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August 23, 2016

Soil and Soil Vapor Investigation Report

And Updated Site Conceptual Model

Property Identification:
3635 13th Avenue
Oakland, California 94606

AEI Project No. 338841
ACHCSA Case No. RO0000159

Prepared for:
Mr. Kia Sumner
1069 Oak Hills Road
Lafayette, California 94549

Prepared by:
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August 22, 2016

Ms. Karel Detterman
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: Transmittal, Soil and Soil Vapor Investigation Report and Updated Site Conceptual Model Report
3635 13th Avenue, Oakland, California 94610
Toxics Case No. RO0000159

Dear Ms. Detterman:

Enclosed is the *Soil and Soil Vapor Investigation Report and Updated Site Conceptual Model* Report prepared at your request for activities at the subject site.

I declare under penalty of perjury, that the information and/or recommendations contained in the attached report for the above-referenced site are true and correct to the best of my knowledge.

If you have any questions or need additional information, please do not hesitate to contact Mr. Trent Weise of AEI Consultants at (925) 746-6000.

Sincerely,

Mr. Kia Sumner

Enclosures

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This document was prepared by, or under the direction, of the undersigned:

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1. INTRODUCTION

On behalf of Mr. Kia Sumner, AEI Consultants (AEI) has prepared this *Soil and Soil Vapor Investigation Report and Updated Site Conceptual Model* for the property at 3635 13th Avenue, Oakland, California ("the Site"). The Site is located in an urban mixed use area of the City of Oakland. The Site is currently vacant and is zoned for residential use. Figure 1 presents the Site location and Figure 2 presents the Site plan.

This report describes the investigation activities conducted on June 22 and June 30, 2016. The purpose of the investigation is to address data gaps identified in the draft *Feasibility Study/Corrective Action Plan* (FS/CAP) prepared for the Site by AEI, dated September 18, 2015. The investigation was conducted in accordance with requests made by Alameda County Department of Public Health (ACDEH) in the meeting held on October 21, 2015, AEI's *Work Plan, Additional Site Investigation* (Work Plan) dated March 15, 2016, and ACDEH's conditional approval of the Work Plan dated June 6, 2016.

2. BACKGROUND

The Site is located on the western corner of Excelsior and Thirteenth Avenues in an urban and primarily residential area of the City of Oakland. The Site is currently vacant pending the planned construction of a single family home. The Site was formerly occupied by a gasoline service station, which ceased operation in 1992. In December 1992, one 250-gallon waste oil underground storage tank (UST), one 500-gallon gasoline UST, and one 1,000-gallon gasoline UST were removed from the Site. Investigation and remediation activities have been performed at the Site to address petroleum hydrocarbons released from the former USTs at the Site.

In September 1993, AEI excavated and disposed of approximately 360 cubic yards of petroleum hydrocarbon impacted soil from the vicinity of the former waste oil UST to an approximate depth of 18 feet below ground surface (bgs). Soil was removed until no further odor or stained soil was apparent. The excavation extent is shown on Figure 2.

To assess the lateral and vertical extent of petroleum hydrocarbons in soil and groundwater, a total of 23 soil borings were advanced and seven groundwater monitoring wells have been installed at the Site, MW-1 through MW-7. Periodic groundwater monitoring has been performed with the groundwater monitoring wells since their installation. Figure 2 presents the Site plan, including the soil boring and monitoring well locations.

On September 18, 2015, AEI submitted a *draft Feasibility Study/Corrective Action Plan* (FS/CAP) to ACDEH. The draft FS/CAP presented a Site Conceptual Model, identified data gaps for further investigation, and recommended additional soil excavation as the final remedial solution to address residual petroleum hydrocarbons at the Site. During an October 20, 2015 meeting between ACDEH, Mr. Kia Sumner, and AEI, ACDEH requested submittal of a Data Gap Work Plan separately to facilitate additional soil and soil vapor data collection prior to finalization of the FS/CAP. AEI submitted the *Work Plan, Additional Investigation* dated March 15, 2016, which was conditionally approved by ACDEH in a letter dated June 6, 2016. The investigation activities performed in general accordance with the work plan are presented below.

