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March 10, 2016

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 Fourth Quarter 2016 Soil Vapor Monitoring & Indoor Air Quality Report**
Former McGrath Steel, 6655 Hollis Street, Emeryville, California 94608
ACEH Fuel Leak Case No. RO0000063, GeoTracker Global ID No. T0600102099

Dear Mr. Detterman:

As requested in your letter of September 30, 2016, we submit this transmittal letter and accompanying *Fourth Quarter 2016 Soil Vapor Monitoring & Indoor Air Quality Report* for the above-referenced subject site.

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

Sincerely,

MCG Investments LLC,
A California Limited Liability Company

Walter F. Merkle
Authorized Agent

AllWest Environmental

FOURTH QUARTER 2016 SOIL VAPOR MONITORING & INDOOR AIR QUALITY REPORT

Former McGrath Steel, 6655 Hollis St. & 1471 67th St. Emeryville, CA 94608

Alameda County Fuel Leak Case #RO0000063
GeoTracker Facility Global ID #T0600102099

PREPARED FOR:

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March 10, 2017

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I. EXECUTIVE SUMMARY

AllWest Environmental, Inc. (AllWest) conducted a soil vapor and indoor/outdoor air quality monitoring event on December 21 and 22, 2016 at the subject site referenced above (Figures 1 and 2).

This work was performed in response to Alameda County Health Care Services Agency (ACHCS) *Data Gap Work Plan and Interim Remedial Actions* letter dated September 30, 2016. AllWest submitted a *Data Gap Investigation Report* on August 3, 2016, documenting the results of a subsurface investigation, and soil vapor and indoor/outdoor air sampling event. This work was completed after approval and with oversight of the ACHCS.

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.

Five semi-permanent sub-slab Vapor Pin™ type probes SVP-12 through SVP-16 were sampled on December 21 and 22, 2016. To determine potential vapor intrusion impact to future occupants of the subject property buildings, indoor air quality (IAQ) samples IAQ-6 through IAQ-12 were collected inside the 6655 Hollis Street office building and 1471 67th Street warehouse building. Two outdoor ambient air (OAA) control samples (OAA-2 and OAA-3) were also collected; OAA-2 was located on the second floor balcony of the office building; OAA-3 was located along Hollis Street, in front of the warehouse. (Figure 3). The IAQ and OAA samples were collected over an 8-hour period on December 21, 2016.

Soil vapor, IAQ and OAA samples were analyzed for constituents of concern (COCs) including total petroleum hydrocarbons as gasoline (TPH-g) and volatile organic compounds (VOCs). Soil vapor samples were additionally analyzed for the leak detection gas helium, and the gases oxygen, methane and carbon dioxide to evaluate biodegradation activity.

Soil Vapor/Sub-Slab Sampling Results:

VOCs detected in soil vapor samples during this event included low concentrations of total xylenes, acetone, e-ethyltoluene, chloroform, chloromethane, methyl tertiary butyl ether (MTBE), tetracloroethene, (PCE), trichloroethene (TCE), 1,3,5-trimethylbenzene and 2-butanone. None of the COCs detected in any sub-slab (0.5 feet bgs) soil vapor samples exceeded applicable Environmental Screening Levels (ESLs).

Indoor Air Quality Sampling Results:

Total petroleum hydrocarbons as gasoline (TPH-g) were not detected in any of the IAQ and OAA samples, above the laboratory detection limit. Benzene was detected in each of the IAQ samples and the OAA control samples at concentrations ranging from 0.80 µg/m^3 in the sample from OAA-2 sample, and 1.6 µg/m^3

in IAQ-7. All detected benzene concentrations exceeded the applicable commercial/industrial indoor air ESL of 0.42 micrograms per meter cubed (µg/m^3; based on direct exposure human health risk.

Carbon tetrachloride was detected in all IAQ and OAA samples at concentrations exceeding the applicable commercial/industrial indoor air ESL of 0.29 µg/m^3 (based on direct exposure human health risk), with a maximum concentration of 0.57 µg/m^3 in sample IAQ-12. Naphthalene was detected in all IAQ and OAA samples collected; however, concentrations in IAQ-7 and IAQ-11 were the only IAQ and OAA sample locations with detectable concentrations above the commercial/industrial ESL of 0.36 µg/m^3, the greatest naphthalene concentration was detected in IAQ-11 at 0.69 µg/m^3. Other COCs were not detected at concentrations exceeding their applicable ESLs.

Concentrations of all detected COCs were similar (within an order of magnitude) between the IAQ samples and the OAA control samples, implying an atmospheric source of IAQ contaminants rather than soil vapor intrusion. None of the COCs detected above applicable ESLs in IAQ samples were detected in sub-slab soil vapor samples, further indicating an atmospheric source. COC concentrations detected in IAQ samples and the OAA control samples during the December 2016 indoor air sampling event were similar (within an order of magnitude) to those detected during prior sampling events.

Conclusion:

The December 2016 monitoring data suggest petroleum hydrocarbon and VOC concentrations at 5 feet bgs or deeper in soil, groundwater and soil vapor samples beneath and adjacent to the subject site warehouse building have attenuated significantly at shallower depths (0.5 feet bgs) and do not present a significant vapor intrusion risk to future building occupants. AllWest concludes that petroleum hydrocarbon and VOC concentrations detected in indoor air quality samples originate from atmospheric sources, not from soil vapor intrusion.

Recommendations:

AllWest recommends discontinuation of soil vapor and indoor air monitoring. We recommend the site be evaluated for case closure according to the State Water Resources Control Board (SWRCB) - Threat Underground Storage Tank Case Closure Policy (LTUSTCCP) dated August 23, 2012 (SWRCB, 2012)

II. PROJECT BACKGROUND

A. Site Location and Description

The subject property is located at the southwest corner of the intersection of Hollis and 67th Streets in a commercial and industrial district of the City of Emeryville, Alameda County, California. A site vicinity map is included as Figure 1.

The subject property consists of two parcels (Assessor's Parcel Numbers 049-1511-01 and 049-1511-014). Parcel 01, on the southwest corner of Hollis and 67th Streets at the 6655 Hollis Street address, is developed with an approximately 4,100 square foot two-story commercial office building constructed in 1947, and a smaller metal tool shed building. Parcel 14, to the west of Parcel 1 at the 1471 67th Street address, is developed with an approximately 15,246 square foot light industrial warehouse building constructed circa 1946 (Stellar, 2011).

The subject property was last occupied by CMC Rebar and is currently vacant. Two USTs formerly present under the sidewalk in front of the warehouse at 1471 67th Street were removed in 1996. A site plan with former UST locations and historical and current boring and monitoring well locations is included as Figure 2.

B. Site Geology and Hydrogeology

The subject site is located on a generally level parcel at an elevation of approximately 20 feet above mean seal level (msl) with a slight slope to the west towards San Francisco Bay approximately ½ mile to the west. The subject site is located within the East Bay Plain Sub-Basin of the Santa Clara Valley Groundwater Basin, an alluvial plain located along the east shore of San Francisco Bay. Although groundwater in the subject site vicinity is not currently used for drinking water purposes, the East Bay Plain Sub-Basin, including the subject site vicinity, has been designated as a zone where groundwater is a potential drinking water resource by the SFRWQCB *Water Quality Control Plan (Basin Plan)* dated June 29, 2013 (SFRWQCB, June 2013).

According to an e-mail communication on February 6, 2013 with Maurice Kaufman, director of the City of Emeryville Public Works Department, use of groundwater for drinking water purposes within the City of Emeryville is prohibited by a City ordinance due to widespread regional contamination. No plans exist for future beneficial use of groundwater within the City of Emeryville. Therefore, AllWest does not regard groundwater in the subject site vicinity as a potential drinking water resource.

The lithology encountered in most borings during subsurface investigations performed by AllWest in 2013 consisted of interbedded silts, clays, and sands. Occasional lenses of silty gravel and gravelly silt were encountered to depths of 12 feet below ground surface (bgs) in borings B16, B17, B19 and B22. Gravelly clay was encountered between 13 and 18 feet bgs in B19. Silty sand was encountered between approximately 15 and 21 feet bgs in borings AMW-1, AMW-2 and AMW-3. Fine sand was encountered to a depth of approximately 9 feet bgs in boring B23 (AllWest, 2013e). Boring and well locations are shown in Figure 2.

Groundwater was encountered during the 2013 investigations between approximately 9 to 30 feet bgs, and rose to static levels of approximately 9 to 11 feet bgs. The direction of groundwater flow was to the southeast at a gradient of 0.0167 feet per foot. During groundwater monitoring events conducted by AllWest from July 2012 to February 2015, depths to groundwater in monitoring wells at the subject site have ranged from 7.26 to 11.52 feet below top-of-casing (TOC). Groundwater flow direction has been predominantly to the southwest, but has varied to the west-northwest at gradients ranging from 0.0107 to 0.02 feet per foot.

C. Site Background

From the early 1900s until circa 1946, the subject property Parcel 01 was developed as a residence, and Parcel 14 was undeveloped. Between circa 1946 and 1950, the subject property was developed with the current office and light industrial warehouse buildings. The McGrath Steel Company operated a steel warehouse and/or the Pacific Rolling Door Company from circa 1950 until about 2007. The McGrath Steel business was sold and relocated in 2007 (Stellar, 2011). CMC Rebar subsequently leased the subject property until circa 2012-2013. The subject property has since been unoccupied.

Two (2) 2,000-gallon single-wall steel underground storage tanks (USTs) were formerly located beneath the 67th Street sidewalk in front of the warehouse building. The diesel and gasoline USTs were installed in 1979 and 1981, respectively. Fuel dispenser pumps were located adjacent to the warehouse building in the driveway between the warehouse and office buildings. The USTs were removed in July 1996 [Subsurface Environmental Corp. (SEC), *Tank Removal Closure Report*, September 16, 1996 (SEC, 1996)]. The fuel dispenser pumps were removed at an indeterminate date following the UST removals.

D. Previous Investigations

Several subsurface investigations, groundwater monitoring events and remedial actions have been performed since removal of the USTs in 1996. Summaries of previous investigations, remedial actions and monitoring activities have been included in our *Additional Site Characterization and Interim Remedial Action Workplan* (AllWest, 2011), *Additional Site Characterization Workplan Addendum* (AllWest, 2012a), *Subsurface Investigation* (AllWest, 2013b), *Additional Site*

Characterization and Monitoring Well Installation Report (AllWest, 2013e), *Indoor Air Quality Monitoring Report (*AllWest, 2014e)*,* and *First Semiannual 2015 Groundwater Monitoring Report* (AllWest, 2015). Historical soil boring and groundwater monitoring well locations are shown in Figure 2.

AllWest conducted quarterly groundwater monitoring of the existing monitoring well MW-3 and new monitoring wells AMW-1, AMW-2 and AMW-3 from August 2012 to June 2014, at which time monitoring frequency was reduced to semiannual per the ACHCS letter dated September 15, 2014. AllWest subsequently conducted a semiannual groundwater monitoring event in February 2015. Interim removal of free product in well MW-3 by bailing and skimming was conducted by AllWest commencing in July 2012. Free product thickness measured in MW-3 has declined from 2.65 feet in July 2012 to none measured since December 2013, except for 0.02-feet during a single event in July 2016. A passive hydrocarbon skimming device was installed in well MW-3 in December 2013 and was removed in February 2015, reinstalled in July 2016 and again removed in December 2016. Free product has not been observed in any of the other site monitoring wells (AllWest, 2015).

AllWest conducted indoor air quality (IAQ) monitoring in June, 2014 at the subject property. Five IAQ samples were collected inside the warehouse building at 1471 67th Street. One outdoor ambient air (OAA) control sample (OAA-1) was collected on the exterior second floor balcony at the 6655 Hollis Street office building. Benzene concentrations detected in four of the five collected IAQ samples exceeded the RWQCB indoor air commercial ESL for benzene. Carbon tetrachloride exceeded its applicable ESL in all five indoor air samples as well as the outdoor ambient air sample OAA-1. Naphthalene exceeded its applicable ESL in one indoor air sample. None of the other detected VOC concentrations exceeded their respective applicable RWQCB commercial indoor air ESLs. AllWest concluded that benzene, carbon tetrachloride and several other detected VOCs were most likely atmospheric contaminants and did not originate from the UST source area (AllWest, 2014e).

III. PURPOSE AND SCOPE OF WORK

The purpose of this proposed monitoring event was to obtain additional data to address concerns raised by the Alameda County Health Care Services Agency (ACHCS) in their letter dated September 30, 2016.

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

1) Collected five soil vapor samples from the semi-permanent sub-slab vapor probes SVP-12 through SVP-16, and one ambient leak detection gas sample from the SVP-6 location, using Summa canisters in general accordance with the DTSC *Advisory – Active Soil Gas Investigations*, July, 2015;

2) Collected seven indoor air quality (IAQ) samples IAQ-6 through IAQ-12 from within the 6655 Hollis Street office building and 1471 67th Street warehouse building, and two outdoor ambient air (OAA) control samples (OAA-2 and OAA-3) from the exterior second floor balcony at the 6655 Hollis Street office building and the exterior of warehouse along Hollis Street. The IAQ and OAA samples were collected over an 8-hour period per procedures outlined in the 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;

3) Maintained soil vapor, ambient leak detect gas, indoor air quality and outdoor ambient air control samples under chain-of-custody and transported the samples to a Department of Health Services (DHS) certified analytical laboratory (Eurofins/Calscience of Garden Grove, California) for chemical analyses. Analyzed five soil vapor samples for TPH-g by EPA Method TO-3(M), BTEX, naphthalene and MTBE by EPA Method TO-15(M), the leak detection gas helium by method ASTM D1946, and the gases oxygen, methane and carbon dioxide by method ASTM D1946. Analyzed one ambient leak detection gas sample for helium by method ASTM D1946. Analyzed IAQ and OAA samples for

total petroleum hydrocarbons as gasoline (TPH-g) by EPA Method TO-3 (M) and full-scan volatile organic compounds (VOCs) by EPA Method TO-15 SIM; and

4) Prepared a written Fourth Quarter 2016 Soil Vapor Monitoring & Indoor Air Quality Report describing the field activities, summarizing the laboratory data, presenting investigation findings, and providing conclusions and recommendations.

IV. MONITORING ACTIVITIES

A. Soil Vapor Sampling

AllWest collected soil vapor samples from five semi-permanent sub-slab soil vapor probes SVP-12 through SVP-16 on December 21 and 22, 2016. Soil vapor sampling was performed in general accordance with the DTSC *Advisory – Active Soil Gas Investigations*, July 2015. Soil vapor sampling procedures and schematic diagrams are included in Appendix A.

AllWest collected soil vapor samples from each probe in laboratory prepared 1-liter or 6-liter capacity SUMMA canisters. Prior to vapor purging and sample collection, a vacuum leak shut-in test of the flow-controller/gauge manifold assembly was performed for a minimum of 2 minutes, with a maximum allowable vacuum drop of 0.2 inches of mercury (in Hg). If maximum allowable vacuum drop was exceeded, the manifold fittings were tightened or manifold replaced and the shut-in test redone. Vacuum gauges were sensitive enough to register a minimum of 0.2 in Hg.

The approximate sampling system volume of a Vapor Pin™ system is 70ml, assuming a 4.5 ml/feet for 0.25-inch Outside Diameter (OD)/0.17-inch Inside Diameter (ID) sample tubing, and a 0.17-inch ID Vapor Pin probe, and 155 ml/feet for a 1-inch diameter borehole within the concrete floor slab with a 3-inch deep void space below the Vapor Pin probe.

Prior to sample collection, a maximum of three sample system volumes of soil vapor (per DTSC, 2015) were purged at a flow rate of approximately 150-200 milliliters per minute (ml/min) from each soil vapor probe, using a dedicated 6-liter capacity SUMMA purge canister. Three sample system volumes equaled approximately 210 ml from each temporary sub-slab soil vapor probe.

While purging and sampling, a leak detection test was 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, 2015). A three-way valve was fitted in the sample tubing train between the probe and SUMMA canister manifold system, with the valve handle passing through the shroud wall where it can be turned from the outside without leakage of helium. The Teflon™ inflow sample tubing was connected from the vapor probe to the three-way valve. The valve controlled two Teflon™ outflow tubes, one leading to the sample Summa canister manifold, and one leading to a purge monitoring port on the outside of the shroud.

The helium concentration within the shroud was monitored with a helium gas detection meter with a minimum precision of 0.1% to keep the concentration at approximately ±10% of the target concentration of approximately 12% (or at least three orders of magnitude above the minimum meter detection limit). The helium tracer gas was infused into the shroud at the required concentration at least 5 minutes prior to sample collection, as recommended in the DTSC *Advisory – Active Soil Gas Investigations* (DTSC, 2015).

If necessary, additional helium was infused into the shroud to maintain the desired concentration, which was monitored and recorded in the field log sample collection remarks column until sampling is completed. To verify helium detection meter accuracy, one ambient air sample was collected inside the leak detection shroud during the sampling of probe SVP-12 to measure helium concentrations inside the shroud. A schematic diagram of the soil vapor sampling system and leak detection shroud is included in Appendix A.

Following purging of three sample system volumes, the soil vapor purge monitoring port was monitored for helium leak tracer gas concentrations using a helium gas detection meter to determine integrity of the vapor probe surface seal per DTSC *Advisory – Active Soil Gas Investigations, Appendix C* (DTSC, 2015). Soil vapor helium concentrations following purging were recorded in the sampling field logs.

Flow rates of approximately 150-200 ml/min were used to fill the sample canisters. The canisters were filled to approximate 80% of capacity (approximately 5 inches of mercury vacuum remaining). All pertinent field observations, pressure, times and readings were recorded. After filling and closing the sample valve, all SUMMA canisters were 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, Eurofins/Calscience, Inc., in Garden Grove, California. The analytical laboratory recorded the final SUMMA canister vacuum upon receipt. Soil vapor sampling procedures are included in Appendix A and copies of the soil vapor sampling field logs are included in Appendix C.

B. Indoor Air Quality Sampling

Prior to indoor air quality sampling activities, AllWest performed a survey of the building layout and conditions to determine optimum IAQ sample locations. Building survey forms are included in Appendix C.

To evaluate the potential indoor air quality impact of intrusion of petroleum hydrocarbons and VOCs in the vapor phase from soil beneath the concrete building floor slabs, seven IAQ samples (IAQ-6 through IAQ-12) were collected within the subject site 1471 67th Street warehouse building and 6655 Hollis Street office building, and two OAA control samples (OAA-2 and OAA-3) collected outside the office building and warehouse, respectively.

IAQ-6 was collected within the office building's main room in the center of the building, and IAQ-7 within the office building women's restroom in the southwest corner of the building. IAQ-8, IAQ-9, IAQ-11 and IAQ-12 were collected within a large open area in the north- and west-central portion of the warehouse building. IAQ-10 was collected within the warehouse building restroom in the northwest corner of the building. Indoor air quality sample locations are shown on Figure 3.

Although the DTSC *Vapor Intrusion Guidance* (DTSC, 2011) recommends collecting OAA samples upwind from the subject site, no secure sample location exists along 67th Street in the predominantly westerly upwind direction from the subject site. Therefore, AllWest located the outdoor ambient air sample OAA-2 on the second floor balcony of the adjacent office building at 6655 Hollis Street. The OAA-2 Summa canister was secured to the balcony railing by a locked chain. OAA-3 was secured to a telephone pole, near the northwest corner of the warehouse building, along Hollis Street. Outdoor ambient air control sample locations are shown on Figure 3.

AllWest collected air quality samples in laboratory prepared 6-liter capacity SUMMA canisters. Flow rates of approximately 12.5 milliliters per minute (ml/min) are used to fill the canisters over an 8 hour period. The canisters are filled to approximately 80% of capacity. Pertinent field observations, pressure, times and readings are recorded. Indoor air quality field sampling logs are included in Appendix C. Sampling was conducted in general accordance with the DTSC *Final, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)* (DTSC, 2011).

C. Sample Preservation, Storage and Handling

To prevent the loss of constituents of interest, all SUMMA canisters were removed from the manifold, labeled with sampling information, including initial and final vacuum pressures, and placed in a dark container for transport to the analytical laboratory

D. Chain-Of-Custody Program

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, SUMMA canister ID numbers, initial and final SUMMA canister vacuums, parameters requested for analysis, signatures of persons and inclusive dates involved in the chain of possession. Upon delivery to the laboratory the document will also include the name of the person receiving the samples, and date and time samples were received. Chain of custody documents are included in Appendix D.

V. ASSESSMENT FINDINGS

A. Laboratory Analyses and Sampling Data

Soil Vapor

All soil vapor sample analysis was performed by a State of California Environmental Laboratory Accreditation Program (ELAP) certified independent analytical laboratory, Eurofins/Calscience, Inc. (ECI) of Garden Grove, California. Five soil vapor samples were analyzed for TPH-g by EPA Method TO-3(M), BTEX, naphthalene and MTBE by EPA Method TO-15(M), and the leak detection gas helium and the gases oxygen, methane and carbon dioxide by method ASTM D1946. One ambient leak detection gas sample will be analyzed for helium by ASTM D1946.

Total xylenes, MTBE, acetone, 4-ethyltoluene, chloroform, chloromethane, tetrachloroethene (PCE), trichloroethene (TCE), 1,3,5-trimethylbenzene and 2-Butanone were detected in soil vapor samples at the following maximum concentrations in micrograms per cubic meter (µg/m^3):

Constituent of Concern	Maximum Concentration (µg/m^3)	Vapor Probe ID #	Depth (Feet bgs)
Total Xylenes	6.1	SVP-15	0.5
Acetone	12	SVP-12	0.5
4-Ethyltoluene	44	SVP-15	0.5
Chloroform	8.3	SVP-16	0.5
Chloromethane	1.4	SVP-16	0.5
Methyl Tertiary Butyl Ether (MTBE)	7.3	SVP-15	0.5
Tetrachloroethene (PCE)	40	SVP-13	0.5
Trichloroethene (TCE)	22	SVP-13	0.5
1,3,5-Trimethylbenzene	81	SVP-15	0.5
2-Butanone	5.2	SVP-15	0.5
1,2,4-Trimethylbenzene	200	SVP-15	0.5

No other VOCs were detected in any soil vapor sample analyzed.

