184.23 Fig 4, Summary Of GW Analytical Data - 12/17/2015

LEGEND

SB-5/SVP-4 Soil Boring and Soil Vapor Probe Location

Fence

Lot Line

Property Boundary

NOTE:

µg/L - Micrograms per Liter
ND - Not Detected
NS - Not Sampled
TPH-g - Total Petroleum Hydrocarbons as Gasoline
TPH-d - Total Petroleum Hydrocarbons as Diesel
TPH-mo - Total Petroleum Hydrocarbons as Motor Oil
Base Map Sources: Google Earth

N

0 10 20

APPROXIMATE SCALE (FEET)

AllWest

PROJECT NO. 15184.23

FIGURE 4
SUMMARY OF GROUNDWATER ANALYTICAL DATA

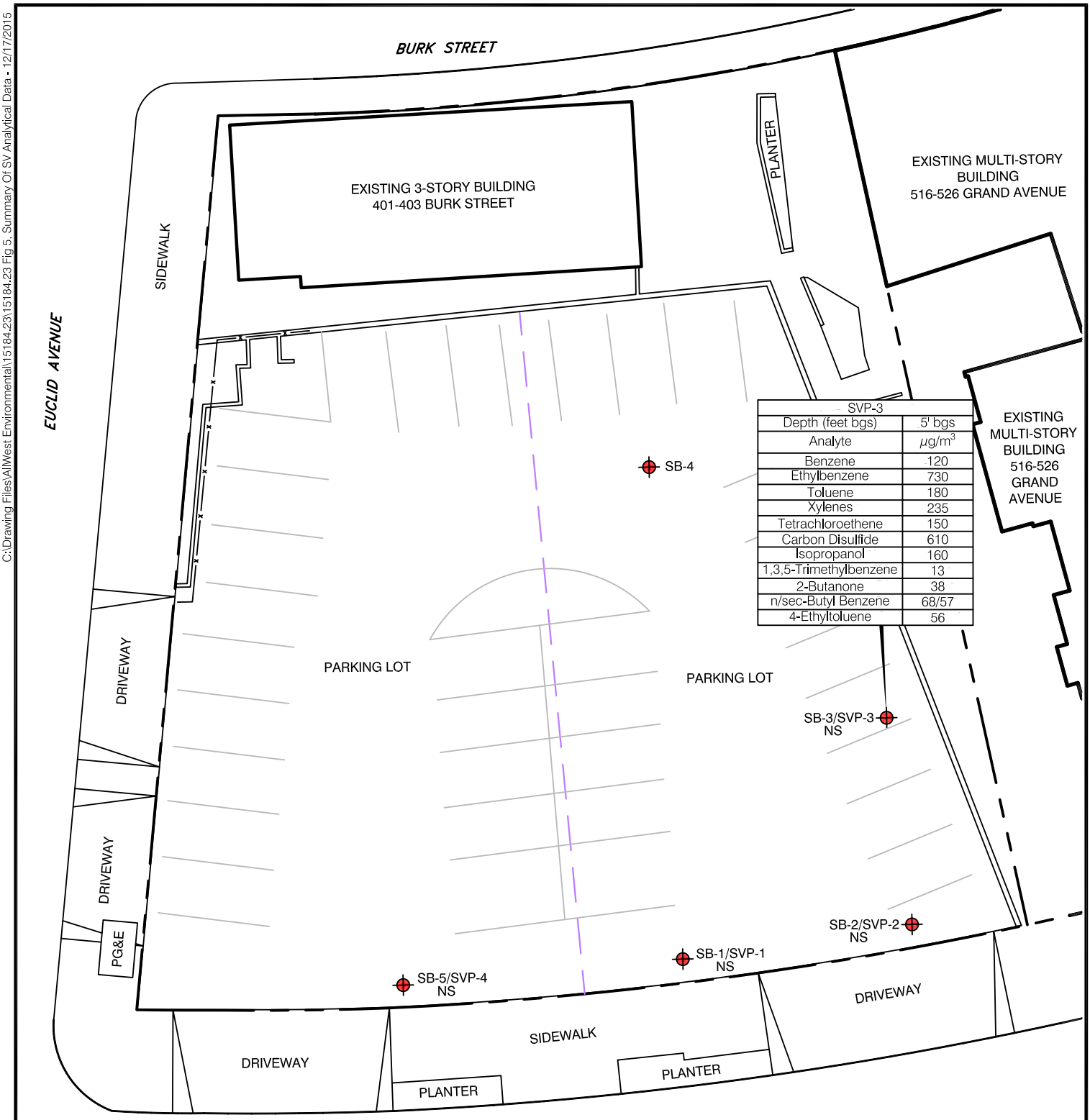
500 Grand Avenue

Oakland, California

SOURCE: AllWest, Donald Vegvary

DRAWN BY: CM (12/17/2015)

C:\Drawing Files\AllWest Environmental\15184.23\15184.23 Fig 5, Summary Of SV Analytical Data - 12/17/2015



LEGEND

SB-5/SVP-4 Soil Boring and Soil Vapor Probe Location

Fence

Lot Line

Property Boundary

NOTE:
µg/m³ - Micrograms per Cubic Meter
NS - Not Sampled
Base Map Sources: Google Earth

N

0 10 20

APPROXIMATE SCALE (FEET)

AllWest

PROJECT NO. 15184.23

FIGURE 5
SUMMARY OF SOIL VAPOR ANALYTICAL DATA

500 Grand Avenue

Oakland, California

SOURCE: AllWest, Donald Vegvary

DRAWN BY: CM (12/17/2015)

APPENDIX A

Table APPENDIX A1. Residual Concentrations Reported in Soil (1988-2008)

(concentrations in mg/kg)

Sample ID (Year)	Depth (ft.)	Location on Site	TPHg	TPHd	B	T	E	X
B-5 (1989)	All to 16	Western Perimeter	<10	NA	<10	<0.1	<0.2	<0.1
B-10 (1990)	1.5	Western Perimeter	8.4	NA	0.28	ND	0.2	0.18
B-10 (1990)	2.5	Western Perimeter	ND	NA	0.09	ND	ND	ND
B-10 (1990)	5.5 & 8.5	Western Perimeter	ND	NA	ND	ND	ND	ND
S-1 (2006)	4	Southern Perimeter	390	15	<0.062	<0.12	0.9	1.9
ME-8E (1988)	5.5	Southern Perimeter (w/in excavation)	750	NA	***0.82***	6.5	***5.5***	26
S-2 (2006)	4	Southern Perimeter	***3,800***	***580***	0.41	17	***36***	170
SV-5 (2008)**	2	Southern Portion (w/in excavation)	<1.0	NA	<0.0005	<0.001	<0.001	<0.001
S-3 (2006)	4	Southern Perimeter	<1.0	11	<0.0005	<0.001	<0.001	<0.001
B-1 (1988)	6.5	Southern Perimeter	12	NA	<0.05	<0.1	<0.2	<0.1
MW-8D (1988)	1.3	Southeastern Corner	10	NA	<0.05	0.4	<0.2	0.5
SV-8 (2008)**	2	Eastern Perimeter	<1.0	NA	<0.0005	<0.001	<0.001	<0.001
SV-8 (2008)**	5	Eastern Perimeter	<1.0	NA	<0.0005	<0.001	<0.001	<0.001
B-6 (1989)	2	Eastern Perimeter	1	<100	<0.05	0.08	<0.05	<0.05
B-6 (1989)	4.5	Eastern Perimeter	<1.0	<10	<0.05	0.09	<0.05	<0.05
B-4 (1988)	3.5	Eastern Perimeter	510	NA	<0.05	1	3.5	13
SV-7 (2008)**	2	Eastern Perimeter	16	NA	0.001	<0.001	0.078	0.027
SV-7 (2008)**	5	Eastern Perimeter	***1,400***	NA	0.11	0.059	***15***	19
ESL*-Shallow Soil-Residential-Protection of Human Health			770	240	0.74	1,000	4.8	600
ESL*-Shallow Soil-Residential-GW is Not Potential DW Source			100	100	0.74	9.3	4.7	11

* ESL = San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential land use where groundwater is not a potential drinking water resource from Table B-1, User's Guide: Derivation and Application of Environmental Screening Levels. RWQCB, Interim Final - December 2013.

**MTBE not detected

mg/kg = milligrams per kilogram

Concentrations exceeding ESL for protection of human health highlighted in ***bold*** font

Table APPENDIX A2. Residual Concentrations Reported in Ground Water (2008 & 2009)

(concentrations in µg/L)

Sample ID (Year)	Sample Type	Location on Site	TPHg	TPHd	B	T	E	X	MBTE
MW-8H (10/1/2009)	Well	Offsite to South	<50	640	<0.5	<0.5	<0.5	<0.5	1
MW-8I (10/1/2009)	Well	Offsite to South	53	92	2	<0.5	<0.5	<0.5	4
MW-8J (10/1/2009)	Well	Offsite to South	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8K (10/1/2009)	Well	Southern Perimeter	<50	<50	<0.5	<0.5	<0.5	<0.5	1
MW-8L (6/10/2009)	Well	Southern Perimeter	2,600	<50	<0.5	<0.5	<0.5	<0.5	<0.5
SV-4-W (2008)	Grab	Southern Portion (w/in excavation)	<50	NA	<0.5	<0.5	<0.5	<0.5	1
SV-5-W (2008)	Grab	Southern Portion (w/in excavation)	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
SV-6-W (2008)	Grab	Southern Portion (w/in excavation)	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
SV-7-W (2008)	Grab	Eastern Perimeter	6,200	NA	200	7	250	260	0.7
SV-8-W (2008)	Grab	Eastern Perimeter	<50	NA	<0.5	<0.5	<0.5	<0.5	2
ESL*-Commercial-Ground Water-Evaluation of Potential Vapor Intrusion			NV	NV	270	NV	3,100	NV	100,000
ESL*-Residential-Ground Water-Evaluation of Potential Vapor Intrusion			NV	NV	27	95,000	310	37,000	9,900
ESL**-Residential-Ground Water-Not Potential DW Source			500	640	27	130	43	100	1,800

* ESL = San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for Evaluation of Potential Vapor Intrusion, residential land use, from Table E-1, User's Guide: Derivation and Application of Environmental Screening Levels. RWQCB, Interim Final - December 2013.

** ESL = RWQCB ESLs for residential land use where groundwater is not a potential drinking water resource from Table F-1b, User's Guide: Derivation and Application of Environmental Screening Levels. RWQCB, Interim Final - December 2013

µg/L = micrograms per liter

Concentrations exceeding ESL indicating potential vapor intrusion concern for commercial use highlighted in **bold** font

NR-not reported; NV-no value, NA –not analyzed

Table APPENDIX A3. Residual Concentrations Reported in Soil Vapor (2006)

(concentrations in µg/m^3)

Sample ID (Year)	Sample Type	Location on Site	TPHg	TPHd	B	T	E	X	MBTE
SV-1 (11/20/2006)	Soil Vapor (4 ft bgs)	Southern Perimeter	60,000	NA	***3,400***	330	***2,600***	380	NA
SV-2 (11/20/2006)	Soil Vapor (4 ft bgs)	Southern Perimeter	2,000,000	NA	***34,000***	160,000	***64,000***	280,000	NA
SV-2 Duplicate (11/20/2006)	Soil Vapor (4 ft bgs)	Southern Perimeter	720,000	NA	***14,000***	69,000	***27,000***	110,000	NA
ESL*- Commercial - Soil Gas (Vapor Intrusion Concerns)			2,500,000	570,000	420	1,300,000	4,900	440,000	47,000
ESL*- Residential - Soil Gas (Vapor Intrusion Concerns)			300,000	68,000	42	160,000	490	52,000	4,700

* ESL = San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for indoor Air and Soil Gas (Vapor Intrusion Concerns), commercial/industrial and residential land use, from Summary Table E, User's Guide: Derivation and Application of Environmental Screening Levels. RWQCB, Interim Final - December 2013.

µg/m^3 = micrograms per cubic meter

NR-not reported; NV-no value, NA –not analyzed

Concentrations exceeding ESL for commercial/industrial land use highlighted in ***bold*** font

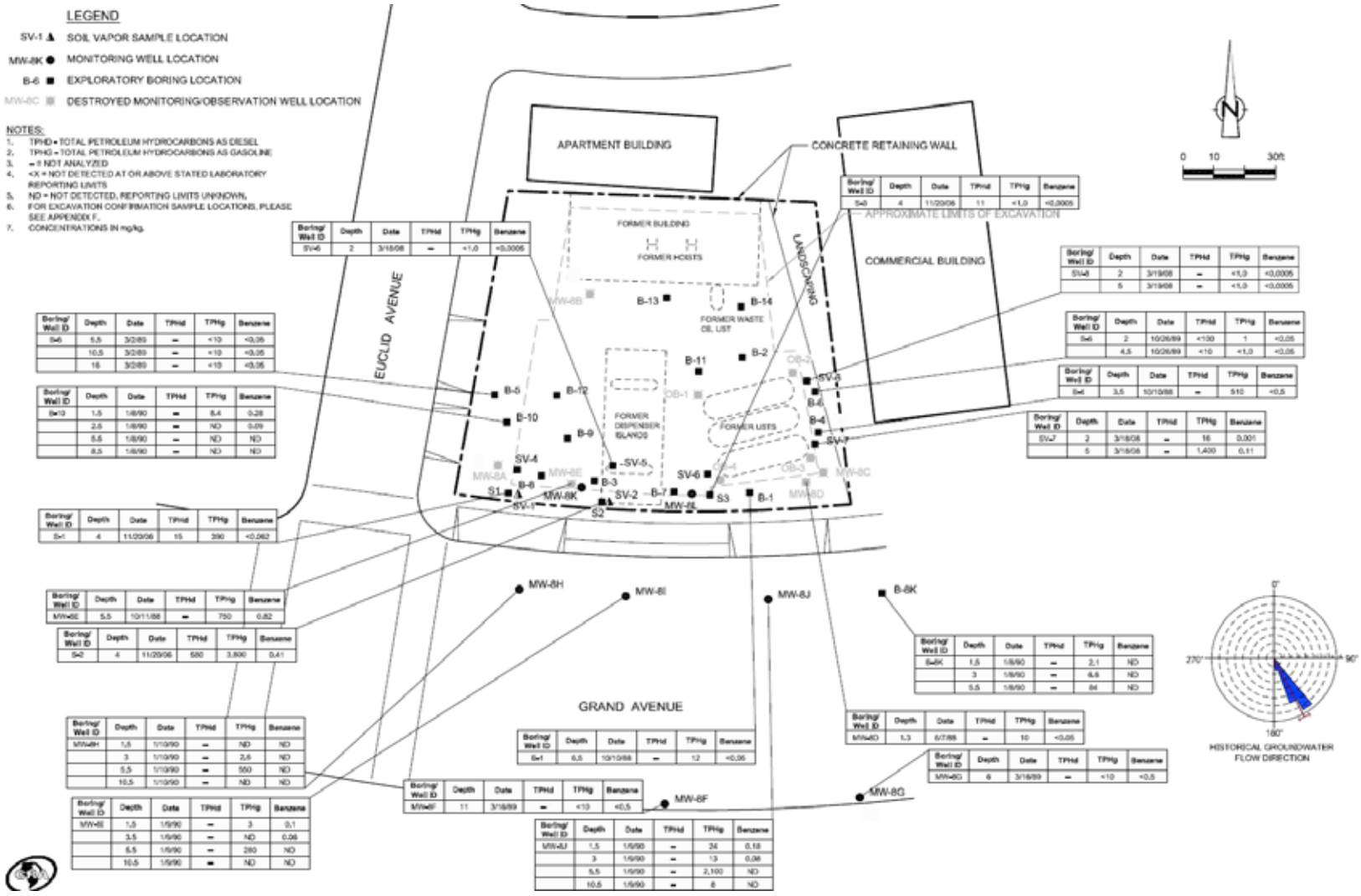


FIGURE - APPENDIX A1 RESIDUAL CONTAMINANT CONCENTRATIONS IN SOIL	Date: 12/4/09 Photo ID No. CRA	N#
AllWest	Site Name: 500 Grand Avenue Oakland, California Project Number: 15184.36	

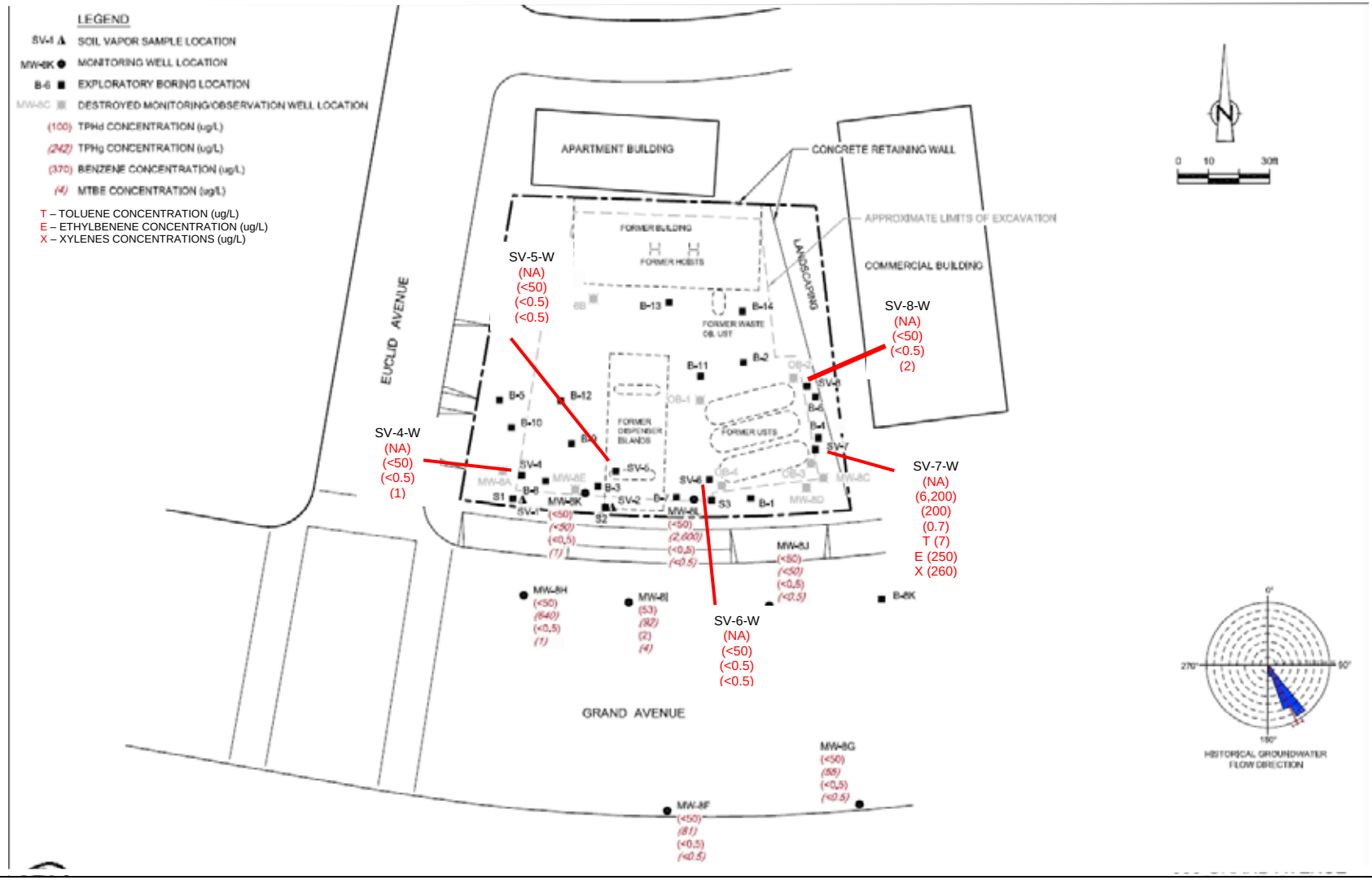


FIGURE - APPENDIX A2
RESIDUAL CONTAMINANT CONCENTRATIONS IN GROUND WATER

Date: 12/4/09
Photo ID No. CRA

N#

AllWest

Site Name: 500 Grand Avenue
Oakland, California

Project Number: 15184.36

APPENDIX B

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

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

Application Approved on: 11/16/2015 By jamesy

Permit Numbers: W2015-1017
Permits Valid from 11/23/2015 to 11/25/2015

Application Id:	1446589587348	**City of Project Site:** Oakland
Site Location:	500 Grand Avenue	
Project Start Date:	11/23/2015	**Completion Date:** 11/25/2015
Assigned Inspector:	Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com	
Applicant:	AllWest Environmental - Sara Bloom 2141 Mission Street, Ste 100, San Francisco, CA 94110	**Phone:** 415-391-2510
Property Owner:	Ellwood Commercial Real Estate 1345 Grand Avenue, Piedmont, CA 94610	**Phone:** 510-238-9111
Client:	** same as Property Owner **	
Contact:	Sara Bloom	**Phone:** 415-391-2510 **Cell:** 360-618-2789

	Total Due:	$265.00
Receipt Number: WR2015-0555	**Total Amount Paid:**	$265.00
Payer Name : AllWest Environmental Inc.	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 5 Boreholes
Driller: Environmental Control Associates, Inc. - Lic #: 695970 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-1017	11/16/2015	02/21/2016	5	2.25 in.	10.00 ft

Specific Work Permit Conditions

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

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

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

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

6. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic

submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

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

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX C

STANDARD GEOPROBE™ DPT SAMPLING PROCEDURES

Soil Sampling

Direct push technology (DPT) soil core sampling using Geoprobe™ or similar methods is accomplished using a nominal 4-foot long, 2-inch diameter stainless steel steel drive probe and extension rods. The drive probe is equipped with nominal 1-1/2 inch diameter clear plastic poly tubes that line the interior of the probe. The probe and insert tubes are together pneumatically driven using a percussion hammer in 4-foot intervals. After each drive interval the drive probe and rods are retrieved to the surfaced. The poly tube containing subsurface soil is then removed. The drive probe is then cleaned, equipped with a new poly tube and reinserted into the boring with extension rods as required. The apparatus is then driven following the above procedure until the desired depth is obtained. The poly tubes and soil are inspected after each drive interval with lithologic and relevant drilling observations recorded. Soil samples are screened for organic vapors using an organic vapor meter (OVM), photo-ionization detector (PID) or other appropriate device. OVM/PID readings, soil staining and other relevant observations are recorded. Selected soil sample intervals can be cut from the 4-foot intervals for possible analytical or geotechnical testing or other purposes.

The soils contained in the sample liners are then classified according to the Uniform Soil Classification System and recorded on the soil boring logs.

Sample liners selected for laboratory analyses are sealed with Teflon sheets, plastic end caps, and silicon tape. The sealed sample liner is then labeled, sealed in a plastic bag, and placed in an ice chest cooled to 4°C with crushed ice for temporary field storage and transportation. The standard chain-of-custody protocol is maintained for all soil samples from the time of collection to arrival at the laboratory.

Groundwater Sampling

Groundwater sampling is performed after the completion of soil sampling and when the boring has reached its desired depth. The steel probe and rods are then removed from the boring and new, nominal 1-inch diameter PVC solid and perforated temporary casing is lowered into the borehole. Alternatively, a retractable screen sampling device such as a Hydropunch™ can be driven to the desired depth and pulled back to expose the screened interval. Depth to water is then measured using an electronic groundwater probe. Groundwater samples are collected using a stainless steel bailer, disposable Teflon™ bailer, or check valve or peristaltic pump with disposable Teflon™ or polyethylene sample tubing.

After the retrieval of the bailer, groundwater contained in the bailer (or discharged from sample tubing) is decanted into laboratory provided containers. The containers are then sealed with Teflon coated caps with no headspace, labeled, and placed in an ice chest for field storage and transportation to a state certified analytical laboratory. The standard chain-of-custody protocols are followed from sample collection to delivery to the laboratory. A new bailer (or sample tubing) is used for each groundwater sampling location to avoid cross contamination.