3. INVESTIGATION ACTIVITIES

The following activities were performed in general accordance with the work plan to further characterize residual petroleum hydrocarbons and lead in shallow soils and residual petroleum hydrocarbons is soil gas at the Site.

3.1 Health and Safety Plan

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

3.2 Preliminary Field Activities

A drilling permit was obtained from Alameda County Public Works Agency for this investigation. Copies of the permit are provided in Appendix A. The public underground utility locating service USA North was notified to identify public utilities in the work area. Private utility locating was conducted by Foresite of Pleasant Hill, California to identify underground utilities on the Site.

3.3 Soil Sampling

On June 22, 2016, AEI contracted State of California-licensed (C-57) drilling contractor Environmental Control Associates of Aptos, California to advance six soil borings, SG-4 through SG-9, at the locations shown on Figure 2. Locations SG-6 and SG-7 were relocated at the request of the ACDEH to be located towards the center of the proposed new building. The soil borings were advanced with a direct push drilling rig to a depth of ten feet bgs, and soil samples were collected at two-foot intervals. Boring logs are presented in Appendix B.

A total of thirty soil samples was collected. Collected soil samples were sealed, labeled, and transported on ice under proper chain of custody protocol to California Department of Health Services (DHS) certified analytical laboratory McCampbell Analytical of Pittsburg, California for the following analyses:

- Total petroleum hydrocarbons as gasoline (TPHg), as diesel (TPHd), and as motor oil (TPH-mo), and total petroleum hydrocarbons as diesel (TPH-d) using US EPA Testing Method 8015M with silica gel clean-up;
- Benzene, toluene, ethylbenzene, and total xylenes (collectively "BTEX compounds"), methyl-tert butyl ether (MTBE), and naphthalene using US EPA Testing Method 8260B;
- Lead using US EPA Testing Method 6020; and
- Polyaromatic Hydrocarbons (PAHs) by 8270-Selected Ion Monitoring (SIM) (only select samples from SG-4 and SG-5).

3.4 Soil Vapor Sampling

After soil sampling at soil boings SG-4 through SG-9, a second soil boring was advanced to construct soil vapor probes immediately adjacent to the soil boring locations. Soil vapor probes were installed by advancing a 2.25-inch diameter drill rod to a depth of five-feet bgs and constructing each probe from the base of the borehole to the surface. For each soil vapor probe, a two-inch vapor screen attached to ¼-inch tubing was placed at depth and covered with approximately one-foot of sand. The monitoring point was then sealed by backfilling the remaining section of borehole to near the ground surface with bentonite, hydrated in six-inch lifts. A gas-tight valve was installed at the end of the sample tubing and closed to seal the tubing.

Each soil vapor probe was completed at the surface with a well box to protect the probe from damage.

The intent of the selected locations for soil gas probes SG-4 and SG-5 was to assess potential vapor intrusion into both for propose new on-site building and the off-site apartment building. The adjacent apartment is at an elevation slightly lower than the Site, with the first floor being used for parking. Due to shallow groundwater level near SG-4 and SG-5, and observed groundwater in soil gas probes set at a depth of 10-feet bgs at the Site, , soil vapor probe SG-4 and SG-5 were installed at a depth of five-feet bgs. On June 30, 2016, AEI collected soil gas samples from each soil gas probe location in general accordance with the *Advisory – Active Soil Gas Investigation* ("the Advisory"), dated July 2015, and issued by the California Department of Toxic Substances Control (DTSC) and San Francisco California Regional Water Quality Control Board (RWQCB). Prior to collecting the samples:

- A shut-in test was performed by placing a vacuum on the above-grade sampling train and vacuum canisters. The vacuum was observed for approximately ten minutes and verified to not change, which would be indicative of a potential leak in the sampling apparatus.
- A leak test was performed, utilizing a shroud and helium as the leak check compound.
- Vapor in the sampling lines and approximately three volumes of the sand pack and dried bentonite were purged.