The gases helium, oxygen, methane and carbon dioxide were detected in soil vapor and ambient air samples at the following maximum (or minimum) concentrations in percent by volume (%v/v):

Constituent of Concern	Maximum Concentration (%v/v)	Vapor Probe ID #	Depth (Feet bgs)
Helium (ambient air in shroud)	7.14	SVP-12	surface
Helium (soil vapor)	0.0622	SVP14	0.5
Oxygen (maximum)	19.4	SVP-15	0.5
Oxygen (minimum)	10.40	SVP-16	0.5

Constituent of Concern	Maximum Concentration (%v/v)	Vapor Probe ID #	Depth (Feet bgs)
Methane	Non Detect	All	0.5
Carbon Dioxide	9.94	SVP-16	0.5

Soil vapor analytical data is summarized in Table 1. Laboratory analytical reports are included in Appendix D.

Indoor Air

All indoor air sample analysis was performed by a State of California ELAP certified independent analytical laboratory, Eurofins/Calscience, Inc. (ECI) of Garden Grove, California. Seven IAQ samples and two OAA control samples were analyzed for TPH-g by EPA Method TO-3(M) and VOCs by EPA Method TO-15 SIM.

Benzene, ethylbenzene, toluene, total xylenes, naphthalene, 1,2-dichloroethane (1,2-DCA), 4-ethyltoluene, tetrachloroethene (PCE), trichloroethene (TCE), trichlorofluoromethane, 1,1,2-trichlor-1,2,2-trifluoroethane, 1,1-difluroethane, carbon tetrachloride, chloromethane, dichlorodifluromethane, methylene chloride, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, chloroform, and chlorobenzene were detected in IAQ and/or OAA samples at the following maximum concentrations in micrograms per cubic meter ($\mu g/m^3$):

Constituent of Concern	Maximum Concentration ($\mu g/m^3$)	Sample ID #	Location
Benzene	1.6	IAQ-7	Office woman's restroom
Ethylbenzene	0.71	IAQ-6, IAQ-7	Multiple locations in Office building
Toluene	3.7	IAQ-7	Office woman's restroom
Total Xylenes	3.31	IAQ-7	Office woman's restroom
Carbon Tetrachloride	0.57	OAA-2	Office balcony
Chloroform	0.23	IAQ-7	Office woman's restroom
Chloromethane	1.1	IAQ-6, IAQ-8, IAQ-9, OAA-2, OAA-3	Multiple locations
Dichlorodifluoromethane	3.9	IAQ-7	Office woman's restroom
Methylene Chloride	1.0	IAQ-6	Office woman's restroom
Naphthalene	0.69	IAQ-11	North-northeast warehouse
Trichloroethene (TCE)	0.37	IAQ-7	Office woman's restroom
Trichlorofluoromethane	1.6	IAQ-6, IAQ-7	Multiple locations in Office building
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.57	OAA-2	Office balcony
1,2,4-Trimethylbenzene	1.1	IAQ-6, IAQ-7	Multiple locations in Office building
1,3,5-Trimethylbenzene	0.42	IAQ-7	Office woman's restroom
1,1-Difluroethane	3.9	IAQ-7	Office woman's restroom
1,2-Dichloroethane	0.47	IAQ-8	West-central warehouse
4-Ethyltoluene	0.45	IAQ-7	Office woman's restroom
Tetrachloroethene (PCE)	0.33	IAQ-12	Southwest warehouse

No other VOCs were detected in any soil vapor sample analyzed. Indoor air analytical data is summarized in Table 2. Laboratory analytical reports are included in Appendix D.

B. Laboratory Quality Assurance and Quality Control

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 the MAI and ECI are considered to be of good quality. Laboratory QA/QC reports and chain-of-custody records are included in Appendix D.

VI. DISCUSSION

A. Environmental Screening Levels

To assess if the identified COCs in soil pose a risk to human health and the environment, AllWest compared analytical data generated during this investigation to Environmental Screening Levels (ESLs) for commercial/industrial land use. The ESLs are compiled by the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) in *User's Guide: Derivation and Application of Environmental Screening Levels (ESLs)*, Interim Final – February 2016 (Rev. 3, May 23, 2016). ESLs used in this investigation were established using the site-specific Tier 2 Interactive Tool, *Table T2-1: Tier 2 ESL Input and Output* (RWQCB, 2016).

Under most circumstances, the presence of a chemical at a concentration below the corresponding ESL is presumed to not pose a significant risk to human health or the environment. The ESLs for the subject suite were established with the following assumptions: commercial/industrial property use, a 'sand scenario' soil type, shallow groundwater (<10 feet bgs) which is not a potential drinking water resource, and shallow AND deep direct exposure, soil depths (≤10 ft bgs and > 10 feet bgs). A City of Emeryville ordinance prohibits use of groundwater for drinking water purposes due to widespread regional contamination, and no plans exist for future beneficial use.

Soil Vapor

No COCs were detected in sub-slab soil vapor samples at concentrations exceeding their respective applicable commercial/industrial land use soil vapor ESLs, (where established). Applicable soil vapor ESLs for COCs detected at the subject site are summarized in Table 1.

Indoor Air

Benzene, 1,2-Dichloroethane (DCA), carbon tetrachloride, and naphthalene were detected in indoor air samples collected during this sampling event at concentrations exceeding their applicable commercial/industrial land use soil vapor ESLs, as summarized below:

Constituent of Concern	Maximum Concentration (µg/m^3)	Commercial/Industrial ESL (µg/m^3)	Location
TPH-g	ND (<930)	100	All locations
Benzene	1.6	0.42	Office woman's restroom (IAQ-7)
1,2-Dichloroethane	0.47	0.47	West-central warehouse (IAQ-8)
Carbon Tetrachloride	0.57	0.29	Office balcony (OAA-2)
Naphthalene	0.69	0.36	North-northeast warehouse (IAQ-11)

TPH-g is included in the table because the lab detection limit exceeds the ESL. None of the other COCs detected in the indoor air samples exceeded their applicable ESLs. Applicable indoor air ESLs for COCs detected at the subject site are summarized in Table 2. None of the COCs

detected in indoor air samples at concentrations exceeding applicable ESLs were detected in sub-slab soil vapor samples during this event or the previous May 13, 2016 event.

B. Vertical Contaminant Distribution and Biodegradation Attenuation Zone

Concentrations of oxygen (>4%) and carbon dioxide detected in the subject slab vapor probe samples during the December and May 2016 sampling events, and from the 7 feet bgs temporary probes during the February 2016 sampling events, indicative of the presence, indicate the presence of a minimum 5 foot biodegradation attenuation zone below building foundations per the SWRCB (SWRCB) Low-Threat Underground Storage Tank Case Closure Policy (LTUSTCCP), dated August 17, 2012. (SWRCB, 2012).

The vertical attenuation of COC concentrations by multiple orders of magnitude from the 7 feet bgs soil vapor probes to below applicable ESLs in the sub-slab (0.5 feet bgs) probes further indicate the presence of minimum 5 foot biodegradation attenuation zone per the JLTUSTCCP (SWRCB, 2012).

VII. CONCLUSIONS

AllWest concludes petroleum hydrocarbon and VOC concentrations present in the subsurface do not present a significant vapor intrusion risk to future occupants in either the warehouse or buildings office. We also conclude petroleum hydrocarbon and VOC concentrations detected in indoor air quality samples originate from atmospheric sources, not from soil vapor intrusion, because the indoor air concentrations exceeded the sub-slab soil vapor concentrations. AllWest further concludes COCs detected in samples previously collected from the 7 feet bgs temporary soil vapor samples have attenuated via bio-degradation during vertical migration to the sub-slab zone. AllWest recommends soil vapor and indoor air monitoring be discontinued and the subject site be evaluated for case closure.

VIII. LIMITATIONS

The work described in this report was performed in accordance with the Environmental Consulting Agreement between MCG Investments, LLC (Client) and AllWest Environmental, Inc, dated December 2016. AllWest has prepared this report for the exclusive use of the 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.

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TABLES

TABLE 1
Summary of Soil Vapor Analytical Data
Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 15179.23/16076.23

Sample Number	Date	Sample Depth feet bgs	TPH-g µg/m^3	Benzene µg/m^3	Ethyl-benzene µg/m^3	Isopropanol µg/m^3	4-Ethyltoluene µg/m^3	Toluene µg/m^3	Xylenes (Total)* µg/m^3	Napthalene µg/m^3	1,2,4-Trimethyl-benzene µg/m^3	1,3,5-Trimethyl-benzene µg/m^3	Tetrachloro-ethane (PCE) µg/m^3	MTBE µg/m^3	Other VOCs µg/m^3	Helium** (Leak detect gas) (% v/v)	Methane (% v/v)	Carbon Dioxide (% v/v)	Oxygen (% v/v)
SVP-1	**2/5/2016**	**7**	**330,000,000**	**500,000**	**410,000**	650,000	71,000	**1,400,000**	**1,640,000**	ND (<260,000)	180,000	62,000	ND (<34,000)	ND (<72,000)	ND (others, varies)	0.130	8.80	13.8	2.72
SVP-2	**2/5/2016**	**7**	**13,000,000**	**210,000**	**61,000**	ND (<6,100)	8,700	330,000	362,000	ND (<13,000)	21,000	9,100	ND (<1,700)	ND (<3,600)	ND (others, varies)	0.568	ND (<0.500)	ND (<0.500)	9.27
SVP-3	**2/6/2016**	**7**	**910,000,000**	**1,100,000**	**720,000**	1,000,000	160,000	**1,700,000**	**3,280,000**	ND (<260,000)	390,000	170,000	ND (<34,000)	ND (<72,000)	ND (others, varies)	0.0113	4.63	14.7	4.11
SVP-4	**2/6/2016 - 2/8/2016**	**7**	**10,000,000**	**45,000**	**90,000**	ND (<6,100)	29,000	15,000	232,000	ND (<13,000)	83,000	27,000	ND (<1,700)	12,000	ND (others, varies)	0.417	1.83	ND (<0.500)	8.30
SVP-5	**2/8/2016**	**7**	**84,000,000**	**1,600,000**	**810,000**	160,000	120,000	**1,300,000**	**3,570,000**	ND (<130,000)	320,000	130,000	ND (<17,000)	**990,000**	ND (others, varies)	0.0706	0.918	ND (<0.500)	11.3
SVP-6	**2/8/2016**	**7**	**13,000,000**	**130,000**	**66,000**	ND (<7,700)	14,000	220,000	301,000	ND (<16,000)	38,000	13,000	ND (<2,100)	6,900	1,300 (1,1-Dichloroethane) **2,500 (1,2-Dichloroethane)** ND (others, varies)	0.0106	1.52	ND (<0.500)	7.33
SVP-6 Ambient	**2/8/2016**	**7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.95	NA	NA	NA
SVP-7	**2/5/2016**	**0.5**	**220,000**	20	97	ND (<17)	85	46	490	ND (<36)	290	77	41	ND (<10)	8.1 (2-Butanone) 64 (Acetone) ND (others, varies)	0.319	ND (<0.500)	3.34	18.2
SVP-12	**5/12/2016**	**0.5**	ND (<7,000)	ND (<1.6)	ND (<2.2)	51	ND (<2.5)	3.2	ND (<2.2,<8.7)	ND (<26)	ND (<7.4)	ND (<2.5)	19	ND (<7.2)	22 (Acetone) 9.6 (Ethanol)	0.0920	<0.50	2.49	19.2
	12/22/2016	**0.5**	ND (<7,000)	ND (<3.0)	ND (<4.0)	ND (<23)	ND (<4.5)	ND (<3.5)	ND (<4.0/<16)	ND (<48)	ND (<14)	ND (<4.5)	9	ND (<13)	12 (Acetone) 5.2 (Trichloroethene)	ND (<0.0100)	ND (<0.500)	2.81	19.3
SVP-12 Ambient	**12/22/2016**	**0.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1400	NA	NA	NA
SVP-13	**5/13/2016**	**0.5**	ND (<7,000)	ND (<1.6)	ND (<2.2)	37	ND (<2.5)	2.2	ND (<2.2,<8.7)	ND (<26)	ND (<7.4)	ND (<2.5)	4.5	ND (<7.2)	26 (Acetone) 11 (Ethanol)	0.807	<0.50	7.88	15.4
	12/22/2016	**0.5**	ND (<7,000)	ND (<2.2)	ND (<3.0)	ND (<17)	ND (<3.4)	ND (<2.6)	ND (<3.0/<12)	ND (<37)	ND (<10)	ND (<3.4)	40	ND (<10)	22 (Trichloroethene)	0.0619	ND (<0.500)	7.96	15.2
SVP-14	**5/13/2016**	**0.5**	ND (<7,000)	12	11	ND (<12)	3.7	31	54.1	ND (<26)	8.9	ND (<2.5)	11	ND (<7.2)	8.9 (Acetone) 14 (Ethanol)	0.0301	<0.50	3.64	18.4
	12/21/2016	**0.5**	ND (<7,000)	ND (<2.0)	ND (<2.7)	ND (<15)	ND (<3.1)	ND (<2.4)	ND (<2.7/<11)	ND (<33)	ND (<9.3)	ND (<3.1)	31	ND (<9.1)	ND (others, varies)	0.0622	ND (<0.500)	2.77	18.7
SVP-15	**5/13/2016**	**0.5**	ND (<7,000)	ND (<1.6)	ND (<2.2)	16	ND (<2.5)	ND (<1.9)	ND (<2.2,<8.7)	ND (<26)	ND (<7.4)	ND (<2.5)	ND (<3.4)	ND (<7.2)	11 (Acetone) 24 (Ethanol)	0.0232	<0.50	2.53	17.0
	12/21/2016	**0.5**	ND (<7,000)	ND (<1.6)	ND (<2.2)	ND (<12)	44	ND (<1.9)	6.1	ND (<26)	200	81	5.2	ND (<7.3)	7.4 (Acetone) 5.2 (2-Butanone)	ND (<0.0100)	ND (<0.500)	2.84	19.4
SVP-16	**5/13/2016**	**0.5**	ND (<7,000)	ND (<1.6)	ND (<2.2)	ND (<12)	ND (<2.5)	5.6	ND (<2.2,<8.7)	ND (<26)	ND (<7.4)	ND (<2.5)	ND (<3.4)	ND (<7.2)	6.4 (Tert-Butyl Alcohol (TBA))	0.149	<0.50	12.40	7.54
	12/21/2016	**0.5**	ND (<7,000)	ND (<1.9)	ND (<2.6)	ND (<15)	ND (<2.6)	ND (<2.2)	ND (<2.6/<10)	ND (<31)	ND (<8.8)	ND (<2.9)	ND (<4.0)	ND (<8.6)	6.8 (Acetone) 8.3 (Chloroform) 1.4 (Chloromethane)	ND (<0.0100)	ND (<0.500)	9.94	10.40
SFRWQCB ESL	Commercial Soil Gas		**100,000 ON**	**420 VI**	**4,900 VI**	NE	NE	**1,300,000 VI**	**440,000 VI/ON**	**360 VI**	NE	NE	**2,100 VI**	**47,000 VI**	**31,000,000 (Acetone) ON** **7,700 (1,1-Dichloroethane) VI** **470 (1,2-Dichloroethane) VI** **3,000 (Trichloroethene)** ND (others, varies)	NE	NE	NE	NE
SWRCB LTUSTCCP	Commercial Soil Gas With 5 ft bgs Bioattenuation Zone (Oxygen ≥ 4%)		NE	**280,000**	**3,600,000**	NE	NE	NE	NE	**310,000**	NE	NE	NE	NE	NE (Acetone) NE (1,1-Dichloroethane) NE (1,2-Dichloroethane) NE (others, varies)	NE	NE	NE	**≥4.0**

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Former McGrath Steel
6655 Hollis Street
Emeryville, California
AllWest Project No. 15179.23/16076.23

Sample Number	Date	Sample Depth feet bgs	TPH-g µg/m^3	Benzene µg/m^3	Ethyl-benzene µg/m^3	Isopropanol µg/m^3	4-Ethyltoluene µg/m^3	Toluene µg/m^3	Xylenes (Total)* µg/m^3	Napthalene µg/m^3	1,2,4-Trimethyl-benzene µg/m^3	1,3,5-Trimethyl-benzene µg/m^3	Tetrachloro-ethane (PCE) µg/m^3	MTBE µg/m^3	Other VOCs µg/m^3	Helium** (Leak detect gas) (% v/v)	Methane (% v/v)	Carbon Dioxide (% v/v)	Oxygen (% v/v)
SWRCB LTUSTCCP	Commercial Soil Gas Without 5 ft bgs Bioattenuation Zone (Oxygen < 4%)		NE	**280**	**3,600**	NE	NE	NE	NE	**310**	NE	NE	NE	NE	NE (Acetone) NE (1,1-Dichloroethane) NE (1,2-Dichloroethane) NE (others, varies)	NE	NE	NE	**<4.0**

Notes:

VOCs = Volatile Organic Compounds by EPA Method TO-15, Eurofins/Calscience, Inc., Garden Grove, CA
Helium, methane, carbon dioxide and oxygen by analytical method ASTM D1946, Eurofins/Calscience, Inc., Garden Grove, CA
µg/m^3 = Micrograms per cubic meter = 0.001 micrograms per liter
% v/v = percent by volume
ND = Not detected at or below laboratory reporting limit
NE = Not Established
* = Quantified as o- and p/m-xylenes, detection limits listed respectively

ON = Taste and Odor Nuisance Screening Level
VI = Vapor Intrusion Human Health Risk Screening Level
GC = Gross Contamination Screening Level
AHG = Ecological Aquatic Habitat Screening Level
NA = Not Analyzed
Bold Font = Detected values exceed regulatory screening levels.
** = Leak detection gas or agent

ESL = San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) for sub-slab and soil gas vapor intrusion for commercial/industrial land use were established using the Tier 2 *Table SG-1 - Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels*, and *Table SG-2 - Subslab/Soil Gas Vapor Intrusion: Odor Nuisance Levels, User's Guide: Derivation and Application of Environmental Screening Levels (ESLs)*, Interim Final, February 22, 2016, Revision 3 (May 23, 2016).

SWRCB LTUSTCCP = California State Water Resources Control Board (SWRCB) *Low Threat Underground Storage Tank Case Closure Policy* (LTUSTCCP) criteria for soil gas, *Appendix 4, Scenario 4 - Direct Measurement of Soil Gas Concentrations, Soil Gas Sampling - with Bioattenuation Zone and No Bioattenuation Zone*, August 24, 2012.

TABLE 2
SUMMARY OF INDOOR AIR QUALITY SAMPLE ANALYTICAL DATA
FORMER McGRATH STEEL
6655 HOLLIS STREET AND 1471 67th STREET
EMERYVILLE, CALIFORNIA
AllWest Project No. 16076.23