STANDARD GEOPROBE® AND SUB-SLAB PROBE SOIL VAPOR SAMPLING PROCEDURES

Geoprobe® DPT PRT Temporary Soil Vapor Probe Advancement

The Geoprobe® Direct Push Technology (DPT) Post Run Tubing (PRT) soil vapor sampling process involves driving into the subsurface a disposable Geoprobe® DPT sampling probe with expendable tip and a PRT adapter that are connected to 4-foot sections of Geoprobe® 1.25-inch inside diameter (ID) extension rods. The PRT adapter has a reverse-thread adapter at the upper end to allow the connection of flexible soil vapor sampling tubing with a PRT tubing adaptor after the installation (post-run) of the tip. The entire sampling assembly, the sampling tip, PRT adapter, and the Geoprobe® extension rods, is driven into the subsurface by a truck-mounted hydraulic percussion hammer. The sampler is driven to the desired depth as additional rods are connected. At the desired sampling depth, typically 5 feet below ground surface (bgs) a sufficient length of disposable flexible polyethylene or Teflon® sample tubing is first lowered through the center of the extension rod and connected to the PRT adapter. The extension rod is then retracted 3 to 4 inches to create a small void around the PRT adapter and the expendable sampling tip for extracting a soil vapor sample from that location. Bentonite chips will be used to fill the annular space between the probe and the subgrade material to the ground surface. The bentonite will then be hydrated with distilled water. The temporary Geoprobe® PRT soil vapor probe will be sampled at least 2 hours following driving of the probe, to allow vapor conditions to equalize in subsurface materials and the bentonite surface seal to hydrate in general accordance with guidelines presented in the CalEPA Department of Toxic Substance Control (DTSC) *Advisory – Active Soil Gas Investigations*, April, 2012..

Geoprobe® DPT Borehole Advancement and Temporary Soil Vapor Probe Installation

Alternatively, borings will be advanced using truck-mounted or limited access Geoprobe® DPT equipment, or a hand-operated slide hammer, to drive 1-inch outside diameter (OD) rods and probes with expendable steel tips to 5 feet bgs, without recovering soil cores. Or, borings will be advanced using Geoprobe® DPT continuous coring equipment using a nominal 4-foot or 5-foot long, 2-inch OD stainless steel core barrel drive sampler and extension rods. The drive probe will be equipped with nominal 1 ½-inch inside diameter (ID) clear PETG plastic tubes that line the interior of the probe. Continuous soil sample cores are recovered for potential lithologic characterization and laboratory analysis. After the probes or core barrels are advanced to the specified depth, typically 5 feet bgs, the probes and drive rods are removed, leaving the borehole open with the expendable probe tip (if used) at the bottom.

Plastic or stainless steel soil vapor probes, ½-inch diameter by 2-inches long and tipped with porous plastic membranes, are then inserted to the bottom of the 1-inch diameter boreholes at 5 feet bgs. The probe tips are attached to 7-foot lengths of 0.25-inch OD Teflon™ tubing extending to the top of the floor slab. A fine sand filter pack is placed in the borehole annulus around the probe. Hydrated bentonite chips are then used to fill the annular space above the filter pack to the top of the floor slab. The bentonite is allowed to hydrate and borehole conditions to equalize for 2 hours prior to sampling activities, per DTSC vapor sampling guidelines. Temporary soil vapor probe installation procedures will be performed in general accordance with guidelines presented in the DTSC *Advisory – Active Soil Gas Investigations*, April, 2012.

AllWest

Sub Slab Soil Vapor Probe Installation

Semi-permanent sub-slab soil vapor probes are emplaced as follows: A 1-inch diameter hole is drilled through the concrete floor slab using a portable electric drill. The boreholes are advanced approximately 0.5 feet bgs into the subgrade material beneath the floor slab. Stainless steel or plastic vapor probes 2 inches long by 0.5 inches in diameter, tipped with porous plastic membranes, will be inserted to the bottom of each sub-slab borehole. The probe tips will be attached to lengths of 0.25-inch diameter Teflon™ or stainless steel tubing extending to approximately 1 inch below the top of the floor slab. The top of the Teflon™ or stainless steel tubing in each probe will be attached to a brass threaded male Swagelock™ fitting and cap recessed below the concrete floor. A fine sand filter pack approximately 2 to 4 inches thick will be placed in the borehole annulus around the probes. A Teflon™ sealing disk will be placed around the tubing above the filter pack.

Dry granular bentonite will be placed in the borehole annulus above the Teflon™ sealing disk to above the base of the concrete floor slab. Hydrated granulated bentonite will then be used to fill the annular space above the dry granular to approximately 2 inches above the bottom of the floor slab, and will be hydrated from the surface using deionized water. Quick-drying cement/bentonite grout will then be used to fill the remaining annular space to the Swagelock fitting approximately ¾ to 1 inch below the top of the slab. A watertight plastic cap or metal vault box will be installed flush with the top of the floor slab within a 2 to 4-inch diameter countersunk hole to protect the probe fitting. At least 2 hours will elapse prior to collecting vapor samples to allow the bentonite and cement grout seal to hydrate and borehole conditions to equalize, per DTSC sub-slab vapor sampling guidelines (DTSC, 2011).

Soil Vapor Sampling via Summa Canister

Soil vapor sampling procedures will be similar for Geoprobe® PRT and continuously cored temporary soil vapor probes, and semi-permanent sub-slab soil vapor probes, and will be in general accordance with *and DTSC Advisory – Active Soil Gas Investigations*, April 2012. Soil vapor sampling will not be performed if significant precipitation (greater than ½ inch in a 24 hour period) has occurred within the previous five days.

AllWest will collect soil vapor samples in laboratory prepared 1-liter capacity SUMMA canisters. Prior to vapor purging and sample collection, a vacuum leak shut-in test of the flow-controller/gauge manifold assembly we be performed for a minimum of 2 minutes. Prior to sample collection, approximately 3 sampling system volumes of soil vapor will be purged at a flow rate of approximately 150-200 milliliters per minute (ml/min) from each vapor probe using a dedicated 6-liter capacity SUMMA purge canister. Typical sampling system volumes are 4.5 ml/feet for ¼-inch OD/0.17-inch ID tubing, and 200 ml/feet for a 2-inch diameter borehole with sand filter pack (minus tubing volume). Assuming a 2-inch diameter borehole with a 0.5 feet sand filter pack interval, the typical system volume would be approximately 130 ml for a 5-feet bgs temporary probe, and 115 ml for a 1–feet bgs sub-slab probe, including 2-3 feet of tubing above grade. Therefore, 3 system volumes would typically be approximately 350 to 400 milliliters (ml) depending on tubing length and borehole diameter, depth and filter pack interval.

While sampling, a leak detection test is conducted using helium as a leak tracer inside an airtight plastic shroud covering the entire sampling apparatus, as recommended in the DTSC *Advisory – Active Soil Gas Investigations* (DTSC, 2012). The helium concentration within the shroud is monitored with a helium gas detection meter with a minimum precision of 0.1% to keep the concentration at approximately 10% (or two orders of magnitude above the minimum meter detection limit). The helium tracer gas will be

infused into the shroud at the required concentration at least 5 minutes prior to sample collection. To verify helium detection meter accuracy, one (1) ambient air sample per day is collected using a 1-liter SUMMA canister inside the leak detection shroud during the sampling of one probe to measure helium concentrations inside the shroud. Depending upon helium availability, other leak detection gases such as isopropyl alcohol (IPA) or difluoroethane may be substituted.

Flow rates of approximately 150-200 ml/min are used to fill the sample canisters. The canisters are filled to approximate 80% of capacity (approximately 5 inches of mercury vacuum remaining). All pertinent field observations, pressure, times and readings are recorded. After filling and closing the sample valve, all SUMMA canisters are removed from the manifold, labeled with sampling information, including initial and final vacuum pressures, placed in a dark container and transported under chain-of-custody to the analytical laboratory. The analytical laboratory will record the final SUMMA canister vacuum upon receipt.

Soil Gas Probe Emplacement Methods

Figure 1
Permanent/Semi-permanent Gas Probe Construction

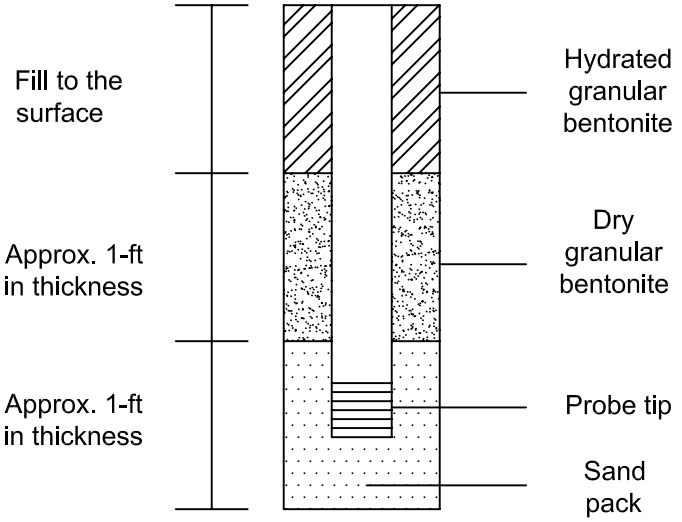
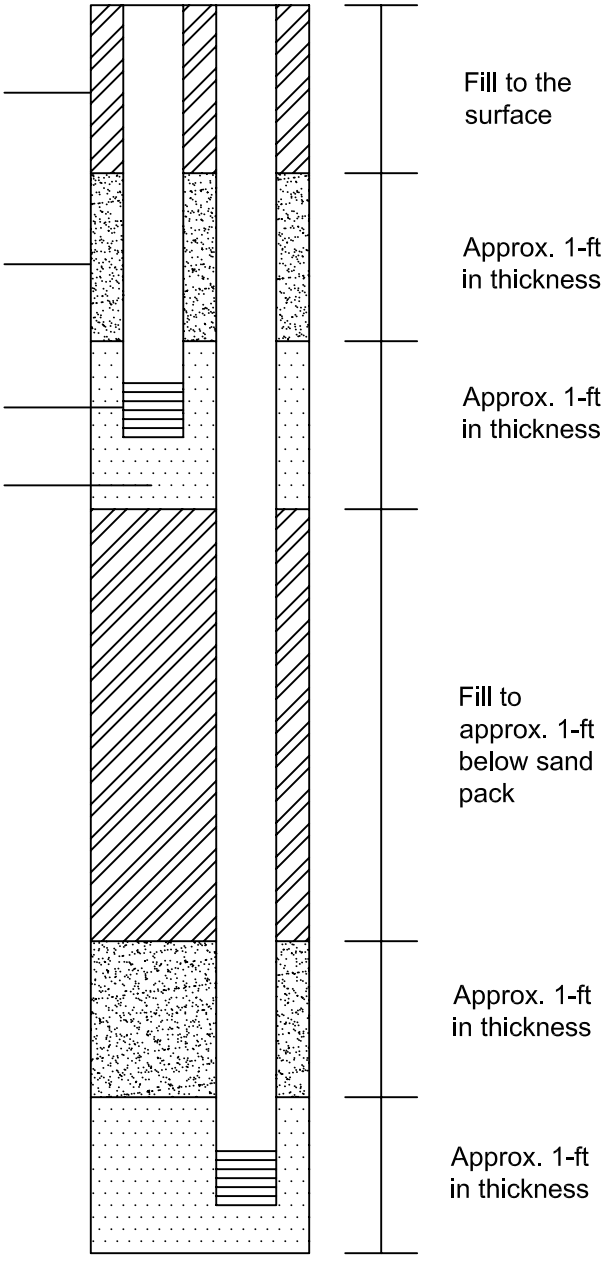
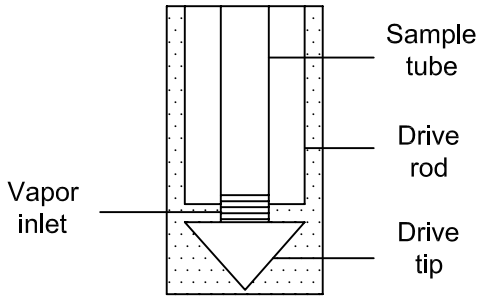


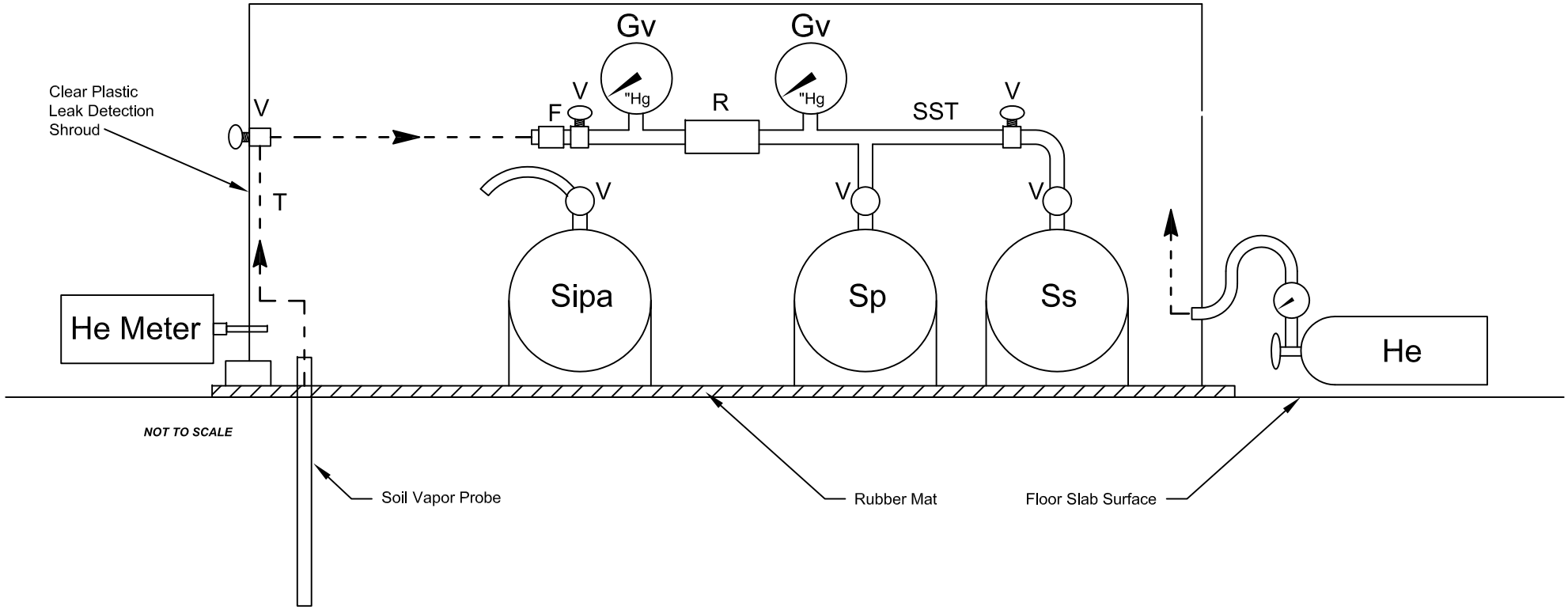
Figure 2
Multi-depth Gas Probe Construction



Temporary Gas Probe Method



General Soil Gas Sampling Manifold Schematic with Leak Detection Shroud



LEGEND

F	=	Filter
V	=	Valve
Gp	=	Pressure Gauge
R	=	Flow Regulator
Gv	=	Vacuum Gauge
Sp	=	Purge Summa Canister
Ss	=	Sample Summa Canister
Sipa	=	Ambient Air Helium Leak Detect Gas Summa Canister
He Meter	=	Helium detector for He concentration readings
T	=	Disposable Teflon or Polyethylene Tubing
SST	=	Stainless Steel Tubing and Fittings
He	=	Helium tank, leak detect gas, regulator and tubing

AllWest

STANDARD OPERATING PROCEDURE
SOIL VAPOR SAMPLING
HELIUM SHROUD
SOURCE: ALLWEST
PREPARED BY: C. RAMELB / C. MONAHAN

APPENDIX D

AllWest
2141 Mission St Ste 100
San Francisco, CA 94110
Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER SB-1

CLIENT Ellwood Commercial Real Estate
PROJECT NAME 500 Grand
PROJECT NUMBER 15184.23
PROJECT LOCATION Oakland, California
DATE STARTED 11/23/15 **COMPLETED** 11/23/15
GROUND ELEVATION 0 ft **HOLE SIZE** 2
DRILLING CONTRACTOR ECA
GROUND WATER LEVELS:
DRILLING METHOD Geoprobe DPT Continuous Core
AT TIME OF DRILLING ---
LOGGED BY Sara Bloom **CHECKED BY** Leonard Niles
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0					0.3 Asphalt. -0.3	
	UD				(SM) Silty Sand, tan, fine grained sand, moist.	
	UD	SB-1@1'-1.5'	SM			PID = 475
	UD				Gray staining present, moderately strong petroleum odor.	
					4.0 Staining is no longer present. -4.0	
5	UD	SB-1@4'-4.5'	ML		(ML) Silt, light brown, trace fine grained sand, moist.	PID = 9.6
	UD				6.0 -6.0	
					(SM) Silty Sand, gray, fine grained sand, moist, faint petroleum odor.	
	UD	SB-1@8'-8.5'				PID = 41
10			SM			
	UD				Color change to light gray.	
					12.0 -12.0	

Bottom of borehole at 12.0 feet.

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2141 Mission St Ste 100
San Francisco, CA 94110
Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER SB-2

CLIENT Ellwood Commercial Real Estate
PROJECT NAME 500 Grand
PROJECT NUMBER 15184.23
PROJECT LOCATION Oakland, California
DATE STARTED 11/23/15 **COMPLETED** 11/23/15
GROUND ELEVATION 0 ft **HOLE SIZE** 2
DRILLING CONTRACTOR ECA
GROUND WATER LEVELS:
DRILLING METHOD Geoprobe DPT Continuous Core
AT TIME OF DRILLING ---
LOGGED BY Sara Bloom **CHECKED BY** Leonard Niles
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0						
	UD		SP		0.3 Asphalt. -0.3	
	UD	SB-2@1'-1.5'			1.0 (SP) Gravelly Sand, dark brown. -1.0	PID = 205.4
	UD		SM		(SM) Silty Sand, gray, very fine grained sand, moist, strong petroleum odor.	
	UD				Color changes to grayish brown.	
5	UD	SB-2@4'-4.5'				PID = 94.7
					5.0 -5.0	
			ML		(ML) Clayey Silt, gray to brown, moist, plastic.	
	UD				6.0 -6.0	
			SM		(SM) Silty Sand, gray, very fine grained sand, faint petroleum odor.	
	UD	SB-2@9.5'-10'				PID = 152.4
	UD				Color change to tan.	
10					9.5 -9.5	
			ML		10.0 (ML) Sandy Silt, tan, very fine grained sand. -10.0	

Bottom of borehole at 10.0 feet.

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2141 Mission St Ste 100
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Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER SB-3

CLIENT Ellwood Commercial Real Estate
PROJECT NAME 500 Grand
PROJECT NUMBER 15184.23
PROJECT LOCATION Oakland, California
DATE STARTED 11/23/15 **COMPLETED** 11/23/15
GROUND ELEVATION 0 ft **HOLE SIZE** 2
DRILLING CONTRACTOR ECA
GROUND WATER LEVELS:
DRILLING METHOD Geoprobe DPT Continuous Core
AT TIME OF DRILLING ---
LOGGED BY Sara Bloom **CHECKED BY** Leonard Niles
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0					0.3 Asphalt. -0.3	
	UD					
	UD	SB-3@1'-1.5'			(ML) Silt, brownish gray, trace fine grained sand, moist, strong petroleum odor.	PID = 223.3
	UD		ML			
	UD	SB-3@4'-4.5'			Some organics present.	PID = 14.2
5					Faint petroleum odor.	
	UD				6.0 -6.0	
			SM		(SM) Silty Sand, very light gray, very fine to fine grained sand, moist.	
					8.0 -8.0	
	UD	SB-3@9.5'-10'	ML		8.5 (ML) Clayey Silt, gray, moist, plastic. -8.5	PID = 20.3
	UD		SM		(SM) Silty Sand, brown, moist.	
10					10.0 -10.0	

Bottom of borehole at 10.0 feet.

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2141 Mission St Ste 100
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Telephone: 415-391-2510
Fax: 415-391-2008

BORING NUMBER SB-4

CLIENT Ellwood Commercial Real Estate
PROJECT NAME 500 Grand
PROJECT NUMBER 15184.23
PROJECT LOCATION Oakland, California
DATE STARTED 11/23/15 **COMPLETED** 11/23/15
GROUND ELEVATION 0 ft **HOLE SIZE** 2
DRILLING CONTRACTOR ECA
GROUND WATER LEVELS:
DRILLING METHOD Geoprobe DPT Continuous Core
AT TIME OF DRILLING ---
LOGGED BY Sara Bloom **CHECKED BY** Leonard Niles
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0	NR		PID = 7.7	0.3	Asphalt. -0.3 (GP) Gravel fill.	
				4.0	-4.0	

Bottom of borehole at 4.0 feet.

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Fax: 415-391-2008

BORING NUMBER SB-5

CLIENT Ellwood Commercial Real Estate
PROJECT NAME 500 Grand
PROJECT NUMBER 15184.23
PROJECT LOCATION Oakland, California
DATE STARTED 11/23/15 **COMPLETED** 11/23/15
GROUND ELEVATION 0 ft **HOLE SIZE** 2
DRILLING CONTRACTOR ECA
GROUND WATER LEVELS:
DRILLING METHOD Geoprobe DPT Continuous Core
AT TIME OF DRILLING ---
LOGGED BY Sara Bloom **CHECKED BY** Leonard Niles
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0	UD		SM		0.3 -0.3 Asphalt.	
	UD	SB-5@1'-1.5'			(SM) Silty Sand, reddish brown, fine grained sand.	PID = 959
	UD				Color change to greenish gray, moist, strong petroleum odor.	
5	UD	SB-5@4'-4.5'				PID = 1000
	UD				6.0 -6.0	
			SM		(SM) Silty Sand, very light gray, very fine grained sand, moderate petroleum odor.	
	UD	SB-5@9.5'-10'				PID = 61.7
10	UD				9.5 -9.5	
			ML		10.0 -10.0 (ML) Sandy Silt, tan, very fine grained sand.	

Bottom of borehole at 10.0 feet.

APPENDIX E

AllWest Environmental, Inc.

Specialists in Physical Due Diligence and Remedial Services

2141 Mission Street, Suite 100
San Francisco, CA 94110
Tel 415.391.2510
Fax 415.391.2008

SOIL GAS VAPOR FIELD LOG

Project No: 15184.23 **Project Name:** 500 Grand

Date: ~~11/24/2015~~ 11/27/2015 **Vapor Probe No:** SVP-3 (SB-3) **Serial No:** 6L SUMMA: D411 1L SUMMA: LC587

Regulatory Agencies: None

Contractor: ECA/AllWest

Hole Diameter: 2" **Total Depth:** 5' **Grout/Bentonite:** 1' SAND, 4.5' BENTONITE

Probe Diameter: 1/2"ODx1/8"ID **Line Length:** 10' **Purge Volume:** ~~~500ml~~ ~675 ml

Tracer Gas: Helium **Flow Regulator:** 150-200 (ml/min) (A448) **Leak Test: Pass/Fail**

Laboratory Name and Number: Eurofins/Calscience (TO-3 & TO-15)

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0907	--	-30" Hg	START LEAK TEST, PURGE SUMMA: D411, LEAK TEST PASSED
0912	5 MIN	-30" Hg	BEGAN PURGING, PURG SUMMA: D411
0915	3 MIN	-29" Hg	
0918	3 MIN	-28" Hg	
0921	3 MIN	-27" Hg	
0924	3 MIN	-27" Hg	
0926	2MIN	-26.5"Hg	COMPLETE PURGE, BEGIN SAMPLE SUMMA SHUT-IN TEST.
0931	5 MIN	-30"Hg	
0940	9 MIN	-30"Hg	BEGAN SAMPLING, He @ 19.9%
0950	10 MIN	-25"Hg	He @ 19.5%

Remarks: T-VALVE: 1D

1010	20MIN	-24"Hg	He @ 19.0%
1030	20MIN	-23.5"Hg	He @ 15.0% - OUT OF HELIUM
1200		-22.5" Hg	
1645		-20.5 Hg	END SAMPLE PURGE, FINAL

Sampler: Sara Bloom

AllWest Environmental, Inc.