Soil vapor samples were collected through a laboratory-supplied, certified clean, regulator at approximately 150 milliliters per minute. After approximately five minutes (depending on the down-hole vacuum), or -5 in Hg vacuum in the canister, each canister was closed and removed from the sampling line and the final canister vacuum was recorded. The vacuum canister sample was sealed with a vapor tight cap, appropriately labeled, and entered onto a chain of custody manifest for delivery to Eurofin Air Toxics in Folsom, California.

A total of nine soil gas samples, including three from existing soil vapor probes SG-1, SG-2, and SG-3, and six from newly installed soil vapor probes SG-4 through SG-9 were collected. Each collected soil vapor sample was analyzed for:

- TPH-g, BTEX compounds, and MTBE using US EPA Testing Method TO-15.
- TPH-d and naphthalene using US EPA Testing Method TO-17.
- Oxygen (O_2), carbon dioxide (CO_2), methane, and the leak check compound helium using ASTM D1946.

3.5 Waste Disposal

Soil cuttings generated during the drilling and soil vapor probe installation activities are stored onsite in a sealed, labeled, department of transportation (DOT) approved 55-gallon drum scheduled for disposal in August 2016 as a non-hazardous waste by Catalyst Environmental, Inc. of San Carlos, California.

4. SUMMARY OF RESULTS

This section presents the results of the investigation activities performed.

4.1 Soil Sample Analytical Results

Table 1 presents a summary of compounds detected in soil. Table 2 presents a summary of current and historical select compounds detected in soil. The laboratory analytical reports are included as Appendix C. Soil sample locations in relation to the proposed development are depicted on Figure 3. The results can be summarized as follows:

- TPH-g was detected in 3 of the 30 soil samples collected and analyzed at a maximum concentration of 47 mg/kg.
- TPH-d was detected in 11 of the 30 soil samples collected and analyzed at a maximum concentration of 51 mg/kg.
- TPH-mo was detected in 21 of the 30 soil samples collected and analyzed at a maximum concentration of 1,300 mg/kg.
- Ethylbenzene was detected in one of the 30 soil samples collected and analyzed. The soil sample collected from SG-7 at 9.5 feet bgs yielded ethylbenzene at a concentration of 0.029 mg/kg.
- Benzene, toluene, total xylenes, MTBE, nor naphthalene were not detected at or above their respective laboratory method detection limit in the soil samples collect and analyzed.
- A total of ten soil samples were analyzed for PHAs, collected from soil borings SG-4 and SG-5. Only two PAHs were detected in the samples analyzed. Phenathrene was detected in the soil sample collected from SG-4 at 2 feet bgs at a concentration of 0.012 mg/kg. Benzo (g,h,i) perylene was detected in the soil sample collected from SG-4 at 6 feet bgs at a concentration of 0.032 mg/kg .
- Lead was detected in each of the 30 soil samples collected and analyzed at concentrations ranging between 2.8 to 26 mg/kg.

To assess whether the compounds detected in soil represent a potential human health risk to future users of the Site, AEI compared the concentrations detected to Environmental Screening Levels (ESLs) developed by the California Regional Water Quality Control Board, San Francisco Bay Region, recently updated in February 2016. Table S-1 provides screening levels for soil that is protective of residential use of the Site. A comparison of the compounds detected in soil and their respective ESL are presented on Table 2. None of the compounds detected in soil samples collected during this recent investigation exceeded the identified ESL for the residential use.

4.2 Soil Vapor Sample Results

Table 3 presents a summary of compounds detected in soil gas. Table 4 presents a summary of current and historical select compounds detected in soil gas. The laboratory analytical reports are included as Appendix C. Soil gas sample locations in relation to the proposed development are depicted on Figure 4. The results can be summarized as follows:

- TPH-g was detected in soil gas samples collected from SG-6, SG-8, SG-9 at concentrations ranging from 780 to 2,200 micrograms per liter (µg/L).
- Benzene was detected in soil gas samples collected from SG-3, SG-8, and SG-9 at concentrations ranging from 7.1 µg/L to 17 µg/L.