Sample ID	Sample Date	Sample Duration	Location	TPH-g (µg/m^3)	1,1,2-Trichloro-1,2,2-Trifluoro-ethane (µg/m^3)	1,1-Difluro-ethane (µg/m^3)	1,2,4-Trimethyl-benzene (µg/m^3)	1,2-Dichloro-ethane (µg/m^3)	1,3,5-Trimethyl-benzene (µg/m^3)	4-Ethyl-toluene (µg/m^3)	Benzene (µg/m^3)	Carbon tetrachloride (µg/m^3)	Chloro-methane (µg/m^3)	Dichlorodifluro-methane (µg/m^3)	Ethyl-benzene (µg/m^3)	Methylene Chloride (µg/m^3)	Naphthalene (µg/m^3)	o-Xylene (µg/m^3)	p/m-Xylene (µg/m3)	Toluene (µg/m3)	Trichloro-ethene (µg/m3)	Trichloro-fluoro-methane (µg/m3)	Other VOCs (µg/m^3)
IAQ-1	6/25/2014-6/26/2014	24 hours	Restroom	ND (<930)	0.53	0.11	0.53	0.15	0.13	0.20	**0.79**	**0.50**	1.0	2.2	0.31	0.22	**0.50**	0.38	1.4	1.9	ND (<0.13)	1.3	ND, reporting limits vary
IAQ-2	6/25/2014-6/26/2014	24 hours	Office	ND (<930)	0.54	0.099	0.34	ND (<0.10)	ND (<0.12)	0.17	**0.56**	**0.55**	1.1	2.3	0.28	0.36	0.15	0.24	0.80	1.2	0.48	1.3	ND, reporting limits vary
IAQ-3	6/25/2014-6/26/2014	24 hours	North wall	ND (<930)	0.56	0.12	0.15	ND (<0.10)	ND (<0.12)	ND (<0.12)	0.39	**0.55**	1.1	2.3	0.14	0.29	0.080	0.19	0.45	0.53	ND (<0.13)	1.3	ND, reporting limits vary
IAQ-4	6/25/2014-6/26/2014	24 hours	Storage area	ND (<930)	0.52	0.15	0.28	ND (<0.10)	0.15	0.20	**0.54**	**0.53**	0.99	2.2	0.14	0.26	0.076	0.19	0.48	0.59	ND (<0.13)	1.2	ND, reporting limits vary
IAQ-5	6/25/2014-6/26/2014	24 hours	South central floor area	ND (<930)	0.57	0.14	0.22	ND (<0.10)	ND (<0.12)	ND (<0.12)	**0.96**	**0.54**	1.3	2.5	0.26	0.26	0.079	0.18	0.49	0.52	ND (<0.13)	1.3	ND, reporting limits vary
OAA-1	6/25/2014-6/26/2014	24 hours	2nd floor balcony of adjacent building	ND (<930)	0.54	0.19	0.15	ND (<0.10)	ND (<0.12)	ND (<0.12)	0.31	**0.51**	1.0	2.3	0.16	0.24	0.13	0.20	0.50	0.61	ND (<0.13)	1.3	ND, reporting limits vary
IAQ-6	5/13/2016	8 hours	1st floor central office counter	**1,000**	0.51	ND (<0.10)	0.44	ND (<0.10)	0.13	ND (<0.25)	0.41	**0.42**	0.94	1.4	0.21	3.1	0.17	0.36	0.80	1.1	ND (<0.13)	1.2	ND, reporting limits vary
	12/21/2016	8 hours	1st floor central office counter	ND (<930)	0.54	3.5	1.1	ND (<0.10)	0.41	0.43	**1.4**	**0.53**	1.1	2.0	0.71	0.87	0.23	0.23	2.3	3.6	ND (<0.13)	1.6	0.18 - Chloroform
IAQ-7	5/13/2016	8 hours	1st floor woman's bathroom	**1,200**	0.46	ND (<0.10)	ND (<0.25)	ND (<0.10)	ND (<0.12)	ND (<0.25)	0.30	**0.38**	0.99	1.4	0.13	2.6	0.092	0.22	0.44	0.94	0.17	1.1	**0.53** - Chloroform
	12/21/2016	8 hours	2nd floor woman's bathroom	ND (<930)	0.53	3.9	1.1	ND (<0.10)	0.42	0.45	**1.6**	**0.53**	0.86	3.9	0.71	1.0	**0.61**	0.91	2.4	3.70	0.37	1.6	0.23 - Chloroform
IAQ-8	5/13/2016	8 hours	warehouse - outside SW office	**1,200**	0.52	ND (<0.68)	ND (<0.25)	ND (<0.10)	ND (<0.12)	ND (<0.25)	**0.54**	**0.42**	0.95	1.5	ND (<0.11)	0.32	ND (<0.052)	0.16	0.26	0.36	ND (<0.13)	1.2	ND, reporting limits vary
	12/21/2016	8 hours	warehouse - outside SW office	ND (<930)	0.52	2.8	0.90	**0.47**	0.38	0.38	**0.99**	**0.50**	1.1	2.3	0.35	0.47	0.17	0.49	1.1	1.9	ND (<0.13)	1.3	0.12 - Chloroform
IAQ-9	5/13/2016	8 hours	warehouse - adjacent to stairs by restroom	**1,400**	0.54	ND (<0.68)	ND (<0.25)	ND (<0.10)	ND (<0.12)	ND (<0.25)	**0.55**	**0.43**	1.0	1.4	0.13	0.33	0.057	0.31	0.49	0.50	ND (<0.13)	1.3	ND, reporting limits vary
	12/21/2016	8 hours	warehouse - adjacent to stairs by restroom	ND (<930)	0.52	2.6	0.84	ND (<0.10)	0.35	0.35	**0.89**	**0.51**	1.1	2.1	0.35	0.45	0.17	0.47	1.2	1.9	ND (<0.13)	1.3	0.13 - Chloroform
IAQ-10	5/13/2016	8 hours	warehouse - restroom	**1,100**	0.51	ND (<0.68)	ND (<0.25)	ND (<0.10)	ND (<0.12)	ND (<0.25)	0.40	**0.40**	0.94	1.6	0.28	0.28	ND (<0.052)	0.91	1.3	0.37	ND (<0.13)	1.2	ND, reporting limits vary
	12/21/2016	8 hours	warehouse - restroom	ND (<930)	0.52	2.5	0.99	ND (<0.10)	0.39	0.41	**1.1**	**0.52**	1.0	1.9	0.48	0.64	0.19	0.69	1.6	2.4	0.19	1.4	0.16 - Chloroform
IAQ-11	12/21/2016	8 hours	warehouse - between roll-up doors	ND (<930)	0.51	2.1	0.97	ND (<0.10)	0.41	0.39	**0.95**	**0.47**	1.0	1.7	0.38	0.45	**0.69**	0.54	1.2	1.8	ND (<0.13)	1.2	0.14 - Chlorobenzene
IAQ-12	12/21/2016	8 hours	warehouse - southwest corner by SVP12	ND (<930)	0.49	2.5	0.85	ND (<0.10)	0.33	0.36	**1.0**	**0.46**	0.96	1.6	0.39	0.59	0.19	0.52	1.3	2.2	ND (<0.13)	1.2	0.13 - Chloroform 0.33 - Tetrachloroethene
OAA-2	5/13/2016	8 hours	2nd floor balcony of adjacent building	**970**	0.49	ND (<0.68)	ND (<0.25)	ND (<0.10)	ND (<0.12)	ND (<0.25)	0.30	**0.40**	1.1	1.4	0.12	0.27	ND (<0.052)	0.16	0.38	0.53	ND (<0.13)	1.1	ND, reporting limits vary
	12/21/2016	8 hours	2nd floor balcony of adjacent building	ND (<930)	0.57	2.8	0.50	ND (<0.10)	0.28	ND (<0.25)	**0.80**	**0.57**	1.1	2.3	0.32	0.36	0.21	0.42	1.10	1.8	ND (<0.13)	1.3	ND, reporting limits vary
OAA-3	12/21/2016	8 hours	West telephone pole in front of warehouse	ND (<930)	0.52	2.6	0.63	ND (<0.10)	0.20	ND (<0.25)	**1.3**	**0.50**	1.1	1.9	0.44	0.49	0.11	0.57	1.4	2.5	ND (<0.13)	1.2	ND, reporting limits vary
SFRWQCB ESLs -Table E, Indoor Air Screening Levels, Commercial/Industrial Land Use				**100 ON**	NL	NL	NL	**0.47 DE**	NL	NL	**0.42 DE**	**0.29 DE**	**390 DE**	NL	**4.9 DE**	**12 DE**	**0.36 DE**	**440 (total xylenes) DE**	**440 (total xylenes) DE**	**1,300 DE**	**3.0 DE**	NL	**0.53 - Chloroform DE 220 - Chlorobenzene VI 2.1 - Tetrachloroethene VI**

Notes:
Laboratory analyses by Eurofins Calscience, Garden Grove, CA
µg/m^3 = micrograms per cubic meter
TPH-g = total petroleum hydrocarbons as gasoline, analytical method TO-3M
VOCs = volatile organic compounds, analytical method TO-15 SIM

IAQ = Indoor Air Quality sample, 24-hour sampling interval (6/26/2014-6/27/2014)
OAA = Outdoor Ambient Air Control sample, 24-hour sampling interval (6/26/2014-6/27/2014)
ND = Not detected above the listed reporting limit
NL = Not listed
Bold Font = Detected values exceed regulatory screening levels.

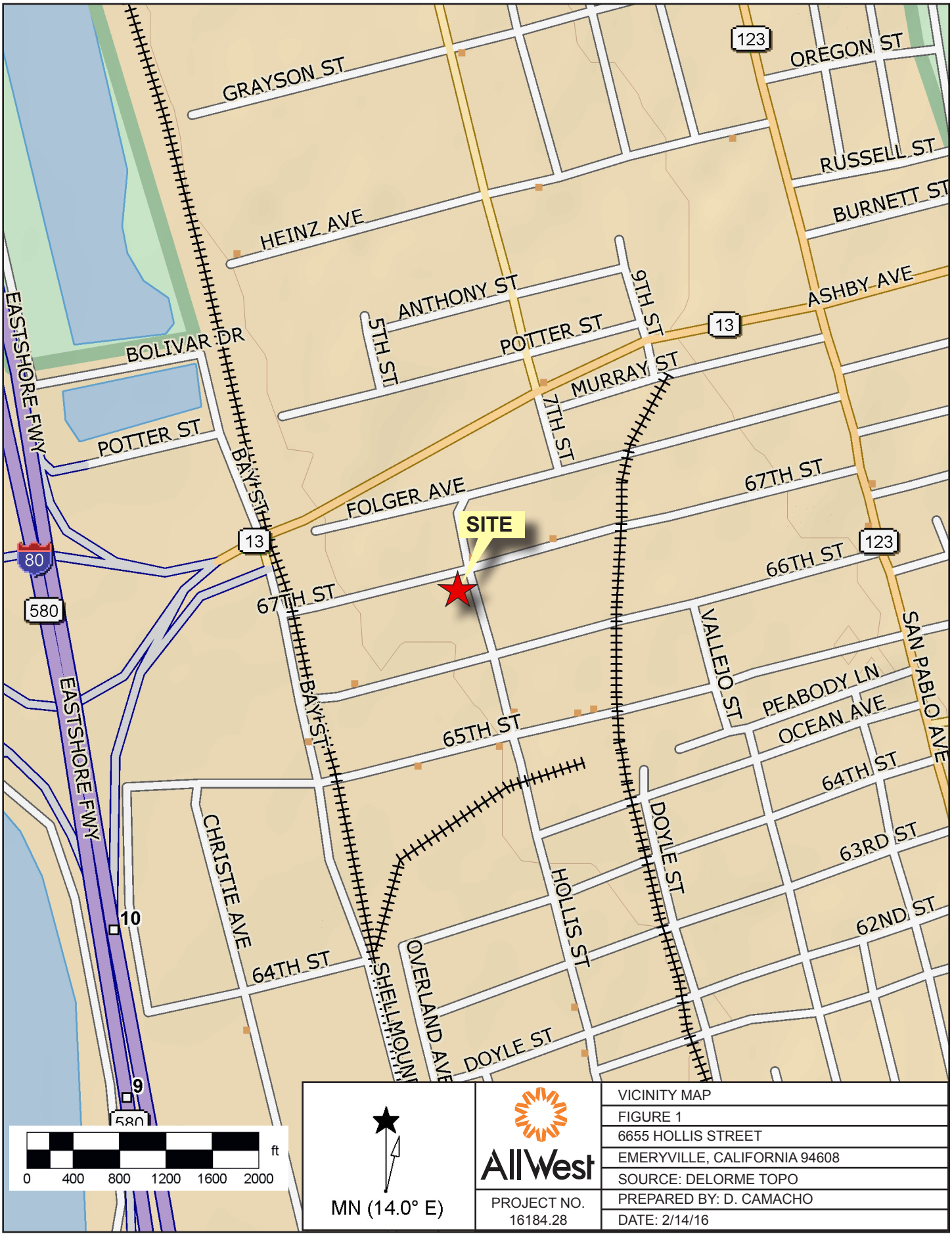
ON = Taste and Odor Nuisance Screening Level
DE = Direct Exposure Human Health Risk Screening Level
GC = Gross Contamination Screening Level
AHG = Ecological Aquatic Habitat Screening Level

SFRWQCB ESLs = Regional Water Quality Control Board, San Francisco Bay Region, *User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), Table IA-1 - Indoor Air Direct Exposure Human Health Risk Screening Levels (Volatile Chemicals Only), Commercial/Industrial Direct Exposure Risk Levels* , and *Table IA-1 - Indoor Air Odor Nuisance Levels* , Interim Final - February 2016, Revision 3 (May 23, 2016).

FIGURES

DELORME

Topo USA® 8



AllWest

PROJECT NO. 16184.28	VICINITY MAP
	FIGURE 1
	6655 HOLLIS STREET
	EMERYVILLE, CALIFORNIA 94608
	SOURCE: DELORME TOPO
	PREPARED BY: D. CAMACHO
	DATE: 2/14/16

RAIL TRACKS

67th STREET

HOLLIS STREET

COULTER STEEL & FORGE COMPANY 1494 67th St.

RICHARDS & STERLING

RICHARDS & STERLING 1488 67th St.

RICHARDS & STERLING

GIAMPOLINI & CO 1482B 67th St.

GIAMPOLINI & CO 1482A 67th St.

PARKING LOT GIAMPOLINI & CO

ADMAC DIGITAL IMAGING 1464 67th St.

VACANT 1450 67th St.

PRIZE-FIGHTER 6702 Hollis St.

BERKLEY COMMUNICATIONS 1321 67th St.

CMC REBAR (FORMER McGRATH STEEL) 6655 Hollis St.

STORAGE

ROLLER PRESS 6647 Hollis St.

MENUS & MUSIC 1462 66th St

METALCO

METALCO 1475 67th St.

CMC REBAR (FORMER McGRATH STEEL) 1471 67th St.

ARCHITECTURAL METAL WORKS 1483 67th St.

ENGINEWORLD 1487 67th St.

ENGINEWORLD

ENGINEWORLD

MW-1 MW-2 MW-3 AMW-1 AMW-2 AMW-3

B-1 B-2 B-5 B-8 B-9 B-10 B-11 B-12 B-13 B-14 B-15 B-16 B-17 B-18 B-19 B-20 B-21 B-22 B-23 B-24 B-25

SB-26

SVP-1 SVP-2 SVP-3 SVP-4 SVP-5 SVP-6 SVP-7 SVP-8 SVP-9 SVP-10 SVP-11 SVP-12 SVP-13 SVP-14 SVP-15 SVP-16

GATE GATE DRIVEWAY DRIVEWAY

FORMER USTs

FORMER USTs

FORMER FUEL DISPENSER

LEGEND

SVP-12	Semi-Permanent Sub-Slab Vapor Probe (AllWest, May 2016)
SVP-1	Soil Boring-Vapor Probe (AllWest, February, 2016)
SVP-7	Temporary Sub-Slab Soil Vapor Probe (AllWest, February, 2016)
MW-2	Monitoring Well (Clearprint/ESC - Destroyed, 2005)
MW-3	Monitoring Well (Clearprint/ESC, 1995)
AMW-3	Monitoring Well (AllWest, 2013)
B-5	Soil Boring (Weiss Associates, 1998)
B-14	Soil Boring (Weiss Associates, 2005)
B-25	Soil Boring (Weiss Associates, January 16, 17, & 18, 2013)
SB-26	Soil Boring (AllWest, February 4, 2016)
	Former USTs, Fuel Dispensers (Removed 1994 & 1996)
x	Fence

N

0 60 120

APPROXIMATE SCALE IN FEET

AllWest

PROJECT NO. 16184.28

FIGURE 2

SITE PLAN WITH BORING, WELL AND SOIL VAPOR PROBE LOCATIONS

Former McGrath Steel

6655 Hollis Street, Emeryville, California

SOURCE: Morrow Surveying and Google Earth

DRAWN BY: CM (06/19/2016)

C:\Drawing Files\AllWest Environmental\16184.28\16184.28 Fig 3. Indoor Air Sample Locations - 02/11/2017

67th STREET

HOLLIS STREET

FORMER USTs

FORMER FUEL DISPENSER

OAA-3

IAQ-3

IAQ-11

IAQ-1

IAQ-9

Restroom

IAQ-10

Office

IAQ-2

IAQ-8

FORMER
McGRATH STEEL WAREHOUSE
1471 67th Street

IAQ-5

IAQ-12

METALCO
1475 67th Street

FLOOR GRATE

IAQ-4

STORAGE

OAA-2

OAA-1

2nd Floor Balcony

Stairs

Storage

Large Office Space

Office

Office

Entry

IAQ-6

Stairs

Corridor

FORMER
McGRATH STEEL
OFFICE BUILDING
(First Floor Layout)
6655 Hollis Street

IAQ-7

Women

Men

Office

Office

Office

ROLLER
PRESS
6647 Hollis St.

N

LEGEND

IAQ-5 Indoor Air Sample Location 5/13 and 12/21/2016

OAA-2 Outdoor Air Sample Location 5/13 and 12/21/2016

IAQ-1 Indoor Air Sample Location 6/25 and 6/26/2016

OAA-1 Outdoor Air Sample Location 6/25 and 6/26/2016

0 20 40

APPROXIMATE SCALE IN FEET

AllWest

FIGURE 3

INDOOR AIR SAMPLE LOCATIONS

Former McGrath Steel

6655 Hollis Street, Emeryville, California

PROJECT NO: 16184.28

SOURCE: Morrow Surveying and Google Earth

DRAWN BY: CM (02/11/2017)

C:\Drawing Files\AllWest Environmental\16184.28\16184.28 Fig 4. SS SV Analytical Summary Dec 21-22, 2016 - 02/11/2017

RAIL TRACKS

COULTER STEEL & FORGE COMPANY 1494 67th St.

RICHARDS & STERLING

RICHARDS & STERLING 1488 67th St.

RICHARDS & STERLING

GIAMPOLINI & CO 1482B 67th St.

GIAMPOLINI & CO 1482A 67th St.

PARKING LOT GIAMPOLINI & CO

ADMAC DIGITAL IMAGING 1464 67th St.

VACANT 1450 67th St.

PRIZE-FIGHTER 6702 Hollis St.

67th STREET

ENGINEWORLD

ENGINEWORLD

ENGINEWORLD 1487 67th St.

ARCHITECTURAL METAL WORKS 1483 67th St.

METALCO

METALCO 1475 67th St.

CMC REBAR (FORMER McGRATH STEEL) 1471 67th St.

ROLLER PRESS 6647 Hollis St.

MENUS & MUSIC 1462 66th St

CMC REBAR (FORMER McGRATH STEEL) 6655 Hollis St.

BERKLEY COMMUNICATIONS 1321 67th St.

HOLLIS STREET

STORAGE

RGA CAPITAL

MW-1 MW-2 MW-3 AMW-1 AMW-2 AMW-3

B-1 B-2 B-5 B-8 B-9 B-10 B-11 B-12 B-13 B-14 B-15 B-16 B-17 B-18 B-19 B-20 B-21 B-22 B-23 B-24 B-25 SB-26

SVP-1 SVP-2 SVP-3 SVP-4 SVP-5 SVP-6 SVP-7 SVP-8 SVP-9 SVP-10 SVP-11 SVP-12 SVP-13 SVP-14 SVP-15 SVP-16

GATE GATE DRIVEWAY DRIVEWAY

FORMER USTs

FORMER USTs

FORMER FUEL DISPENSER

SVP-16	
4-E	ND(<2.6)
X	ND(<2.6/<10)
1,3,5-Tri	ND(<2.9)
PCE	ND(<4.0)
TCE	ND(<3.2)
M	ND(<8.6)

SVP-15	
4-E	44
X	6.1
1,3,5-Tri	81
PCE	5.2
TCE	ND(<2.7)
M	ND(<7.3)

SVP-14	
4-E	ND(<3.1)
X	ND(<2.7/<11)
1,3,5-Tri	ND(<3.1)
PCE	31
TCE	ND(<3.4)
M	ND(<9.1)

SVP-13	
4-E	ND(<3.4)
X	ND(<3.0/<12)
1,3,5-Tri	ND(<3.4)
PCE	40
TCE	22
M	ND(<10)

SVP-12	
4-E	ND(<4.5)
X	ND(<4.0/<16)
1,3,5-Tri	ND(<4.5)
PCE	8.8
TCE	5.2
M	ND(<13)

LEGEND

- SVP-12 — Semi-Permanent Sub-Slab Vapor Probe (AllWest, May 2016)
- SVP-1 — Soil Boring-Vapor Probe (AllWest, February, 2016)
- SVP-7 — Temporary Sub-Slab Soil Vapor Probe (AllWest, February, 2016)
- MW-2 — Monitoring Well (Clearprint/ESC - Destroyed, 2005)
- MW-3 — Monitoring Well (Clearprint/ESC, 1995)
- AMW-3 — Monitoring Well (AllWest, 2013)
- B-5 — Soil Boring (Weiss Associates, 1998)
- B-14 — Soil Boring (Weiss Associates, 2005)
- B-25 — Soil Boring (Weiss Associates, January 16, 17, & 18, 2013)
- SB-26 — Soil Boring (AllWest, February 4, 2016)
- Former USTs, Fuel Dispensers (Removed 1994 & 1996)
- —— x —— Fence

Analyte	ESL
4-E	100,000
X	420
1,3,5-Tri	1,300,000
PCE	4,900
TCE	440,000
M	47,000

Notes:

- 4-E - 4-Ethyltoluene
- X - Total Xylenes
- 1,3,5-Tri - 1,3,5-Trimethylbenzene
- PCE - Tetrachloroethene
- M - Methyl Tertiary Butyl Ether (MBTE)
- TCE - Trichloroethene
- 910,000,000* Concentrations in micrograms per cubic meter ($\mu g/m^3$) bolded where exceeding RWQCB Environmental Screening Level (ESL)

N

0 60 120

APPROXIMATE SCALE IN FEET

AllWest

PROJECT NO. 16184.28

FIGURE 4
SUB-SLAB SOIL VAPOR ANALYTICAL SUMMARY DECEMBER 21-22, 2016

Former McGrath Steel

6655 Hollis Street, Emeryville, California

SOURCE: Morrow Surveying and Google Earth

DRAWN BY: CM (02/11/2017)

C:\Drawing Files\AllWest Environmental\16184.28\16184.28 Fig 5. Indoor Air Sample Analytical Results Dec 21-22, 2016 - 02/13/2017

LEGEND

- IAQ-5 ⊗ Indoor Air Sample Location 5/13 and 12/21/2016
- OAA-2 ⊗ Outdoor Air Sample Location 5/13 and 12/21/2016
- IAQ-1 ⊗ Indoor Air Sample Location 6/25 and 6/26/2016
- OAA-1 ⊗ Outdoor Air Sample Location 6/25 and 6/26/2016

NOTE:

IAQ-1 through IAQ-5 and OAA-1 were sampled 6/25/2014 - 6/26/2014

IAQ-6 through IAQ-10 and OAA-2 were sampled 5/13/2016

All concentrations in micrograms per cubic meter ($\mu g/m^3$)

- B - Benzene
- CT - Carbon Tetrachloride
- N - Naphthalene
- TPH-g - Total Petroleum Hydrocarbons as Gasoline
- ND - Not Detected above listed reporting limit
- 0.96 - Exceeds SFRWQCB Commercial/Industrial Environmental Screening Level (ESL)

Analyte	ESL
B	0.42
CT	0.29
N	0.36
TPH-g	2,500

0 20 40

APPROXIMATE SCALE IN FEET

AllWest

FIGURE 5

INDOOR AIR SAMPLE ANALYTICAL RESULTS DECEMBER 21-22, 2016

Former McGrath Steel

6655 Hollis Street, Emeryville, California

PROJECT NO: 16184.28

SOURCE: Morrow Surveying and Google Earth

DRAWN BY: CM (02/13/2017)

APPENDIX A

STANDARD VAPOR PIN™ SUB-SLAB PROBE INSTALLATION AND SOIL VAPOR SAMPLING PROCEDURES

Vapor Pin™ Sub-Slab Soil Vapor Probe Installation

The Cox-Colvin Vapor Pin™ semi-permanent sub-slab soil vapor probes are emplaced as follows: For a flush-mount installation, a 1 ½-inch diameter countersunk hole is drilled at least 1 3/4 inches into the concrete floor slab using a portable electric drill. A 5/8-inch diameter hole is then drilled below the countersunk hole through the concrete floor slab using a portable electric drill, and approximately 1-inch into the underlying soil to form a void. The concrete corings are removed using a brush or vacuum. Place the lower end of Vapor Pin™ assembly into the drilled hole. Place the small hole located in the handle of the extraction/installation tool over the Vapor Pin™ to protect the barb fitting and cap, and tap the Vapor Pin™ into place using a dead blow hammer. Make sure the extraction/installation tool is aligned parallel to the Vapor Pin™ to avoid damaging the barb fitting.