Specialists in Physical Due Diligence and Remedial Services

2141 Mission Street, Suite 100
San Francisco, CA 94110
Tel 415.391.2510
Fax 415.391.2008

SOIL GAS VAPOR FIELD LOG

Project No: 15184.23 **Project Name:** 500 Grand

Date: ~~11/24/2015~~ 12/1/15 **Vapor Probe No:** SVP-1 (SB-1) **Serial No:** _____

Regulatory Agencies: None

Contractor: ECA/AllWest

Hole Diameter: 2" **Total Depth:** 5' **Grout/Bentonite:** _____

Probe Diameter: 1/2"ODx1/8"ID **Line Length:** 10' **Purge Volume:** ~500ml

Tracer Gas: Helium **Flow Regulator:** 150-200 **(ml/min)** **Leak Test: Pass/Fail**

Laboratory Name and Number: Eurofins/Calscience (TO-3 & TO-15)

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks

Remarks: WATER WAS UNDER PRESSURE IN TUBING. NOT SAMPLED.

Sampler: Sara Bloom

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Tel 415.391.2510
Fax 415.391.2008

SOIL GAS VAPOR FIELD LOG

Project No: 15184.23 **Project Name:** 500 Grand

Date: ~~11/24/2015~~ 12/1/15 **Vapor Probe No:** SVP-2 (SB-2) **Serial No:** 6L SUMMA: D411 1L SUMMA: LC795

Regulatory Agencies: None

Contractor: ECA/AllWest

Hole Diameter: 2" **Total Depth:** 5' **Grout/Bentonite:**

Probe Diameter: 1/2"ODx1/8"ID **Line Length:** 10' **Purge Volume:** ~500ml

Tracer Gas: Helium **Flow Regulator:** 150-200 (ml/min) **Leak Test: Pass/Fail**

Laboratory Name and Number: Eurofins/Calscience (TO-3 & TO-15) (A176)

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
1035	- -	-26" Hg	START LEAK TEST
1040	5 MIN	-26" Hg	LEAK TEST: PASSED, BEGAN PURGING
1042		-26"Hg	END PURGE, WATER IN TUBING

Remarks: T-VALVE: 33

NOT SAMPLED DUE TO WATER IN TUBING.

Sampler: Sara Bloom

AllWest Environmental, Inc.

Specialists in Physical Due Diligence and Remedial Services

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San Francisco, CA 94110
Tel 415.391.2510
Fax 415.391.2008

SOIL GAS VAPOR FIELD LOG

Project No: 15184.23 **Project Name:** 500 Grand

Date: ~~11/24/2015~~ 12/01/2015 **Vapor Probe No:** SVP-4 (SB-5) **Serial No:** 6L SUMMA: P411 1L SUMMA: LC795

Regulatory Agencies: None

Contractor: ECA/AllWest

Hole Diameter: 2" **Total Depth:** 5' **Grout/Bentonite:** 1' SAND, 4.5' BENTONITE

Probe Diameter: 1/2"ODx1/8"ID **Line Length:** 10' **Purge Volume:** ~500ml

Tracer Gas: Helium **Flow Regulator:** 150-200 (ml/min) (A349) **Leak Test: Pass/Fail**

Laboratory Name and Number: Eurofins/Calscience (TO-3 & TO-15)

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0845	--	-26.5"Hg	START LEAK TEST
0850	5 MIN	-26.5"Hg	LEAK TEST: PASSED, BEGAN PURGING
0855	5 MIN	-26"Hg	
0909	14 MIN	-26"Hg	STOPPED PURGE - WATER WAS OBSERVED IN TUBING

Remarks: T-VALVE: 15

NOT SAMPLED DUE TO WATER IN TUBING.

Sampler: Sara Bloom

APPENDIX F

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1511962

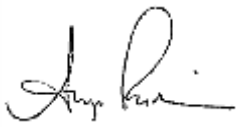
Report Created for: All West Environmental, Inc

2141 Mission Street, Ste 100
San Francisco, CA 94110

Project Contact: Leonard Niles
Project P.O.:
Project Name: 15184.23; 500 Grand

Project Received: 11/23/2015

Analytical Report reviewed & approved for release on 12/01/2015 by:



Angela Rydelius,
Laboratory Manager

McCampbell 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

Glossary of Terms & Qualifier Definitions

Client: All West Environmental, Inc
Project: 15184.23; 500 Grand
WorkOrder: 1511962

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)

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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

Glossary of Terms & Qualifier Definitions

Client: All West Environmental, Inc
Project: 15184.23; 500 Grand
WorkOrder: 1511962

Analytical Qualifiers

S	spike recovery outside accepted recovery limits
a2	sample diluted due to cluttered chromatogram
a3	sample diluted due to high organic content.
c1	surrogate recovery outside of the control limits due to the dilution of the sample.
c2	surrogate recovery outside of the control limits due to matrix interference.
c7	Surrogate value diluted out of range
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant
e8	kerosene/kerosene range/jet fuel range
e11	stoddard solvent/mineral spirit (?)

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validated the prep batch.
F2	LCS recovery for this compound is outside of acceptance limits.
F3	the surrogate standard recovery and/or RPD is outside of acceptance limits.

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

Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

Benzene, Toluene, Ethylbenzene & Xylenes (BTEX) by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@1'-1.5'	1511962-001A	Soil	11/23/2015 08:46	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	11/25/2015 15:48
Ethylbenzene	ND	0.0050	1	11/25/2015 15:48
Toluene	ND	0.0050	1	11/25/2015 15:48
Xylenes, Total	ND	0.0050	1	11/25/2015 15:48
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	101	70-130		11/25/2015 15:48
Toluene-d8	91	70-130		11/25/2015 15:48
Ethylbenzene-d10	95	60-140		11/25/2015 15:48
Benzene-d6	93	60-140		11/25/2015 15:48

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@8'-8.5'	1511962-003A	Soil	11/23/2015 09:06	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	11/25/2015 16:26
Ethylbenzene	ND	0.0050	1	11/25/2015 16:26
Toluene	ND	0.0050	1	11/25/2015 16:26
Xylenes, Total	ND	0.0050	1	11/25/2015 16:26
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	101	70-130		11/25/2015 16:26
Toluene-d8	89	70-130		11/25/2015 16:26
Ethylbenzene-d10	99	60-140		11/25/2015 16:26
Benzene-d6	97	60-140		11/25/2015 16:26

Analyst(s): AK

(Cont.)

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

Benzene, Toluene, Ethylbenzene & Xylenes (BTEX) by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@1'-15'	1511962-004A	Soil	11/23/2015 09:25	GC18	113297

Analytes	Result		RL	DF	Date Analyzed
Benzene	ND		1.0	200	11/26/2015 00:24
Ethylbenzene	ND		1.0	200	11/26/2015 00:24
Toluene	ND		1.0	200	11/26/2015 00:24
Xylenes, Total	ND		1.0	200	11/26/2015 00:24
Surrogates	**REC (%)**	**Qualifiers**	**Limits**		
Dibromofluoromethane	107		70-130		11/26/2015 00:24
Toluene-d8	83		70-130		11/26/2015 00:24
Ethylbenzene-d10	0	S	60-140		11/26/2015 00:24
Benzene-d6	0	S	60-140		11/26/2015 00:24

Analyst(s): AK Analytical Comments: c7,a2,a3

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@9.5'-10'	1511962-006A	Soil	11/23/2015 09:41	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	11/25/2015 17:05
Ethylbenzene	ND	0.0050	1	11/25/2015 17:05
Toluene	ND	0.0050	1	11/25/2015 17:05
Xylenes, Total	ND	0.0050	1	11/25/2015 17:05
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	101	70-130		11/25/2015 17:05
Toluene-d8	91	70-130		11/25/2015 17:05
Ethylbenzene-d10	97	60-140		11/25/2015 17:05
Benzene-d6	98	60-140		11/25/2015 17:05

Analyst(s): AK

(Cont.)

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"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:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

Benzene, Toluene, Ethylbenzene & Xylenes (BTEX) by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@1'-1.5'	1511962-007A	Soil	11/23/2015 10:01	GC16	113331

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	11/25/2015 05:22
Ethylbenzene	ND	0.0050	1	11/25/2015 05:22
Toluene	ND	0.0050	1	11/25/2015 05:22
Xylenes, Total	ND	0.0050	1	11/25/2015 05:22
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	93	70-130		11/25/2015 05:22
Toluene-d8	95	70-130		11/25/2015 05:22
Ethylbenzene-d10	85	60-140		11/25/2015 05:22
Benzene-d6	78	60-140		11/25/2015 05:22

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@9.5'-10'	1511962-009A	Soil	11/23/2015 10:15	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	11/25/2015 17:44
Ethylbenzene	ND	0.0050	1	11/25/2015 17:44
Toluene	ND	0.0050	1	11/25/2015 17:44
Xylenes, Total	ND	0.0050	1	11/25/2015 17:44
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	102	70-130		11/25/2015 17:44
Toluene-d8	91	70-130		11/25/2015 17:44
Ethylbenzene-d10	98	60-140		11/25/2015 17:44
Benzene-d6	97	60-140		11/25/2015 17:44

Analyst(s): AK

(Cont.)

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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:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

Benzene, Toluene, Ethylbenzene & Xylenes (BTEX) by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@1'-1.5'	**1511962-010A**	**Soil**	**11/23/2015 11:12**	**GC18**	**113331**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	11/25/2015 22:29
Ethylbenzene	ND	0.0050	1	11/25/2015 22:29
Toluene	ND	0.0050	1	11/25/2015 22:29
Xylenes, Total	ND	0.0050	1	11/25/2015 22:29
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	101	70-130		11/25/2015 22:29
Toluene-d8	92	70-130		11/25/2015 22:29
Ethylbenzene-d10	97	60-140		11/25/2015 22:29
Benzene-d6	96	60-140		11/25/2015 22:29

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@4'-4.5'	**1511962-011A**	**Soil**	**11/23/2015 11:20**	**GC18**	**113331**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.10	20	11/25/2015 23:08
Ethylbenzene	**2.4**	0.10	20	11/25/2015 23:08
Toluene	ND	0.10	20	11/25/2015 23:08
Xylenes, Total	**6.0**	0.10	20	11/25/2015 23:08
Surrogates	**REC (%)**	**Qualifiers**	**Limits**	
Dibromofluoromethane	110		70-130	11/25/2015 23:08
Toluene-d8	84		70-130	11/25/2015 23:08
Ethylbenzene-d10	61		60-140	11/25/2015 23:08
Benzene-d6	34	S	60-140	11/25/2015 23:08

Analyst(s): AK Analytical Comments: c7

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

Benzene, Toluene, Ethylbenzene & Xylenes (BTEX) by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4@1'-1.5'	1511962-013A	Soil	11/23/2015 11:55	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	11/25/2015 23:46
Ethylbenzene	ND	0.0050	1	11/25/2015 23:46
Toluene	ND	0.0050	1	11/25/2015 23:46
Xylenes, Total	ND	0.0050	1	11/25/2015 23:46
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	101	70-130		11/25/2015 23:46
Toluene-d8	92	70-130		11/25/2015 23:46
Ethylbenzene-d10	94	60-140		11/25/2015 23:46
Benzene-d6	96	60-140		11/25/2015 23:46

Analyst(s): AK

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/25/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	µg/L

Oxygenated Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4	**1511962-014A**	**Water**	**11/23/2015 12:00**	**GC16**	**113489**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.50	1	11/25/2015 16:31
Ethylbenzene	**1.0**	0.50	1	11/25/2015 16:31
Toluene	ND	0.50	1	11/25/2015 16:31
Xylenes, Total	**1.6**	0.50	1	11/25/2015 16:31
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	96	70-130		11/25/2015 16:31
Toluene-d8	88	70-130		11/25/2015 16:31

Analyst(s): KBO

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@1'-1.5'	1511962-001A	Soil	11/23/2015 08:46	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	11/25/2015 15:48
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	86	70-130		11/25/2015 15:48
Benzene-d6	81	60-140		11/25/2015 15:48

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@8'-8.5'	1511962-003A	Soil	11/23/2015 09:06	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**2.5**	0.25	1	11/25/2015 16:26
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	86	70-130		11/25/2015 16:26
Benzene-d6	85	60-140		11/25/2015 16:26

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@1'-15'	1511962-004A	Soil	11/23/2015 09:25	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**110**	50	200	11/26/2015 00:24
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	91	70-130		11/26/2015 00:24
Benzene-d6	88	60-140		11/26/2015 00:24

Analyst(s): AK

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@9.5'-10'	1511962-006A	Soil	11/23/2015 09:41	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	11/25/2015 17:05
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	86	70-130		11/25/2015 17:05
Benzene-d6	86	60-140		11/25/2015 17:05

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@1'-1.5'	1511962-007A	Soil	11/23/2015 10:01	GC16	113331

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	11/25/2015 05:22
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	96	70-130		11/25/2015 05:22
Benzene-d6	86	60-140		11/25/2015 05:22

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@9.5'-10'	1511962-009A	Soil	11/23/2015 10:15	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	11/25/2015 17:44
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	87	70-130		11/25/2015 17:44
Benzene-d6	85	60-140		11/25/2015 17:44

Analyst(s): AK

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@1'-1.5'	1511962-010A	Soil	11/23/2015 11:12	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	11/25/2015 22:29

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	11/25/2015 22:29
Benzene-d6	84	60-140	11/25/2015 22:29

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@4'-4.5'	1511962-011A	Soil	11/23/2015 11:20	GC16	113331

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**200**	25	100	12/01/2015 00:26

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	108		70-130	12/01/2015 00:26
Benzene-d6	335	S	60-140	12/01/2015 00:26

Analyst(s): KF Analytical Comments: c7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4@1'-1.5'	1511962-013A	Soil	11/23/2015 11:55	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	11/25/2015 23:46

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	11/25/2015 23:46
Benzene-d6	84	60-140	11/25/2015 23:46

Analyst(s): AK

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/25/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	µg/L

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4	1511962-014A	Water	11/23/2015 12:00	GC16	113489

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	11/25/2015 16:31

Surrogates	REC (%)	Limits	
Dibromofluoromethane	98	70-130	11/25/2015 16:31

Analyst(s): KBO

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW3550B/3630C
Date Prepared:	11/23/15	**Analytical Method:**	SW8015B
Project:	15184.23; 500 Grand	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@1'-1.5'	1511962-001A	Soil	11/23/2015 08:46	GC11B	113322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/25/2015 14:27
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/25/2015 14:27

Surrogates	REC (%)	Limits	
C9	114	70-130	11/25/2015 14:27

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@8'-8.5'	1511962-003A	Soil	11/23/2015 09:06	GC11B	113322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**16**	10	10	11/25/2015 21:19
TPH-Motor Oil (C18-C36)	**390**	50	10	11/25/2015 21:19

Surrogates	REC (%)	Limits	
C9	107	70-130	11/25/2015 21:19

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@1'-15'	1511962-004A	Soil	11/23/2015 09:25	GC39B	113322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**30**	1.0	1	11/30/2015 23:49
TPH-Motor Oil (C18-C36)	**5.4**	5.0	1	11/30/2015 23:49

Surrogates	REC (%)	Limits	
C9	111	70-130	11/30/2015 23:49

Analyst(s): TK Analytical Comments: e11,e7,e2

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW3550B/3630C
Date Prepared:	11/23/15	**Analytical Method:**	SW8015B
Project:	15184.23; 500 Grand	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@9.5'-10'	1511962-006A	Soil	11/23/2015 09:41	GC11B	113322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/25/2015 15:36
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/25/2015 15:36
Surrogates	REC (%)	Limits		
C9	114	70-130		11/25/2015 15:36

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@1'-1.5'	1511962-007A	Soil	11/23/2015 10:01	GC11B	113322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/25/2015 16:44
TPH-Motor Oil (C18-C36)	**11**	5.0	1	11/25/2015 16:44
Surrogates	REC (%)	Limits		
C9	113	70-130		11/25/2015 16:44

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@9.5'-10'	1511962-009A	Soil	11/23/2015 10:15	GC11B	113322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/25/2015 17:53
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/25/2015 17:53
Surrogates	REC (%)	Limits		
C9	114	70-130		11/25/2015 17:53

Analyst(s): TK

(Cont.)

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW3550B/3630C
Date Prepared:	11/23/15	**Analytical Method:**	SW8015B
Project:	15184.23; 500 Grand	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@1'-1.5'	1511962-010A	Soil	11/23/2015 11:12	GC11B	113322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1.5**	1.0	1	11/25/2015 19:02
TPH-Motor Oil (C18-C36)	**36**	5.0	1	11/25/2015 19:02

Surrogates	REC (%)	Limits	
C9	115	70-130	11/25/2015 19:02

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@4'-4.5'	1511962-011A	Soil	11/23/2015 11:20	GC11B	113322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**170**	10	10	11/26/2015 05:18
TPH-Motor Oil (C18-C36)	**230**	50	10	11/26/2015 05:18

Surrogates	REC (%)	Qualifiers	Limits	
C9	131	S	70-130	11/26/2015 05:18

Analyst(s): TK Analytical Comments: e7,e11,e2,c1,c2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4@1'-1.5'	1511962-013A	Soil	11/23/2015 11:55	GC11B	113322

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1.1**	1.0	1	11/25/2015 20:10
TPH-Motor Oil (C18-C36)	**5.5**	5.0	1	11/25/2015 20:10

Surrogates	REC (%)	Limits	
C9	114	70-130	11/25/2015 20:10

Analyst(s): TK Analytical Comments: e7,e2

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW3510C/3630C
Date Prepared:	11/23/15	**Analytical Method:**	SW8015B
Project:	15184.23; 500 Grand	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4	**1511962-014B**	**Water**	**11/23/2015 12:00**	**GC39A**	**113298**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**200**	100	1	11/30/2015 22:31
TPH-Motor Oil (C18-C36)	**4400**	500	1	11/30/2015 22:31

Surrogates	REC (%)	Limits	
C9	107	70-130	11/30/2015 22:31

Analyst(s): TK Analytical Comments: e7,e2,e8

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113297
Date Analyzed:	11/23/15	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113297 1511885-009AMS/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	-	0.0050	-	-	-	-
Benzene	ND	0.0412	0.0050	0.050	-	82	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	-	0.050	-	-	-	-
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	-	0.0050	-	-	-	-
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	-	0.0040	-	-	-	-
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	-	0.0040	-	-	-	-
1,1-Dichloroethene	ND	-	0.0050	-	-	-	-
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	-	-	-	-

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113297
Date Analyzed:	11/23/15	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113297 1511885-009AMS/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	-	0.0050	-	-	-	-
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	-	0.0050	-	-	-	-
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	-	0.0050	-	-	-	-
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	0.0404	0.0050	0.050	-	81	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	-	0.0050	-	-	-	-
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.)

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113297
Date Analyzed:	11/23/15	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113297 1511885-009AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.125	0.128		0.12	100	103	70-130
Toluene-d8	0.114	0.112		0.12	91	90	70-130
4-BFB	0.0130	-		0.0125	104	-	-
Benzene-d6	0.0925	0.0907		0.10	92	91	60-140
Ethylbenzene-d10	0.0926	0.0901		0.10	93	90	60-140
1,2-DCB-d4	0.0811	-		0.1	81	-	-

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzene	0.0295	0.0297	0.050	ND	59,F1	59,F1	70-130	0	20
Toluene	0.0319	0.0330	0.050	ND	64,F1	66,F1	70-130	3.60	20
Surrogate Recovery									
Dibromofluoromethane	0.109	0.106	0.12		87	85	70-130	2.68	20
Toluene-d8	0.112	0.113	0.12		90	91	70-130	1.05	20
Benzene-d6	0.0594	0.0631	0.10		59,F3	63	60-140	6.05	20
Ethylbenzene-d10	0.0701	0.0767	0.10		70	77	60-140	9.02	20

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CDPH ELAP 1644 ♦ NELAP 4033ORELAP

QA/QC Officer

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113331
Date Analyzed:	11/24/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113331 1511962-007AMS/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	-	0.0050	-	-	-	-
Benzene	ND	0.0431	0.0050	0.050	-	86	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	-	0.050	-	-	-	-
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	-	0.0050	-	-	-	-
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	-	0.0040	-	-	-	-
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	-	0.0040	-	-	-	-
1,1-Dichloroethene	ND	-	0.0050	-	-	-	-
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	-	-	-	-

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113331
Date Analyzed:	11/24/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113331 1511962-007AMS/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	-	0.0050	-	-	-	-
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	-	0.0050	-	-	-	-
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	-	0.0050	-	-	-	-
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	0.0471	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	-	0.0050	-	-	-	-
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	-	-	-	-

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113331
Date Analyzed:	11/24/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113331 1511962-007AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.115	0.118		0.12	92	94	70-130
Toluene-d8	0.117	0.118		0.12	94	95	70-130
4-BFB	0.0123	-		0.0125	98	-	-
Benzene-d6	0.0804	0.0804		0.10	80	80	60-140
Ethylbenzene-d10	0.0853	0.0900		0.10	85	90	60-140
1,2-DCB-d4	0.0722	-		0.1	72	-	-

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzene	0.0398	0.0447	0.050	ND	80	89	70-130	11.6	20
Toluene	0.0423	0.0485	0.050	ND	85	97	70-130	13.7	20
Surrogate Recovery									
Dibromofluoromethane	0.119	0.118	0.12		95	94	70-130	0.480	20
Toluene-d8	0.116	0.118	0.12		93	95	70-130	1.72	20
Benzene-d6	0.0765	0.0820	0.10		76	82	60-140	6.95	20
Ethylbenzene-d10	0.0849	0.0920	0.10		85	92	60-140	8.11	20

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/25/15	**BatchID:**	113489
Date Analyzed:	11/25/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113489 1511A74-001CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	-	0.50	-	-	-	-
Benzene	ND	10.5	0.50	10	-	105	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	-	2.0	-	-	-	-
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	-	0.50	-	-	-	-
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	-	0.50	-	-	-	-
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	-	0.50	-	-	-	-
1,1-Dichloroethene	ND	10.5	0.50	10	-	105	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/25/15	**BatchID:**	113489
Date Analyzed:	11/25/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113489 1511A74-001CMS/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	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	-	0.50	-	-	-	-
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	-	0.50	-	-	-	-
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	-	0.50	-	-	-	-
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	10.6	0.50	10	-	106	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	-	0.50	-	-	-	-
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

(Cont.)