- Toluene was detected in soil gas samples collected from SG-3, SG-4, SG-6 through SG-9 at concentrations ranging from 12 µg/L to 170 µg/L.
- Ethylbenzene was detected in soil gas samples collected from SG-6 through SG-9 at concentrations ranging from 6.3 µg/L to 34 µg/L.
- Xylenes were detected in soil gas samples collected from SG-3, SG-6 through SG-9 at concentrations ranging from 5.1 µg/L to 158 µg/L.
- MTBE was detected in soil gas samples collected from SG-1, SG-3, SG-4, SG-6, and SG-9 at concentrations ranging from 5.4 to 9.4 µg/L.
- TPH-d and naphthalene were not detected above their respective laboratory method reporting limits.
- Helium was detected in soil gas samples collected from SG-6 at 0.13% which was below the allowable 5% of the 21.3% helium ambient generated during sample collection.
- Methane was detected in one soil gas sample collected, observed at a concentration of 0.00065 %, which is orders of magnitude below the lower explosive limit for methane of 5%.

To assess whether the compounds detected in soil gas represent a potential human health risk to future users of the Site, AEI compared the concentrations detected to ESLs. Table SG-1 provides screening levels for soil gas that is protective of residential indoor air quality. A comparison of the compounds detected in soil gas and their respective ESL are presented on Table 4. None of the compounds detected exceeded the identified ESL for the protection of indoor air quality. Based upon this, residual petroleum hydrocarbons present in soil gas at the Site do not represent a risk to human health to residential users of the Site, nor to users of the surrounding properties.

One goal of the soil gas sampling was to assess whether petroleum hydrocarbon-impacted soil vapor may be a risk to the apartment complex adjacent to the Site to the southwest. Since benzene was not detected in the soil gas samples collected from soil gas probes SG-4 and SG-5 and benzene was not observed in the groundwater sample collected from MW-1, in the immediate vicinity of SG-5, benzene in groundwater does not pose a significant threat for vapor intrusion for the adjacent property.

5. UPDATED SITE CONCEPTUAL MODEL

The Site conceptual model (SCM) has been updated with the most recent soil, soil gas, and groundwater monitoring data and included as Table 5. Though the SCM remains primarily unchanged, updates to the SCM include:

- Additional well and sensitive receptor survey was conducted with Alameda County Public Work Agency (ACPWA) and Department of Water Resources (DWR) in August 2016, and the results of the search are currently pending.
- The chemical of potential concern (COPCs) has been updated to TPH-g, TPH-d, TPH-mo, the five metals (cadmium, chromium, nickel, lead, and zinc), semi-volatile organic compounds (SVOCs), and polychlorinated biphenyl (PCBs) as requested by the ACDEH.

No further data gap exist at the Site.

6. CONCLUSIONS

AEI has completed the investigation activities described in the work plan and approved by the ACDEH. The purpose of the additional investigation was to further characterize residual petroleum hydrocarbons in soil and soil gas at the Site. The investigation completed sufficiently characterized residual petroleum hydrocarbons and lead in shallow soils at the Site and residual petroleum hydrocarbons in soil gas. AEI recommends finalizing the FS/CAP and implementing the proposed remedial excavation to complete remediation at the Site.