For flush mount installations, unscrew the threaded coupling from the installation/extraction handle and use the hole in the end of the tool to assist with the installation. During installation, the silicone sleeve will form a slight bulge between the slab and the Vapor Pin™ shoulder. Place the protective plastic cap on the Vapor Pin™ barbed fitting to prevent vapor loss prior to sampling. For flush mount installations, cover the Vapor Pin™ with a threaded metal flush mount cover. Allow 2 hours or more (per DTSC sub-slab vapor sampling guidelines) for the sub-slab soil-gas conditions to equilibrate prior to sampling.

Vapor Pin™ Sub-Slab Soil Vapor Sampling via Summa Canister

Soil vapor sampling procedures will be in general accordance with *DTSC Advisory – Active Soil Gas Investigations*, July 2015. 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. The 0.25-inch outside diameter (OD)/0.17-inch inside diameter (ID) Teflon sample tubing will be placed over the Vapor Pin™ barbed fitting. Since the 0.17-inch ID tubing may be too small and too rigid to fit over the barbed fitting, it may be necessary to construct a connector sleeve using a short length of 3/8-inch OD/3/16-inch ID flexible silicone Masterflex® or similar tubing to fit over both the Vapor Pin™ barbed fitting and the end of the 0.25-inch OD/0.17-inch ID sample tubing. The sample tubing will then be connected to the sample manifold system via threaded SwageLok™ connectors.

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 will be performed for a minimum of 1 minute, with a no allowable observed vacuum drop of 0.2 inches of mercury (in Hg). If any noticeable vacuum drop is observed, the manifold fittings will be tightened or manifold replaced and the shut-in test redone. Vacuum gauge sensitivity will register a minimum of 0.5 inches of mercury (in Hg). The sampling system configuration is shown in the attached schematic diagram.

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 (approximately 200 ml per in Hg vacuum). A 3-way valve (with the handle mounted outside the leak detection shroud) will be opened to divert the flow of purged soil vapor from the probe to the purge Summa canister, after opening the purge Summa valve. Typical sampling system volumes are 4.5 ml/feet for ¼-inch OD/0.17-inch ID tubing and 0.17-inch ID Vapor Pin™ probe,

and 155 ml/feet for a 1-inch diameter borehole within the concrete floor slab. Assuming a 1-inch diameter borehole with a 3-inch deep void space in the floor slab below the Vapor Pin™ probe, the typical system volume would be approximately 60 ml including 5 feet of tubing and manifold above grade. Therefore, 3 system volumes would typically be approximately 180 milliliters (ml) depending on sample tubing and manifold length, borehole diameter, and floor slab borehole void depth below the installed Vapor Pin™ probe.

During purging and 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 Appendix C, 2015). The leak detection shroud configuration is shown in the attached schematic diagram. The helium concentration within the shroud is monitored with a helium gas detection meter with a minimum precision of 0.1% to keep the ambient concentration at approximately 10% to 20% (or at least 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 purging and sample collection. The ambient helium concentration within the shroud will be maintained throughout the purge and sample periods to within ±10% of the target concentration.

Depending upon helium availability, other leak detection gases such as isopropyl alcohol (IPA) or difluoroethane (DFA, commonly known as DustOff) may be substituted. Ambient concentrations of IPA within the shroud or purged soil vapor will be measured with a photo-ionization detector (PID); DFA concentrations are not measurable with a PID. The same volume of IPA (typically a cotton ball soaked with 5 milliliters of IPA) or DFA (typically a 5-second aerosol can discharge) will be used for each sample to maintain consistent ambient concentrations within the shroud.

Immediately following purging of 3 sampling system volumes of soil vapor, a leak test of the probe seal will be conducted by using the 3-way valve to divert the flow of purged soil vapor from the probe to the helium detection meter via a monitoring port on the outside of the shroud. If the measured purged soil vapor helium concentration is less than 5% of the ambient shroud concentration, the soil vapor probe seal is presumed to be acceptable (per DTSC Appendix C, 2015), and sampling will proceed. If the measured purged soil vapor helium concentration is greater than 5% of the ambient shroud concentration, the soil vapor probe seal is presumed to be defective, and the probe should be reinstalled and re-sampled.

Following the purged soil vapor readings and acceptable vapor probe seal leak test, the 3-way and purge Summa valves will be closed, sample Summa valve opened, and additional helium added to the shroud to bring the ambient concentration back up to within ±10% of the target concentration. The 3-way valve will then be turned to divert soil vapor from the probe to the sample Summa canister. To verify helium detection (or PID if used) meter accuracy, one (1) ambient air sample per day is usually collected using a 1-liter SUMMA canister with a 150-200 ml/min flow restrictor inside the leak detection shroud during the sampling of one probe to measure ambient helium (or IPA or DFA if used instead) concentrations inside the shroud.

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), at which point first the 3-way valve, then the sample Summa valve are closed. 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 Vapor Sampling via Tenax™ Sorbent Tubes

For collecting soil vapor samples in sorbent tubes for analysis by EPA Method TO-17, the sampling manifold setup, shut-in leak checks, system purging and leak detect shroud setup are similar to that using Summa canisters. However, instead of using Summa canisters for sample collection, samples are collected in stainless steel sample tubes filled with Tenax™ sorbent material. The sorbent tubes are attached with Swagelock™ fittings to the sample manifold downstream from the gauges, filters, flow restrictors, and purge canister or pump, and within the leak detection shroud. In areas of suspected high contaminant concentrations, two (2) Tenax™ sorbent tubes may be placed in series to prevent contaminant breakthrough. A vacuum pump, 100 ml syringe or second SUMMA sample purge canister is attached to the downstream end of the Tenax™ sorbent tubes. If the sample manifold train is too large to fit in the leak detection shroud, the pump, syringe or second sample purge SUMMA may be located outside the shroud with the sample train tubing passing through the shroud wall.

A cotton ball saturated with approximately 5 ml isopropyl alcohol (IPA) and placed inside the shroud will be used as the leak detection gas agent. A photo-ionization detector (PID) is used to monitor IPA concentrations within the leak detection shroud, or purged soil vapor through access ports in the shroud via the 3-way valve. The 3-way valve is used to divert purged soil vapor to either the purge Summa canister during purging, or to the purged soil vapor monitoring port following purging for probe seal leak detection by monitoring IPA concentrations with a PID, as described in the Summa canister sampling section.

Flow rates of approximately 50 to 100 ml/min are used to fill the sorbent tubes with a total sample volume of approximately 1 to 4 liters, depending on the desired laboratory detection limits. The sampling system vacuum should not exceed 100 inches of water (or 7.4 in Hg). All pertinent field observations, pressure, times, and ambient and soil vapor IPA (PID) concentration readings are recorded. After the desired sample volume is withdrawn through the sorbent tubes, the tubes are removed from the manifold, capped with Swagelock™ caps, wrapped in aluminum foil, placed in a sealed plastic tube container, labeled with sampling information, placed in an ice chest cooled to 4°C with crushed ice, and transported under chain-of-custody to the analytical laboratory.

APPENDIX B

AllWest

STANDARD INDOOR AIR QUALITY SAMPLING PROCEDURES

Indoor air quality (IAQ) sampling is conducted in general accordance with the DTSC *Final, Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)*, October 2011. Prior to collecting IAQ samples, AllWest will perform a survey of the building layout and conditions to determine optimum IAQ sample locations, and conduct an inventory of chemicals at the site that may affect IAQ sample data. Building and chemical survey forms per the DTSC *Vapor Intrusion Guidance* will be utilized.

To evaluate the potential indoor air quality impact of intrusion of petroleum hydrocarbons and VOCs in the vapor phase from soil beneath the concrete floor slab in site buildings, IAQ samples and typically one outdoor ambient air (OAA) control sample will be collected during two semiannual monitoring events at the subject site. IAQ samples will typically be located in the center of building spaces to evaluate conditions in primary work areas, addition to locations in restrooms or near floor drains to evaluate preferential pathway conduits such as sewer lines. IAQ and OAA samples will be collected in approximately the same locations during both sampling events.

During each sampling event, at least one outdoor OAA sample will be collected in a secure exterior area in the presumed upwind direction away from building walls or foundation slabs, inaccessible to the public, chosen to ensure that the SUMMA canister is not stolen or tampered with overnight. The OAA sample will be secured by lock and chain to an immovable object. OAA sample collection will start at least 30 minutes prior to the start of IAQ sampling, and will be terminated 30 minutes after the last IAQ sample.

AllWest will collect air quality samples in laboratory prepared SIM-certified 6-liter capacity SUMMA canisters. Flow rates of approximately 3.5 milliliters per minute (ml/min) are used to fill the canisters over a 24 hour period. The canisters are filled to approximate 80% of capacity. All pertinent field observations, pressure, times and readings are recorded. Sample containers are labeled, placed in a dark container and transported under chain-of-custody control to the California State-certified analytical laboratory, Calscience Environmental Laboratories, Inc. (Calscience) in Garden Grove, California. Other certified analytical laboratories may be used if necessary. An example of an indoor air quality field sampling log is included in Appendix C.

A second IAQ monitoring event will be performed approximately six months from the first event in order to evaluate any seasonal variability in sub-slab vapor conditions, as recommended in the DTSC *Vapor Intrusion Guidance* (DTSC, October 2011). The scope of work, number of samples and sampling methodology will be similar to those described above, except that samples will be collected over an 8-hour period at flow rates of 10.4 ml/min.

APPENDIX C

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: _____ **Project Name:** HOLLIS

Date: 12/22/16 **Vapor Probe No:** SVP-12 **Serial No:** PURGE: SIM087 SAMPLE: LC1207 AMBIENT: LC944

Regulatory Agencies: ACEH

Contractor: —

Hole Diameter: 1½" **Total Depth:** 5" **Grout/Bentonite:** —

Probe Diameter: ⅛" **Line Length:** 6' **Purge Volume:** 211.3 mL / 1.06" Hg

Tracer Gas: HELIUM **Flow Regulator:** 150-200 (ml/min) SGM220 **Leak Test:** (Pass)/Fail

Laboratory Name and Number: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0914	—	28	BEGIN LEAK TEST
0919	5 MIN	28	END LEAK TEST - PASSED
0922	—	28	BEGIN PURGE, He @ 12.3%
0923	1MIN	26	END PURGE, He @ 11.7%
0924	—	30/30	BEGIN SAMPLING / AMBIENT, He @ 12.7%
0929	5MIN	-/54	END AMBIENT, He @ 12.4%
0930	6 MIN	5/-	END SAMPLE, He @ 12.2%

Remarks: AMBIENT FLOW-RESTRICTOR: A414

Sampler: S.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: _____ **Project Name:** HOLLIS

Date: 12/22/16 **Vapor Probe No:** SVP-13 **Serial No:** PURGE: SIM 087 SAMPLE: LC402

Regulatory Agencies: ACEH

Contractor: —

Hole Diameter: 1½" **Total Depth:** 5" **Grout/Bentonite:** —

Probe Diameter: 1/8" **Line Length:** 6' **Purge Volume:** 211.3 mL / 1.06" Hg

Tracer Gas: HELIUM **Flow Regulator:** 150-200 (ml/min) SGM 185 **Leak Test:** (Pass)/Fail

Laboratory Name and Number: EUROFINS

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0827	—	30	BEGIN LEAK TEST
0830	3 MIN	30	END LEAK TEST - PASS
0836	—	30	BEGIN PURGING, He @ 12.2%
0839	3 MIN	28	END PURGE, He @ 11.8%
0840	—	30	BEGIN SAMPLING
0845	5 MIN	4	END SAMPLING, He @ 10.3%

Remarks: _____

Sampler: S. 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: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Vapor Probe No:** SVP-14 **Serial No:** PURGE: LC111 SAMPLE: LC1206

Regulatory Agencies: ACEH

Contractor: —

Hole Diameter: 1½" **Total Depth:** 5" **Grout/Bentonite:** NA

Probe Diameter: ⅛" **Line Length:** 6' **Purge Volume:** 211.3 mL / 1.06" Hg

Tracer Gas: HELIUM **Flow Regulator:** 150-200 (ml/min) SGM 382 **Leak Test:** Pass/Fail

Laboratory Name and Number: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
1308	—	23	BEGIN LEAK TEST
1321	13 MIN	23	END LEAK TEST – PASS
1328	—	23	BEGIN PURGING
1334	6 MIN	15	END PURGE, BEGIN SAMPLING
1341	7 MIN	4	END SAMPLE

Remarks: _____

Sampler: S. BLOOM

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SOIL GAS VAPOR FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Vapor Probe No:** SVP-15 **Serial No:** PURGE: LC111 SAMPLE: LC423

Regulatory Agencies: ACEH

Contractor: —

Hole Diameter: 1 1/2" **Total Depth:** 5" **Grout/Bentonite:** —

Probe Diameter: 1/8" **Line Length:** 6' **Purge Volume:** 211.3 mL / 1.06" Hg

Tracer Gas: HELIUM **Flow Regulator:** 150-200 SGM 250 (ml/min) **Leak Test:** Pass/Fail

Laboratory Name and Number: EUROFINS

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
1217	—	30	BEGIN LEAK TEST
1219	2 MIN	30	END LEAK CHECK – PASS
1222	—	30	BEGIN PURGE (VIA 1L), He @ 12.5%
1223	1 MIN	23	END PURGE, He @ 12.4%
1224	—	30	BEGIN SAMPLING, He @ 12.3%
1233	9 MIN	5	END SAMPLE, He @ 11.5%

Remarks: _____

Sampler: S. BLOOM

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SOIL GAS VAPOR FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Vapor Probe No:** SVP-16 **Serial No:** PURGE: SIM007 SAMPLE: LC605

Regulatory Agencies: ACEH

Contractor: —

Hole Diameter: 1½" **Total Depth:** 5' **Grout/Bentonite:** N/A

Probe Diameter: ⅛" **Line Length:** 6' **Purge Volume:** 211.3 mL / 1.06 "Hg

Tracer Gas: HELIUM **Flow Regulator:** 150-200 (ml/min) SGM 178 **Leak Test:** (Pass)/Fail

Laboratory Name and Number: EUROFIN

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
1030	—	30	BEGIN LEAK TEST.
1035	5 MIN	30	END LEAK TEST - PASS
1043	8 MIN	30	He @ 12.3%
1044			BEGAN PURGING
1047	3 MIN	28.5	END PURGE, He @ 11.7%
1048	—	30	BEGIN SAMPLING, He@ 11.5%
1120	32 MIN	6	END SAMPLEE, He@ 11.5%

Remarks: _____

Sampler: S. BLOOM

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530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Site Location:** 6655 HOLLIS ST.

Sample ID No: OAQ-2 **Canister Type:** 6L SUMMA **Serial No:** SIM041

Regulatory Agencies: ACEH **Contractor:** —

Indoor/Outdoor: OUTDOOR **Building Name/Location:** TOP OF OFFICE EXTERIOR STAIRS

Initial Vacuum: 30 ("Hg) **Final Vacuum:** _____ ("Hg) **Canister Volume:** 6 (L)

Sampling Interval (hrs): 8 **Flow Regulator:** _____ (ml/min) **Regulator Serial No:** FC81

Laboratory Name and Location: EUROFINS

Laboratory Analyses: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0855	—	30	BEGIN SAMPLING
1627		4.5"	END SAMPLING

Remarks: _____

Sampler: S. BLOOM / L. NILES

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530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Site Location:** 6655 HOLLIS ST.

Sample ID No: SAQ-3 **Canister Type:** 6L SUMMA **Serial No:** SIM081

Regulatory Agencies: ACEH **Contractor:** —

Indoor/Outdoor: OUTDOOR **Building Name/Location:** FRONT OF WAREHOUSE ON HOLLIS

Initial Vacuum: 30 ("Hg) **Final Vacuum:** _____ ("Hg) **Canister Volume:** 6 (L)

Sampling Interval (hrs): 8 **Flow Regulator:** _____ (ml/min) **Regulator Serial No:** FC 185

Laboratory Name and Location: EUROFINS

Laboratory Analyses: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0846	—	30	BEGIN SAMPLE
1541		5	END SAMPLE

Remarks: VALVE ON SUMMA WAS VERY TOUGH TO OPEN!

Sampler: S.BLOOM/L.NILES

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530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Site Location:** 6655 HOLLIS ST.

Sample ID No: IAQ-6 **Canister Type:** 6L SUMMA **Serial No:** D673

Regulatory Agencies: ACEH **Contractor:** _____

Indoor/Outdoor: INDOOR **Building Name/Location:** 1ST FL, MAIN OFFICE AREA

Initial Vacuum: 30 ("Hg) **Final Vacuum:** _____ ("Hg) **Canister Volume:** 6 (L)

Sampling Interval (hrs): 8 **Flow Regulator:** _____ (ml/min) **Regulator Serial No:** FC449

Laboratory Name and Location: EUROFINS

Laboratory Analyses: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0908	—	30	BEGIN SAMPLE
1635		7	END SAMPLE

Remarks: _____

Sampler: S. BLOOM / L. NILES

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530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Site Location:** 6655 HOLLIS ST.

Sample ID No: IAQ-7 **Canister Type:** 6L SUMMA **Serial No:** D118

Regulatory Agencies: ACEH **Contractor:** —

Indoor/Outdoor: INDOOR **Building Name/Location:** 1ST FL-WOMAN'S BATHROOM

Initial Vacuum: 30 ("Hg) **Final Vacuum:** _____ ("Hg) **Canister Volume:** 6 (L)

Sampling Interval (hrs): 8 **Flow Regulator:** _____ (ml/min) **Regulator Serial No:** FC437

Laboratory Name and Location: EUROFINS

Laboratory Analyses: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0909	—	30	BEGIN SAMPLE
1633		6	END PURGE/SAMPLE

Remarks: _____

Sampler: S. BLOOM / L. NILES

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530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Site Location:** 6655 HOLLIS ST.

Sample ID No: IAQ-8 **Canister Type:** 6L SUMMA **Serial No:** D454

Regulatory Agencies: ACEH **Contractor:** _____

Indoor/Outdoor: INDOOR **Building Name/Location:** MAIN WAREHOUSE - W SIDE (BY SVP-13)

Initial Vacuum: 30 ("Hg) **Final Vacuum:** _____ ("Hg) **Canister Volume:** 6 (L)

Sampling Interval (hrs): 8 **Flow Regulator:** _____ (ml/min) **Regulator Serial No:** FC46

Laboratory Name and Location: EUROFINS

Laboratory Analyses: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0933	—	30"	BEGIN SAMPLE
1718		8"	END SAMPLE

Remarks: _____

Sampler: S. BLOOM / L. NIVES

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530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Site Location:** 6655 HOLLIS ST

Sample ID No: IAQ-9 **Canister Type:** 6L SUMMA **Serial No:** D326

Regulatory Agencies: ACEH **Contractor:** _____

Indoor/Outdoor: INDOOR **Building Name/Location:** MAIN WAREHOUSE - NW CORNER

Initial Vacuum: 30 ("Hg) **Final Vacuum:** _____ ("Hg) **Canister Volume:** 6 (L)

Sampling Interval (hrs): 8 **Flow Regulator:** _____ (ml/min) **Regulator Serial No:** FC559

Laboratory Name and Location: EUROFINS

Laboratory Analyses: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0931	—	30	BEGIN SAMPLE
1642		6	END SAMPLE

Remarks: _____

Sampler: S. BLOOM / L. NIVES

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530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Site Location:** 6655 HOLLIS ST.

Sample ID No: IAQ-10 **Canister Type:** 6L SUMMA **Serial No:** D850

Regulatory Agencies: ACEH **Contractor:** _____

Indoor/Outdoor: INDOOR **Building Name/Location:** BATHROOM

Initial Vacuum: 30 ("Hg) **Final Vacuum:** _____ ("Hg) **Canister Volume:** 6 (L)

Sampling Interval (hrs): 8 **Flow Regulator:** _____ (ml/min) **Regulator Serial No:** FC365

Laboratory Name and Location: EUROFINS

Laboratory Analyses: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0928	—	30	BEGIN SAMPLING
1716		6	END SAMPLING

Remarks: _____

Sampler: S. BLOOM / NILES

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530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Site Location:** 6655 HOLLIS ST.

Sample ID No: IAQ-11 **Canister Type:** 6L SUMMA **Serial No:** D145

Regulatory Agencies: ACEH **Contractor:** —

Indoor/Outdoor: INDOOR **Building Name/Location:** MAIN WAREHOUSE - N SIDE (BY SVP16)

Initial Vacuum: 30 ("Hg) **Final Vacuum:** _____ ("Hg) **Canister Volume:** 6 (L)

Sampling Interval (hrs): 8 **Flow Regulator:** _____ (ml/min) **Regulator Serial No:** FC 560

Laboratory Name and Location: EUROFINS

Laboratory Analyses: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0940	—	30	
1712		8"	

Remarks: _____

Sampler: S. BLOOM / L. NILES

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530 Howard Street, Suite 300
San Francisco, CA 94105
Tel 415.391.2510
Fax 415.391.2008

INDOOR/AMBIENT AIR SAMPLING FIELD LOG

Project No: _____ **Project Name:** HOLLIS

Date: 12/21/16 **Site Location:** 6655 HOLLIS ST.