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/25/15	**BatchID:**	113489
Date Analyzed:	11/25/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113489 1511A74-001CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	24.4	24.6		25	98	98	70-130
Toluene-d8	22.4	21.9		25	90	88	70-130
4-BFB	2.06	-		2.5	82	-	-

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzene	10.9	11.1	10	ND	109	111	69-141	2.54	20
1,1-Dichloroethene	10.6	11.0	10	ND	106	110	59-140	3.73	20
Toluene	10.4	10.7	10	ND	104	107	71-128	2.82	20
Surrogate Recovery									
Dibromofluoromethane	24.6	24.7	25		98	99	70-130	0.749	20
Toluene-d8	21.4	21.2	25		85	85	70-130	0	20

CLIENT: All West Environmental, Inc
Work Order: 1511962
Project: 15184.23; 500 Grand

ANALYTICAL QC SUMMARY REPORT

BatchID: 113297

SampleID **MB-113297**	TestCode: **8260gas_s**	Units: **mg/kg**	Prep Date: **11/23/2015**
Batch ID: **113297**	TestNo: **SW8260B**	Run ID: **GC18_151201C**	Analysis Date: **11/23/2015**

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
TPH(g)	ND	0.25				-				
Surrogate Recovery										
Dibromofluoromethane	0.107		0.125		86	70 - 130				
Benzene-d6	0.0805		0.1		81	60 - 140				

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: All West Environmental, Inc
Work Order: 1511962
Project: 15184.23; 500 Grand

ANALYTICAL QC SUMMARY REPORT

BatchID: 113297

SampleID **LCS-113297**	TestCode: **8260gas_s**	Units: **mg/kg**	Prep Date: **11/23/2015**
Batch ID: **113297**	TestNo: **SW8260B**	Run ID: **GC18_151201C**	Analysis Date: **11/23/2015**

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
VOC (C6-C12)	1.96	0.25	3.2	0	61	74 - 142				S
Surrogate Recovery										
Dibromofluoromethane	0.110		0.125		88	70 - 130				
Benzene-d6	0.0788		0.1		79	60 - 140				

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

Angela Rydelius, Lab Manager

CLIENT: All West Environmental, Inc
Work Order: 1511962
Project: 15184.23; 500 Grand

ANALYTICAL QC SUMMARY REPORT

BatchID: 113331

SampleID **MB-113331**	TestCode: **8260gas_s**	Units: **mg/kg**	Prep Date: **11/23/2015**
Batch ID: **113331**	TestNo: **SW8260B**	Run ID: **GC16_151201F**	Analysis Date: **11/24/2015**

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
TPH(g)	ND	0.25				-				
Surrogate Recovery										
Dibromofluoromethane	0.117		0.125		94	70 - 130				
Benzene-d6	0.0892		0.1		89	60 - 140				

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

Angela Rydelius, Lab Manager

CLIENT: All West Environmental, Inc
Work Order: 1511962
Project: 15184.23; 500 Grand

ANALYTICAL QC SUMMARY REPORT

BatchID: 113331

SampleID **LCS-113331**	TestCode: **8260gas_s**	Units: **mg/kg**	Prep Date: **11/23/2015**
Batch ID: **113331**	TestNo: **SW8260B**	Run ID: **GC16_151201F**	Analysis Date: **11/24/2015**

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
VOC (C6-C12)	2.54	0.25	3.2	0	79	74 - 142				
Surrogate Recovery										
Dibromofluoromethane	0.121		0.125		97	70 - 130				
Benzene-d6	0.0894		0.1		89	60 - 140				

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

Angela Rydelius, Lab Manager

CLIENT: All West Environmental, Inc
Work Order: 1511962
Project: 15184.23; 500 Grand

ANALYTICAL QC SUMMARY REPORT

BatchID: 113489

SampleID	**MB-113489**	TestCode:	**8260GAS_W**	Units:	**µg/L**	Prep Date:	**11/25/2015**
Batch ID:	**113489**	TestNo:	**SW8260B**	Run ID:	**GC16_151130B**	Analysis Date:	**11/25/2015**

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
TPH(g)	ND	50				-				
Surrogate Recovery										
Dibromofluoromethane	25.0		25		100	70 - 130				

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

Angela Rydelius, Lab Manager

CLIENT: All West Environmental, Inc
Work Order: 1511962
Project: 15184.23; 500 Grand

ANALYTICAL QC SUMMARY REPORT

BatchID: 113489

SampleID **LCS-113489**	TestCode: **8260GAS_W**	Units: **µg/L**	Prep Date: **11/25/2015**
Batch ID: **113489**	TestNo: **SW8260B**	Run ID: **GC16_151130B**	Analysis Date: **11/25/2015**

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
VOC (C6-C12)	519	50	644	0	81	75 - 105				
Surrogate Recovery										
Dibromofluoromethane	25.2		25		101	70 - 130				

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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

Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113322
Date Analyzed:	11/24/15	**Extraction Method:**	SW3550B/3630C
Instrument:	GC6A	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113322 1511955-006AMS/MSD

QC Report for SW8015B with Silica Gel Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	42.1	1.0	40	-	105	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	28.1	28.7		25	113	115	62-139

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	59.2	59.7	40	32.71	66,F1	67,F1	70-130	0.731	30
Surrogate Recovery									
C9	24.2	24.4	25		97	97	70-130	0	30

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113298
Date Analyzed:	11/24/15 - 11/25/15	**Extraction Method:**	SW3510C/3630C
Instrument:	GC2B, GC6A	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113298

QC Report for SW8015B w/ SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1150	50	1000	-	115	59-151
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-
Surrogate Recovery							
C9	709	642		625	113	103	65-122

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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1511962 **ClientCode: AWE**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Leonard Niles
All West Environmental, Inc
2141 Mission Street, Ste 100
San Francisco, CA 94110
(415) 391-2510 FAX: (415) 391-2008

Email: Leonard@allwest1.com
cc/3rd Party:
PO:
ProjectNo: 15184.23; 500 Grand

Bill to:
Darlene Torio
All West Environmental, Inc
2141 Mission Street, Ste 100
San Francisco, CA 94110
darlene@allwest1.com

Requested TAT: **5 days;**

Date Received: **11/23/2015**
Date Logged: **11/23/2015**

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
1511962-001	SB-1@1'-1.5'	Soil	11/23/2015 8:46	☐	A		A		A							
1511962-003	SB-1@8'-8.5'	Soil	11/23/2015 9:06	☐	A		A		A							
1511962-004	SB-2@1'-15'	Soil	11/23/2015 9:25	☐	A		A		A							
1511962-006	SB-2@9.5'-10'	Soil	11/23/2015 9:41	☐	A		A		A							
1511962-007	SB-3@1'-1.5'	Soil	11/23/2015 10:01	☐	A		A		A							
1511962-009	SB-3@9.5'-10'	Soil	11/23/2015 10:15	☐	A		A		A							
1511962-010	SB-5@1'-1.5'	Soil	11/23/2015 11:12	☐	A		A		A							
1511962-011	SB-5@4'-4.5'	Soil	11/23/2015 11:20	☐	A		A		A							
1511962-013	SB-4@1'-1.5'	Soil	11/23/2015 11:55	☐	A		A		A							
1511962-014	SB-4	Water	11/23/2015 12:00	☐		A		A		B						

Test Legend:

1	8260B_BTEX_S	2	8260B_BTEX_W	3	8260GAS_S	4	8260GAS_W
5	TPH(DMO)WSG_S	6	TPH(DMO)WSG_W	7		8	
9		10		11		12	

The following SampIDs: 001A, 003A, 004A, 006A, 007A, 009A, 010A, 011A, 013A, 014A contain testgroup.

Prepared by: Briana Cutino

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.

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WORK ORDER SUMMARY

Client Name: ALL WEST ENVIRONMENTAL, INC
QC Level: LEVEL 2
Work Order: 1511962
Project: 15184.23; 500 Grand
Client Contact: Leonard Niles
Date Logged: 11/23/2015
Comments:
Contact's Email: Leonard@allwest1.com

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ 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
1511962-001A	SB-1@1'-1.5'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	11/23/2015 8:46	5 days		☐	
			TPH(g) & BTEX by 8260B			☐		5 days		☐	
1511962-002A	SB-1@4'-4.5'	Soil		1	Acetate Liner	☐	11/23/2015 8:58			☑	
1511962-003A	SB-1@8'-8.5'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	11/23/2015 9:06	5 days		☐	
			TPH(g) & BTEX by 8260B			☐		5 days		☐	
1511962-004A	SB-2@1'-15'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	11/23/2015 9:25	5 days		☐	
			TPH(g) & BTEX by 8260B			☐		5 days		☐	
1511962-005A	SB-2@4'-4.5'	Soil		1	Acetate Liner	☐	11/23/2015 9:32			☑	
1511962-006A	SB-2@9.5'-10'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	11/23/2015 9:41	5 days		☐	
			TPH(g) & BTEX by 8260B			☐		5 days		☐	
1511962-007A	SB-3@1'-1.5'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	11/23/2015 10:01	5 days		☐	
			TPH(g) & BTEX by 8260B			☐		5 days		☐	
1511962-008A	SB-3@4'-4.5'	Soil		1	Acetate Liner	☐	11/23/2015 10:08			☑	
1511962-009A	SB-3@9.5'-10'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	11/23/2015 10:15	5 days		☐	
			TPH(g) & BTEX by 8260B			☐		5 days		☐	
1511962-010A	SB-5@1'-1.5'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	11/23/2015 11:12	5 days		☐	

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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WORK ORDER SUMMARY

Client Name: ALL WEST ENVIRONMENTAL, INC
QC Level: LEVEL 2
Work Order: 1511962
Project: 15184.23; 500 Grand
Client Contact: Leonard Niles
Date Logged: 11/23/2015
Comments:
Contact's Email: Leonard@allwest1.com

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ 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
1511962-010A	SB-5@1'-1.5'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	☐	11/23/2015 11:12	5 days		☐	
1511962-011A	SB-5@4'-4.5'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	11/23/2015 11:20	5 days		☐	
			TPH(g) & BTEX by 8260B			☐		5 days		☐	
1511962-012A	SB-5@9.5'-10'	Soil		1	Acetate Liner	☐	11/23/2015 11:37			☑	
1511962-013A	SB-4@1'-1.5'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	11/23/2015 11:55	5 days		☐	
			TPH(g) & BTEX by 8260B			☐		5 days		☐	
1511962-014A	SB-4	Water	TPH(g) & BTEX by 8260B	3	VOA w/ HCl	☐	11/23/2015 12:00	5 days	Present	☐	
				1	1LA w/ HCl	☐			Present	☐	
				1	VOA w/ HCl	☐			Present	☐	
1511962-014B	SB-4	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	VOA w/ HCl	☐	11/23/2015 12:00	5 days	Present	☐	
				1	1LA w/ HCl	☐			Present	☐	
				1	VOA w/ HCl	☐			Present	☐	

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.

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

15511962

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ **PDF** ☐ **Excel** ☐ **Write On (DW)** ☐

☐ Check if sample is effluent and "J" flag is required

Report To: Len Niles/Sara Bloom	Bill To: Darlene Torio
Company: AllWest Environmental	
2141 Mission Street, Ste 100	
San Francisco, CA 94110	E-Mail: leonard@/sara@/darlene@allwest1.com
Tele: (415) 391-2510	Fax: (415) 391-2008
Project #: 15184.23	Project Name: 500 Grand
Project Location: Oakland, CA	
Sampler Signature: Sara Bloom	

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (8260B)	TPH as Diesel (8015)& Motor Oil w/Silica Gel C/U	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	Metals (BA, total Cr, Co, Cu, Hg, Ni) - field filtered	9010C/9012B/SM4500CN (Total Cyanides)	E218.6 (Hexavalent Chromium)	Filter sample for DISSOLVED metals analysis	Other	Other	Other	Comments
SB-1@1'-1.5'		11/23/15	0846				X								X	X																		
SB-1@4'-4.5'			0858				X																										HOLD	
SB-1@8'-8.5'			0906				X								X	X																		
SB-2@1'-1.5'			0925				X								X	X																		
SB-2@4'-4.5'			0932				X																										HOLD	
SB-2@9.5'-10'			0941				X								X	X																		
SB-3@1'-1.5'			1001				X								X	X																		
SB-3@4'-4.5'			1008				X																										HOLD	
SB-3@9.5'-10'			1015				X								X	X																		
SB-5@1'-1.5'			1112				X								X	X																		
SB-5@4'-4.5'		11/23/15	1120				X								X	X																		

**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:	Date:	Time:	Received By:
Sara Bloom	11/23/15	1315	
Relinquished By:	Date:	Time:	Received By:
	11/23/15	1515	
Relinquished By:	Date:	Time:	Received By:

ICE/t° 3.6°C
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB

VOAS O&G METALS OTHER
PRESERVATION pH<2

COMMENTS:

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

1511962

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ PDF ☐ Excel ☐ Write On (DW) ☐

☐ Check if sample is effluent and "J" flag is required

Report To: Len Niles/Sara Bloom	Bill To: Darlene Torio
Company: AllWest Environmental	
2141 Mission Street, Ste 100	
San Francisco, CA 94110	E-Mail: leonard@/sara@/darlene@allwest1.com
Tele: (415) 391-2510	Fax: (415) 391-2008
Project #: 15184.23	Project Name: 500 Grand
Project Location: Oakland, CA	
Sampler Signature: Sara Bloom	

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (8260B)	TPH as Diesel (8015)& Motor Oil w/Silica Gel C/U	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	Metals (BA, total Cr, Co, Cu, Hg, Ni) - field filtered	9010C/9012B/SM4500CN (Total Cyanides)	E218.6 (Hexavalent Chromium)	Other: Filter sample for DISSOLVED metals analysis	Other	Other	Comments
SB-5@9.5-10'		11/23/15	1137	1			X																										HOLD
SB-4@1'-1.5'			1155	1			X								X	X																	
SB-4		11/23/15	1200	4	G	X									X	X																	

**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.

	Date:	Time:	
Relinquished By: Sara Bloom	11/23/15	1315	Received By:
Relinquished By:	Date: 11/23/15	Time: 1715	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 3.6°
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

VOAS O&G METALS OTHER
PRESERVATION_____ pH<2_____

COMMENTS:

McCampbell Analytical, Inc.
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http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name:	**All West Environmental, Inc**	Date and Time Received:	**11/23/2015 15:15**
Project Name:	**15184.23; 500 Grand**	Date Logged:	**11/23/2015**
WorkOrder №:	**1511962** Matrix: Soil/Water	Received by:	Briana Cutino
Carrier:	Bernie Cummins (MAI Courier)	Logged by:	Briana Cutino

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Sample/Temp Blank temperature	Temp: 3.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	
	(Ice Type: WET ICE)		

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

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

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1511962 A

Report Created for: All West Environmental, Inc

2141 Mission Street, Ste 100
San Francisco, CA 94110

Project Contact: Leonard Niles
Project P.O.:
Project Name: 15184.23; 500 Grand

Project Received: 11/23/2015

Analytical Report reviewed & approved for release on 12/03/2015 by:

Angela Rydelius,
Laboratory Manager

McCampbell 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

Glossary of Terms & Qualifier Definitions

Client: All West Environmental, Inc
Project: 15184.23; 500 Grand
WorkOrder: 1511962

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)

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Glossary of Terms & Qualifier Definitions

Client: All West Environmental, Inc
Project: 15184.23; 500 Grand
WorkOrder: 1511962

Analytical Qualifiers

S	spike recovery outside accepted recovery limits
a2	sample diluted due to cluttered chromatogram
a3	sample diluted due to high organic content.
c1	surrogate recovery outside of the control limits due to the dilution of the sample.
c2	surrogate recovery outside of the control limits due to matrix interference.
c7	Surrogate value diluted out of range
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant
e8	kerosene/kerosene range/jet fuel range
e11	stoddard solvent/mineral spirit (?)

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validated the prep batch.
F2	LCS recovery for this compound is outside of acceptance limits.
F3	the surrogate standard recovery and/or RPD is outside of acceptance limits.

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@1'-1.5'	1511962-001A	Soil	11/23/2015 08:46	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/25/2015 15:48
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/25/2015 15:48
Benzene	ND	0.0050	1	11/25/2015 15:48
Bromobenzene	ND	0.0050	1	11/25/2015 15:48
Bromochloromethane	ND	0.0050	1	11/25/2015 15:48
Bromodichloromethane	ND	0.0050	1	11/25/2015 15:48
Bromoform	ND	0.0050	1	11/25/2015 15:48
Bromomethane	ND	0.0050	1	11/25/2015 15:48
2-Butanone (MEK)	ND	0.020	1	11/25/2015 15:48
t-Butyl alcohol (TBA)	ND	0.050	1	11/25/2015 15:48
n-Butyl benzene	ND	0.0050	1	11/25/2015 15:48
sec-Butyl benzene	ND	0.0050	1	11/25/2015 15:48
tert-Butyl benzene	ND	0.0050	1	11/25/2015 15:48
Carbon Disulfide	ND	0.0050	1	11/25/2015 15:48
Carbon Tetrachloride	ND	0.0050	1	11/25/2015 15:48
Chlorobenzene	ND	0.0050	1	11/25/2015 15:48
Chloroethane	ND	0.0050	1	11/25/2015 15:48
Chloroform	ND	0.0050	1	11/25/2015 15:48
Chloromethane	ND	0.0050	1	11/25/2015 15:48
2-Chlorotoluene	ND	0.0050	1	11/25/2015 15:48
4-Chlorotoluene	ND	0.0050	1	11/25/2015 15:48
Dibromochloromethane	ND	0.0050	1	11/25/2015 15:48
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/25/2015 15:48
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/25/2015 15:48
Dibromomethane	ND	0.0050	1	11/25/2015 15:48
1,2-Dichlorobenzene	ND	0.0050	1	11/25/2015 15:48
1,3-Dichlorobenzene	ND	0.0050	1	11/25/2015 15:48
1,4-Dichlorobenzene	ND	0.0050	1	11/25/2015 15:48
Dichlorodifluoromethane	ND	0.0050	1	11/25/2015 15:48
1,1-Dichloroethane	ND	0.0050	1	11/25/2015 15:48
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/25/2015 15:48
1,1-Dichloroethene	ND	0.0050	1	11/25/2015 15:48
cis-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 15:48
trans-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 15:48
1,2-Dichloropropane	ND	0.0050	1	11/25/2015 15:48
1,3-Dichloropropane	ND	0.0050	1	11/25/2015 15:48
2,2-Dichloropropane	ND	0.0050	1	11/25/2015 15:48

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Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@1'-1.5'	1511962-001A	Soil	11/23/2015 08:46	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/25/2015 15:48
cis-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 15:48
trans-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 15:48
Diisopropyl ether (DIPE)	ND	0.0050	1	11/25/2015 15:48
Ethylbenzene	ND	0.0050	1	11/25/2015 15:48
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/25/2015 15:48
Freon 113	ND	0.0050	1	11/25/2015 15:48
Hexachlorobutadiene	ND	0.0050	1	11/25/2015 15:48
Hexachloroethane	ND	0.0050	1	11/25/2015 15:48
2-Hexanone	ND	0.0050	1	11/25/2015 15:48
Isopropylbenzene	ND	0.0050	1	11/25/2015 15:48
4-Isopropyl toluene	ND	0.0050	1	11/25/2015 15:48
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/25/2015 15:48
Methylene chloride	ND	0.0050	1	11/25/2015 15:48
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/25/2015 15:48
Naphthalene	ND	0.0050	1	11/25/2015 15:48
n-Propyl benzene	ND	0.0050	1	11/25/2015 15:48
Styrene	ND	0.0050	1	11/25/2015 15:48
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 15:48
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 15:48
Tetrachloroethene	ND	0.0050	1	11/25/2015 15:48
Toluene	ND	0.0050	1	11/25/2015 15:48
1,2,3-Trichlorobenzene	ND	0.0050	1	11/25/2015 15:48
1,2,4-Trichlorobenzene	ND	0.0050	1	11/25/2015 15:48
1,1,1-Trichloroethane	ND	0.0050	1	11/25/2015 15:48
1,1,2-Trichloroethane	ND	0.0050	1	11/25/2015 15:48
Trichloroethene	ND	0.0050	1	11/25/2015 15:48
Trichlorofluoromethane	ND	0.0050	1	11/25/2015 15:48
1,2,3-Trichloropropane	ND	0.0050	1	11/25/2015 15:48
1,2,4-Trimethylbenzene	ND	0.0050	1	11/25/2015 15:48
1,3,5-Trimethylbenzene	ND	0.0050	1	11/25/2015 15:48
Vinyl Chloride	ND	0.0050	1	11/25/2015 15:48
Xylenes, Total	ND	0.0050	1	11/25/2015 15:48

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Angela Rydelius, Lab Manager

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Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@1'-1.5'	**1511962-001A**	**Soil**	**11/23/2015 08:46**	**GC18**	**113297**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	101	70-130		11/25/2015 15:48
Toluene-d8	91	70-130		11/25/2015 15:48
4-BFB	104	70-130		11/25/2015 15:48
Benzene-d6	93	60-140		11/25/2015 15:48
Ethylbenzene-d10	95	60-140		11/25/2015 15:48
1,2-DCB-d4	86	60-140		11/25/2015 15:48

Analyst(s): AK

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Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@8'-8.5'	1511962-003A	Soil	11/23/2015 09:06	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/25/2015 16:26
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/25/2015 16:26
Benzene	ND	0.0050	1	11/25/2015 16:26
Bromobenzene	ND	0.0050	1	11/25/2015 16:26
Bromochloromethane	ND	0.0050	1	11/25/2015 16:26
Bromodichloromethane	ND	0.0050	1	11/25/2015 16:26
Bromoform	ND	0.0050	1	11/25/2015 16:26
Bromomethane	ND	0.0050	1	11/25/2015 16:26
2-Butanone (MEK)	ND	0.020	1	11/25/2015 16:26
t-Butyl alcohol (TBA)	ND	0.050	1	11/25/2015 16:26
n-Butyl benzene	ND	0.0050	1	11/25/2015 16:26
sec-Butyl benzene	ND	0.0050	1	11/25/2015 16:26
tert-Butyl benzene	ND	0.0050	1	11/25/2015 16:26
Carbon Disulfide	ND	0.0050	1	11/25/2015 16:26
Carbon Tetrachloride	ND	0.0050	1	11/25/2015 16:26
Chlorobenzene	ND	0.0050	1	11/25/2015 16:26
Chloroethane	ND	0.0050	1	11/25/2015 16:26
Chloroform	ND	0.0050	1	11/25/2015 16:26
Chloromethane	ND	0.0050	1	11/25/2015 16:26
2-Chlorotoluene	ND	0.0050	1	11/25/2015 16:26
4-Chlorotoluene	ND	0.0050	1	11/25/2015 16:26
Dibromochloromethane	ND	0.0050	1	11/25/2015 16:26
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/25/2015 16:26
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/25/2015 16:26
Dibromomethane	ND	0.0050	1	11/25/2015 16:26
1,2-Dichlorobenzene	ND	0.0050	1	11/25/2015 16:26
1,3-Dichlorobenzene	ND	0.0050	1	11/25/2015 16:26
1,4-Dichlorobenzene	ND	0.0050	1	11/25/2015 16:26
Dichlorodifluoromethane	ND	0.0050	1	11/25/2015 16:26
1,1-Dichloroethane	ND	0.0050	1	11/25/2015 16:26
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/25/2015 16:26
1,1-Dichloroethene	ND	0.0050	1	11/25/2015 16:26
cis-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 16:26
trans-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 16:26
1,2-Dichloropropane	ND	0.0050	1	11/25/2015 16:26
1,3-Dichloropropane	ND	0.0050	1	11/25/2015 16:26
2,2-Dichloropropane	ND	0.0050	1	11/25/2015 16:26

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@8'-8.5'	1511962-003A	Soil	11/23/2015 09:06	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/25/2015 16:26
cis-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 16:26
trans-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 16:26
Diisopropyl ether (DIPE)	ND	0.0050	1	11/25/2015 16:26
Ethylbenzene	ND	0.0050	1	11/25/2015 16:26
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/25/2015 16:26
Freon 113	ND	0.0050	1	11/25/2015 16:26
Hexachlorobutadiene	ND	0.0050	1	11/25/2015 16:26
Hexachloroethane	ND	0.0050	1	11/25/2015 16:26
2-Hexanone	ND	0.0050	1	11/25/2015 16:26
Isopropylbenzene	ND	0.0050	1	11/25/2015 16:26
4-Isopropyl toluene	ND	0.0050	1	11/25/2015 16:26
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/25/2015 16:26
Methylene chloride	ND	0.0050	1	11/25/2015 16:26
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/25/2015 16:26
Naphthalene	ND	0.0050	1	11/25/2015 16:26
n-Propyl benzene	ND	0.0050	1	11/25/2015 16:26
Styrene	ND	0.0050	1	11/25/2015 16:26
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 16:26
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 16:26
Tetrachloroethene	ND	0.0050	1	11/25/2015 16:26
Toluene	ND	0.0050	1	11/25/2015 16:26
1,2,3-Trichlorobenzene	ND	0.0050	1	11/25/2015 16:26
1,2,4-Trichlorobenzene	ND	0.0050	1	11/25/2015 16:26
1,1,1-Trichloroethane	ND	0.0050	1	11/25/2015 16:26
1,1,2-Trichloroethane	ND	0.0050	1	11/25/2015 16:26
Trichloroethene	ND	0.0050	1	11/25/2015 16:26
Trichlorofluoromethane	ND	0.0050	1	11/25/2015 16:26
1,2,3-Trichloropropane	ND	0.0050	1	11/25/2015 16:26
1,2,4-Trimethylbenzene	ND	0.0050	1	11/25/2015 16:26
1,3,5-Trimethylbenzene	ND	0.0050	1	11/25/2015 16:26
Vinyl Chloride	ND	0.0050	1	11/25/2015 16:26
Xylenes, Total	ND	0.0050	1	11/25/2015 16:26