7. REFERENCES

The regulatory record for this Site can be found on the State of California GeoTracker Website at https://geotracker.waterboards.ca.gov/esi/view_submittals.asp?global_id=T0600100274

California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB). 2016. *User's Guide: Derivation and Application of Environmental Screening Levels – Interim Final*. February. http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Users%20Guide_22Feb16.pdf

California Department of Toxic Substances Control (DTSC). 2015. *Advisory – Active Soil Gas Investigation*. July. http://www.dtsc.ca.gov/SiteCleanup/upload/VI_ActiveSoilGasAdvisory_FINAL_043012.pdf

AEI Consultants
Environmental & Engineering Services

TABLES

Table 1

Summary of Compounds Detected in Soil

3635 13th Avenue, Oakland, California

Sample Location	Date	Analyte	Result	Units
SG-4-2	06/22/16	TPH-d	2.2	mg/kg
		TPH-mo	6.2	mg/kg
		Lead	26	mg/kg
		Phenathrene	0.012	mg/kg
SG-4-4	06/22/16	TPH-d	1.4	mg/kg
		TPH-mo	25	mg/kg
		Lead	4.0	mg/kg
SG-4-6	06/22/16	TPH-d	2.1	mg/kg
		TPH-mo	21	mg/kg
		Lead	15	mg/kg
		Benzo (g,h,i) perylene	0.032	mg/kg
SG-4-8	06/22/16	Lead	2.9	mg/kg
SG-4-9.5	06/22/16	Lead	7.0	mg/kg
SG-5-2	06/22/16	TPH-mo	15	mg/kg
		Lead	3.5	mg/kg
SG-5-4	06/22/16	TPH-d	14	mg/kg
		TPH-mo	1,300	mg/kg
		Lead	17	mg/kg
SG-5-6	06/22/16	Lead	3.3	mg/kg
SG-5-8	06/22/16	TPH-d	51	mg/kg
		TPH-mo	800	mg/kg
		Lead	7.8	mg/kg
SG-5-9.5	06/22/16	Lead	2.8	mg/kg
SG-6-2	06/22/16	Lead	12	mg/kg
SG-6-4	06/22/16	Lead	9.2	mg/kg
SG-6-6	06/22/16	TPH-mo	9.4	mg/kg
		Lead	6.5	mg/kg
SG-6-8	06/22/16	TPH-d	1.2	mg/kg
		TPH-mo	16	mg/kg
		Lead	10	mg/kg
SG-6-9.5	06/22/16	TPH-mo	20	mg/kg
		Lead	9.8	mg/kg
SG-7-2	06/22/16	TPH-mo	6.4	mg/kg
		Lead	6.2	mg/kg
SG-7-4	06/22/16	TPH-mo	11	mg/kg
		Lead	7.5	mg/kg

Table 1

Summary of Compounds Detected in Soil

3635 13th Avenue, Oakland, California

Sample Location	Date	Analyte	Result	Units
SG-7-6	06/22/16	TPH-mo	5.6	mg/kg
		Lead	8.4	mg/kg
SG-7-8	06/22/16	TPH-mo	9.1	mg/kg
		Lead	6.8	mg/kg
SG-7-9.5	06/22/16	TPH-g	41	mg/kg
		TPH-d	11	mg/kg
		TPH-mo	32	mg/kg
		Ethylbenzene	0.029	mg/kg
		Lead	8.1	mg/kg
SG-8-2	06/22/16	TPH-d	11	mg/kg
		TPH-mo	190	mg/kg
		Lead	31	mg/kg
SG-8-4	06/22/16	TPH-mo	23	mg/kg
		Lead	21	mg/kg
SG-8-6	06/22/16	TPH-mo	5.2	mg/kg
		Lead	7.4	mg/kg
SG-8-8	06/22/16	TPH-g	16	mg/kg
		TPH-d	3.9	mg/kg
		TPH-mo	11	mg/kg
		Lead	11	mg/kg
SG-8-9.5	06/22/16	TPH-g	47	mg/kg
		TPH-d	2.0	mg/kg
		Lead	7.3	mg/kg
SG-9-2	06/22/16	TPH-mo	7.3	mg/kg
		Lead	9.8	mg/kg
SG-9-4	06/22/16	TPH-d	2.4	mg/kg
		TPH-mo	150	mg/kg
		Lead	8.0	mg/kg
SG-9-6	06/22/16	Lead	6.8	mg/kg
SG-9-8	06/22/16	TPH-mo	13	mg/kg
		Lead	13	mg/kg
SG-9-9.5	06/22/16	Lead	6.0	mg/kg