Sample ID No: IAQ-12 **Canister Type:** 6L SUMMA **Serial No:** D932

Regulatory Agencies: ACEH **Contractor:** —

Indoor/Outdoor: INDOOR **Building Name/Location:** MAIN WAREHOUSE - SW CORNER (BY SVP-12)

Initial Vacuum: 30 ("Hg) **Final Vacuum:** _____ ("Hg) **Canister Volume:** 6 (L)

Sampling Interval (hrs): 8 **Flow Regulator:** _____ (ml/min) **Regulator Serial No:** FC 372

Laboratory Name and Location: EUROFINS

Laboratory Analyses: _____

SAMPLE COLLECTION

Start Time	Time Elapsed	Pressure	Remarks
0944	—	30	
1719		6	

Remarks: _____

Sampler: S. BLOOM / L. NIVES

APPENDIX L - BUILDING SURVEY FORM

Preparer's Name: Sara Bloom Date/Time Prepared: 12/21/16
Affiliation: AllWest Environmental Phone Number: (415) 391-2510

Occupant Information

Occupant Name: NONE - Vacant Interviewed: ☐ Yes ☐ No
Mailing Address: 6655 Hollis St.
City: Emeryville State: CA Zip Code:
Phone: — Email:

Owner/Landlord Information (Check if same as occupant ☐)

Occupant Name: N/A Interviewed: ☐ Yes ☐ No
Mailing Address:
City: State: Zip Code:
Phone: Email:

Building Type (Check appropriate boxes)

☐ Residential ☐ Residential Duplex ☐ Apartment Building ☐ Mobile Home ☒ Commercial (office)
☒ Commercial (warehouse) ☐ Industrial ☐ Strip Mall ☐ Split Level ☐ Church ☐ School

Building Characteristics

Approximate Building Age (years): Number of Stories: 2
Approximate Building Area (square feet): Number of Elevators: 0

Foundation Type (Check appropriate boxes)

☐ Slab-on-Grade ☒ Crawl Space ☐ Basement

Basement Characteristics (Check appropriate boxes)

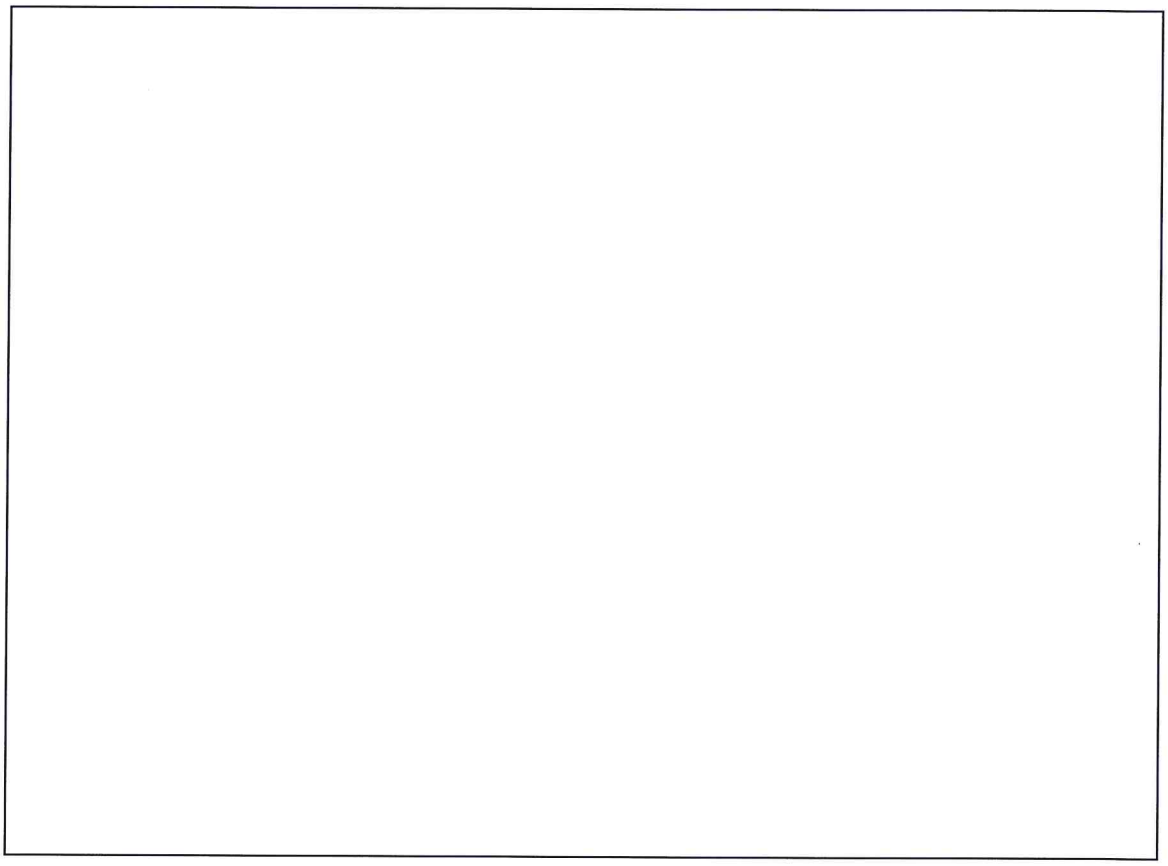
☐ Dirt Floor ☐ Sealed ☐ Wet Surfaces ☐ Sump Pump ☐ Concrete Cracks ☐ Floor Drains

Factors Influencing Indoor Air Quality

Is there an attached garage?	☐ Yes	☒ No	
Is there smoking in the building?	☐ Yes	☒ No	
Is there new carpet or furniture?	☐ Yes	☒ No	Describe:
Have clothes or drapes been recently dry cleaned?	☐ Yes	☒ No	Describe:
Has painting or staining been done with the last six months?	☐ Yes	☒ No	Describe:
Has the building been recently remodeled?	☐ Yes	☒ No	Describe:
Has the building ever had a fire?	☐ Yes	☒ No	
Is there a hobby or craft area in the building?	☐ Yes	☒ No	Describe:
Is gun cleaner stored in the building?	☐ Yes	☒ No	
Is there a fuel oil tank on the property?	☐ Yes	☒ No	
Is there a septic tank on the property?	☐ Yes	☒ No	
Has the building been fumigated or sprayed for pests recently?	☐ Yes	☒ No	Describe:
Do any building occupants use solvents at work?	☐ Yes	☒ No	Describe:

Sampling Locations

Draw the general floor plan of the building and denote locations of sample collection. Indicate locations of doors, windows, indoor air contaminant sources and field instrument readings.



Primary Type of Energy Used (Check appropriate boxes)

☐ Natural Gas ☐ Fuel Oil ☐ Propane ☒ Electricity ☐ Wood ☐ Kerosene

Meteorological Conditions

Describe the general weather conditions during the indoor air sampling event.
Mostly sunny, 40's - 50's

General Comments

Provide any other information that may be of importance in understanding the indoor air quality of this building.
The building is vacant, but homeless have broken in and used the building recently; according to property management.

APPENDIX L - BUILDING SURVEY FORM

Preparer's Name: Sara Bloom Date/Time Prepared: 12/21/16
Affiliation: AllWest Environmental Phone Number: (415) 391-2510

Occupant Information

Occupant Name: NONE - Vacant Interviewed: ☐ Yes ☒ No
Mailing Address: 67th ST.
City: Emeryville, CA State: CA Zip Code: _____
Phone: _____ Email: _____

Owner/Landlord Information (Check if same as occupant ☐)

Occupant Name: _____ Interviewed: ☐ Yes ☐ No
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Email: _____

Building Type (Check appropriate boxes)

☐ Residential ☐ Residential Duplex ☐ Apartment Building ☐ Mobile Home ☐ Commercial (office)
☒ Commercial (warehouse) ☐ Industrial ☐ Strip Mall ☐ Split Level ☐ Church ☐ School

Building Characteristics

Approximate Building Age (years): _____ Number of Stories: 1
Approximate Building Area (square feet): _____ Number of Elevators: 0

Foundation Type (Check appropriate boxes)

☒ Slab-on-Grade ☐ Crawl Space ☐ Basement

Basement Characteristics (Check appropriate boxes)

☐ Dirt Floor ☐ Sealed ☐ Wet Surfaces ☐ Sump Pump ☒ Concrete Cracks ☐ Floor Drains

Factors Influencing Indoor Air Quality

Is there an attached garage?	☐ Yes ☒ No		
Is there smoking in the building?	☐ Yes ☒ No		
Is there new carpet or furniture?	☐ Yes ☒ No	Describe:	_____
Have clothes or drapes been recently dry cleaned?	☐ Yes ☒ No	Describe:	_____
Has painting or staining been done with the last six months?	☐ Yes ☒ No	Describe:	_____
Has the building been recently remodeled?	☐ Yes ☒ No	Describe:	_____
Has the building ever had a fire?	☐ Yes ☒ No		
Is there a hobby or craft area in the building?	☐ Yes ☒ No	Describe:	_____
Is gun cleaner stored in the building?	☐ Yes ☒ No		
Is there a fuel oil tank on the property?	☐ Yes ☒ No		
Is there a septic tank on the property?	☐ Yes ☒ No		
Has the building been fumigated or sprayed for pests recently?	☐ Yes ☒ No	Describe:	_____
Do any building occupants use solvents at work?	☐ Yes ☒ No	Describe:	_____

Sampling Locations

Draw the general floor plan of the building and denote locations of sample collection. Indicate locations of doors, windows, indoor air contaminant sources and field instrument readings.

Primary Type of Energy Used (Check appropriate boxes)

☐ Natural Gas ☐ Fuel Oil ☐ Propane ☒ Electricity ☐ Wood ☐ Kerosene

Meteorological Conditions

Describe the general weather conditions during the indoor air sampling event.
Mostly sunny, 40's-50's

General Comments

Provide any other information that may be of importance in understanding the indoor air quality of this building.
Building is vacant. Some broken windows are present.

APPENDIX D

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WORK ORDER NUMBER: 16-12-2440

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AllWest Environmental, Inc.

Client Project Name: Hollis

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

Approved for release on 01/05/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: Hollis
Work Order Number: 16-12-2440

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Work Order Narrative

Work Order: 16-12-2440 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 12/27/16. They were assigned to Work Order 16-12-2440.

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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Detections Summary

Client:	AllWest Environmental, Inc.	Work Order:	16-12-2440
	2141 Mission Street, Suite 100	Project Name:	Hollis
	San Francisco, CA 94110-6331	Received:	12/27/16
Attn:	Leonard Niles		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
SVP-16 (16-12-2440-1)						
Carbon Dioxide	9.94		0.500	%v	ASTM D-1946	N/A
Oxygen (+ Argon)	10.4		0.500	%v	ASTM D-1946	N/A
Acetone	6.8		5.7	ug/m3	EPA TO-15	N/A
Chloroform	8.3		2.9	ug/m3	EPA TO-15	N/A
Chloromethane	1.4		1.2	ug/m3	EPA TO-15	N/A
SVP-15 (16-12-2440-2)						
Carbon Dioxide	2.84		0.500	%v	ASTM D-1946	N/A
Oxygen (+ Argon)	19.4		0.500	%v	ASTM D-1946	N/A
Acetone	7.4		4.8	ug/m3	EPA TO-15	N/A
2-Butanone	5.2		4.5	ug/m3	EPA TO-15	N/A
4-Ethyltoluene	44		2.5	ug/m3	EPA TO-15	N/A
o-Xylene	6.1		2.2	ug/m3	EPA TO-15	N/A
Tetrachloroethene	5.2		3.4	ug/m3	EPA TO-15	N/A
1,3,5-Trimethylbenzene	81		2.5	ug/m3	EPA TO-15	N/A
1,2,4-Trimethylbenzene	200		7.4	ug/m3	EPA TO-15	N/A
SVP-14 (16-12-2440-3)						
Carbon Dioxide	2.77		0.500	%v	ASTM D-1946	N/A
Oxygen (+ Argon)	18.7		0.500	%v	ASTM D-1946	N/A
Helium	0.0622		0.0100	%v	ASTM D-1946 (M)	N/A
Tetrachloroethene	31		4.3	ug/m3	EPA TO-15	N/A
SVP-13 (16-12-2440-4)						
Carbon Dioxide	7.96		0.500	%v	ASTM D-1946	N/A
Oxygen (+ Argon)	15.2		0.500	%v	ASTM D-1946	N/A
Helium	0.0619		0.0100	%v	ASTM D-1946 (M)	N/A
Tetrachloroethene	40		4.7	ug/m3	EPA TO-15	N/A
Trichloroethene	22		3.8	ug/m3	EPA TO-15	N/A
SVP-12 (16-12-2440-5)						
Carbon Dioxide	2.81		0.500	%v	ASTM D-1946	N/A
Oxygen (+ Argon)	19.3		0.500	%v	ASTM D-1946	N/A
Acetone	12		8.8	ug/m3	EPA TO-15	N/A
Tetrachloroethene	8.8		6.3	ug/m3	EPA TO-15	N/A
Trichloroethene	5.2		5.0	ug/m3	EPA TO-15	N/A
AMBIENT (16-12-2440-6)						
Helium	7.14		0.0100	%v	ASTM D-1946 (M)	N/A

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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: ASTM D-1946
Units: %v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-16	**16-12-2440-1-A**	**12/21/16 11:20**	**Air**	**GC 65**	**N/A**	**12/28/16 12:02**	**161228L02**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	9.94	0.500	1.00	
Oxygen (+ Argon)	10.4	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-15	**16-12-2440-2-A**	**12/21/16 12:33**	**Air**	**GC 65**	**N/A**	**12/28/16 12:23**	**161228L02**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	2.84	0.500	1.00	
Oxygen (+ Argon)	19.4	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-14	**16-12-2440-3-A**	**12/21/16 13:41**	**Air**	**GC 65**	**N/A**	**12/28/16 12:40**	**161228L02**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	2.77	0.500	1.00	
Oxygen (+ Argon)	18.7	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-13	**16-12-2440-4-A**	**12/22/16 08:45**	**Air**	**GC 65**	**N/A**	**12/28/16 12:58**	**161228L02**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	7.96	0.500	1.00	
Oxygen (+ Argon)	15.2	0.500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-12	**16-12-2440-5-A**	**12/22/16 09:30**	**Air**	**GC 65**	**N/A**	**12/28/16 13:17**	**161228L02**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	2.81	0.500	1.00	
Oxygen (+ Argon)	19.3	0.500	1.00	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: ASTM D-1946
Units: %v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-444-534**	**N/A**	**Air**	**GC 65**	**N/A**	**12/28/16 10:33**	**161228L02**

Parameter	Result	RL	DF	Qualifiers
Methane	ND	0.500	1.00	
Carbon Dioxide	ND	0.500	1.00	
Oxygen (+ Argon)	ND	0.500	1.00	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: ASTM D-1946 (M)
Units: %v

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-16	**16-12-2440-1-A**	**12/21/16 11:20**	**Air**	**GC 55**	**N/A**	**12/28/16 11:55**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-15	**16-12-2440-2-A**	**12/21/16 12:33**	**Air**	**GC 55**	**N/A**	**12/28/16 12:14**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-14	**16-12-2440-3-A**	**12/21/16 13:41**	**Air**	**GC 55**	**N/A**	**12/28/16 12:34**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.0622	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-13	**16-12-2440-4-A**	**12/22/16 08:45**	**Air**	**GC 55**	**N/A**	**12/28/16 12:56**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Helium	0.0619	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-12	**16-12-2440-5-A**	**12/22/16 09:30**	**Air**	**GC 55**	**N/A**	**12/28/16 13:18**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AMBIENT	**16-12-2440-6-A**	**12/22/16 09:29**	**Air**	**GC 55**	**N/A**	**12/28/16 14:02**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Helium	7.14	0.0100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-872-1011**	**N/A**	**Air**	**GC 55**	**N/A**	**12/28/16 10:16**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Helium	ND	0.0100	1.00	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
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-16	**16-12-2440-1-A**	**12/21/16 11:20**	**Air**	**GC/MS K**	**N/A**	**12/29/16 06:37**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	6.8	5.7	1.19	
Benzene	ND	1.9	1.19	
Benzyl Chloride	ND	9.2	1.19	
Bromodichloromethane	ND	4.0	1.19	
Bromoform	ND	6.2	1.19	
Bromomethane	ND	2.3	1.19	
2-Butanone	ND	5.3	1.19	
Carbon Disulfide	ND	7.4	1.19	
Carbon Tetrachloride	ND	3.7	1.19	
Chlorobenzene	ND	2.7	1.19	
Chloroethane	ND	1.6	1.19	
Chloroform	8.3	2.9	1.19	
Chloromethane	1.4	1.2	1.19	
Dibromochloromethane	ND	5.1	1.19	
Dichlorodifluoromethane	ND	2.9	1.19	
Diisopropyl Ether (DIPE)	ND	9.9	1.19	
1,1-Dichloroethane	ND	2.4	1.19	
1,1-Dichloroethene	ND	2.4	1.19	
1,2-Dibromoethane	ND	4.6	1.19	
Dichlorotetrafluoroethane	ND	17	1.19	
1,2-Dichlorobenzene	ND	3.6	1.19	
1,2-Dichloroethane	ND	2.4	1.19	
1,2-Dichloropropane	ND	2.7	1.19	
1,3-Dichlorobenzene	ND	3.6	1.19	
1,4-Dichlorobenzene	ND	3.6	1.19	
c-1,3-Dichloropropene	ND	2.7	1.19	
c-1,2-Dichloroethene	ND	2.4	1.19	
t-1,2-Dichloroethene	ND	2.4	1.19	
t-1,3-Dichloropropene	ND	5.4	1.19	
Ethanol	ND	11	1.19	
Ethyl-t-Butyl Ether (ETBE)	ND	9.9	1.19	
Ethylbenzene	ND	2.6	1.19	
4-Ethyltoluene	ND	2.9	1.19	
Hexachloro-1,3-Butadiene	ND	19	1.19	
2-Hexanone	ND	7.3	1.19	

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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Parameter	Result	RL	DF	Qualifiers
Methyl-t-Butyl Ether (MTBE)	ND	8.6	1.19	
Methylene Chloride	ND	21	1.19	
4-Methyl-2-Pentanone	ND	7.3	1.19	
Naphthalene	ND	31	1.19	
o-Xylene	ND	2.6	1.19	
p/m-Xylene	ND	10	1.19	
Styrene	ND	7.6	1.19	
Tert-Amyl-Methyl Ether (TAME)	ND	9.9	1.19	
Tert-Butyl Alcohol (TBA)	ND	7.2	1.19	
Tetrachloroethene	ND	4.0	1.19	
Toluene	ND	2.2	1.19	
Trichloroethene	ND	3.2	1.19	
Trichlorofluoromethane	ND	6.7	1.19	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	14	1.19	
1,1,1-Trichloroethane	ND	3.2	1.19	
1,1,2-Trichloroethane	ND	3.2	1.19	
1,3,5-Trimethylbenzene	ND	2.9	1.19	
1,1,2,2-Tetrachloroethane	ND	8.2	1.19	
1,2,4-Trimethylbenzene	ND	8.8	1.19	
1,2,4-Trichlorobenzene	ND	18	1.19	
Vinyl Acetate	ND	8.4	1.19	
Vinyl Chloride	ND	1.5	1.19	
1,1-Difluoroethane	ND	6.4	1.19	
Isopropanol	ND	15	1.19	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	104	68-134	
1,2-Dichloroethane-d4	95	67-133	
Toluene-d8	96	70-130	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
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-15	**16-12-2440-2-A**	**12/21/16 12:33**	**Air**	**GC/MS K**	**N/A**	**12/29/16 07:35**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	7.4	4.8	1.01	
Benzene	ND	1.6	1.01	
Benzyl Chloride	ND	7.8	1.01	
Bromodichloromethane	ND	3.4	1.01	
Bromoform	ND	5.2	1.01	
Bromomethane	ND	2.0	1.01	
2-Butanone	5.2	4.5	1.01	
Carbon Disulfide	ND	6.3	1.01	
Carbon Tetrachloride	ND	3.2	1.01	
Chlorobenzene	ND	2.3	1.01	
Chloroethane	ND	1.3	1.01	
Chloroform	ND	2.5	1.01	
Chloromethane	ND	1.0	1.01	
Dibromochloromethane	ND	4.3	1.01	
Dichlorodifluoromethane	ND	2.5	1.01	
Diisopropyl Ether (DIPE)	ND	8.4	1.01	
1,1-Dichloroethane	ND	2.0	1.01	
1,1-Dichloroethene	ND	2.0	1.01	
1,2-Dibromoethane	ND	3.9	1.01	
Dichlorotetrafluoroethane	ND	14	1.01	
1,2-Dichlorobenzene	ND	3.0	1.01	
1,2-Dichloroethane	ND	2.0	1.01	
1,2-Dichloropropane	ND	2.3	1.01	
1,3-Dichlorobenzene	ND	3.0	1.01	
1,4-Dichlorobenzene	ND	3.0	1.01	
c-1,3-Dichloropropene	ND	2.3	1.01	
c-1,2-Dichloroethene	ND	2.0	1.01	
t-1,2-Dichloroethene	ND	2.0	1.01	
t-1,3-Dichloropropene	ND	4.6	1.01	
Ethanol	ND	9.5	1.01	
Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1.01	
Ethylbenzene	ND	2.2	1.01	
4-Ethyltoluene	44	2.5	1.01	
Hexachloro-1,3-Butadiene	ND	16	1.01	
2-Hexanone	ND	6.2	1.01	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2440
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Hollis		Page 4 of 14