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Analytical Report

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Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-1@8'-8.5'	**1511962-003A**	**Soil**	**11/23/2015 09:06**	**GC18**	**113297**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	101	70-130		11/25/2015 16:26
Toluene-d8	89	70-130		11/25/2015 16:26
4-BFB	97	70-130		11/25/2015 16:26
Benzene-d6	97	60-140		11/25/2015 16:26
Ethylbenzene-d10	99	60-140		11/25/2015 16:26
1,2-DCB-d4	88	60-140		11/25/2015 16:26

Analyst(s): AK

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Analytical Report

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Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@1'-15'	1511962-004A	Soil	11/23/2015 09:25	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	20	200	11/26/2015 00:24
tert-Amyl methyl ether (TAME)	ND	1.0	200	11/26/2015 00:24
Benzene	ND	1.0	200	11/26/2015 00:24
Bromobenzene	ND	1.0	200	11/26/2015 00:24
Bromochloromethane	ND	1.0	200	11/26/2015 00:24
Bromodichloromethane	ND	1.0	200	11/26/2015 00:24
Bromoform	ND	1.0	200	11/26/2015 00:24
Bromomethane	ND	1.0	200	11/26/2015 00:24
2-Butanone (MEK)	ND	4.0	200	11/26/2015 00:24
t-Butyl alcohol (TBA)	ND	10	200	11/26/2015 00:24
n-Butyl benzene	ND	1.0	200	11/26/2015 00:24
sec-Butyl benzene	ND	1.0	200	11/26/2015 00:24
tert-Butyl benzene	ND	1.0	200	11/26/2015 00:24
Carbon Disulfide	ND	1.0	200	11/26/2015 00:24
Carbon Tetrachloride	ND	1.0	200	11/26/2015 00:24
Chlorobenzene	ND	1.0	200	11/26/2015 00:24
Chloroethane	ND	1.0	200	11/26/2015 00:24
Chloroform	ND	1.0	200	11/26/2015 00:24
Chloromethane	ND	1.0	200	11/26/2015 00:24
2-Chlorotoluene	ND	1.0	200	11/26/2015 00:24
4-Chlorotoluene	ND	1.0	200	11/26/2015 00:24
Dibromochloromethane	ND	1.0	200	11/26/2015 00:24
1,2-Dibromo-3-chloropropane	ND	0.80	200	11/26/2015 00:24
1,2-Dibromoethane (EDB)	ND	0.80	200	11/26/2015 00:24
Dibromomethane	ND	1.0	200	11/26/2015 00:24
1,2-Dichlorobenzene	ND	1.0	200	11/26/2015 00:24
1,3-Dichlorobenzene	ND	1.0	200	11/26/2015 00:24
1,4-Dichlorobenzene	ND	1.0	200	11/26/2015 00:24
Dichlorodifluoromethane	ND	1.0	200	11/26/2015 00:24
1,1-Dichloroethane	ND	1.0	200	11/26/2015 00:24
1,2-Dichloroethane (1,2-DCA)	ND	0.80	200	11/26/2015 00:24
1,1-Dichloroethene	ND	1.0	200	11/26/2015 00:24
cis-1,2-Dichloroethene	ND	1.0	200	11/26/2015 00:24
trans-1,2-Dichloroethene	ND	1.0	200	11/26/2015 00:24
1,2-Dichloropropane	ND	1.0	200	11/26/2015 00:24
1,3-Dichloropropane	ND	1.0	200	11/26/2015 00:24
2,2-Dichloropropane	ND	1.0	200	11/26/2015 00:24

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@1'-15'	1511962-004A	Soil	11/23/2015 09:25	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	1.0	200	11/26/2015 00:24
cis-1,3-Dichloropropene	ND	1.0	200	11/26/2015 00:24
trans-1,3-Dichloropropene	ND	1.0	200	11/26/2015 00:24
Diisopropyl ether (DIPE)	ND	1.0	200	11/26/2015 00:24
Ethylbenzene	ND	1.0	200	11/26/2015 00:24
Ethyl tert-butyl ether (ETBE)	ND	1.0	200	11/26/2015 00:24
Freon 113	ND	1.0	200	11/26/2015 00:24
Hexachlorobutadiene	ND	1.0	200	11/26/2015 00:24
Hexachloroethane	ND	1.0	200	11/26/2015 00:24
2-Hexanone	ND	1.0	200	11/26/2015 00:24
Isopropylbenzene	ND	1.0	200	11/26/2015 00:24
4-Isopropyl toluene	ND	1.0	200	11/26/2015 00:24
Methyl-t-butyl ether (MTBE)	ND	1.0	200	11/26/2015 00:24
Methylene chloride	ND	1.0	200	11/26/2015 00:24
4-Methyl-2-pentanone (MIBK)	ND	1.0	200	11/26/2015 00:24
Naphthalene	**3.7**	1.0	200	11/26/2015 00:24
n-Propyl benzene	ND	1.0	200	11/26/2015 00:24
Styrene	ND	1.0	200	11/26/2015 00:24
1,1,1,2-Tetrachloroethane	ND	1.0	200	11/26/2015 00:24
1,1,2,2-Tetrachloroethane	ND	1.0	200	11/26/2015 00:24
Tetrachloroethene	ND	1.0	200	11/26/2015 00:24
Toluene	ND	1.0	200	11/26/2015 00:24
1,2,3-Trichlorobenzene	ND	1.0	200	11/26/2015 00:24
1,2,4-Trichlorobenzene	ND	1.0	200	11/26/2015 00:24
1,1,1-Trichloroethane	ND	1.0	200	11/26/2015 00:24
1,1,2-Trichloroethane	ND	1.0	200	11/26/2015 00:24
Trichloroethene	ND	1.0	200	11/26/2015 00:24
Trichlorofluoromethane	ND	1.0	200	11/26/2015 00:24
1,2,3-Trichloropropane	ND	1.0	200	11/26/2015 00:24
1,2,4-Trimethylbenzene	**1.5**	1.0	200	11/26/2015 00:24
1,3,5-Trimethylbenzene	ND	1.0	200	11/26/2015 00:24
Vinyl Chloride	ND	1.0	200	11/26/2015 00:24
Xylenes, Total	ND	1.0	200	11/26/2015 00:24

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@1'-15'	**1511962-004A**	**Soil**	**11/23/2015 09:25**	**GC18**	**113297**

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
Dibromofluoromethane	107		70-130		11/26/2015 00:24
Toluene-d8	83		70-130		11/26/2015 00:24
4-BFB	101		70-130		11/26/2015 00:24
Benzene-d6	0	S	60-140		11/26/2015 00:24
Ethylbenzene-d10	0	S	60-140		11/26/2015 00:24
1,2-DCB-d4	168	S	60-140		11/26/2015 00:24

Analyst(s): AK Analytical Comments: c7

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@9.5'-10'	1511962-006A	Soil	11/23/2015 09:41	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/25/2015 17:05
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/25/2015 17:05
Benzene	ND	0.0050	1	11/25/2015 17:05
Bromobenzene	ND	0.0050	1	11/25/2015 17:05
Bromochloromethane	ND	0.0050	1	11/25/2015 17:05
Bromodichloromethane	ND	0.0050	1	11/25/2015 17:05
Bromoform	ND	0.0050	1	11/25/2015 17:05
Bromomethane	ND	0.0050	1	11/25/2015 17:05
2-Butanone (MEK)	ND	0.020	1	11/25/2015 17:05
t-Butyl alcohol (TBA)	ND	0.050	1	11/25/2015 17:05
n-Butyl benzene	ND	0.0050	1	11/25/2015 17:05
sec-Butyl benzene	ND	0.0050	1	11/25/2015 17:05
tert-Butyl benzene	ND	0.0050	1	11/25/2015 17:05
Carbon Disulfide	ND	0.0050	1	11/25/2015 17:05
Carbon Tetrachloride	ND	0.0050	1	11/25/2015 17:05
Chlorobenzene	ND	0.0050	1	11/25/2015 17:05
Chloroethane	ND	0.0050	1	11/25/2015 17:05
Chloroform	ND	0.0050	1	11/25/2015 17:05
Chloromethane	ND	0.0050	1	11/25/2015 17:05
2-Chlorotoluene	ND	0.0050	1	11/25/2015 17:05
4-Chlorotoluene	ND	0.0050	1	11/25/2015 17:05
Dibromochloromethane	ND	0.0050	1	11/25/2015 17:05
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/25/2015 17:05
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/25/2015 17:05
Dibromomethane	ND	0.0050	1	11/25/2015 17:05
1,2-Dichlorobenzene	ND	0.0050	1	11/25/2015 17:05
1,3-Dichlorobenzene	ND	0.0050	1	11/25/2015 17:05
1,4-Dichlorobenzene	ND	0.0050	1	11/25/2015 17:05
Dichlorodifluoromethane	ND	0.0050	1	11/25/2015 17:05
1,1-Dichloroethane	ND	0.0050	1	11/25/2015 17:05
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/25/2015 17:05
1,1-Dichloroethene	ND	0.0050	1	11/25/2015 17:05
cis-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 17:05
trans-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 17:05
1,2-Dichloropropane	ND	0.0050	1	11/25/2015 17:05
1,3-Dichloropropane	ND	0.0050	1	11/25/2015 17:05
2,2-Dichloropropane	ND	0.0050	1	11/25/2015 17:05

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@9.5'-10'	1511962-006A	Soil	11/23/2015 09:41	GC18	113297

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/25/2015 17:05
cis-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 17:05
trans-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 17:05
Diisopropyl ether (DIPE)	ND	0.0050	1	11/25/2015 17:05
Ethylbenzene	ND	0.0050	1	11/25/2015 17:05
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/25/2015 17:05
Freon 113	ND	0.0050	1	11/25/2015 17:05
Hexachlorobutadiene	ND	0.0050	1	11/25/2015 17:05
Hexachloroethane	ND	0.0050	1	11/25/2015 17:05
2-Hexanone	ND	0.0050	1	11/25/2015 17:05
Isopropylbenzene	ND	0.0050	1	11/25/2015 17:05
4-Isopropyl toluene	ND	0.0050	1	11/25/2015 17:05
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/25/2015 17:05
Methylene chloride	ND	0.0050	1	11/25/2015 17:05
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/25/2015 17:05
Naphthalene	ND	0.0050	1	11/25/2015 17:05
n-Propyl benzene	ND	0.0050	1	11/25/2015 17:05
Styrene	ND	0.0050	1	11/25/2015 17:05
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 17:05
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 17:05
Tetrachloroethene	ND	0.0050	1	11/25/2015 17:05
Toluene	ND	0.0050	1	11/25/2015 17:05
1,2,3-Trichlorobenzene	ND	0.0050	1	11/25/2015 17:05
1,2,4-Trichlorobenzene	ND	0.0050	1	11/25/2015 17:05
1,1,1-Trichloroethane	ND	0.0050	1	11/25/2015 17:05
1,1,2-Trichloroethane	ND	0.0050	1	11/25/2015 17:05
Trichloroethene	ND	0.0050	1	11/25/2015 17:05
Trichlorofluoromethane	ND	0.0050	1	11/25/2015 17:05
1,2,3-Trichloropropane	ND	0.0050	1	11/25/2015 17:05
1,2,4-Trimethylbenzene	ND	0.0050	1	11/25/2015 17:05
1,3,5-Trimethylbenzene	ND	0.0050	1	11/25/2015 17:05
Vinyl Chloride	ND	0.0050	1	11/25/2015 17:05
Xylenes, Total	ND	0.0050	1	11/25/2015 17:05

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Angela Rydelius, Lab Manager

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-2@9.5'-10'	**1511962-006A**	**Soil**	**11/23/2015 09:41**	**GC18**	**113297**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	101	70-130		11/25/2015 17:05
Toluene-d8	91	70-130		11/25/2015 17:05
4-BFB	107	70-130		11/25/2015 17:05
Benzene-d6	98	60-140		11/25/2015 17:05
Ethylbenzene-d10	97	60-140		11/25/2015 17:05
1,2-DCB-d4	92	60-140		11/25/2015 17:05

Analyst(s): AK

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@1'-1.5'	1511962-007A	Soil	11/23/2015 10:01	GC16	113331

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/25/2015 05:22
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/25/2015 05:22
Benzene	ND	0.0050	1	11/25/2015 05:22
Bromobenzene	ND	0.0050	1	11/25/2015 05:22
Bromochloromethane	ND	0.0050	1	11/25/2015 05:22
Bromodichloromethane	ND	0.0050	1	11/25/2015 05:22
Bromoform	ND	0.0050	1	11/25/2015 05:22
Bromomethane	ND	0.0050	1	11/25/2015 05:22
2-Butanone (MEK)	ND	0.020	1	11/25/2015 05:22
t-Butyl alcohol (TBA)	ND	0.050	1	11/25/2015 05:22
n-Butyl benzene	ND	0.0050	1	11/25/2015 05:22
sec-Butyl benzene	ND	0.0050	1	11/25/2015 05:22
tert-Butyl benzene	ND	0.0050	1	11/25/2015 05:22
Carbon Disulfide	ND	0.0050	1	11/25/2015 05:22
Carbon Tetrachloride	ND	0.0050	1	11/25/2015 05:22
Chlorobenzene	ND	0.0050	1	11/25/2015 05:22
Chloroethane	ND	0.0050	1	11/25/2015 05:22
Chloroform	ND	0.0050	1	11/25/2015 05:22
Chloromethane	ND	0.0050	1	11/25/2015 05:22
2-Chlorotoluene	ND	0.0050	1	11/25/2015 05:22
4-Chlorotoluene	ND	0.0050	1	11/25/2015 05:22
Dibromochloromethane	ND	0.0050	1	11/25/2015 05:22
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/25/2015 05:22
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/25/2015 05:22
Dibromomethane	ND	0.0050	1	11/25/2015 05:22
1,2-Dichlorobenzene	ND	0.0050	1	11/25/2015 05:22
1,3-Dichlorobenzene	ND	0.0050	1	11/25/2015 05:22
1,4-Dichlorobenzene	ND	0.0050	1	11/25/2015 05:22
Dichlorodifluoromethane	ND	0.0050	1	11/25/2015 05:22
1,1-Dichloroethane	ND	0.0050	1	11/25/2015 05:22
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/25/2015 05:22
1,1-Dichloroethene	ND	0.0050	1	11/25/2015 05:22
cis-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 05:22
trans-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 05:22
1,2-Dichloropropane	ND	0.0050	1	11/25/2015 05:22
1,3-Dichloropropane	ND	0.0050	1	11/25/2015 05:22
2,2-Dichloropropane	ND	0.0050	1	11/25/2015 05:22

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@1'-1.5'	1511962-007A	Soil	11/23/2015 10:01	GC16	113331

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/25/2015 05:22
cis-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 05:22
trans-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 05:22
Diisopropyl ether (DIPE)	ND	0.0050	1	11/25/2015 05:22
Ethylbenzene	ND	0.0050	1	11/25/2015 05:22
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/25/2015 05:22
Freon 113	ND	0.0050	1	11/25/2015 05:22
Hexachlorobutadiene	ND	0.0050	1	11/25/2015 05:22
Hexachloroethane	ND	0.0050	1	11/25/2015 05:22
2-Hexanone	ND	0.0050	1	11/25/2015 05:22
Isopropylbenzene	ND	0.0050	1	11/25/2015 05:22
4-Isopropyl toluene	ND	0.0050	1	11/25/2015 05:22
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/25/2015 05:22
Methylene chloride	ND	0.0050	1	11/25/2015 05:22
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/25/2015 05:22
Naphthalene	ND	0.0050	1	11/25/2015 05:22
n-Propyl benzene	ND	0.0050	1	11/25/2015 05:22
Styrene	ND	0.0050	1	11/25/2015 05:22
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 05:22
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 05:22
Tetrachloroethene	ND	0.0050	1	11/25/2015 05:22
Toluene	ND	0.0050	1	11/25/2015 05:22
1,2,3-Trichlorobenzene	ND	0.0050	1	11/25/2015 05:22
1,2,4-Trichlorobenzene	ND	0.0050	1	11/25/2015 05:22
1,1,1-Trichloroethane	ND	0.0050	1	11/25/2015 05:22
1,1,2-Trichloroethane	ND	0.0050	1	11/25/2015 05:22
Trichloroethene	ND	0.0050	1	11/25/2015 05:22
Trichlorofluoromethane	ND	0.0050	1	11/25/2015 05:22
1,2,3-Trichloropropane	ND	0.0050	1	11/25/2015 05:22
1,2,4-Trimethylbenzene	ND	0.0050	1	11/25/2015 05:22
1,3,5-Trimethylbenzene	ND	0.0050	1	11/25/2015 05:22
Vinyl Chloride	ND	0.0050	1	11/25/2015 05:22
Xylenes, Total	ND	0.0050	1	11/25/2015 05:22

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Angela Rydelius, Lab Manager

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@1'-1.5'	**1511962-007A**	**Soil**	**11/23/2015 10:01**	**GC16**	**113331**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	93	70-130		11/25/2015 05:22
Toluene-d8	95	70-130		11/25/2015 05:22
4-BFB	91	70-130		11/25/2015 05:22
Benzene-d6	78	60-140		11/25/2015 05:22
Ethylbenzene-d10	85	60-140		11/25/2015 05:22
1,2-DCB-d4	68	60-140		11/25/2015 05:22

Analyst(s): AK

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@9.5'-10'	1511962-009A	Soil	11/23/2015 10:15	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/25/2015 17:44
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/25/2015 17:44
Benzene	ND	0.0050	1	11/25/2015 17:44
Bromobenzene	ND	0.0050	1	11/25/2015 17:44
Bromochloromethane	ND	0.0050	1	11/25/2015 17:44
Bromodichloromethane	ND	0.0050	1	11/25/2015 17:44
Bromoform	ND	0.0050	1	11/25/2015 17:44
Bromomethane	ND	0.0050	1	11/25/2015 17:44
2-Butanone (MEK)	ND	0.020	1	11/25/2015 17:44
t-Butyl alcohol (TBA)	ND	0.050	1	11/25/2015 17:44
n-Butyl benzene	ND	0.0050	1	11/25/2015 17:44
sec-Butyl benzene	ND	0.0050	1	11/25/2015 17:44
tert-Butyl benzene	ND	0.0050	1	11/25/2015 17:44
Carbon Disulfide	ND	0.0050	1	11/25/2015 17:44
Carbon Tetrachloride	ND	0.0050	1	11/25/2015 17:44
Chlorobenzene	ND	0.0050	1	11/25/2015 17:44
Chloroethane	ND	0.0050	1	11/25/2015 17:44
Chloroform	ND	0.0050	1	11/25/2015 17:44
Chloromethane	ND	0.0050	1	11/25/2015 17:44
2-Chlorotoluene	ND	0.0050	1	11/25/2015 17:44
4-Chlorotoluene	ND	0.0050	1	11/25/2015 17:44
Dibromochloromethane	ND	0.0050	1	11/25/2015 17:44
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/25/2015 17:44
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/25/2015 17:44
Dibromomethane	ND	0.0050	1	11/25/2015 17:44
1,2-Dichlorobenzene	ND	0.0050	1	11/25/2015 17:44
1,3-Dichlorobenzene	ND	0.0050	1	11/25/2015 17:44
1,4-Dichlorobenzene	ND	0.0050	1	11/25/2015 17:44
Dichlorodifluoromethane	ND	0.0050	1	11/25/2015 17:44
1,1-Dichloroethane	ND	0.0050	1	11/25/2015 17:44
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/25/2015 17:44
1,1-Dichloroethene	ND	0.0050	1	11/25/2015 17:44
cis-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 17:44
trans-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 17:44
1,2-Dichloropropane	ND	0.0050	1	11/25/2015 17:44
1,3-Dichloropropane	ND	0.0050	1	11/25/2015 17:44
2,2-Dichloropropane	ND	0.0050	1	11/25/2015 17:44

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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:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@9.5'-10'	1511962-009A	Soil	11/23/2015 10:15	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/25/2015 17:44
cis-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 17:44
trans-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 17:44
Diisopropyl ether (DIPE)	ND	0.0050	1	11/25/2015 17:44
Ethylbenzene	ND	0.0050	1	11/25/2015 17:44
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/25/2015 17:44
Freon 113	ND	0.0050	1	11/25/2015 17:44
Hexachlorobutadiene	ND	0.0050	1	11/25/2015 17:44
Hexachloroethane	ND	0.0050	1	11/25/2015 17:44
2-Hexanone	ND	0.0050	1	11/25/2015 17:44
Isopropylbenzene	ND	0.0050	1	11/25/2015 17:44
4-Isopropyl toluene	ND	0.0050	1	11/25/2015 17:44
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/25/2015 17:44
Methylene chloride	ND	0.0050	1	11/25/2015 17:44
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/25/2015 17:44
Naphthalene	ND	0.0050	1	11/25/2015 17:44
n-Propyl benzene	ND	0.0050	1	11/25/2015 17:44
Styrene	ND	0.0050	1	11/25/2015 17:44
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 17:44
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 17:44
Tetrachloroethene	ND	0.0050	1	11/25/2015 17:44
Toluene	ND	0.0050	1	11/25/2015 17:44
1,2,3-Trichlorobenzene	ND	0.0050	1	11/25/2015 17:44
1,2,4-Trichlorobenzene	ND	0.0050	1	11/25/2015 17:44
1,1,1-Trichloroethane	ND	0.0050	1	11/25/2015 17:44
1,1,2-Trichloroethane	ND	0.0050	1	11/25/2015 17:44
Trichloroethene	ND	0.0050	1	11/25/2015 17:44
Trichlorofluoromethane	ND	0.0050	1	11/25/2015 17:44
1,2,3-Trichloropropane	ND	0.0050	1	11/25/2015 17:44
1,2,4-Trimethylbenzene	ND	0.0050	1	11/25/2015 17:44
1,3,5-Trimethylbenzene	ND	0.0050	1	11/25/2015 17:44
Vinyl Chloride	ND	0.0050	1	11/25/2015 17:44
Xylenes, Total	ND	0.0050	1	11/25/2015 17:44

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Angela Rydelius, Lab Manager

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Analytical Report

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Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-3@9.5'-10'	**1511962-009A**	**Soil**	**11/23/2015 10:15**	**GC18**	**113331**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	102	70-130		11/25/2015 17:44
Toluene-d8	91	70-130		11/25/2015 17:44
4-BFB	106	70-130		11/25/2015 17:44
Benzene-d6	97	60-140		11/25/2015 17:44
Ethylbenzene-d10	98	60-140		11/25/2015 17:44
1,2-DCB-d4	89	60-140		11/25/2015 17:44

Analyst(s): AK

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Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@1'-1.5'	1511962-010A	Soil	11/23/2015 11:12	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/25/2015 22:29
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/25/2015 22:29
Benzene	ND	0.0050	1	11/25/2015 22:29
Bromobenzene	ND	0.0050	1	11/25/2015 22:29
Bromochloromethane	ND	0.0050	1	11/25/2015 22:29
Bromodichloromethane	ND	0.0050	1	11/25/2015 22:29
Bromoform	ND	0.0050	1	11/25/2015 22:29
Bromomethane	ND	0.0050	1	11/25/2015 22:29
2-Butanone (MEK)	ND	0.020	1	11/25/2015 22:29
t-Butyl alcohol (TBA)	ND	0.050	1	11/25/2015 22:29
n-Butyl benzene	ND	0.0050	1	11/25/2015 22:29
sec-Butyl benzene	ND	0.0050	1	11/25/2015 22:29
tert-Butyl benzene	ND	0.0050	1	11/25/2015 22:29
Carbon Disulfide	ND	0.0050	1	11/25/2015 22:29
Carbon Tetrachloride	ND	0.0050	1	11/25/2015 22:29
Chlorobenzene	ND	0.0050	1	11/25/2015 22:29
Chloroethane	ND	0.0050	1	11/25/2015 22:29
Chloroform	ND	0.0050	1	11/25/2015 22:29
Chloromethane	ND	0.0050	1	11/25/2015 22:29
2-Chlorotoluene	ND	0.0050	1	11/25/2015 22:29
4-Chlorotoluene	ND	0.0050	1	11/25/2015 22:29
Dibromochloromethane	ND	0.0050	1	11/25/2015 22:29
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/25/2015 22:29
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/25/2015 22:29
Dibromomethane	ND	0.0050	1	11/25/2015 22:29
1,2-Dichlorobenzene	ND	0.0050	1	11/25/2015 22:29
1,3-Dichlorobenzene	ND	0.0050	1	11/25/2015 22:29
1,4-Dichlorobenzene	ND	0.0050	1	11/25/2015 22:29
Dichlorodifluoromethane	ND	0.0050	1	11/25/2015 22:29
1,1-Dichloroethane	ND	0.0050	1	11/25/2015 22:29
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/25/2015 22:29
1,1-Dichloroethene	ND	0.0050	1	11/25/2015 22:29
cis-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 22:29
trans-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 22:29
1,2-Dichloropropane	ND	0.0050	1	11/25/2015 22:29
1,3-Dichloropropane	ND	0.0050	1	11/25/2015 22:29
2,2-Dichloropropane	ND	0.0050	1	11/25/2015 22:29

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Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@1'-1.5'	1511962-010A	Soil	11/23/2015 11:12	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/25/2015 22:29
cis-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 22:29
trans-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 22:29
Diisopropyl ether (DIPE)	ND	0.0050	1	11/25/2015 22:29
Ethylbenzene	ND	0.0050	1	11/25/2015 22:29
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/25/2015 22:29
Freon 113	ND	0.0050	1	11/25/2015 22:29
Hexachlorobutadiene	ND	0.0050	1	11/25/2015 22:29
Hexachloroethane	ND	0.0050	1	11/25/2015 22:29
2-Hexanone	ND	0.0050	1	11/25/2015 22:29
Isopropylbenzene	ND	0.0050	1	11/25/2015 22:29
4-Isopropyl toluene	ND	0.0050	1	11/25/2015 22:29
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/25/2015 22:29
Methylene chloride	ND	0.0050	1	11/25/2015 22:29
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/25/2015 22:29
Naphthalene	ND	0.0050	1	11/25/2015 22:29
n-Propyl benzene	ND	0.0050	1	11/25/2015 22:29
Styrene	ND	0.0050	1	11/25/2015 22:29
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 22:29
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 22:29
Tetrachloroethene	ND	0.0050	1	11/25/2015 22:29
Toluene	ND	0.0050	1	11/25/2015 22:29
1,2,3-Trichlorobenzene	ND	0.0050	1	11/25/2015 22:29
1,2,4-Trichlorobenzene	ND	0.0050	1	11/25/2015 22:29
1,1,1-Trichloroethane	ND	0.0050	1	11/25/2015 22:29
1,1,2-Trichloroethane	ND	0.0050	1	11/25/2015 22:29
Trichloroethene	ND	0.0050	1	11/25/2015 22:29
Trichlorofluoromethane	ND	0.0050	1	11/25/2015 22:29
1,2,3-Trichloropropane	ND	0.0050	1	11/25/2015 22:29
1,2,4-Trimethylbenzene	ND	0.0050	1	11/25/2015 22:29
1,3,5-Trimethylbenzene	ND	0.0050	1	11/25/2015 22:29
Vinyl Chloride	ND	0.0050	1	11/25/2015 22:29
Xylenes, Total	ND	0.0050	1	11/25/2015 22:29

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Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@1'-1.5'	**1511962-010A**	**Soil**	**11/23/2015 11:12**	**GC18**	**113331**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	101	70-130		11/25/2015 22:29
Toluene-d8	92	70-130		11/25/2015 22:29
4-BFB	106	70-130		11/25/2015 22:29
Benzene-d6	96	60-140		11/25/2015 22:29
Ethylbenzene-d10	97	60-140		11/25/2015 22:29
1,2-DCB-d4	88	60-140		11/25/2015 22:29

Analyst(s): AK

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Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@4'-4.5'	1511962-011A	Soil	11/23/2015 11:20	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	5.0	50	12/02/2015 14:35
tert-Amyl methyl ether (TAME)	ND	0.25	50	12/02/2015 14:35
Benzene	ND	0.25	50	12/02/2015 14:35
Bromobenzene	ND	0.25	50	12/02/2015 14:35
Bromochloromethane	ND	0.25	50	12/02/2015 14:35
Bromodichloromethane	ND	0.25	50	12/02/2015 14:35
Bromoform	ND	0.25	50	12/02/2015 14:35
Bromomethane	ND	0.25	50	12/02/2015 14:35
2-Butanone (MEK)	ND	1.0	50	12/02/2015 14:35
t-Butyl alcohol (TBA)	ND	2.5	50	12/02/2015 14:35
n-Butyl benzene	**0.96**	0.25	50	12/02/2015 14:35
sec-Butyl benzene	ND	0.25	50	12/02/2015 14:35
tert-Butyl benzene	ND	0.25	50	12/02/2015 14:35
Carbon Disulfide	ND	0.25	50	12/02/2015 14:35
Carbon Tetrachloride	ND	0.25	50	12/02/2015 14:35
Chlorobenzene	ND	0.25	50	12/02/2015 14:35
Chloroethane	ND	0.25	50	12/02/2015 14:35
Chloroform	ND	0.25	50	12/02/2015 14:35
Chloromethane	ND	0.25	50	12/02/2015 14:35
2-Chlorotoluene	ND	0.25	50	12/02/2015 14:35
4-Chlorotoluene	ND	0.25	50	12/02/2015 14:35
Dibromochloromethane	ND	0.25	50	12/02/2015 14:35
1,2-Dibromo-3-chloropropane	ND	0.20	50	12/02/2015 14:35
1,2-Dibromoethane (EDB)	ND	0.20	50	12/02/2015 14:35
Dibromomethane	ND	0.25	50	12/02/2015 14:35
1,2-Dichlorobenzene	ND	0.25	50	12/02/2015 14:35
1,3-Dichlorobenzene	ND	0.25	50	12/02/2015 14:35
1,4-Dichlorobenzene	ND	0.25	50	12/02/2015 14:35
Dichlorodifluoromethane	ND	0.25	50	12/02/2015 14:35
1,1-Dichloroethane	ND	0.25	50	12/02/2015 14:35
1,2-Dichloroethane (1,2-DCA)	ND	0.20	50	12/02/2015 14:35
1,1-Dichloroethene	ND	0.25	50	12/02/2015 14:35
cis-1,2-Dichloroethene	ND	0.25	50	12/02/2015 14:35
trans-1,2-Dichloroethene	ND	0.25	50	12/02/2015 14:35
1,2-Dichloropropane	ND	0.25	50	12/02/2015 14:35
1,3-Dichloropropane	ND	0.25	50	12/02/2015 14:35
2,2-Dichloropropane	ND	0.25	50	12/02/2015 14:35

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Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@4'-4.5'	1511962-011A	Soil	11/23/2015 11:20	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.25	50	12/02/2015 14:35
cis-1,3-Dichloropropene	ND	0.25	50	12/02/2015 14:35
trans-1,3-Dichloropropene	ND	0.25	50	12/02/2015 14:35
Diisopropyl ether (DIPE)	ND	0.25	50	12/02/2015 14:35
Ethylbenzene	**3.0**	0.25	50	12/02/2015 14:35
Ethyl tert-butyl ether (ETBE)	ND	0.25	50	12/02/2015 14:35
Freon 113	ND	0.25	50	12/02/2015 14:35
Hexachlorobutadiene	ND	0.25	50	12/02/2015 14:35
Hexachloroethane	ND	0.25	50	12/02/2015 14:35
2-Hexanone	ND	0.25	50	12/02/2015 14:35
Isopropylbenzene	**0.26**	0.25	50	12/02/2015 14:35
4-Isopropyl toluene	ND	0.25	50	12/02/2015 14:35
Methyl-t-butyl ether (MTBE)	ND	0.25	50	12/02/2015 14:35
Methylene chloride	ND	0.25	50	12/02/2015 14:35
4-Methyl-2-pentanone (MIBK)	ND	0.25	50	12/02/2015 14:35
Naphthalene	**6.5**	0.25	50	12/02/2015 14:35
n-Propyl benzene	**1.1**	0.25	50	12/02/2015 14:35
Styrene	ND	0.25	50	12/02/2015 14:35
1,1,1,2-Tetrachloroethane	ND	0.25	50	12/02/2015 14:35
1,1,2,2-Tetrachloroethane	ND	0.25	50	12/02/2015 14:35
Tetrachloroethene	ND	0.25	50	12/02/2015 14:35
Toluene	ND	0.25	50	12/02/2015 14:35
1,2,3-Trichlorobenzene	ND	0.25	50	12/02/2015 14:35
1,2,4-Trichlorobenzene	ND	0.25	50	12/02/2015 14:35
1,1,1-Trichloroethane	ND	0.25	50	12/02/2015 14:35
1,1,2-Trichloroethane	ND	0.25	50	12/02/2015 14:35
Trichloroethene	ND	0.25	50	12/02/2015 14:35
Trichlorofluoromethane	ND	0.25	50	12/02/2015 14:35
1,2,3-Trichloropropane	ND	0.25	50	12/02/2015 14:35
1,2,4-Trimethylbenzene	**7.0**	0.25	50	12/02/2015 14:35
1,3,5-Trimethylbenzene	**2.1**	0.25	50	12/02/2015 14:35
Vinyl Chloride	ND	0.25	50	12/02/2015 14:35
Xylenes, Total	**6.6**	0.25	50	12/02/2015 14:35

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Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5@4'-4.5'	**1511962-011A**	**Soil**	**11/23/2015 11:20**	**GC18**	**113331**

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
Dibromofluoromethane	115		70-130		12/02/2015 14:35
Toluene-d8	94		70-130		12/02/2015 14:35
4-BFB	93		70-130		12/02/2015 14:35
Benzene-d6	0	S	60-140		12/02/2015 14:35
Ethylbenzene-d10	0	S	60-140		12/02/2015 14:35
1,2-DCB-d4	153	S	60-140		12/02/2015 14:35

Analyst(s): KF Analytical Comments: c7

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Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4@1'-1.5'	1511962-013A	Soil	11/23/2015 11:55	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/25/2015 23:46
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/25/2015 23:46
Benzene	ND	0.0050	1	11/25/2015 23:46
Bromobenzene	ND	0.0050	1	11/25/2015 23:46
Bromochloromethane	ND	0.0050	1	11/25/2015 23:46
Bromodichloromethane	ND	0.0050	1	11/25/2015 23:46
Bromoform	ND	0.0050	1	11/25/2015 23:46
Bromomethane	ND	0.0050	1	11/25/2015 23:46
2-Butanone (MEK)	ND	0.020	1	11/25/2015 23:46
t-Butyl alcohol (TBA)	ND	0.050	1	11/25/2015 23:46
n-Butyl benzene	ND	0.0050	1	11/25/2015 23:46
sec-Butyl benzene	ND	0.0050	1	11/25/2015 23:46
tert-Butyl benzene	ND	0.0050	1	11/25/2015 23:46
Carbon Disulfide	ND	0.0050	1	11/25/2015 23:46
Carbon Tetrachloride	ND	0.0050	1	11/25/2015 23:46
Chlorobenzene	ND	0.0050	1	11/25/2015 23:46
Chloroethane	ND	0.0050	1	11/25/2015 23:46
Chloroform	ND	0.0050	1	11/25/2015 23:46
Chloromethane	ND	0.0050	1	11/25/2015 23:46
2-Chlorotoluene	ND	0.0050	1	11/25/2015 23:46
4-Chlorotoluene	ND	0.0050	1	11/25/2015 23:46
Dibromochloromethane	ND	0.0050	1	11/25/2015 23:46
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/25/2015 23:46
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/25/2015 23:46
Dibromomethane	ND	0.0050	1	11/25/2015 23:46
1,2-Dichlorobenzene	ND	0.0050	1	11/25/2015 23:46
1,3-Dichlorobenzene	ND	0.0050	1	11/25/2015 23:46
1,4-Dichlorobenzene	ND	0.0050	1	11/25/2015 23:46
Dichlorodifluoromethane	ND	0.0050	1	11/25/2015 23:46
1,1-Dichloroethane	ND	0.0050	1	11/25/2015 23:46
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/25/2015 23:46
1,1-Dichloroethene	ND	0.0050	1	11/25/2015 23:46
cis-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 23:46
trans-1,2-Dichloroethene	ND	0.0050	1	11/25/2015 23:46
1,2-Dichloropropane	ND	0.0050	1	11/25/2015 23:46
1,3-Dichloropropane	ND	0.0050	1	11/25/2015 23:46
2,2-Dichloropropane	ND	0.0050	1	11/25/2015 23:46

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4@1'-1.5'	1511962-013A	Soil	11/23/2015 11:55	GC18	113331

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/25/2015 23:46
cis-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 23:46
trans-1,3-Dichloropropene	ND	0.0050	1	11/25/2015 23:46
Diisopropyl ether (DIPE)	ND	0.0050	1	11/25/2015 23:46
Ethylbenzene	ND	0.0050	1	11/25/2015 23:46
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/25/2015 23:46
Freon 113	ND	0.0050	1	11/25/2015 23:46
Hexachlorobutadiene	ND	0.0050	1	11/25/2015 23:46
Hexachloroethane	ND	0.0050	1	11/25/2015 23:46
2-Hexanone	ND	0.0050	1	11/25/2015 23:46
Isopropylbenzene	ND	0.0050	1	11/25/2015 23:46
4-Isopropyl toluene	ND	0.0050	1	11/25/2015 23:46
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/25/2015 23:46
Methylene chloride	ND	0.0050	1	11/25/2015 23:46
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/25/2015 23:46
Naphthalene	ND	0.0050	1	11/25/2015 23:46
n-Propyl benzene	ND	0.0050	1	11/25/2015 23:46
Styrene	ND	0.0050	1	11/25/2015 23:46
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 23:46
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/25/2015 23:46
Tetrachloroethene	ND	0.0050	1	11/25/2015 23:46
Toluene	ND	0.0050	1	11/25/2015 23:46
1,2,3-Trichlorobenzene	ND	0.0050	1	11/25/2015 23:46
1,2,4-Trichlorobenzene	ND	0.0050	1	11/25/2015 23:46
1,1,1-Trichloroethane	ND	0.0050	1	11/25/2015 23:46
1,1,2-Trichloroethane	ND	0.0050	1	11/25/2015 23:46
Trichloroethene	ND	0.0050	1	11/25/2015 23:46
Trichlorofluoromethane	ND	0.0050	1	11/25/2015 23:46
1,2,3-Trichloropropane	ND	0.0050	1	11/25/2015 23:46
1,2,4-Trimethylbenzene	ND	0.0050	1	11/25/2015 23:46
1,3,5-Trimethylbenzene	ND	0.0050	1	11/25/2015 23:46
Vinyl Chloride	ND	0.0050	1	11/25/2015 23:46
Xylenes, Total	ND	0.0050	1	11/25/2015 23:46

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/23/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4@1'-1.5'	**1511962-013A**	**Soil**	**11/23/2015 11:55**	**GC18**	**113331**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	101	70-130		11/25/2015 23:46
Toluene-d8	92	70-130		11/25/2015 23:46
4-BFB	108	70-130		11/25/2015 23:46
Benzene-d6	96	60-140		11/25/2015 23:46
Ethylbenzene-d10	94	60-140		11/25/2015 23:46
1,2-DCB-d4	89	60-140		11/25/2015 23:46

Analyst(s): AK

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/25/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4	1511962-014A	Water	11/23/2015 12:00	GC16	113489

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	11/25/2015 16:31
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/25/2015 16:31
Benzene	ND	0.50	1	11/25/2015 16:31
Bromobenzene	ND	0.50	1	11/25/2015 16:31
Bromochloromethane	ND	0.50	1	11/25/2015 16:31
Bromodichloromethane	ND	0.50	1	11/25/2015 16:31
Bromoform	ND	0.50	1	11/25/2015 16:31
Bromomethane	ND	0.50	1	11/25/2015 16:31
2-Butanone (MEK)	ND	2.0	1	11/25/2015 16:31
t-Butyl alcohol (TBA)	ND	2.0	1	11/25/2015 16:31
n-Butyl benzene	ND	0.50	1	11/25/2015 16:31
sec-Butyl benzene	ND	0.50	1	11/25/2015 16:31
tert-Butyl benzene	ND	0.50	1	11/25/2015 16:31
Carbon Disulfide	ND	0.50	1	11/25/2015 16:31
Carbon Tetrachloride	ND	0.50	1	11/25/2015 16:31
Chlorobenzene	ND	0.50	1	11/25/2015 16:31
Chloroethane	ND	0.50	1	11/25/2015 16:31
Chloroform	ND	0.50	1	11/25/2015 16:31
Chloromethane	ND	0.50	1	11/25/2015 16:31
2-Chlorotoluene	ND	0.50	1	11/25/2015 16:31
4-Chlorotoluene	ND	0.50	1	11/25/2015 16:31
Dibromochloromethane	ND	0.50	1	11/25/2015 16:31
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/25/2015 16:31
1,2-Dibromoethane (EDB)	ND	0.50	1	11/25/2015 16:31
Dibromomethane	ND	0.50	1	11/25/2015 16:31
1,2-Dichlorobenzene	ND	0.50	1	11/25/2015 16:31
1,3-Dichlorobenzene	ND	0.50	1	11/25/2015 16:31
1,4-Dichlorobenzene	ND	0.50	1	11/25/2015 16:31
Dichlorodifluoromethane	ND	0.50	1	11/25/2015 16:31
1,1-Dichloroethane	ND	0.50	1	11/25/2015 16:31
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/25/2015 16:31
1,1-Dichloroethene	ND	0.50	1	11/25/2015 16:31
cis-1,2-Dichloroethene	ND	0.50	1	11/25/2015 16:31
trans-1,2-Dichloroethene	ND	0.50	1	11/25/2015 16:31
1,2-Dichloropropane	ND	0.50	1	11/25/2015 16:31
1,3-Dichloropropane	ND	0.50	1	11/25/2015 16:31
2,2-Dichloropropane	ND	0.50	1	11/25/2015 16:31

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/25/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4	1511962-014A	Water	11/23/2015 12:00	GC16	113489

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	11/25/2015 16:31
cis-1,3-Dichloropropene	ND	0.50	1	11/25/2015 16:31
trans-1,3-Dichloropropene	ND	0.50	1	11/25/2015 16:31
Diisopropyl ether (DIPE)	ND	0.50	1	11/25/2015 16:31
Ethylbenzene	**1.0**	0.50	1	11/25/2015 16:31
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/25/2015 16:31
Freon 113	ND	0.50	1	11/25/2015 16:31
Hexachlorobutadiene	ND	0.50	1	11/25/2015 16:31
Hexachloroethane	ND	0.50	1	11/25/2015 16:31
2-Hexanone	ND	0.50	1	11/25/2015 16:31
Isopropylbenzene	ND	0.50	1	11/25/2015 16:31
4-Isopropyl toluene	ND	0.50	1	11/25/2015 16:31
Methyl-t-butyl ether (MTBE)	ND	0.50	1	11/25/2015 16:31
Methylene chloride	ND	0.50	1	11/25/2015 16:31
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	11/25/2015 16:31
Naphthalene	**0.73**	0.50	1	11/25/2015 16:31
n-Propyl benzene	ND	0.50	1	11/25/2015 16:31
Styrene	ND	0.50	1	11/25/2015 16:31
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/25/2015 16:31
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/25/2015 16:31
Tetrachloroethene	ND	0.50	1	11/25/2015 16:31
Toluene	ND	0.50	1	11/25/2015 16:31
1,2,3-Trichlorobenzene	ND	0.50	1	11/25/2015 16:31
1,2,4-Trichlorobenzene	ND	0.50	1	11/25/2015 16:31
1,1,1-Trichloroethane	ND	0.50	1	11/25/2015 16:31
1,1,2-Trichloroethane	ND	0.50	1	11/25/2015 16:31
Trichloroethene	ND	0.50	1	11/25/2015 16:31
Trichlorofluoromethane	ND	0.50	1	11/25/2015 16:31
1,2,3-Trichloropropane	ND	0.50	1	11/25/2015 16:31
1,2,4-Trimethylbenzene	**2.8**	0.50	1	11/25/2015 16:31
1,3,5-Trimethylbenzene	ND	0.50	1	11/25/2015 16:31
Vinyl Chloride	ND	0.50	1	11/25/2015 16:31
Xylenes, Total	**1.6**	0.50	1	11/25/2015 16:31

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Analytical Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Received:	11/23/15 17:23	**Extraction Method:**	SW5030B
Date Prepared:	11/25/15	**Analytical Method:**	SW8260B
Project:	15184.23; 500 Grand	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-4	1511962-014A	Water	11/23/2015 12:00	GC16	113489

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	96	70-130		11/25/2015 16:31
Toluene-d8	88	70-130		11/25/2015 16:31
4-BFB	77	70-130		11/25/2015 16:31

Analyst(s): AK

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113297
Date Analyzed:	11/23/15	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113297 1511885-009AMS/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	0.0472	0.0050	0.050	-	94	53-116
Benzene	ND	0.0412	0.0050	0.050	-	82	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	0.184	0.050	0.20	-	92	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	0.0421	0.0050	0.050	-	84	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	0.0446	0.0040	0.050	-	89	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	0.0426	0.0040	0.050	-	85	58-135
1,1-Dichloroethene	ND	0.0399	0.0050	0.050	-	80	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	-	-	-	-

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113297
Date Analyzed:	11/23/15	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113297 1511885-009AMS/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	0.0413	0.0050	0.050	-	83	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0448	0.0050	0.050	-	90	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	0.0452	0.0050	0.050	-	90	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	0.0404	0.0050	0.050	-	81	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	0.0404	0.0050	0.050	-	81	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	-	-	-	-

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113297
Date Analyzed:	11/23/15	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113297 1511885-009AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.125	0.128		0.12	100	103	70-130
Toluene-d8	0.114	0.112		0.12	91	90	70-130
4-BFB	0.0130	0.0134		0.012	104	107	70-130
Benzene-d6	0.0925	0.0907		0.10	92	91	60-140
Ethylbenzene-d10	0.0926	0.0901		0.10	93	90	60-140
1,2-DCB-d4	0.0811	0.0853		0.10	81	85	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)	0.0314	0.0313	0.050	ND	63,F1	63,F1	70-130	0	20
Benzene	0.0295	0.0297	0.050	ND	59,F1	59,F1	70-130	0	20
t-Butyl alcohol (TBA)	0.127	0.134	0.20	ND	63,F1	67,F1	70-130	5.63	20
Chlorobenzene	0.0305	0.0317	0.050	ND	61,F1	63,F1	70-130	3.99	20
1,2-Dibromoethane (EDB)	0.0313	0.0320	0.050	ND	63,F1	64,F1	70-130	2.33	20
1,2-Dichloroethane (1,2-DCA)	0.0307	0.0311	0.050	ND	61,F1	62,F1	70-130	1.36	20
1,1-Dichloroethene	0.0278	0.0274	0.050	ND	56,F1	55,F1	70-130	1.33	20
Diisopropyl ether (DIPE)	0.0304	0.0302	0.050	ND	61,F1	60,F1	70-130	0.773	20
Ethyl tert-butyl ether (ETBE)	0.0314	0.0308	0.050	ND	63,F1	62,F1	70-130	1.70	20
Methyl-t-butyl ether (MTBE)	0.0311	0.0309	0.050	ND	62,F1	62,F1	70-130	0	20
Toluene	0.0319	0.0330	0.050	ND	64,F1	66,F1	70-130	3.60	20
Trichloroethene	0.0284	0.0292	0.050	ND	57,F1	58,F1	70-130	2.93	20
Surrogate Recovery									
Dibromofluoromethane	0.109	0.106	0.12		87	85	70-130	2.68	20
Toluene-d8	0.112	0.113	0.12		90	91	70-130	1.05	20
4-BFB	0.0113	0.0109	0.012		90	87	70-130	3.44	20
Benzene-d6	0.0594	0.0631	0.10		59,F3	63	60-140	6.05	20
Ethylbenzene-d10	0.0701	0.0767	0.10		70	77	60-140	9.02	20
1,2-DCB-d4	0.0557	0.0578	0.10		56	58	60-140	3.70	20

(Cont.)