Parameter	Result	RL	DF	Qualifiers
Methyl-t-Butyl Ether (MTBE)	ND	7.3	1.01	
Methylene Chloride	ND	18	1.01	
4-Methyl-2-Pentanone	ND	6.2	1.01	
Naphthalene	ND	26	1.01	
o-Xylene	6.1	2.2	1.01	
p/m-Xylene	ND	8.8	1.01	
Styrene	ND	6.5	1.01	
Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1.01	
Tert-Butyl Alcohol (TBA)	ND	6.1	1.01	
Tetrachloroethene	5.2	3.4	1.01	
Toluene	ND	1.9	1.01	
Trichloroethene	ND	2.7	1.01	
Trichlorofluoromethane	ND	5.7	1.01	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	12	1.01	
1,1,1-Trichloroethane	ND	2.8	1.01	
1,1,2-Trichloroethane	ND	2.8	1.01	
1,3,5-Trimethylbenzene	81	2.5	1.01	
1,1,2,2-Tetrachloroethane	ND	6.9	1.01	
1,2,4-Trimethylbenzene	200	7.4	1.01	
1,2,4-Trichlorobenzene	ND	15	1.01	
Vinyl Acetate	ND	7.1	1.01	
Vinyl Chloride	ND	1.3	1.01	
1,1-Difluoroethane	ND	5.5	1.01	
Isopropanol	ND	12	1.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	105	68-134	
1,2-Dichloroethane-d4	96	67-133	
Toluene-d8	96	70-130	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
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-14	**16-12-2440-3-A**	**12/21/16 13:41**	**Air**	**GC/MS K**	**N/A**	**12/29/16 08:34**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	6.0	1.26	
Benzene	ND	2.0	1.26	
Benzyl Chloride	ND	9.8	1.26	
Bromodichloromethane	ND	4.2	1.26	
Bromoform	ND	6.5	1.26	
Bromomethane	ND	2.4	1.26	
2-Butanone	ND	5.6	1.26	
Carbon Disulfide	ND	7.8	1.26	
Carbon Tetrachloride	ND	4.0	1.26	
Chlorobenzene	ND	2.9	1.26	
Chloroethane	ND	1.7	1.26	
Chloroform	ND	3.1	1.26	
Chloromethane	ND	1.3	1.26	
Dibromochloromethane	ND	5.4	1.26	
Dichlorodifluoromethane	ND	3.1	1.26	
Diisopropyl Ether (DIPE)	ND	11	1.26	
1,1-Dichloroethane	ND	2.5	1.26	
1,1-Dichloroethene	ND	2.5	1.26	
1,2-Dibromoethane	ND	4.8	1.26	
Dichlorotetrafluoroethane	ND	18	1.26	
1,2-Dichlorobenzene	ND	3.8	1.26	
1,2-Dichloroethane	ND	2.5	1.26	
1,2-Dichloropropane	ND	2.9	1.26	
1,3-Dichlorobenzene	ND	3.8	1.26	
1,4-Dichlorobenzene	ND	3.8	1.26	
c-1,3-Dichloropropene	ND	2.9	1.26	
c-1,2-Dichloroethene	ND	2.5	1.26	
t-1,2-Dichloroethene	ND	2.5	1.26	
t-1,3-Dichloropropene	ND	5.7	1.26	
Ethanol	ND	12	1.26	
Ethyl-t-Butyl Ether (ETBE)	ND	11	1.26	
Ethylbenzene	ND	2.7	1.26	
4-Ethyltoluene	ND	3.1	1.26	
Hexachloro-1,3-Butadiene	ND	20	1.26	
2-Hexanone	ND	7.7	1.26	

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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Parameter	Result	RL	DF	Qualifiers
Methyl-t-Butyl Ether (MTBE)	ND	9.1	1.26	
Methylene Chloride	ND	22	1.26	
4-Methyl-2-Pentanone	ND	7.7	1.26	
Naphthalene	ND	33	1.26	
o-Xylene	ND	2.7	1.26	
p/m-Xylene	ND	11	1.26	
Styrene	ND	8.1	1.26	
Tert-Amyl-Methyl Ether (TAME)	ND	11	1.26	
Tert-Butyl Alcohol (TBA)	ND	7.6	1.26	
Tetrachloroethene	31	4.3	1.26	
Toluene	ND	2.4	1.26	
Trichloroethene	ND	3.4	1.26	
Trichlorofluoromethane	ND	7.1	1.26	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	14	1.26	
1,1,1-Trichloroethane	ND	3.4	1.26	
1,1,2-Trichloroethane	ND	3.4	1.26	
1,3,5-Trimethylbenzene	ND	3.1	1.26	
1,1,2,2-Tetrachloroethane	ND	8.6	1.26	
1,2,4-Trimethylbenzene	ND	9.3	1.26	
1,2,4-Trichlorobenzene	ND	19	1.26	
Vinyl Acetate	ND	8.9	1.26	
Vinyl Chloride	ND	1.6	1.26	
1,1-Difluoroethane	ND	6.8	1.26	
Isopropanol	ND	15	1.26	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	105	68-134	
1,2-Dichloroethane-d4	96	67-133	
Toluene-d8	96	70-130	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
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-13	**16-12-2440-4-A**	**12/22/16 08:45**	**Air**	**GC/MS K**	**N/A**	**12/29/16 09:32**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	6.7	1.40	
Benzene	ND	2.2	1.40	
Benzyl Chloride	ND	11	1.40	
Bromodichloromethane	ND	4.7	1.40	
Bromoform	ND	7.2	1.40	
Bromomethane	ND	2.7	1.40	
2-Butanone	ND	6.2	1.40	
Carbon Disulfide	ND	8.7	1.40	
Carbon Tetrachloride	ND	4.4	1.40	
Chlorobenzene	ND	3.2	1.40	
Chloroethane	ND	1.8	1.40	
Chloroform	ND	3.4	1.40	
Chloromethane	ND	1.4	1.40	
Dibromochloromethane	ND	6.0	1.40	
Dichlorodifluoromethane	ND	3.5	1.40	
Diisopropyl Ether (DIPE)	ND	12	1.40	
1,1-Dichloroethane	ND	2.8	1.40	
1,1-Dichloroethene	ND	2.8	1.40	
1,2-Dibromoethane	ND	5.4	1.40	
Dichlorotetrafluoroethane	ND	20	1.40	
1,2-Dichlorobenzene	ND	4.2	1.40	
1,2-Dichloroethane	ND	2.8	1.40	
1,2-Dichloropropane	ND	3.2	1.40	
1,3-Dichlorobenzene	ND	4.2	1.40	
1,4-Dichlorobenzene	ND	4.2	1.40	
c-1,3-Dichloropropene	ND	3.2	1.40	
c-1,2-Dichloroethene	ND	2.8	1.40	
t-1,2-Dichloroethene	ND	2.8	1.40	
t-1,3-Dichloropropene	ND	6.4	1.40	
Ethanol	ND	13	1.40	
Ethyl-t-Butyl Ether (ETBE)	ND	12	1.40	
Ethylbenzene	ND	3.0	1.40	
4-Ethyltoluene	ND	3.4	1.40	
Hexachloro-1,3-Butadiene	ND	22	1.40	
2-Hexanone	ND	8.6	1.40	

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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Parameter	Result	RL	DF	Qualifiers
Methyl-t-Butyl Ether (MTBE)	ND	10	1.40	
Methylene Chloride	ND	24	1.40	
4-Methyl-2-Pentanone	ND	8.6	1.40	
Naphthalene	ND	37	1.40	
o-Xylene	ND	3.0	1.40	
p/m-Xylene	ND	12	1.40	
Styrene	ND	8.9	1.40	
Tert-Amyl-Methyl Ether (TAME)	ND	12	1.40	
Tert-Butyl Alcohol (TBA)	ND	8.5	1.40	
Tetrachloroethene	40	4.7	1.40	
Toluene	ND	2.6	1.40	
Trichloroethene	22	3.8	1.40	
Trichlorofluoromethane	ND	7.9	1.40	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	16	1.40	
1,1,1-Trichloroethane	ND	3.8	1.40	
1,1,2-Trichloroethane	ND	3.8	1.40	
1,3,5-Trimethylbenzene	ND	3.4	1.40	
1,1,2,2-Tetrachloroethane	ND	9.6	1.40	
1,2,4-Trimethylbenzene	ND	10	1.40	
1,2,4-Trichlorobenzene	ND	21	1.40	
Vinyl Acetate	ND	9.9	1.40	
Vinyl Chloride	ND	1.8	1.40	
1,1-Difluoroethane	ND	7.6	1.40	
Isopropanol	ND	17	1.40	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	107	68-134	
1,2-Dichloroethane-d4	98	67-133	
Toluene-d8	96	70-130	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
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-12	**16-12-2440-5-A**	**12/22/16 09:30**	**Air**	**GC/MS K**	**N/A**	**12/29/16 19:07**	**161229L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	12	8.8	1.85	
Benzene	ND	3.0	1.85	
Benzyl Chloride	ND	14	1.85	
Bromodichloromethane	ND	6.2	1.85	
Bromoform	ND	9.6	1.85	
Bromomethane	ND	3.6	1.85	
2-Butanone	ND	8.2	1.85	
Carbon Disulfide	ND	12	1.85	
Carbon Tetrachloride	ND	5.8	1.85	
Chlorobenzene	ND	4.3	1.85	
Chloroethane	ND	2.4	1.85	
Chloroform	ND	4.5	1.85	
Chloromethane	ND	1.9	1.85	
Dibromochloromethane	ND	7.9	1.85	
Dichlorodifluoromethane	ND	4.6	1.85	
Diisopropyl Ether (DIPE)	ND	15	1.85	
1,1-Dichloroethane	ND	3.7	1.85	
1,1-Dichloroethene	ND	3.7	1.85	
1,2-Dibromoethane	ND	7.1	1.85	
Dichlorotetrafluoroethane	ND	26	1.85	
1,2-Dichlorobenzene	ND	5.6	1.85	
1,2-Dichloroethane	ND	3.7	1.85	
1,2-Dichloropropane	ND	4.3	1.85	
1,3-Dichlorobenzene	ND	5.6	1.85	
1,4-Dichlorobenzene	ND	5.6	1.85	
c-1,3-Dichloropropene	ND	4.2	1.85	
c-1,2-Dichloroethene	ND	3.7	1.85	
t-1,2-Dichloroethene	ND	3.7	1.85	
t-1,3-Dichloropropene	ND	8.4	1.85	
Ethanol	ND	17	1.85	
Ethyl-t-Butyl Ether (ETBE)	ND	15	1.85	
Ethylbenzene	ND	4.0	1.85	
4-Ethyltoluene	ND	4.5	1.85	
Hexachloro-1,3-Butadiene	ND	30	1.85	
2-Hexanone	ND	11	1.85	

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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Parameter	Result	RL	DF	Qualifiers
Methyl-t-Butyl Ether (MTBE)	ND	13	1.85	
Methylene Chloride	ND	32	1.85	
4-Methyl-2-Pentanone	ND	11	1.85	
Naphthalene	ND	48	1.85	
o-Xylene	ND	4.0	1.85	
p/m-Xylene	ND	16	1.85	
Styrene	ND	12	1.85	
Tert-Amyl-Methyl Ether (TAME)	ND	15	1.85	
Tert-Butyl Alcohol (TBA)	ND	11	1.85	
Tetrachloroethene	8.8	6.3	1.85	
Toluene	ND	3.5	1.85	
Trichloroethene	5.2	5.0	1.85	
Trichlorofluoromethane	ND	10	1.85	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	21	1.85	
1,1,1-Trichloroethane	ND	5.0	1.85	
1,1,2-Trichloroethane	ND	5.0	1.85	
1,3,5-Trimethylbenzene	ND	4.5	1.85	
1,1,2,2-Tetrachloroethane	ND	13	1.85	
1,2,4-Trimethylbenzene	ND	14	1.85	
1,2,4-Trichlorobenzene	ND	27	1.85	
Vinyl Acetate	ND	13	1.85	
Vinyl Chloride	ND	2.4	1.85	
1,1-Difluoroethane	ND	10	1.85	
Isopropanol	ND	23	1.85	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-134	
1,2-Dichloroethane-d4	103	67-133	
Toluene-d8	95	70-130	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
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	**095-01-021-17926**	**N/A**	**Air**	**GC/MS K**	**N/A**	**12/28/16 15:38**	**161228L01**

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	
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	
Dichlorodifluoromethane	ND	2.5	1.00	
Diisopropyl Ether (DIPE)	ND	8.4	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Ethanol	ND	9.4	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1.00	
Ethylbenzene	ND	2.2	1.00	
4-Ethyltoluene	ND	2.5	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	

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

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Analytical Report

AllWest Environmental, Inc.		Date Received:	12/27/16
2141 Mission Street, Suite 100		Work Order:	16-12-2440
San Francisco, CA 94110-6331		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Hollis			Page 12 of 14

Parameter	Result	RL	DF	Qualifiers
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	
Naphthalene	ND	26	1.00	
o-Xylene	ND	2.2	1.00	
p/m-Xylene	ND	8.7	1.00	
Styrene	ND	6.4	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1.00	
Tert-Butyl Alcohol (TBA)	ND	6.1	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	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	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
1,3,5-Trimethylbenzene	ND	2.5	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,2,4-Trichlorobenzene	ND	15	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Isopropanol	ND	12	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-134	
1,2-Dichloroethane-d4	94	67-133	
Toluene-d8	96	70-130	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
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	**095-01-021-17936**	**N/A**	**Air**	**GC/MS K**	**N/A**	**12/29/16 16:33**	**161229L01**

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	
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	
Dichlorodifluoromethane	ND	2.5	1.00	
Diisopropyl Ether (DIPE)	ND	8.4	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Ethanol	ND	9.4	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1.00	
Ethylbenzene	ND	2.2	1.00	
4-Ethyltoluene	ND	2.5	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Parameter	Result	RL	DF	Qualifiers
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	
Naphthalene	ND	26	1.00	
o-Xylene	ND	2.2	1.00	
p/m-Xylene	ND	8.7	1.00	
Styrene	ND	6.4	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1.00	
Tert-Butyl Alcohol (TBA)	ND	6.1	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	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	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
1,3,5-Trimethylbenzene	ND	2.5	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,2,4-Trichlorobenzene	ND	15	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Isopropanol	ND	12	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-134	
1,2-Dichloroethane-d4	97	67-133	
Toluene-d8	96	70-130	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: EPA TO-3M
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-16	**16-12-2440-1-A**	**12/21/16 11:20**	**Air**	**GC 60**	**N/A**	**12/28/16 11:52**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7000	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-15	**16-12-2440-2-A**	**12/21/16 12:33**	**Air**	**GC 60**	**N/A**	**12/28/16 12:04**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7000	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-14	**16-12-2440-3-A**	**12/21/16 13:41**	**Air**	**GC 60**	**N/A**	**12/28/16 12:16**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7000	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-13	**16-12-2440-4-A**	**12/22/16 08:45**	**Air**	**GC 60**	**N/A**	**12/28/16 12:35**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7000	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SVP-12	**16-12-2440-5-A**	**12/22/16 09:30**	**Air**	**GC 60**	**N/A**	**12/28/16 12:47**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7000	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-7581**	**N/A**	**Air**	**GC 60**	**N/A**	**12/28/16 09:38**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7000	1.00	

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

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Quality Control - Sample Duplicate

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

Project: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: EPA TO-3M

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
16-12-2584-1	**Sample**	**Air**	**GC 60**	**N/A**	**12/28/16 16:54**	**161228D01**
16-12-2584-1	**Sample Duplicate**	**Air**	**GC 60**	**N/A**	**12/28/16 17:07**	**161228D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
TPH as Gasoline	72650000	73870000	2	0-20	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: ASTM D-1946

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-444-534	**LCS**	**Air**	**GC 65**	**N/A**	**12/28/16 09:53**	**161228L02**
099-16-444-534	**LCSD**	**Air**	**GC 65**	**N/A**	**12/28/16 10:12**	**161228L02**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Methane	4.500	4.453	99	4.484	100	80-120	1	0-30	
Carbon Dioxide	15.00	15.08	101	15.48	103	80-120	3	0-30	
Carbon Monoxide	6.990	6.956	100	6.989	100	80-120	0	0-30	
Oxygen (+ Argon)	4.010	4.038	101	3.986	99	80-120	1	0-30	
Nitrogen	69.50	67.77	98	67.72	97	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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: ASTM D-1946 (M)

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-1011	**LCS**	**Air**	**GC 55**	**N/A**	**12/28/16 09:34**	**161228L01**
099-12-872-1011	**LCSD**	**Air**	**GC 55**	**N/A**	**12/28/16 09:55**	**161228L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Helium	1.000	0.9404	94	0.9501	95	80-120	1	0-30	
Hydrogen	1.000	0.9396	94	0.9487	95	80-120	1	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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: EPA TO-15

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-17926	**LCS**	**Air**	**GC/MS K**	**N/A**	**12/28/16 12:51**	**161228L01**
095-01-021-17926	**LCSD**	**Air**	**GC/MS K**	**N/A**	**12/28/16 13:43**	**161228L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	59.39	53.38	90	52.42	88	67-133	56-144	2	0-30	
Benzene	79.87	81.92	103	82.53	103	70-130	60-140	1	0-30	
Benzyl Chloride	129.4	122.9	95	122.2	94	38-158	18-178	1	0-30	
Bromodichloromethane	167.5	165.2	99	165.1	99	70-130	60-140	0	0-30	
Bromoform	258.4	273.6	106	273.1	106	63-147	49-161	0	0-30	
Bromomethane	97.08	79.83	82	78.41	81	70-139	58-150	2	0-30	
2-Butanone	73.73	70.72	96	71.47	97	66-132	55-143	1	0-30	
Carbon Disulfide	77.85	67.33	86	67.16	86	68-146	55-159	0	0-30	
Carbon Tetrachloride	157.3	150.4	96	149.0	95	70-136	59-147	1	0-30	
Chlorobenzene	115.1	114.8	100	115.7	100	70-130	60-140	1	0-30	
Chloroethane	65.96	56.28	85	55.15	84	65-149	51-163	2	0-30	
Chloroform	122.1	111.9	92	110.9	91	70-130	60-140	1	0-30	
Chloromethane	51.63	42.22	82	41.76	81	69-141	57-153	1	0-30	
Dibromochloromethane	213.0	215.3	101	215.0	101	70-138	59-149	0	0-30	
Dichlorodifluoromethane	123.6	109.8	89	105.5	85	67-139	55-151	4	0-30	
Diisopropyl Ether (DIPE)	104.5	98.63	94	100.8	96	63-130	52-141	2	0-30	
1,1-Dichloroethane	101.2	100.9	100	97.73	97	70-130	60-140	3	0-30	
1,1-Dichloroethene	99.12	85.24	86	82.83	84	70-135	59-146	3	0-30	
1,2-Dibromoethane	192.1	201.4	105	201.8	105	70-133	60-144	0	0-30	
Dichlorotetrafluoroethane	174.8	147.9	85	142.8	82	51-135	37-149	3	0-30	
1,2-Dichlorobenzene	150.3	159.0	106	159.6	106	48-138	33-153	0	0-30	
1,2-Dichloroethane	101.2	96.71	96	95.92	95	70-132	60-142	1	0-30	
1,2-Dichloropropane	115.5	122.1	106	122.3	106	70-130	60-140	0	0-30	
1,3-Dichlorobenzene	150.3	157.0	104	156.6	104	56-134	43-147	0	0-30	
1,4-Dichlorobenzene	150.3	155.8	104	155.6	104	52-136	38-150	0	0-30	
c-1,3-Dichloropropene	113.5	130.9	115	131.5	116	70-130	60-140	0	0-30	
c-1,2-Dichloroethene	99.12	102.6	104	102.2	103	70-130	60-140	0	0-30	
t-1,2-Dichloroethene	99.12	98.29	99	92.95	94	70-130	60-140	6	0-30	
t-1,3-Dichloropropene	113.5	134.7	119	134.4	118	70-147	57-160	0	0-30	
Ethanol	188.4	160.3	85	161.3	86	37-139	20-156	1	0-30	
Ethyl-t-Butyl Ether (ETBE)	104.5	100.2	96	100.3	96	67-130	56-140	0	0-30	
Ethylbenzene	108.6	117.0	108	116.5	107	70-130	60-140	0	0-30	
4-Ethyltoluene	122.9	132.3	108	131.7	107	68-130	58-140	0	0-30	
Hexachloro-1,3-Butadiene	266.6	271.2	102	276.5	104	44-146	27-163	2	0-30	
2-Hexanone	102.4	126.6	124	126.0	123	70-136	59-147	0	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	86.65	96	85.70	95	68-130	58-140	1	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AllWest Environmental, Inc.		Date Received:	12/27/16
2141 Mission Street, Suite 100		Work Order:	16-12-2440
San Francisco, CA 94110-6331		Preparation:	N/A
		Method:	EPA TO-15
Project: Hollis			Page 4 of 7

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Methylene Chloride	86.84	74.43	86	73.34	84	69-130	59-140	1	0-30	
4-Methyl-2-Pentanone	102.4	110.3	108	109.9	107	70-130	60-140	0	0-30	
Naphthalene	131.1	153.9	117	155.9	119	24-144	4-164	1	0-30	
o-Xylene	108.6	108.0	99	108.0	99	69-130	59-140	0	0-30	
p/m-Xylene	217.1	215.8	99	215.0	99	70-132	60-142	0	0-30	
Styrene	106.5	99.61	94	99.74	94	65-131	54-142	0	0-30	
Tert-Amyl-Methyl Ether (TAME)	104.5	99.43	95	100.6	96	69-130	59-140	1	0-30	
Tert-Butyl Alcohol (TBA)	151.6	133.1	88	131.4	87	66-144	53-157	1	0-30	
Tetrachloroethene	169.6	163.4	96	162.6	96	70-130	60-140	1	0-30	
Toluene	94.21	95.68	102	95.49	101	70-130	60-140	0	0-30	
Trichloroethene	134.3	134.8	100	134.8	100	70-130	60-140	0	0-30	
Trichlorofluoromethane	140.5	117.7	84	113.7	81	63-141	50-154	3	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	167.3	87	163.0	85	70-136	59-147	3	0-30	
1,1,1-Trichloroethane	136.4	129.1	95	127.5	93	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	140.0	103	139.5	102	70-130	60-140	0	0-30	
1,3,5-Trimethylbenzene	122.9	126.4	103	125.8	102	62-130	51-141	0	0-30	
1,1,2,2-Tetrachloroethane	171.6	168.7	98	168.5	98	63-130	52-141	0	0-30	
1,2,4-Trimethylbenzene	122.9	121.9	99	121.7	99	60-132	48-144	0	0-30	
1,2,4-Trichlorobenzene	185.5	218.4	118	222.9	120	31-151	11-171	2	0-30	
Vinyl Acetate	88.03	83.17	94	86.03	98	58-130	46-142	3	0-30	
Vinyl Chloride	63.91	53.64	84	52.68	82	70-134	59-145	2	0-30	
1,1-Difluoroethane	67.54	64.63	96	64.23	95	70-131	60-141	1	0-30	
Isopropanol	61.45	50.77	83	50.47	82	57-135	44-148	1	0-30	

Total number of LCS compounds: 59
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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Quality Control - LCS/LCSD

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

Project: Hollis

Date Received: 12/27/16
Work Order: 16-12-2440
Preparation: N/A
Method: EPA TO-15