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

QA/QC Officer

McCampbell 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

Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113331
Date Analyzed:	11/24/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113331 1511962-007AMS/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	0.0397	0.0050	0.050	-	79	53-116
Benzene	ND	0.0431	0.0050	0.050	-	86	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	0.173	0.050	0.20	-	87	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	0.0427	0.0050	0.050	-	85	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	0.0425	0.0040	0.050	-	85	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	0.0426	0.0040	0.050	-	85	58-135
1,1-Dichloroethene	ND	0.0427	0.0050	0.050	-	85	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.)

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113331
Date Analyzed:	11/24/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113331 1511962-007AMS/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	0.0413	0.0050	0.050	-	83	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0413	0.0050	0.050	-	83	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	0.0407	0.0050	0.050	-	81	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	0.0471	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	0.0434	0.0050	0.050	-	87	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.)

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Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/23/15	**BatchID:**	113331
Date Analyzed:	11/24/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113331 1511962-007AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.115	0.118		0.12	92	94	70-130
Toluene-d8	0.117	0.118		0.12	94	95	70-130
4-BFB	0.0123	0.0121		0.012	98	97	70-130
Benzene-d6	0.0804	0.0804		0.10	80	80	60-140
Ethylbenzene-d10	0.0853	0.0900		0.10	85	90	60-140
1,2-DCB-d4	0.0722	0.0755		0.10	72	76	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)	0.0356	0.0396	0.050	ND	71	79	70-130	10.7	20
Benzene	0.0398	0.0447	0.050	ND	80	89	70-130	11.6	20
t-Butyl alcohol (TBA)	0.151	0.173	0.20	ND	76	87	70-130	13.7	20
Chlorobenzene	0.0390	0.0437	0.050	ND	78	87	70-130	11.4	20
1,2-Dibromoethane (EDB)	0.0381	0.0428	0.050	ND	76	86	70-130	11.7	20
1,2-Dichloroethane (1,2-DCA)	0.0384	0.0425	0.050	ND	77	85	70-130	10.2	20
1,1-Dichloroethene	0.0372	0.0430	0.050	ND	74	86	70-130	14.5	20
Diisopropyl ether (DIPE)	0.0379	0.0427	0.050	ND	76	85	70-130	11.9	20
Ethyl tert-butyl ether (ETBE)	0.0371	0.0418	0.050	ND	74	84	70-130	11.8	20
Methyl-t-butyl ether (MTBE)	0.0364	0.0409	0.050	ND	73	82	70-130	11.6	20
Toluene	0.0423	0.0485	0.050	ND	85	97	70-130	13.7	20
Trichloroethene	0.0389	0.0441	0.050	ND	78	88	70-130	12.6	20
Surrogate Recovery									
Dibromofluoromethane	0.119	0.118	0.12		95	94	70-130	0.480	20
Toluene-d8	0.116	0.118	0.12		93	95	70-130	1.72	20
4-BFB	0.0121	0.0124	0.012		97	99	70-130	2.58	20
Benzene-d6	0.0765	0.0820	0.10		76	82	60-140	6.95	20
Ethylbenzene-d10	0.0849	0.0920	0.10		85	92	60-140	8.11	20
1,2-DCB-d4	0.0714	0.0748	0.10		71	75	60-140	4.65	20

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

Quality Control Report

Client:	All West Environmental, Inc	**WorkOrder:**	1511962
Date Prepared:	11/25/15	**BatchID:**	113489
Date Analyzed:	11/25/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113489 1511A74-001CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	10.8	0.50	10	-	108	54-140
Benzene	ND	10.5	0.50	10	-	105	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	40.7	2.0	40	-	102	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	10.1	0.50	10	-	101	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	10.5	0.50	10	-	105	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	9.92	0.50	10	-	99	66-125
1,1-Dichloroethene	ND	10.5	0.50	10	-	105	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

(Cont.)

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Quality Control Report

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Date Prepared:	11/25/15	**BatchID:**	113489
Date Analyzed:	11/25/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113489 1511A74-001CMS/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	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	10.8	0.50	10	-	108	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.9	0.50	10	-	109	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	10.4	0.50	10	-	104	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	10.6	0.50	10	-	106	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	10.3	0.50	10	-	103	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

(Cont.)

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Quality Control Report

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Date Prepared:	11/25/15	**BatchID:**	113489
Date Analyzed:	11/25/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	15184.23; 500 Grand	**Sample ID:**	MB/LCS-113489 1511A74-001CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	24.4	24.6		25	98	98	70-130
Toluene-d8	22.4	21.9		25	90	88	70-130
4-BFB	2.06	2.24		2.5	82	89	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.7	11.5	10	ND	107	115	69-139	7.04	20
Benzene	10.9	11.1	10	ND	109	111	69-141	2.54	20
t-Butyl alcohol (TBA)	41.6	46.2	40	ND	104	115	41-152	10.4	20
Chlorobenzene	10.1	10.4	10	ND	101	104	77-120	2.90	20
1,2-Dibromoethane (EDB)	10.4	10.9	10	ND	104	109	76-135	4.73	20
1,2-Dichloroethane (1,2-DCA)	10.3	10.8	10	ND	103	108	73-139	5.10	20
1,1-Dichloroethene	10.6	11.0	10	ND	106	110	59-140	3.73	20
Diisopropyl ether (DIPE)	10.9	11.4	10	ND	109	114	72-140	4.67	20
Ethyl tert-butyl ether (ETBE)	10.8	11.4	10	ND	108	114	71-140	6.14	20
Methyl-t-butyl ether (MTBE)	10.5	11.2	10	ND	105	112	73-139	6.31	20
Toluene	10.4	10.7	10	ND	104	107	71-128	2.82	20
Trichloroethene	10.4	10.6	10	ND	104	106	64-132	1.84	20
Surrogate Recovery									
Dibromofluoromethane	24.6	24.7	25		98	99	70-130	0.749	20
Toluene-d8	21.4	21.2	25		85	85	70-130	0	20
4-BFB	2.26	2.24	2.5		90	90	70-130	0	20

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1511962 A **ClientCode: AWE**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Leonard Niles
All West Environmental, Inc
2141 Mission Street, Ste 100
San Francisco, CA 94110
(415) 391-2510 FAX: (415) 391-2008

Email: Leonard@allwest1.com
cc/3rd Party:
PO:
ProjectNo: 15184.23; 500 Grand

Bill to:
Darlene Torio
All West Environmental, Inc
2141 Mission Street, Ste 100
San Francisco, CA 94110
darlene@allwest1.com

Requested TAT: 5 days;

Date Received: **11/23/2015**
Date Logged: **11/23/2015**
Date Add-On: **12/02/2015**

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
1511962-001	SB-1@1'-1.5'	Soil	11/23/2015 8:46	☐	A											
1511962-003	SB-1@8'-8.5'	Soil	11/23/2015 9:06	☐	A											
1511962-004	SB-2@1'-15'	Soil	11/23/2015 9:25	☐	A											
1511962-006	SB-2@9.5'-10'	Soil	11/23/2015 9:41	☐	A											
1511962-007	SB-3@1'-1.5'	Soil	11/23/2015 10:01	☐	A											
1511962-009	SB-3@9.5'-10'	Soil	11/23/2015 10:15	☐	A											
1511962-010	SB-5@1'-1.5'	Soil	11/23/2015 11:12	☐	A											
1511962-011	SB-5@4'-4.5'	Soil	11/23/2015 11:20	☐	A											
1511962-013	SB-4@1'-1.5'	Soil	11/23/2015 11:55	☐	A											
1511962-014	SB-4	Water	11/23/2015 12:00	☐		A										

Test Legend:

1	8260B_S	2	8260B_W	3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Briana Cutino

Add-On Prepared By: Maria Venegas

Comments: Full VOCs added 12/2/15

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.

McCampbell 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

WORK ORDER SUMMARY

Client Name: ALL WEST ENVIRONMENTAL, INC
Project: 15184.23; 500 Grand
Comments: Full VOCs added 12/2/15

QC Level: LEVEL 2
Client Contact: Leonard Niles
Contact's Email: Leonard@allwest1.com

Work Order: 1511962
Date Logged: 11/23/2015
Date Add-On: 12/2/2015

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1511962-001A	SB-1@1'-1.5'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	11/23/2015 8:46	5 days		☐	
1511962-003A	SB-1@8'-8.5'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	11/23/2015 9:06	5 days		☐	
1511962-004A	SB-2@1'-15'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	11/23/2015 9:25	5 days		☐	
1511962-006A	SB-2@9.5'-10'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	11/23/2015 9:41	5 days		☐	
1511962-007A	SB-3@1'-1.5'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	11/23/2015 10:01	5 days		☐	
1511962-009A	SB-3@9.5'-10'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	11/23/2015 10:15	5 days		☐	
1511962-010A	SB-5@1'-1.5'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	11/23/2015 11:12	5 days		☐	
1511962-011A	SB-5@4'-4.5'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	11/23/2015 11:20	5 days		☐	
1511962-013A	SB-4@1'-1.5'	Soil	TPH(g) & BTEX by 8260B	1	Acetate Liner	11/23/2015 11:55	5 days		☐	
1511962-014A	SB-4	Water	TPH(g) & BTEX by 8260B	3	VOA w/ HCl	11/23/2015 12:00	5 days	Present	☐	

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.

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

15511962

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ PDF ☐ Excel ☐ Write On (DW) ☐

☐ Check if sample is effluent and "J" flag is required

Report To: Len Niles/Sara Bloom Bill To: Darlene Torio

Company: AllWest Environmental

2141 Mission Street, Ste 100

San Francisco, CA 94110 E-Mail: leonard@/sara@/darlene@allwest1.com

Tele: (415) 391-2510 Fax: (415) 391-2008

Project #: 15184.23 Project Name: 500 Grand

Project Location: Oakland, CA

Sampler Signature: Sara Bloom

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other
SB-1@1'-1.5'		11/23/15	0846				X							
SB-1@4'-4.5'			0858				X							
SB-1@8'-8.5'			0906				X							
SB-2@1'-1.5'			0925				X							
SB-2@4'-4.5'			0932				X							
SB-2@9.5'-10'			0941				X							
SB-3@1'-1.5'			1001				X							
SB-3@4'-4.5'			1008				X							
SB-3@9.5'-10'			1015				X							
SB-5@1'-1.5'			1112				X							
SB-5@4'-4.5'		11/23/15	1120				X							

Analysis Request	Other	Comments
BTEX & TPH as Gas (8260B); TPH as Diesel (8015)& Motor Oil w/Silica Gel C/U; Total Petroleum Oil & Grease (1664 / 5520 E/B&F); Total Petroleum Hydrocarbons (418.1); EPA 502.2 / 601 / 8010 / 8021 (HVOCs); MTBE / BTEX ONLY (EPA 602 / 8021); EPA 505/ 608 / 8081 (Cl Pesticides); EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners; EPA 507 / 8141 (NP Pesticides); EPA 515 / 8151 (Acidic Cl Herbicides); EPA 524.2 / 624 / 8260 (VOCs) Full List 12-2-15; EPA 525.2 / 625 / 8270 (SVOCs); EPA 8270 SIM / 8310 (PAHs / PNAs); Metals (BA, total Cr, Co, Cu, Hg, Ni) - field filtered; 9010C/9012B/SM4500CN (Total Cyanides); E218.6 (Hexavalent Chromium)	Filter sample for DISSOLVED metals analysis	**Indicate here if these samples are potentially dangerous to handle:
X X X		
X		HOLD
X X X		
X X X		
X		HOLD
X X X		
X X X		
X		HOLD
X X X		
X X X		
X X X		

**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:	Date:	Time:	Received By:
Sara Bloom	11/23/15	1315	
Relinquished By:	Date:	Time:	Received By:
	11-23-15	1515	
Relinquished By:	Date:	Time:	Received By:

ICE/t° 3.6c
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB

COMMENTS:

VOAS O&G METALS OTHER
PRESERVATION pH<2

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
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Telephone: (877) 252-9262 Fax: (925) 252-9269

15119162

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ PDF ☐ Excel ☐ Write On (DW) ☐

☐ Check if sample is effluent and "J" flag is required

Report To: Len Niles/Sara Bloom	Bill To: Darlene Torio
Company: AllWest Environmental	
2141 Mission Street, Ste 100	
San Francisco, CA 94110	E-Mail: leonard@/sara@/darlene@allwest1.com
Tele: (415) 391-2510	Fax: (415) 391-2008
Project #: 15184.23	Project Name: 500 Grand
Project Location: Oakland, CA	
Sampler Signature: Sara Bloom	

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (8260B)	TPH as Diesel (8015)& Motor Oil w/Silica Gel C/U	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs) Full List	EPA 525.2 / 625 / 8270 (SVOCs) 12-2-15	EPA 8270 SIM / 8310 (PAHs / PNAs)	Metals (BA, total Cr, Co, Cu, Hg, Ni) - field filtered	9010C/9012B/SM4500CN (Total Cyanides)	E218.6 (Hexavalent Chromium)	Other: Filter sample for DISSOLVED metals analysis	Comments
SB-5@9.5-10'		11/23/15	1137	1			X																									HOLD
SB-4@1'-1.5'			1155	1			X								X	X																
SB-4		11/23/15	1200	4	G	X									X	X									XX							

**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:	Date:	Time:	Received By:
Sara Bloom	11/23/15	1315	
Relinquished By:	Date:	Time:	Received By:
	11-23-15	1515	
Relinquished By:	Date:	Time:	Received By:

ICE/t° 3.6°
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

COMMENTS:

VOAS O&G METALS OTHER
PRESERVATION_____ pH<2_____

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WORK ORDER NUMBER: 15-12-0102

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AllWest Environmental, Inc.

Client Project Name: 15184.23

Attention: Leonard Niles
2141 Mission Street, Suite 100
San Francisco, CA 94110-6331

Approved for release on 12/10/2015 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: 15184.23
Work Order Number: 15-12-0102

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Work Order Narrative

Work Order: 15-12-0102 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 12/02/15. They were assigned to Work Order 15-12-0102.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Sample Summary

Client:	AllWest Environmental, Inc.	Work Order:	15-12-0102
	2141 Mission Street, Suite 100	Project Name:	15184.23
	San Francisco, CA 94110-6331	PO Number:	
		Date/Time Received:	12/02/15 10:30
		Number of Containers:	1
Attn:	Leonard Niles		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SVP-3	15-12-0102-1	11/27/15 16:45	1	Air

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Detections Summary

Client:	AllWest Environmental, Inc.	Work Order:	15-12-0102
	2141 Mission Street, Suite 100	Project Name:	15184.23
	San Francisco, CA 94110-6331	Received:	12/02/15
Attn:	Leonard Niles		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
SVP-3 (15-12-0102-1)						
Helium	873000		16400	ug/m3	ASTM D-1946 (M)	N/A
Benzene	120		6.5	ug/m3	EPA TO-15	N/A
2-Butanone	38		18	ug/m3	EPA TO-15	N/A
n-Butylbenzene	68		11	ug/m3	EPA TO-15	N/A
sec-Butylbenzene	57		11	ug/m3	EPA TO-15	N/A
Carbon Disulfide	610		25	ug/m3	EPA TO-15	N/A
Ethylbenzene	730		8.9	ug/m3	EPA TO-15	N/A
4-Ethyltoluene	56		10	ug/m3	EPA TO-15	N/A
Isopropanol	160		50	ug/m3	EPA TO-15	N/A
Tetrachloroethene	150		14	ug/m3	EPA TO-15	N/A
Toluene	180		7.7	ug/m3	EPA TO-15	N/A
1,3,5-Trimethylbenzene	13		10	ug/m3	EPA TO-15	N/A
o-Xylene	45		8.9	ug/m3	EPA TO-15	N/A
p/m-Xylene	190		35	ug/m3	EPA TO-15	N/A

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Analytical Report

AllWest Environmental, Inc.
2141 Mission Street, Suite 100
San Francisco, CA 94110-6331

Project: 15184.23

Date Received: 12/02/15
Work Order: 15-12-0102
Preparation: N/A
Method: ASTM D-1946 (M)
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-3	**15-12-0102-1-A**	**11/27/15 16:45**	**Air**	**GC 55**	**N/A**	**12/03/15 17:20**	**151203L01**

Parameter	Result	RL	DF	Qualifiers
Helium	873000	16400	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-884**	**N/A**	**Air**	**GC 55**	**N/A**	**12/03/15 11:10**	**151203L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	16400	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AllWest Environmental, Inc.
2141 Mission Street, Suite 100
San Francisco, CA 94110-6331

Project: 15184.23

Date Received: 12/02/15
Work Order: 15-12-0102
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-3	**15-12-0102-1-A**	**11/27/15 16:45**	**Air**	**GC/MS K**	**N/A**	**12/09/15 01:21**	**151208L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	19	4.08	
Benzene	120	6.5	4.08	
Benzyl Chloride	ND	32	4.08	
Bromodichloromethane	ND	14	4.08	
Bromoform	ND	21	4.08	
Bromomethane	ND	7.9	4.08	
2-Butanone	38	18	4.08	
n-Butylbenzene	68	11	4.08	
sec-Butylbenzene	57	11	4.08	
tert-Butylbenzene	ND	11	4.08	
Carbon Disulfide	610	25	4.08	
Carbon Tetrachloride	ND	13	4.08	
Chlorobenzene	ND	9.4	4.08	
Chloroethane	ND	5.4	4.08	
Chloroform	ND	10	4.08	
Chloromethane	ND	4.2	4.08	
Dibromochloromethane	ND	17	4.08	
1,2-Dibromoethane	ND	16	4.08	
1,2-Dichlorobenzene	ND	12	4.08	
1,3-Dichlorobenzene	ND	12	4.08	
1,4-Dichlorobenzene	ND	12	4.08	
Dichlorodifluoromethane	ND	10	4.08	
1,1-Dichloroethane	ND	8.3	4.08	
1,2-Dichloroethane	ND	8.3	4.08	
1,1-Dichloroethene	ND	8.1	4.08	
c-1,2-Dichloroethene	ND	8.1	4.08	
t-1,2-Dichloroethene	ND	8.1	4.08	
1,2-Dichloropropane	ND	9.4	4.08	
c-1,3-Dichloropropene	ND	9.3	4.08	
t-1,3-Dichloropropene	ND	19	4.08	
Dichlorotetrafluoroethane	ND	57	4.08	
1,1-Difluoroethane	ND	22	4.08	
Ethylbenzene	730	8.9	4.08	
4-Ethyltoluene	56	10	4.08	
Hexachloro-1,3-Butadiene	ND	65	4.08	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AllWest Environmental, Inc.
2141 Mission Street, Suite 100
San Francisco, CA 94110-6331

Project: 15184.23

Date Received: 12/02/15
Work Order: 15-12-0102
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Parameter	Result	RL	DF	Qualifiers
2-Hexanone	ND	25	4.08	
Isopropanol	160	50	4.08	
Methyl-t-Butyl Ether (MTBE)	ND	29	4.08	
Methylene Chloride	ND	71	4.08	
4-Methyl-2-Pentanone	ND	25	4.08	
Styrene	ND	26	4.08	
1,1,2,2-Tetrachloroethane	ND	28	4.08	
Tetrachloroethene	150	14	4.08	
Toluene	180	7.7	4.08	
1,2,4-Trichlorobenzene	ND	61	4.08	
1,1,1-Trichloroethane	ND	11	4.08	
1,1,2-Trichloroethane	ND	11	4.08	
Trichloroethene	ND	11	4.08	
Trichlorofluoromethane	ND	23	4.08	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	47	4.08	
1,2,4-Trimethylbenzene	ND	30	4.08	
1,3,5-Trimethylbenzene	13	10	4.08	
Vinyl Acetate	ND	29	4.08	
Vinyl Chloride	ND	5.2	4.08	
o-Xylene	45	8.9	4.08	
p/m-Xylene	190	35	4.08	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	128	68-134	
1,2-Dichloroethane-d4	96	67-133	
Toluene-d8	70	70-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AllWest Environmental, Inc.
2141 Mission Street, Suite 100
San Francisco, CA 94110-6331

Project: 15184.23

Date Received: 12/02/15
Work Order: 15-12-0102
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-16297**	**N/A**	**Air**	**GC/MS K**	**N/A**	**12/08/15 18:51**	**151208L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	4.8	1.00	
Benzene	ND	1.6	1.00	
Benzyl Chloride	ND	7.8	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	ND	4.4	1.00	
n-Butylbenzene	ND	2.7	1.00	
sec-Butylbenzene	ND	2.7	1.00	
tert-Butylbenzene	ND	2.7	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	1.0	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	ND	2.2	1.00	
4-Ethyltoluene	ND	2.5	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AllWest Environmental, Inc.
2141 Mission Street, Suite 100
San Francisco, CA 94110-6331

Project: 15184.23

Date Received: 12/02/15
Work Order: 15-12-0102
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Parameter	Result	RL	DF	Qualifiers
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	15	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	2.5	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	2.2	1.00	
p/m-Xylene	ND	8.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-134	
1,2-Dichloroethane-d4	93	67-133	
Toluene-d8	101	70-130	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - LCS/LCSD

AllWest Environmental, Inc.
2141 Mission Street, Suite 100
San Francisco, CA 94110-6331

Project: 15184.23

Date Received: 12/02/15
Work Order: 15-12-0102
Preparation: N/A
Method: ASTM D-1946 (M)
Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-884	**LCS**	**Air**	**GC 55**	**N/A**	**12/03/15 10:26**	**151203L01**
099-12-872-884	**LCSD**	**Air**	**GC 55**	**N/A**	**12/03/15 10:46**	**151203L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Helium	1637000	1566000	96	1568000	96	80-120	0	0-30	
Hydrogen	824500	781600	95	784800	95	80-120	0	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AllWest Environmental, Inc.
2141 Mission Street, Suite 100
San Francisco, CA 94110-6331

Project: 15184.23

Date Received: 12/02/15
Work Order: 15-12-0102
Preparation: N/A
Method: EPA TO-15

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-16297	**LCS**	**Air**	**GC/MS K**	**N/A**	**12/08/15 16:27**	**151208L01**
095-01-021-16297	**LCSD**	**Air**	**GC/MS K**	**N/A**	**12/08/15 17:16**	**151208L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	59.39	58.07	98	58.07	98	67-133	56-144	0	0-30	
Benzene	79.87	77.94	98	76.89	96	70-130	60-140	1	0-30	
Benzyl Chloride	129.4	159.0	123	156.7	121	38-158	18-178	1	0-30	
Bromodichloromethane	167.5	177.5	106	175.2	105	70-130	60-140	1	0-30	
Bromoform	258.4	326.3	126	324.1	125	63-147	49-161	1	0-30	
Bromomethane	97.08	97.05	100	95.55	98	70-139	58-150	2	0-30	
2-Butanone	73.73	61.43	83	60.72	82	66-132	55-143	1	0-30	
n-Butylbenzene	137.2	146.4	107	145.9	106	50-150	33-167	0	0-30	
sec-Butylbenzene	137.2	144.1	105	143.7	105	50-150	33-167	0	0-30	
tert-Butylbenzene	137.2	145.5	106	144.1	105	50-150	33-167	1	0-30	
Carbon Disulfide	77.85	77.94	100	77.28	99	68-146	55-159	1	0-30	
Carbon Tetrachloride	157.3	185.8	118	181.6	115	70-136	59-147	2	0-30	
Chlorobenzene	115.1	114.7	100	113.8	99	70-130	60-140	1	0-30	
Chloroethane	65.96	67.97	103	66.61	101	65-149	51-163	2	0-30	
Chloroform	122.1	116.7	96	115.5	95	70-130	60-140	1	0-30	
Chloromethane	51.63	50.41	98	49.74	96	69-141	57-153	1	0-30	
Dibromochloromethane	213.0	242.0	114	240.2	113	70-138	59-149	1	0-30	
1,2-Dibromoethane	192.1	201.6	105	198.1	103	70-133	60-144	2	0-30	
1,2-Dichlorobenzene	150.3	158.7	106	157.2	105	48-138	33-153	1	0-30	
1,3-Dichlorobenzene	150.3	162.6	108	161.3	107	56-134	43-147	1	0-30	
1,4-Dichlorobenzene	150.3	158.8	106	157.3	105	52-136	38-150	1	0-30	
Dichlorodifluoromethane	123.6	126.1	102	120.8	98	67-139	55-151	4	0-30	
1,1-Dichloroethane	101.2	89.99	89	89.14	88	70-130	60-140	1	0-30	
1,2-Dichloroethane	101.2	95.46	94	93.83	93	70-132	60-142	2	0-30	
1,1-Dichloroethene	99.12	100.1	101	99.17	100	70-135	59-146	1	0-30	
c-1,2-Dichloroethene	99.12	103.4	104	99.38	100	70-130	60-140	4	0-30	
t-1,2-Dichloroethene	99.12	92.51	93	91.26	92	70-130	60-140	1	0-30	
1,2-Dichloropropane	115.5	113.0	98	111.8	97	70-130	60-140	1	0-30	
c-1,3-Dichloropropene	113.5	120.5	106	118.8	105	70-130	60-140	1	0-30	
t-1,3-Dichloropropene	113.5	131.0	115	128.8	114	70-147	57-160	2	0-30	
Dichlorotetrafluoroethane	174.8	178.5	102	176.8	101	51-135	37-149	1	0-30	
1,1-Difluoroethane	67.54	64.66	96	62.52	93	70-131	60-141	3	0-30	
Ethylbenzene	108.6	107.5	99	107.0	99	70-130	60-140	0	0-30	
4-Ethyltoluene	122.9	124.2	101	124.3	101	68-130	58-140	0	0-30	
Hexachloro-1,3-Butadiene	266.6	325.3	122	323.0	121	44-146	27-163	1	0-30	
2-Hexanone	102.4	105.1	103	103.4	101	70-136	59-147	2	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AllWest Environmental, Inc.
2141 Mission Street, Suite 100
San Francisco, CA 94110-6331

Project: 15184.23

Date Received: 12/02/15
Work Order: 15-12-0102
Preparation: N/A
Method: EPA TO-15

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Isopropanol	61.45	59.04	96	58.54	95	57-135	44-148	1	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	78.18	87	77.39	86	68-130	58-140	1	0-30	
Methylene Chloride	86.84	82.08	95	82.33	95	69-130	59-140	0	0-30	
4-Methyl-2-Pentanone	102.4	102.4	100	100.2	98	70-130	60-140	2	0-30	
Styrene	106.5	108.5	102	107.4	101	65-131	54-142	1	0-30	
1,1,2,2-Tetrachloroethane	171.6	174.1	101	173.2	101	63-130	52-141	1	0-30	
Tetrachloroethene	169.6	172.3	102	171.0	101	70-130	60-140	1	0-30	
Toluene	94.21	93.16	99	92.19	98	70-130	60-140	1	0-30	
1,2,4-Trichlorobenzene	185.5	213.9	115	212.5	115	31-151	11-171	1	0-30	
1,1,1-Trichloroethane	136.4	135.7	99	133.8	98	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	138.6	102	136.6	100	70-130	60-140	1	0-30	
Trichloroethene	134.3	133.2	99	133.5	99	70-130	60-140	0	0-30	
Trichlorofluoromethane	140.5	144.6	103	142.9	102	63-141	50-154	1	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	192.0	100	191.5	100	70-136	59-147	0	0-30	
1,2,4-Trimethylbenzene	122.9	128.0	104	126.7	103	60-132	48-144	1	0-30	
1,3,5-Trimethylbenzene	122.9	123.1	100	122.8	100	62-130	51-141	0	0-30	
Vinyl Acetate	88.03	78.89	90	78.46	89	58-130	46-142	1	0-30	
Vinyl Chloride	63.91	64.00	100	63.79	100	70-134	59-145	0	0-30	
o-Xylene	108.6	107.3	99	106.8	98	69-130	59-140	0	0-30	
p/m-Xylene	217.1	218.6	101	215.7	99	70-132	60-142	1	0-30	

Total number of LCS compounds: 56
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Summa Canister Vacuum Summary

Work Order: 15-12-0102 Page 1 of 1

Sample Name	Vacuum Out	Vacuum In	Equipment	Description
SVP-3	-29.50 in Hg	-18.10 in Hg	LC587	Summa Canister 1L

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Sample Analysis Summary Report

Work Order: 15-12-0102 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
ASTM D-1946 (M)	N/A	982	GC 55	2
EPA TO-15	N/A	953	GC/MS K	2

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Glossary of Terms and Qualifiers

Work Order: 15-12-0102 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

AIR CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY: **15-12-0102**

DATE: 11/27/15

PAGE: 1 OF 1

LABORATORY CLIENT: ALLWEST ENVIRONMENTAL INC.	CLIENT PROJECT NAME / NO.: 15184.23
ADDRESS: 2141 MISSION ST, SFE 160	PROJECT CONTACT: LEONARD NILES / SARA BLOOM
CITY: SAN FRANCISCO STATE: CA ZIP: 94110	PROJECT ADDRESS: 500 GRAND AVE
TEL: (415) 391-2510 E-MAIL: LEONARD@ALLWESTL.COM	CITY: OAKLAND STATE: CA ZIP:
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ STANDARD	
EDD: ☐ COELT EDF ☒ OTHER PDF	UNITS: ug/m3
SPECIAL INSTRUCTIONS:	

P.O. NO.: 15184.23
LAB CONTACT OR QUOTE NO.:
SAMPLER(S): (PRINT) SARA BLOOM

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD ID / POINT OF COLLECTION	MATRIX: Indoor (I) Soil Vap. (SV) Ambient (A)	SAMPLING EQUIPMENT: Media ID	Canister Size 6L or 1L	Flow Controller ID	START SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	STOP SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	TO-15
1	SVP-3	SB-3	SV	LC587	1L	A448	11/27/15	0940	-30"	11/27/15	1645	-20.5"	X

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Sara Bloom			
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature) (Fedex)	Received by: (Signature/Affiliation)	Date: 12/02/15	Time: 1030

2014-07-01 Revision

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WORK ORDER NUMBER: 15-12- 0102

SAMPLE RECEIPT CHECKLIST

COOLER 0 OF 0

CLIENT: Allwest Env'l., Inc.

DATE: 12 / 02 / 2015

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC2 (CF:-0.4°C); Temperature (w/o CF): _____°C (w/ CF): _____°C; ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: 836

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present (BOX) ☐ N/A Checked by: 836

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 1058

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☑ No relinquished date ☑ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☑ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1058

Reviewed by: SR

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APPENDIX G

APPLICATION FOR AUTHORIZATION TO USE

REPORT TITLE: SUBSURFACE INVESTIGATION REPORT

500 Grand Avenue
Oakland, CA 94610

PROJECT NUMBER: 15184.23

To: AllWest Environmental, Inc.
2141 Mission Street, Suite 100
San Francisco, CA 94110

From (Applicant): _____

_____

_____
(Please clearly identify name and address of person/entity applying for permission to use or copy this document)

Ladies and Gentlemen:

Applicant states they have thoroughly reviewed the report and had the opportunity to discuss with AllWest the report's methodology, findings and conclusion(s).

Applicant hereby applies for permission to rely upon AllWest's work product, as described above, for the purpose of (state here the purpose for which you wish to rely upon the work product):

Applicant only can accept and rely upon AllWest work product under the strict understanding that Applicant is bound by all provisions in the General Conditions to the Work Authorization Agreement provided below. Every report, recommendation, finding, or conclusion issued by AllWest shall be subject to the limitations stated in the Agreement and subject report(s). If this is agreeable, please sign below and return one copy of this letter to us along with the applicable fees. Upon receipt and if acceptable, our signed letter will be returned. AllWest may withhold permission at its sole discretion or require additional re-use fees or terms.

FEES: A $1,650 coordination and reliance fee, payable in advance, will apply. If desired, for an additional $150 report reproduction fee, we will reissue the report in the name of the Applicant; the report date, however, will remain the same. All checks will be returned if your request for reliance is not approved.

REQUESTED BY	**APPROVED BY**
_____	**AllWest Environmental, Inc.**
Applicant Company	
_____	_____
Print Name and Title	Print Name and Title
_____	_____
Signature and Date	Signature and Date

GENERAL CONDITIONS TO THE WORK AUTHORIZATION AGREEMENT

It is hereby agreed that the Client retains AllWest to provide services as set forth in the Work Authorization attached hereto (the "Work"). This contract shall be controlled by the following terms and conditions, and these terms and conditions shall also control any further assignments performed pursuant to this Work Authorization. Client's signature on this Work Authorization constitutes Client's agreement to the all terms to this contract, including these General Conditions.

FEES AND COSTS

1. AllWest shall charge for work performed by its personnel at the rates identified in the Work Authorization. These rates are subject to reasonable increases by AllWest upon giving Client 30 days advance notice. Reimbursable Costs will be charged to the Client in addition to the fees for the basic services under this Agreement and all Additional Services (defined below) under the Agreement. Reimbursable Costs include, but are not limited to, expenses for travel, including transportation, meals, lodging, long distance telephone and other related expenses, as well as the costs of reproduction of all drawings for the Client's use, costs for specifications and type-written reports, permit and approval fees, automobile travel reimbursement, costs and fees of subcontractors, and soil and other materials testing. No overtime is accrued for time spent in travel. All costs incurred which relate to the services or materials provided by a contractor or subcontractor to AllWest shall be invoiced by AllWest on the basis of cost plus twenty percent (20%). Automobile travel reimbursement shall be at the rate of fifty- eight cents ($0.58) per mile. All other reimbursable costs shall be invoiced and billed by AllWest at the rate of 1.1 times the direct cost to AllWest. Reimbursable costs will be charged to the client only as outlined in the Work Authorization if the scope of work is for Phase I Environmental Site Assessment, Property Condition Assessment, Seismic Assessment or ALTA survey. Invoices for work performed shall be submitted monthly. Payment will be due upon receipt of invoice. Client shall pay interest on the balance of unpaid invoices which are overdue by more than 30 days, at a rate of 18% per annum as well as all attorney fees and costs incurred by AllWest to secure payment of unpaid invoices. AllWest may waive such fees at its sole discretion.

STANDARD OF CARE

2. AllWest will perform its work in accordance with the standard of care of its industry, as it is at the time of the work being performed, and applicable in the locale of the work being performed. AllWest makes no other warranties, express or implied regarding its work.

LIMITATION OF REMEDIES

3. Client expressly agrees that to the fullest extent permitted by law, Client's remedies for any liability incurred by AllWest, and/or its employees or agents, for any and all claims arising from AllWest's services, shall be $50,000 or its fees, whichever is greater.

Client may request a higher limitation of remedies, but must do so in writing. Upon such written request, AllWest may agree to increase this limit in exchange for a mutually negotiated higher fee commensurate with the increased risk to AllWest. Any such agreed increase in fee and limitation of remedies amount must be memorialized by written agreement which expressly amends the terms of this clause.

As used in this section, the term "limitation of remedies" shall apply to claims of any kind, including, but not limited to, claims brought in contract, tort, strict liability, or otherwise, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to AllWest's services or the services of AllWest's subcontractors, consultants, agents, officers, directors, and employees from any cause(s). AllWest shall not be liable for any claims of loss of profits or any other indirect, incidental, or consequential damages of any nature whatsoever. Client & AllWest have specifically negotiated this limitation.

INDEMNIFICATION

4. Notwithstanding any other provision of this Agreement, Client agrees, to the fullest extent permitted by law, to waive any claim against, release from any liability or responsibility for, and , indemnify and hold harmless AllWest, its employees, agents and sub-consultants (collectively, Consultant) from and against any and all damages, liabilities, claims, actions or costs of any kind, including reasonable attorney's fees and defense costs, arising or alleged to arise out of or to be in any way connected with the Project or the performance or non-performance of Consultant of any services under this Agreement, excepting only any such liabilities determined by a court or other forum of competent jurisdiction to have been caused by the negligence or willful misconduct of Consultant. This provision shall be in addition to any rights of indemnity that Consultant may have under the law and shall survive and remain in effect following the termination of this Agreement for any reason. Should any part of this provision be determined to be unenforceable, AllWest and Client agree that the rest of the provision shall apply to the maximum extent permitted by law. The Client's duty to defend AllWest shall arise immediately upon tender of any matter potentially covered by the above obligations to indemnify and hold harmless.

MEDIATION & JUDICIAL REFERENCE

5. In an effort to resolve any conflicts or disputes that arise regarding the performance of this agreement, the Client & AllWest agree that all such disputes shall be submitted to non-binding mediation, using a mutually agreed upon mediation service experienced in the resolution of construction disputes. Unless the parties mutually agree otherwise, such mediation shall be a condition precedent to the initiation of any other adjudicative proceedings. It is further agreed that any dispute that is not settled pursuant to such mediation shall be adjudicated by a court appointed referee in accordance with the Judicial Reference procedures as set forth in California Code of Civil Procedure Section 638 et seq. The parties hereby mutually agree to waive any right to a trial by jury regarding any dispute arising out of this agreement.

The parties further agree to include a similar mediation, Judicial Reference & waiver of jury trial provision in their agreements with other independent contractors & consultants retained for the project and require them to similarly agree to these dispute resolution procedures. The cost of said Mediation shall be split equally between the parties. This agreement to mediate shall be specifically enforceable under the prevailing law of the jurisdiction in which this agreement was signed.

HAZARDOUS WASTE

6. Client acknowledges that AllWest and its sub-contractors have played no part in the creation of any hazardous waste, pollution sources, nuisance, or chemical or industrial disposal problem, which may exist, and that AllWest has been retained for the sole purpose of performing the services set out in the scope of work within this Agreement, which may include, but is not necessarily limited to such services as assisting the Client in assessing any problem which may exist and in assisting the

Client in formulating a remedial program. Client acknowledges that while necessary for investigations, commonly used exploration methods employed by AllWest may penetrate through contaminated materials and serve as a connecting passageway between the contaminated material and an uncontaminated aquifer or groundwater, possibly inducing cross contamination. While back-filling with grout or other means, according to a state of practice design is intended to provide a seal against such passageway, it is recognized that such a seal may be imperfect and that there is an inherent risk in drilling borings of performing other exploration methods in a hazardous waste site.

AllWest will not sign or execute hazardous waste manifests or other waste tracking documents on behalf of Client unless Client specifically establishes AllWest as an express agent of Client under a written agency agreement approved by AllWest. In addition, Client agrees that AllWest shall not be required to sign any documents, no matter requested by whom, that would have the effect of AllWest providing any form of certification, guarantee, or warranty as to any matter or to opine on conditions for which the existence AllWest cannot ascertain. Client also agrees that it shall never seek or otherwise attempt to have AllWest provide any form of such certification, guarantee or warranty in exchange for resolution of any disputes between Client and AllWest, or as a condition precedent to making payment to AllWest for fees and costs owing under this Agreement.

Client understands and agrees that AllWest is not, and has no responsibility as, a generator, operator, treater, storer, transporter , arranger or disposer of hazardous or toxic substances found or identified at the site, including investigation-derived waste. The Client shall undertake and arrange for the removal, treatment, storage, disposal and/or treatment of hazardous material and investigation derived waste (such as drill cuttings) and further, assumes full responsibility for such wastes to the complete exclusion of any responsibility, duty or obligation upon AllWest. AllWest's responsibilities shall be limited to recommendations regarding such matters and assistance with appropriate arrangements if authorized by Client.

FORCE MAJUERE

7. Neither party shall be responsible for damages or delays in performance under this Agreement caused by acts of God, strikes, lockouts, accidents or other events or condition (other than financial inability) beyond the other Party’s reasonable control.

TERMINATION

8. This Agreement may be terminated by either party upon ten (10) days' written notice should the other party substantially fail to perform in accordance with its duties and responsibilities as set forth in this Agreement and such failure to perform is through no fault of the party initiating the termination. Client agrees that if it chooses to terminate AllWest for convenience, and AllWest has otherwise satisfactorily performed its obligations under this Agreement to that point, AllWest shall be paid no less than eighty percent (80%) of the contract price, provided, however, that if AllWest shall have completed more than eighty percent of the Work at the time of said termination, AllWest shall be compensated as provided in the Work Authorization for all services performed prior to the termination date which fall within the scope of work described in the Work Authorization and may as well, at its sole discretion and in accordance with said Schedule of Fees, charge Client, and Client agrees to pay AllWest’s reasonable costs and labor in winding up its files and removing equipment and other materials from the Project.

Upon notice of termination by Client to AllWest, AllWest may issue notice of such termination to other consultants, contractors, subcontractors and to governing agencies having jurisdiction over the Project, and take such other actions as are reasonably necessary in order to give notice that AllWest is no longer associated with the Project and to protect AllWest from claims of liability from the work of others.

DOCUMENTS

9. Any documents prepared by AllWest, including, but not limited to proposals, project specifications, drawings, calculations, plans and maps, and any ideas and designs incorporated therein, as well as any reproduction of the above are instruments of service and shall remain the property of AllWest and AllWest retains copyrights to these instruments of service. AllWest grants to Client a non-exclusive license to use these instruments of service for the purpose of completing and maintaining the Project. The Client shall be permitted to retain a copy of any instruments of service, but Client expressly agrees and acknowledges that the instruments of service may not be used by the Client on other projects, or for any other purpose, except the project for which they were prepared, unless Client first obtains a written agreement expanding the license to such use from AllWest, and with appropriate compensation to AllWest. Client further agrees that such instruments of service shall not be provided to any third parties without the express written permission of AllWest.

Client shall furnish, or cause to be furnished to AllWest all documents and information known to Client that relate to the identity, location, quantity, nature, or characteristics of any asbestos, PCBs, or any other hazardous materials or waste at, on or under the site. In addition, Client will furnish or cause to be furnished such reports, data, studies, plans, specifications, documents and other information on surface or subsurface site conditions, e.g., underground tanks, pipelines and buried utilities, required by AllWest for proper performance of its services. IF Client fails to provide AllWest with all hazardous material subject matter reports including geotechnical assessments in its possession during the period that AllWest is actively providing its services (including up to 30 days after its final invoice), Client shall release AllWest from any and all liability for risks and damages the Client incurs resulting from its reliance on AllWest’s professional opinion. AllWest shall be entitled to rely upon Client - provided documents and information in performing the services required in this Agreement; however, AllWest assumes no responsibility or liability for the accuracy or completeness of Client-provided documents. Client-provided documents will remain the property of the Client.

ACCESS TO PROJECT

10. Client grants to AllWest the right of access and entry to the Project at all times necessary for AllWest to perform the Work. If Client is not the owner of the Project, then Client represents that Client has full authority to grant access and right of entry to AllWest for the purpose of AllWest's performance of the Work. This right of access and entry extends fully to any agents, employees, contractors or subcontractors of AllWest upon reasonable proof of association with AllWest. Client’s failure to provide such timely access and permission shall constitute a material breach of this Agreement excusing AllWest from performance of its duties under this Agreement.

CONFIDENTIAL INFORMATION

11. Both Client and AllWest understand that in conjunction with AllWest's performance of the Work on the project, both Client and AllWest may receive or be exposed to Proprietary Information of the other. As used herein, the term "Proprietary Information" refers to any and all information of a confidential, proprietary or secret nature which may be either applicable to, or relate in any way to: (a) the personal, financial or other affairs of the business of each of the Parties, or (b) the

research and development or investigations of each of the Parties. Proprietary Information includes, for example and without limitation, trade secrets, processes, formulas, data, know-how, improvements, inventions, techniques, software technical data, developments, research projects, plans for future development, marketing plans and strategies. Each of the Parties agrees that all Proprietary Information of the other party is and shall remain exclusively the property of that other party. The parties further acknowledge that the Proprietary Information of the other party is a special, valuable and unique asset of that party, and each of the Parties agrees that at all times during the terms of this Agreement and thereafter to keep in confidence and trust all Proprietary Information of the other party, whether such Proprietary Information was obtained or developed by the other party before, during or after the term of this Agreement. Each of the Parties agrees not to sell, distribute, disclose or use in any other unauthorized manner the Proprietary Information of the other party. AllWest further agrees that it will not sell, distribute or disclose information or the results of any testing obtained by AllWest during the performance of the Work without the prior written approval of Client unless required to do so by federal, state or local statute, ordinance or regulation.

INDEPENDENT CONTRACTOR

12. Both Client and AllWest agree that AllWest is an independent contractor in the performance of the Work under this Agreement. All persons or parties employed by AllWest in connection with the Work are the agents, employees or subcontractors of AllWest and not of Client. Accordingly, AllWest shall be responsible for payment of all taxes arising out of AllWest's activities in performing the Work under this Agreement.

ENTIRE AGREEMENT

13. This Agreement contains the entire agreement between the Parties pertaining to the subject matter contained in it and supersedes and replaces in its entirety all prior and contemporaneous proposals, agreements, representations and understandings of the Parties. The Parties have carefully read and understand the contents of this Agreement and sign their names to the same as their own free act.

INTEGRATION

14. This is a fully integrated Agreement. The terms of this Agreement may be modified only by a writing signed by both Parties. The terms of this Agreement were fully negotiated by the Parties and shall not be construed for or against the Client or AllWest but shall be interpreted in accordance with the general meaning of the language in an effort to reach the intended result.

MODIFICATION / WAIVER / PARTIAL INVALIDITY

15. Failure on the part of either party to complain of any act or omission of the other, or to declare the other party in default, shall not constitute a waiver by such party of its rights hereunder. If any provision of this Agreement or its application be unenforceable to any extent, the Parties agree that the remainder of this Agreement shall not be affected and shall be enforced to the greatest extent permitted by law.

INUREMENT / TITLES

16. Subject to any restrictions on transfers, assignments and encumbrances set forth herein, this Agreement shall inure to the benefit of and be binding upon the undersigned Parties and their respective heirs, executors, legal representatives, successors and assigns. Paragraph titles or captions contained in this Agreement are inserted only as a matter of convenience, and for reference only, and in no way limit, define or extend the provisions of any paragraph. , et al., incurred in that action or proceeding, in addition to any other relief to which it or they may be entitled.

AUTHORITY

17. Each of the persons executing this Agreement on behalf of a corporation does hereby covenant and warrant that the corporation is duly authorized and existing under the laws of its respective state of incorporation, that the corporation has and is qualified to do business in its respective state of incorporation, that the corporation has the full right and authority to enter into this Agreement, and that each person signing on behalf of the corporation is authorized to do so. If the Client is a joint venture, limited liability company or a partnership, the signatories below warrant that said entity is properly and duly organized and existing under the laws of the state of its formation and pursuant to the organizational and operating document of the entity, and the laws of the state of its formation, said signatory has authority act on behalf of and commit the entity to this Agreement.

COUNTERPARTS

18. This Agreement may be signed in counterparts by each of the Parties hereto and, taken together, the signed counterparts shall constitute a single document.

THIRD PARTY BENEFICIARIES / CONTROLLING LAW

19. There are no intended third party beneficiaries of this Agreement. The services, data & opinions expressed by AllWest are for the sole use of the client, are for a particular project and may not be relied upon by anyone other than the client. This Agreement shall be controlled by the laws of the State of California and any action by either party to enforce this Agreement shall be brought in San Francisco County, California.

TIME BAR TO LEGAL ACTION

20. Any legal actions by either party against the other related to this Agreement, shall be barred after one year has passed from the time the claimant knew or should have known of its claim, and under no circumstances shall be initiated after two years have passed from the date by which AllWest completes its services.