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-17936	**LCS**	**Air**	**GC/MS K**	**N/A**	**12/29/16 13:53**	**161229L01**
095-01-021-17936	**LCSD**	**Air**	**GC/MS K**	**N/A**	**12/29/16 14:45**	**161229L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	59.39	54.71	92	55.22	93	67-133	56-144	1	0-30	
Benzene	79.87	77.92	98	78.97	99	70-130	60-140	1	0-30	
Benzyl Chloride	129.4	125.9	97	126.4	98	38-158	18-178	0	0-30	
Bromodichloromethane	167.5	165.1	99	165.6	99	70-130	60-140	0	0-30	
Bromoform	258.4	278.1	108	280.2	108	63-147	49-161	1	0-30	
Bromomethane	97.08	82.18	85	83.28	86	70-139	58-150	1	0-30	
2-Butanone	73.73	69.26	94	70.22	95	66-132	55-143	1	0-30	
Carbon Disulfide	77.85	69.37	89	70.03	90	68-146	55-159	1	0-30	
Carbon Tetrachloride	157.3	155.0	99	154.9	99	70-136	59-147	0	0-30	
Chlorobenzene	115.1	113.3	98	114.1	99	70-130	60-140	1	0-30	
Chloroethane	65.96	57.25	87	57.57	87	65-149	51-163	1	0-30	
Chloroform	122.1	110.3	90	111.4	91	70-130	60-140	1	0-30	
Chloromethane	51.63	44.60	86	45.27	88	69-141	57-153	2	0-30	
Dibromochloromethane	213.0	215.9	101	216.7	102	70-138	59-149	0	0-30	
Dichlorodifluoromethane	123.6	112.7	91	113.0	91	67-139	55-151	0	0-30	
Diisopropyl Ether (DIPE)	104.5	95.57	91	98.38	94	63-130	52-141	3	0-30	
1,1-Dichloroethane	101.2	94.49	93	99.45	98	70-130	60-140	5	0-30	
1,1-Dichloroethene	99.12	87.57	88	87.98	89	70-135	59-146	0	0-30	
1,2-Dibromoethane	192.1	197.7	103	200.4	104	70-133	60-144	1	0-30	
Dichlorotetrafluoroethane	174.8	153.9	88	153.6	88	51-135	37-149	0	0-30	
1,2-Dichlorobenzene	150.3	163.7	109	162.6	108	48-138	33-153	1	0-30	
1,2-Dichloroethane	101.2	97.10	96	98.44	97	70-132	60-142	1	0-30	
1,2-Dichloropropane	115.5	118.2	102	119.7	104	70-130	60-140	1	0-30	
1,3-Dichlorobenzene	150.3	160.2	107	161.5	107	56-134	43-147	1	0-30	
1,4-Dichlorobenzene	150.3	159.1	106	159.6	106	52-136	38-150	0	0-30	
c-1,3-Dichloropropene	113.5	129.0	114	129.1	114	70-130	60-140	0	0-30	
c-1,2-Dichloroethene	99.12	98.82	100	99.54	100	70-130	60-140	1	0-30	
t-1,2-Dichloroethene	99.12	92.76	94	94.93	96	70-130	60-140	2	0-30	
t-1,3-Dichloropropene	113.5	133.1	117	134.1	118	70-147	57-160	1	0-30	
Ethanol	188.4	168.1	89	171.8	91	37-139	20-156	2	0-30	
Ethyl-t-Butyl Ether (ETBE)	104.5	97.92	94	99.58	95	67-130	56-140	2	0-30	
Ethylbenzene	108.6	115.3	106	115.9	107	70-130	60-140	1	0-30	
4-Ethyltoluene	122.9	134.8	110	133.0	108	68-130	58-140	1	0-30	
Hexachloro-1,3-Butadiene	266.6	282.9	106	289.8	109	44-146	27-163	2	0-30	
2-Hexanone	102.4	122.4	120	124.2	121	70-136	59-147	1	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	82.88	92	78.52	87	68-130	58-140	5	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AllWest Environmental, Inc.		Date Received:	12/27/16
2141 Mission Street, Suite 100		Work Order:	16-12-2440
San Francisco, CA 94110-6331		Preparation:	N/A
		Method:	EPA TO-15
Project: Hollis			Page 6 of 7

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Methylene Chloride	86.84	76.10	88	77.04	89	69-130	59-140	1	0-30	
4-Methyl-2-Pentanone	102.4	107.3	105	109.2	107	70-130	60-140	2	0-30	
Naphthalene	131.1	156.3	119	161.1	123	24-144	4-164	3	0-30	
o-Xylene	108.6	110.2	102	108.2	100	69-130	59-140	2	0-30	
p/m-Xylene	217.1	216.1	100	216.0	99	70-132	60-142	0	0-30	
Styrene	106.5	102.4	96	99.44	93	65-131	54-142	3	0-30	
Tert-Amyl-Methyl Ether (TAME)	104.5	96.32	92	97.43	93	69-130	59-140	1	0-30	
Tert-Butyl Alcohol (TBA)	151.6	137.2	91	140.2	92	66-144	53-157	2	0-30	
Tetrachloroethene	169.6	162.3	96	161.7	95	70-130	60-140	0	0-30	
Toluene	94.21	91.99	98	93.19	99	70-130	60-140	1	0-30	
Trichloroethene	134.3	133.1	99	133.4	99	70-130	60-140	0	0-30	
Trichlorofluoromethane	140.5	123.9	88	123.3	88	63-141	50-154	0	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	173.0	90	174.1	91	70-136	59-147	1	0-30	
1,1,1-Trichloroethane	136.4	129.6	95	130.9	96	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	137.3	101	137.6	101	70-130	60-140	0	0-30	
1,3,5-Trimethylbenzene	122.9	130.3	106	127.6	104	62-130	51-141	2	0-30	
1,1,2,2-Tetrachloroethane	171.6	169.7	99	167.1	97	63-130	52-141	2	0-30	
1,2,4-Trimethylbenzene	122.9	125.5	102	124.9	102	60-132	48-144	1	0-30	
1,2,4-Trichlorobenzene	185.5	225.6	122	230.3	124	31-151	11-171	2	0-30	
Vinyl Acetate	88.03	82.89	94	97.80	111	58-130	46-142	16	0-30	
Vinyl Chloride	63.91	54.94	86	56.03	88	70-134	59-145	2	0-30	
1,1-Difluoroethane	67.54	66.60	99	68.82	102	70-131	60-141	3	0-30	
Isopropanol	61.45	52.08	85	53.40	87	57-135	44-148	3	0-30	

Total number of LCS compounds: 59
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AllWest Environmental, Inc.		Date Received:	12/27/16
2141 Mission Street, Suite 100		Work Order:	16-12-2440
San Francisco, CA 94110-6331		Preparation:	N/A
		Method:	EPA TO-3M
Project: Hollis			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
098-01-005-7581	**LCS**	**Air**	**GC 60**	**N/A**	**12/28/16 09:22**	**161228L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	932500	912000	98	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Summa Canister Vacuum Summary

Work Order: 16-12-2440 Page 1 of 1

Sample Name	Vacuum Out	Vacuum In	Equipment	Description
SVP-16	-29.50 in Hg	-4.20 in Hg	LC605	Summa Canister 1L
SVP-15	-29.50 in Hg	0.50 psi	LC423	Summa Canister 1L
SVP-14	-29.50 in Hg	-3.10 in Hg	LC1206	Summa Canister 1L
SVP-13	-29.50 in Hg	-5.00 in Hg	LC402	Summa Canister 1L
SVP-12	-29.50 in Hg	-4.60 in Hg	LC1207	Summa Canister 1L
AMBIENT	-29.50 in Hg	-2.20 in Hg	LC944	Summa Canister 1L

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Sample Analysis Summary Report

Work Order: 16-12-2440 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
ASTM D-1946	N/A	1074	GC 65	2
ASTM D-1946 (M)	N/A	929	GC 55	2
ASTM D-1946 (M)	N/A	1074	GC 55	2
EPA TO-15	N/A	1087	GC/MS K	2
EPA TO-3M	N/A	929	GC 60	2
EPA TO-3M	N/A	1074	GC 60	2

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Glossary of Terms and Qualifiers

Work Order: 16-12-2440 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

DATE: 12/21/16
PAGE: 1 OF 1

WO NO. / LAB USE ONLY: **16-12-2440**

LABORATORY CLIENT: ALLWEST ENVIRONMENTAL INC.
ADDRESS: 2141 MISSION ST, STE100
CITY: SAN FRANCISCO, CA STATE: ZIP: 94110
TEL: (415)391-2510 E-MAIL: LEONARD@ALLWEST1.COM
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 UNITS:

CLIENT PROJECT NAME / NO.: HOLLIS
PROJECT CONTACT: LEONARD NILES
PROJECT ADDRESS: 6655 HOLLIS ST
CITY: EMERYVILLE STATE: CA ZIP:

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

SPECIAL INSTRUCTIONS:

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)	REQUESTED ANALYSES: TP-3 (TPH-g)	TO-15 (FULL LIST + ONY + MNN)	ASTM D1946 (He, O2, CO2, CH4)	ASTM D1946 (He ONLY)	
1	SVP-16		SV	LC605	1L	SGM178	12/21/16	1048	30	12/21/16	1120	6	X	X	X		
2	SVP-15		SV	LC423	1L	SGM250	12/21/16	1224	30	12/21/16	1233	5	X	X	X		
3	SVP-14		SV	LC1206	1L	SGM382	12/21/16	1334	30	12/21/16	1341	4	X	X	X		
4	SVP-13		SV	LC402	1L	SGM185	12/22/16	0840	30	12/22/16	0845	4	X	X	X		
5	SVP-12		SV	LC1207	1L	SGM220	12/22/16	0924	30	12/22/16	0930	5	X	X	X		
6	AMBIENT		SV	LC944	1L	A414	12/22/16	0924	30	12/22/16	0929	4				X	

Relinquished by: (Signature) Sara Bloom	Received by: (Signature/Affiliation)	Date: 12/22/16	Time: 1530
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature) (GSO)	Received by: (Signature/Affiliation)	Date: 12/27/16	Time: 1050

2014-07-01 Revision

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GSO GOLDEN STATE OVERNIGHT

WebShip > > > > >
800-322-5555 www.gso.com

Ship From:
SARA BLOOM
ALLWEST ENVIRONMENTAL
2141 MISSION STREET SUITE 100
SAN FRANCISCO, CA 94110

Tracking #: 534467448

NPS

ORC

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GSO GOLDEN STATE OVERNIGHT

WebShip > > > > >
800-322-5555 www.gso.com

Ship From:
SARA BLOOM
ALLWEST ENVIRONMENTAL
2141 MISSION STREET SUITE 100
SAN FRANCISCO, CA 94110

Ship To:
SAMPLE CONTROL
EUROFINS CALSCIENCE, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD: $0.00
Weight:
Dimensions:
Reference:
EO/AIR BILLS REQUEST
Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 534467449

NPS

ORC

A

GARDEN GROVE

D92845A

60743590

Print Date : 12/22/16 16:13 PM

SEND LABEL TO PRINTER ☑ Print All

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WORK ORDER NUMBER: 16-12-2490

SAMPLE RECEIPT CHECKLIST

COOLER 0 OF 0

CLIENT: AllWest Env'l., Inc.

DATE: 12 / 27 / 2016

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

Thermometer ID: SC3A (CF: 0.0°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: SM6

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present (BOX) ☐ N/A Checked by: SM6

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: SM6

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, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: SM6

Reviewed by: 681

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WORK ORDER NUMBER: 16-12-2439

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AllWest Environmental, Inc.

Client Project Name: Hollis

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

Vikas Patel

Approved for release on 01/09/2017 by:
Vikas Patel
Project Manager

ResultLink

Email your PM

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Client Project Name: Hollis
Work Order Number: 16-12-2439

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Work Order Narrative

Work Order: 16-12-2439 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 12/27/16. They were assigned to Work Order 16-12-2439.

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. 2141 Mission Street, Suite 100 San Francisco, CA 94110-6331	Work Order:	16-12-2439
		Project Name:	Hollis
		PO Number:	
		Date/Time Received:	12/27/16 10:45
		Number of Containers:	9
Attn:	Leonard Niles		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
OAA-2	16-12-2439-1	12/21/16 16:27	1	Air
OAA-3	16-12-2439-2	12/21/16 15:41	1	Air
IAQ-6	16-12-2439-3	12/21/16 16:35	1	Air
IAQ-7	16-12-2439-4	12/21/16 16:33	1	Air
IAQ-8	16-12-2439-5	12/21/16 17:18	1	Air
IAQ-9	16-12-2439-6	12/21/16 16:42	1	Air
IAQ-10	16-12-2439-7	12/21/16 17:16	1	Air
IAQ-11	16-12-2439-8	12/21/16 17:12	1	Air
IAQ-12	16-12-2439-9	12/21/16 17:19	1	Air

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Detections Summary

Client:	AllWest Environmental, Inc.	Work Order:	16-12-2439
	2141 Mission Street, Suite 100	Project Name:	Hollis
	San Francisco, CA 94110-6331	Received:	12/27/16
Attn:	Leonard Niles		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
OAA-2 (16-12-2439-1)						
Dichlorodifluoromethane	2.3		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.1		0.052	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.3		0.14	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.36		0.087	ug/m3	EPA TO-15 SIM	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.57		0.19	ug/m3	EPA TO-15 SIM	N/A
1,2,4-Trimethylbenzene	0.50		0.25	ug/m3	EPA TO-15 SIM	N/A
1,3,5-Trimethylbenzene	0.28		0.12	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	2.8		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.80		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.57		0.063	ug/m3	EPA TO-15 SIM	N/A
Toluene	1.8		0.19	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.32		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	1.1		0.11	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.42		0.11	ug/m3	EPA TO-15 SIM	N/A
Naphthalene	0.21		0.052	ug/m3	EPA TO-15 SIM	N/A
OAA-3 (16-12-2439-2)						
Dichlorodifluoromethane	1.9		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.1		0.052	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.2		0.14	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.49		0.087	ug/m3	EPA TO-15 SIM	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52		0.19	ug/m3	EPA TO-15 SIM	N/A
1,2,4-Trimethylbenzene	0.63		0.25	ug/m3	EPA TO-15 SIM	N/A
1,3,5-Trimethylbenzene	0.20		0.12	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	2.6		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	1.3		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.50		0.063	ug/m3	EPA TO-15 SIM	N/A
Toluene	2.5		0.19	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.44		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	1.4		0.11	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.57		0.11	ug/m3	EPA TO-15 SIM	N/A
Naphthalene	0.11		0.052	ug/m3	EPA TO-15 SIM	N/A

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Detections Summary

Client:	AllWest Environmental, Inc.	Work Order:	16-12-2439
	2141 Mission Street, Suite 100	Project Name:	Hollis
	San Francisco, CA 94110-6331	Received:	12/27/16
Attn:	Leonard Niles		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
IAQ-6 (16-12-2439-3)						
Dichlorodifluoromethane	2.0		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.1		0.052	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.6		0.14	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.87		0.087	ug/m3	EPA TO-15 SIM	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.54		0.19	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.18		0.12	ug/m3	EPA TO-15 SIM	N/A
1,2,4-Trimethylbenzene	1.1		0.25	ug/m3	EPA TO-15 SIM	N/A
1,3,5-Trimethylbenzene	0.41		0.12	ug/m3	EPA TO-15 SIM	N/A
4-Ethyltoluene	0.43		0.25	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	3.5		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	1.4		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.53		0.063	ug/m3	EPA TO-15 SIM	N/A
Toluene	3.6		0.19	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.71		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	2.3		0.11	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.93		0.11	ug/m3	EPA TO-15 SIM	N/A
Naphthalene	0.23		0.052	ug/m3	EPA TO-15 SIM	N/A
IAQ-7 (16-12-2439-4)						
Dichlorodifluoromethane	3.9		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	0.86		0.052	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.6		0.14	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	1.0		0.087	ug/m3	EPA TO-15 SIM	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.53		0.19	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.23		0.12	ug/m3	EPA TO-15 SIM	N/A
1,2,4-Trimethylbenzene	1.1		0.25	ug/m3	EPA TO-15 SIM	N/A
1,3,5-Trimethylbenzene	0.42		0.12	ug/m3	EPA TO-15 SIM	N/A
4-Ethyltoluene	0.45		0.25	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	3.9		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	1.6		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.53		0.063	ug/m3	EPA TO-15 SIM	N/A
Toluene	3.7		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichloroethene	0.37		0.13	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.71		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	2.4		0.11	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.91		0.11	ug/m3	EPA TO-15 SIM	N/A
Naphthalene	0.61		0.052	ug/m3	EPA TO-15 SIM	N/A

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Detections Summary

Client:	AllWest Environmental, Inc.	Work Order:	16-12-2439
	2141 Mission Street, Suite 100	Project Name:	Hollis
	San Francisco, CA 94110-6331	Received:	12/27/16
Attn:	Leonard Niles		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
IAQ-8 (16-12-2439-5)						
Dichlorodifluoromethane	2.3		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.1		0.052	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.3		0.14	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.47		0.087	ug/m3	EPA TO-15 SIM	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52		0.19	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.12		0.12	ug/m3	EPA TO-15 SIM	N/A
1,2-Dichloroethane	0.47		0.10	ug/m3	EPA TO-15 SIM	N/A
1,2,4-Trimethylbenzene	0.90		0.25	ug/m3	EPA TO-15 SIM	N/A
1,3,5-Trimethylbenzene	0.38		0.12	ug/m3	EPA TO-15 SIM	N/A
4-Ethyltoluene	0.38		0.25	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	2.8		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.99		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.50		0.063	ug/m3	EPA TO-15 SIM	N/A
Toluene	1.9		0.19	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.35		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	1.1		0.11	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.49		0.11	ug/m3	EPA TO-15 SIM	N/A
Naphthalene	0.17		0.052	ug/m3	EPA TO-15 SIM	N/A
IAQ-9 (16-12-2439-6)						
Dichlorodifluoromethane	2.1		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.1		0.052	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.3		0.14	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.45		0.087	ug/m3	EPA TO-15 SIM	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52		0.19	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.13		0.12	ug/m3	EPA TO-15 SIM	N/A
1,2,4-Trimethylbenzene	0.84		0.25	ug/m3	EPA TO-15 SIM	N/A
1,3,5-Trimethylbenzene	0.35		0.12	ug/m3	EPA TO-15 SIM	N/A
4-Ethyltoluene	0.35		0.25	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	2.6		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.89		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.51		0.063	ug/m3	EPA TO-15 SIM	N/A
Toluene	1.9		0.19	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.35		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	1.2		0.11	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.47		0.11	ug/m3	EPA TO-15 SIM	N/A
Naphthalene	0.17		0.052	ug/m3	EPA TO-15 SIM	N/A

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Detections Summary

Client:	AllWest Environmental, Inc.	Work Order:	16-12-2439
	2141 Mission Street, Suite 100	Project Name:	Hollis
	San Francisco, CA 94110-6331	Received:	12/27/16
Attn:	Leonard Niles		

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
IAQ-10 (16-12-2439-7)						
Dichlorodifluoromethane	1.9		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.0		0.052	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.4		0.14	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.64		0.087	ug/m3	EPA TO-15 SIM	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52		0.19	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.16		0.12	ug/m3	EPA TO-15 SIM	N/A
1,2,4-Trimethylbenzene	0.99		0.25	ug/m3	EPA TO-15 SIM	N/A
1,3,5-Trimethylbenzene	0.39		0.12	ug/m3	EPA TO-15 SIM	N/A
4-Ethyltoluene	0.41		0.25	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	2.5		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	1.1		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.52		0.063	ug/m3	EPA TO-15 SIM	N/A
Toluene	2.4		0.19	ug/m3	EPA TO-15 SIM	N/A
Trichloroethene	0.19		0.13	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.48		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	1.6		0.11	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.69		0.11	ug/m3	EPA TO-15 SIM	N/A
Naphthalene	0.19		0.052	ug/m3	EPA TO-15 SIM	N/A
IAQ-11 (16-12-2439-8)						
Dichlorodifluoromethane	1.7		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	1.0		0.052	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.2		0.14	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.45		0.087	ug/m3	EPA TO-15 SIM	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.51		0.19	ug/m3	EPA TO-15 SIM	N/A
1,2,4-Trimethylbenzene	0.97		0.25	ug/m3	EPA TO-15 SIM	N/A
1,3,5-Trimethylbenzene	0.41		0.12	ug/m3	EPA TO-15 SIM	N/A
4-Ethyltoluene	0.39		0.25	ug/m3	EPA TO-15 SIM	N/A
Chlorobenzene	0.14		0.12	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	2.1		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	0.95		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.47		0.063	ug/m3	EPA TO-15 SIM	N/A
Toluene	1.8		0.19	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.38		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	1.2		0.11	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.54		0.11	ug/m3	EPA TO-15 SIM	N/A
Naphthalene	0.69		0.052	ug/m3	EPA TO-15 SIM	N/A

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Detections Summary

Client:	AllWest Environmental, Inc.	Work Order:	16-12-2439
	2141 Mission Street, Suite 100	Project Name:	Hollis
	San Francisco, CA 94110-6331	Received:	12/27/16
Attn:	Leonard Niles		Page 5 of 5

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
IAQ-12 (16-12-2439-9)						
Dichlorodifluoromethane	1.6		0.12	ug/m3	EPA TO-15 SIM	N/A
Chloromethane	0.96		0.052	ug/m3	EPA TO-15 SIM	N/A
Trichlorofluoromethane	1.2		0.14	ug/m3	EPA TO-15 SIM	N/A
Methylene Chloride	0.59		0.087	ug/m3	EPA TO-15 SIM	N/A
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.49		0.19	ug/m3	EPA TO-15 SIM	N/A
Chloroform	0.13		0.12	ug/m3	EPA TO-15 SIM	N/A
1,2,4-Trimethylbenzene	0.85		0.25	ug/m3	EPA TO-15 SIM	N/A
1,3,5-Trimethylbenzene	0.33		0.12	ug/m3	EPA TO-15 SIM	N/A
4-Ethyltoluene	0.36		0.25	ug/m3	EPA TO-15 SIM	N/A
1,1-Difluoroethane	2.5		0.68	ug/m3	EPA TO-15 SIM	N/A
Benzene	1.0		0.080	ug/m3	EPA TO-15 SIM	N/A
Carbon Tetrachloride	0.46		0.063	ug/m3	EPA TO-15 SIM	N/A
Toluene	2.2		0.19	ug/m3	EPA TO-15 SIM	N/A
Tetrachloroethene	0.33		0.17	ug/m3	EPA TO-15 SIM	N/A
Ethylbenzene	0.39		0.11	ug/m3	EPA TO-15 SIM	N/A
p/m-Xylene	1.3		0.11	ug/m3	EPA TO-15 SIM	N/A
o-Xylene	0.52		0.11	ug/m3	EPA TO-15 SIM	N/A
Naphthalene	0.19		0.052	ug/m3	EPA TO-15 SIM	N/A

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

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Analytical Report

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

Project: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OAA-2	**16-12-2439-1-A**	**12/21/16 16:27**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 01:18**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	2.3	0.12	1.00	
Chloromethane	1.1	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	1.3	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	0.36	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.57	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	ND	0.12	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	0.50	0.25	1.00	
1,3,5-Trimethylbenzene	0.28	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Chlorobenzene	ND	0.12	1.00	
1,1-Difluoroethane	2.8	0.68	1.00	
Benzene	0.80	0.080	1.00	
Carbon Tetrachloride	0.57	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	1.8	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	ND	0.13	1.00	
Tetrachloroethene	ND	0.17	1.00	
Ethylbenzene	0.32	0.11	1.00	
p/m-Xylene	1.1	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	0.42	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	0.21	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 2 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	104	45-153	
1,2-Dichloroethane-d4	101	37-163	
Toluene-d8	89	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OAA-3	**16-12-2439-2-A**	**12/21/16 15:41**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 02:08**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	1.9	0.12	1.00	
Chloromethane	1.1	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	1.2	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	0.49	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	ND	0.12	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	0.63	0.25	1.00	
1,3,5-Trimethylbenzene	0.20	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Chlorobenzene	ND	0.12	1.00	
1,1-Difluoroethane	2.6	0.68	1.00	
Benzene	1.3	0.080	1.00	
Carbon Tetrachloride	0.50	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	2.5	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	ND	0.13	1.00	
Tetrachloroethene	ND	0.17	1.00	
Ethylbenzene	0.44	0.11	1.00	
p/m-Xylene	1.4	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	0.57	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	0.11	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 4 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	45-153	
1,2-Dichloroethane-d4	103	37-163	
Toluene-d8	93	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-6	**16-12-2439-3-A**	**12/21/16 16:35**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 02:58**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	2.0	0.12	1.00	
Chloromethane	1.1	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	1.6	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	0.87	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.54	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	0.18	0.12	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	1.1	0.25	1.00	
1,3,5-Trimethylbenzene	0.41	0.12	1.00	
4-Ethyltoluene	0.43	0.25	1.00	
Chlorobenzene	ND	0.12	1.00	
1,1-Difluoroethane	3.5	0.68	1.00	
Benzene	1.4	0.080	1.00	
Carbon Tetrachloride	0.53	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	3.6	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	ND	0.13	1.00	
Tetrachloroethene	ND	0.17	1.00	
Ethylbenzene	0.71	0.11	1.00	
p/m-Xylene	2.3	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	0.93	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	0.23	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 6 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	45-153	
1,2-Dichloroethane-d4	98	37-163	
Toluene-d8	90	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-7	**16-12-2439-4-A**	**12/21/16 16:33**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 03:49**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	3.9	0.12	1.00	
Chloromethane	0.86	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	1.6	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	1.0	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.53	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	0.23	0.12	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	1.1	0.25	1.00	
1,3,5-Trimethylbenzene	0.42	0.12	1.00	
4-Ethyltoluene	0.45	0.25	1.00	
Chlorobenzene	ND	0.12	1.00	
1,1-Difluoroethane	3.9	0.68	1.00	
Benzene	1.6	0.080	1.00	
Carbon Tetrachloride	0.53	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	3.7	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	0.37	0.13	1.00	
Tetrachloroethene	ND	0.17	1.00	
Ethylbenzene	0.71	0.11	1.00	
p/m-Xylene	2.4	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	0.91	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	0.61	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 8 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	45-153	
1,2-Dichloroethane-d4	92	37-163	
Toluene-d8	88	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-8	**16-12-2439-5-A**	**12/21/16 17:18**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 04:39**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	2.3	0.12	1.00	
Chloromethane	1.1	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	1.3	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	0.47	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	0.12	0.12	1.00	
1,2-Dichloroethane	0.47	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	0.90	0.25	1.00	
1,3,5-Trimethylbenzene	0.38	0.12	1.00	
4-Ethyltoluene	0.38	0.25	1.00	
Chlorobenzene	ND	0.12	1.00	
1,1-Difluoroethane	2.8	0.68	1.00	
Benzene	0.99	0.080	1.00	
Carbon Tetrachloride	0.50	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	1.9	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	ND	0.13	1.00	
Tetrachloroethene	ND	0.17	1.00	
Ethylbenzene	0.35	0.11	1.00	
p/m-Xylene	1.1	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	0.49	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	0.17	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 10 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	45-153	
1,2-Dichloroethane-d4	98	37-163	
Toluene-d8	92	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-9	**16-12-2439-6-A**	**12/21/16 16:42**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 05:29**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	2.1	0.12	1.00	
Chloromethane	1.1	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	1.3	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	0.45	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	0.13	0.12	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	0.84	0.25	1.00	
1,3,5-Trimethylbenzene	0.35	0.12	1.00	
4-Ethyltoluene	0.35	0.25	1.00	
Chlorobenzene	ND	0.12	1.00	
1,1-Difluoroethane	2.6	0.68	1.00	
Benzene	0.89	0.080	1.00	
Carbon Tetrachloride	0.51	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	1.9	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	ND	0.13	1.00	
Tetrachloroethene	ND	0.17	1.00	
Ethylbenzene	0.35	0.11	1.00	
p/m-Xylene	1.2	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	0.47	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	0.17	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 12 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	45-153	
1,2-Dichloroethane-d4	99	37-163	
Toluene-d8	94	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-10	**16-12-2439-7-A**	**12/21/16 17:16**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 06:18**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	1.9	0.12	1.00	
Chloromethane	1.0	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	1.4	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	0.64	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.52	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	0.16	0.12	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	0.99	0.25	1.00	
1,3,5-Trimethylbenzene	0.39	0.12	1.00	
4-Ethyltoluene	0.41	0.25	1.00	
Chlorobenzene	ND	0.12	1.00	
1,1-Difluoroethane	2.5	0.68	1.00	
Benzene	1.1	0.080	1.00	
Carbon Tetrachloride	0.52	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	2.4	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	0.19	0.13	1.00	
Tetrachloroethene	ND	0.17	1.00	
Ethylbenzene	0.48	0.11	1.00	
p/m-Xylene	1.6	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	0.69	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	0.19	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 14 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	45-153	
1,2-Dichloroethane-d4	98	37-163	
Toluene-d8	96	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-11	**16-12-2439-8-A**	**12/21/16 17:12**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 07:09**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	1.7	0.12	1.00	
Chloromethane	1.0	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	1.2	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	0.45	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.51	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	ND	0.12	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	0.97	0.25	1.00	
1,3,5-Trimethylbenzene	0.41	0.12	1.00	
4-Ethyltoluene	0.39	0.25	1.00	
Chlorobenzene	0.14	0.12	1.00	
1,1-Difluoroethane	2.1	0.68	1.00	
Benzene	0.95	0.080	1.00	
Carbon Tetrachloride	0.47	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	1.8	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	ND	0.13	1.00	
Tetrachloroethene	ND	0.17	1.00	
Ethylbenzene	0.38	0.11	1.00	
p/m-Xylene	1.2	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	0.54	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	0.69	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 16 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	45-153	
1,2-Dichloroethane-d4	93	37-163	
Toluene-d8	93	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-12	**16-12-2439-9-A**	**12/21/16 17:19**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 07:58**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	1.6	0.12	1.00	
Chloromethane	0.96	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	1.2	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	0.59	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.49	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	0.13	0.12	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	0.85	0.25	1.00	
1,3,5-Trimethylbenzene	0.33	0.12	1.00	
4-Ethyltoluene	0.36	0.25	1.00	
Chlorobenzene	ND	0.12	1.00	
1,1-Difluoroethane	2.5	0.68	1.00	
Benzene	1.0	0.080	1.00	
Carbon Tetrachloride	0.46	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	2.2	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	ND	0.13	1.00	
Tetrachloroethene	0.33	0.17	1.00	
Ethylbenzene	0.39	0.11	1.00	
p/m-Xylene	1.3	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	0.52	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	0.19	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 18 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	45-153	
1,2-Dichloroethane-d4	92	37-163	
Toluene-d8	96	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM
Units: ug/m3
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-052-1724**	**N/A**	**Air**	**GC/MS DD**	**N/A**	**01/06/17 00:27**	**170105L01**

Parameter	Result	RL	DF	Qualifiers
Dichlorodifluoromethane	ND	0.12	1.00	
Chloromethane	ND	0.052	1.00	
Vinyl Chloride	ND	0.026	1.00	
Chloroethane	ND	0.066	1.00	
Trichlorofluoromethane	ND	0.14	1.00	
1,1-Dichloroethene	ND	0.099	1.00	
Methylene Chloride	ND	0.087	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.19	1.00	
t-1,2-Dichloroethene	ND	0.099	1.00	
1,1-Dichloroethane	ND	0.10	1.00	
c-1,2-Dichloroethene	ND	0.099	1.00	
Chloroform	ND	0.12	1.00	
1,2-Dichloroethane	ND	0.10	1.00	
1,1,1-Trichloroethane	ND	0.14	1.00	
1,2,4-Trimethylbenzene	ND	0.25	1.00	
1,3,5-Trimethylbenzene	ND	0.12	1.00	
4-Ethyltoluene	ND	0.25	1.00	
Chlorobenzene	ND	0.12	1.00	
1,1-Difluoroethane	ND	0.68	1.00	
Benzene	ND	0.080	1.00	
Carbon Tetrachloride	ND	0.063	1.00	
Bromodichloromethane	ND	0.17	1.00	
1,1,2-Trichloroethane	ND	0.14	1.00	
Toluene	ND	0.19	1.00	
Dibromochloromethane	ND	0.21	1.00	
Trichloroethene	ND	0.13	1.00	
Tetrachloroethene	ND	0.17	1.00	
Ethylbenzene	ND	0.11	1.00	
p/m-Xylene	ND	0.11	1.00	
1,1,2,2-Tetrachloroethane	ND	0.17	1.00	
o-Xylene	ND	0.11	1.00	
Hexachloro-1,3-Butadiene	ND	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.090	1.00	
Naphthalene	ND	0.052	1.00	

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

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Analytical Report

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
	Units:	ug/m3
Project: Hollis		Page 20 of 20

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	74	45-153	
1,2-Dichloroethane-d4	106	37-163	
Toluene-d8	103	73-121	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-3M
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OAA-2	**16-12-2439-1-A**	**12/21/16 16:27**	**Air**	**GC 13**	**N/A**	**12/28/16 12:38**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OAA-3	**16-12-2439-2-A**	**12/21/16 15:41**	**Air**	**GC 13**	**N/A**	**12/28/16 12:55**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-6	**16-12-2439-3-A**	**12/21/16 16:35**	**Air**	**GC 13**	**N/A**	**12/28/16 14:36**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-7	**16-12-2439-4-A**	**12/21/16 16:33**	**Air**	**GC 13**	**N/A**	**12/28/16 14:53**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-8	**16-12-2439-5-A**	**12/21/16 17:18**	**Air**	**GC 13**	**N/A**	**12/28/16 13:29**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-9	**16-12-2439-6-A**	**12/21/16 16:42**	**Air**	**GC 13**	**N/A**	**12/28/16 13:54**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-10	**16-12-2439-7-A**	**12/21/16 17:16**	**Air**	**GC 13**	**N/A**	**12/28/16 14:05**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-11	**16-12-2439-8-A**	**12/21/16 17:12**	**Air**	**GC 13**	**N/A**	**12/28/16 14:15**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-3M
Units: ug/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IAQ-12	**16-12-2439-9-A**	**12/21/16 17:19**	**Air**	**GC 13**	**N/A**	**12/28/16 14:25**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-709-22**	**N/A**	**Air**	**GC 13**	**N/A**	**12/28/16 09:39**	**161228L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	930	1.00	

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

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Quality Control - Sample Duplicate

AllWest Environmental, Inc.		Date Received:	12/27/16
2141 Mission Street, Suite 100		Work Order:	16-12-2439
San Francisco, CA 94110-6331		Preparation:	N/A
		Method:	EPA TO-3M
Project: Hollis			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
OAA-2	**Sample**	**Air**	**GC 13**	**N/A**	**12/28/16 12:38**	**161228D01**
OAA-2	**Sample Duplicate**	**Air**	**GC 13**	**N/A**	**12/28/16 15:07**	**161228D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	ND	N/A	0-20	

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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: Hollis

Date Received: 12/27/16
Work Order: 16-12-2439
Preparation: N/A
Method: EPA TO-15 SIM

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-052-1724	**LCS**	**Air**	**GC/MS DD**	**N/A**	**01/05/17 19:38**	**170105L01**
095-01-052-1724	**LCSD**	**Air**	**GC/MS DD**	**N/A**	**01/05/17 20:26**	**170105L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Dichlorodifluoromethane	2.473	1.885	76	2.007	81	50-150	33-167	6	0-30	
Chloromethane	1.033	0.9499	92	0.9588	93	50-150	33-167	1	0-30	
Vinyl Chloride	1.278	1.489	117	1.378	108	44-140	28-156	8	0-33	
Chloroethane	1.319	1.272	96	1.322	100	50-150	33-167	4	0-30	
Trichlorofluoromethane	2.809	2.632	94	2.681	95	50-150	33-167	2	0-30	
1,1-Dichloroethene	1.982	1.932	97	1.919	97	50-150	33-167	1	0-30	
Methylene Chloride	1.737	1.509	87	1.498	86	50-150	33-167	1	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	3.832	3.685	96	3.662	96	50-150	33-167	1	0-30	
t-1,2-Dichloroethene	1.982	1.946	98	1.948	98	50-150	33-167	0	0-30	
1,1-Dichloroethane	2.024	2.014	100	2.014	100	50-150	33-167	0	0-30	
c-1,2-Dichloroethene	1.982	1.979	100	1.934	98	35-165	13-187	2	0-35	
Chloroform	2.441	2.310	95	2.301	94	50-150	33-167	0	0-30	
1,2-Dichloroethane	2.024	1.913	95	1.920	95	28-166	5-189	0	0-40	
1,1,1-Trichloroethane	2.728	2.664	98	2.671	98	50-150	33-167	0	0-30	
1,2,4-Trimethylbenzene	2.458	2.417	98	2.432	99	50-150	33-167	1	0-30	
1,3,5-Trimethylbenzene	2.458	2.413	98	2.394	97	50-150	33-167	1	0-30	
4-Ethyltoluene	2.458	2.385	97	2.275	93	50-150	33-167	5	0-30	
Chlorobenzene	2.302	2.223	97	2.215	96	50-150	33-167	0	0-30	
1,1-Difluoroethane	1.351	1.172	87	1.255	93	50-150	33-167	7	0-30	
Benzene	1.597	1.548	97	1.529	96	27-153	6-174	1	0-34	
Carbon Tetrachloride	3.146	3.108	99	3.109	99	7-187	0-217	0	0-31	
Bromodichloromethane	3.350	3.137	94	3.143	94	50-150	33-167	0	0-30	
1,1,2-Trichloroethane	2.728	2.526	93	2.615	96	27-171	3-195	3	0-38	
Toluene	1.884	1.824	97	1.835	97	28-154	7-175	1	0-42	
Dibromochloromethane	4.259	4.117	97	4.090	96	50-150	33-167	1	0-30	
Trichloroethene	2.687	2.472	92	2.435	91	43-139	27-155	2	0-31	
Tetrachloroethene	3.391	3.285	97	3.268	96	34-154	14-174	1	0-33	
Ethylbenzene	2.171	2.157	99	2.070	95	27-153	6-174	4	0-46	
p/m-Xylene	4.342	4.298	99	4.186	96	21-165	0-189	3	0-51	
1,1,2,2-Tetrachloroethane	3.433	3.207	93	3.242	94	50-150	33-167	1	0-30	
o-Xylene	2.171	2.096	97	2.081	96	22-160	0-183	1	0-48	
Hexachloro-1,3-Butadiene	5.333	4.942	93	4.976	93	50-150	33-167	1	0-30	
Methyl-t-Butyl Ether (MTBE)	1.803	1.870	104	1.827	101	50-150	33-167	2	0-30	
Naphthalene	2.621	3.579	137	2.976	114	40-190	15-215	18	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AllWest Environmental, Inc.	Date Received:	12/27/16
2141 Mission Street, Suite 100	Work Order:	16-12-2439
San Francisco, CA 94110-6331	Preparation:	N/A
	Method:	EPA TO-15 SIM
Project: Hollis		Page 2 of 3

Total number of LCS compounds: 34
Total number of ME compounds: 0
Total number of ME compounds allowed: 2
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

AllWest Environmental, Inc.		Date Received:	12/27/16
2141 Mission Street, Suite 100		Work Order:	16-12-2439
San Francisco, CA 94110-6331		Preparation:	N/A
		Method:	EPA TO-3M
Project: Hollis			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-709-22	**LCS**	**Air**	**GC 13**	**N/A**	**12/28/16 09:23**	**161228L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	932500	925100	99	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Summa Canister Vacuum Summary

Work Order: 16-12-2439 Page 1 of 1

Sample Name	Vacuum Out	Vacuum In	Equipment	Description
OAA-2	-29.50 in Hg	-5.60 in Hg	SIM041	Summa Canister 6L
OAA-3	-29.50 in Hg	-5.10 in Hg	SIM081	Summa Canister 6L
IAQ-6	-29.50 in Hg	-6.50 in Hg	D673	Summa Canister 6L
IAQ-7	-29.50 in Hg	-6.40 in Hg	D118	Summa Canister 6L
IAQ-8	-29.50 in Hg	-4.50 in Hg	D454	Summa Canister 6L
IAQ-9	-29.50 in Hg	-6.00 in Hg	D326	Summa Canister 6L
IAQ-10	-29.50 in Hg	-4.70 in Hg	D850	Summa Canister 6L
IAQ-11	-29.50 in Hg	-6.30 in Hg	D145	Summa Canister 6L
IAQ-12	-29.50 in Hg	-4.50 in Hg	D932	Summa Canister 6L

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Sample Analysis Summary Report

Work Order: 16-12-2439 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA TO-15 SIM	N/A	953	GC/MS DD	2
EPA TO-3M	N/A	929	GC 13	2
EPA TO-3M	N/A	1074	GC 13	2

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Glossary of Terms and Qualifiers

Work Order: 16-12-2439 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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AIR CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY: **16-12-2439**

DATE: 12/21/16
PAGE: 1 OF 1

LABORATORY CLIENT: ALLWEST ENVIRONMENTAL INC.	CLIENT PROJECT NAME / NO.: HOLLIS
ADDRESS: 2141 MISSION ST, STE 100	PROJECT CONTACT: LEONARD NILES
CITY: SAN FRANCISCO STATE: CA ZIP: 94110	PROJECT ADDRESS: 6655 HOLLIS ST
TEL: (415) 391-2510 E-MAIL: LEONARD@ALLWEST1.COM	CITY: EMERYVILLE STATE: CA ZIP:
	P.O. NO.:
	LAB CONTACT OR QUOTE NO.:
	SAMPLER(S): (PRINT) S. BLOOM L. NILES

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
UNITS:

SPECIAL INSTRUCTIONS:

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-3 (TPH-g)	TO-15 SIM (ALL UST + MAH)			
1	OAA-2	OAA-2	O	SIM041	6L	FC81	12/21/16	0855	30	12/21/16	1627	4.5	X	X			
2	OAA-3	OAA-3	O	SIM081	↑	FC185	↑	0846	30	↑	1541	5	X	X			
3	IAQ-6	IAQ-6	I	D673		FC449		0908	30		1635	7	X	X			
4	IAQ-7	IAQ-7	I	D118		FC437		0909	30		1633	6	X	X			
5	IAQ-8	IAQ-8	I	D454		FC416		0933	30		1718	8	X	X			
6	IAQ-9	IAQ-9	I	D326		FC559		0931	30		1642	6	X	X			
7	IAQ-10	IAQ-10	I	D850		FC365		0928	30		1716	6	X	X			
8	IAQ-11	IAQ-11	I	D145		FC560		0940	30		1712	8	X	X			
9	IAQ-12	IAQ-12	I	D932	6L	FC372	12/21/16	0944	30	12/21/16	1719	6	X	X			
	—	—	—	—	—	—	—	—	—	—	—	—					

Relinquished by: (Signature) Sara Bloom	Received by: (Signature/Affiliation)	Date: 12/22/16	Time: 1530
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature) (GSO)	Received by: (Signature/Affiliation) by	Date: 12/27/16	Time: 1047

2014-07-01 Revision

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2439

GSO GOLDEN STATE OVERNIGHT

WebShip >>>>>

800-322-5555 www.gso.com

Ship From:
SARA BLOOM
ALLWEST ENVIRONMENTAL

Tracking #: 534467450

NPS

GSO GOLDEN STATE OVERNIGHT

WebShip >>>>>

800-322-5555 www.gso.com

Ship From:
SARA BLOOM

Tracking #: 534467451

NPS

GSO GOLDEN STATE OVERNIGHT

WebShip >>>>>

800-322-5555 www.gso.com

Ship From:
SARA BLOOM
ALLWEST ENVIRONMENTAL
2141 MISSION STREET SUITE 100
SAN FRANCISCO, CA 94110

Ship To:
SAMPLE CONTROL
EUROFINS CALSCIENCE, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD: $0.00
Weight:
Dimensions:
Reference:
EO/AIR BILLS REQUEST
Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 534467452

NPS

ORC

A

GARDEN GROVE

D92845A

60743593

Print Date : 12/22/16 16:13 PM

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SEND LABEL TO PRINTER ☑ Print All

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WORK ORDER NUMBER: 16-12-2439

SAMPLE RECEIPT CHECKLIST

COOLER 0 OF 0

CLIENT: Allwest Env'l., Inc.

DATE: 12 / 27 / 2016

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

Thermometer ID: SC3A (CF: 0.0°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: SR6

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present (BOX) ☐ N/A Checked by: SR6

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: SR6

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, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: SR6

Reviewed by: 681

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APPENDIX E

APPLICATION FOR AUTHORIZATION TO USE

REPORT TITLE: **4Q 2016 SOIL VAPOR MONITORING & INDOOR AIR QUALITY REPORT**

6655 Hollis St. & 1471 67th St.
Emeryville, CA 94608

PROJECT NUMBER: 16184.28

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.