Abbreviations:

$\mu g/m^3$ = micrograms per cubic meter

mg/kg = milligram per kilogram

TPH-g = Total Petroleum Hydrocarbons as gasoline

TPH-d = Total Petroleum Hydrocarbons as diesel

TPH-mo = Total Petroleum Hydrocarbons as motor oil

MTBE = Methyl tert butyl ether

Table 2
Summary of Soil Sample Data
3635 13th Avenue, Oakland, California

Location ID	Date	Depth (feet bgs)	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	Naphthalene (mg/kg)	Lead (mg/kg)
T1-N	12/15/1992	7	<1.0	--	--	<5.0	<5.0	<5.0	<5.0	--	--	--	--
T1-S	12/15/1992	6	27	--	--	**5.5**	**5.7**	**8.8**	**34**	--	--	--	--
T2-N	12/15/1992	7	<1.0	--	--	<5.0	<5.0	<5.0	<5.0	--	--	--	--
T2-S	12/15/1992	7	1.0	--	--	<5.0	**5.0**	**8.0**	**15**	--	--	--	--
W/OB	12/15/1992	5.5	**290**	--	--	**140**	**730**	**820**	**2,800**	--	--	--	--
T1-STKP	12/15/1992	--	5.1	--	--	<5.0	<5.0	**5.6**	**30**	--	--	--	--
T2-STKP	12/15/1992	--	28	--	--	**5.2**	**7.7**	**8.9**	**39**	--	--	--	--
W/O-STKP	12/15/1992	--	24	--	--	**8.4**	**46**	**25**	**37**	--	--	--	--
EB-19	9/13/1993	19	<1.0	--	--	<5.0	<5.0	<5.0	<5.0	--	--	--	6.9
SWE	9/13/1993	NM	**400**	--	2,100	**1,000**	**1,500**	**1,600**	**5,100**	--	--	--	6.2
SWN	9/13/1993	NM	<1.0	--	--	<5.0	<5.0	<5.0	<5.0	--	--	--	9.1
SWS	9/13/1993	NM	9.4	--	--	**24**	**36**	**38**	**120**	--	--	--	4.7
SWW	9/13/1993	NM	<1.0	--	--	<5.0	<5.0	<5.0	<5.0	--	--	--	8.4
HLN	9/13/1993	NM	--	--	--	--	--	--	--	--	--	--	--
HLS	9/13/1993	NM	--	--	--	--	--	--	--	--	--	--	--
STKP (1-4)	9/13/1993	NM	6	--	--	**15**	**23**	**24**	**77**	--	--	--	8.7
STKP (5-8)	9/13/1993	NM	19	--	--	**48**	**71**	**76**	**240**	--	--	--	6.7
STKP (9-12)	9/13/1993	NM	27	--	--	**68**	**100**	**110**	**340**	--	--	--	15
STKP (13-16)	9/13/1993	NM	17	--	--	**43**	**64**	**68**	**220**	--	--	--	12
SB1-10	8/97-1/98	10	8.2	15	--	**0.17**	0.031	0.097	0.069	<2.0	--	--	--
SB2-10	8/97-1/98	10	1.3	<1.0	--	**0.061**	0.016	0.03	0.014	<0.05	--	--	--
SB3	8/97-1/98	5	1.6	--	--	**0.048**	0.044	0.016	0.046	<0.05	--	--	--
		10	**590**	160	--	**8.6**	**15**	**10**	**48**	<6.0	--	--	--
		15	**1,000**	--	--	**8.3**	**8.8**	**15**	**52**	<10	--	--	--
		20	<1.0	--	--	0.006	0.009	<0.005	0.017	<0.05	--	--	--
		25	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
SB4-10	8/97-1/98	10	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
SB5-15	8/97-1/98	15	2.0	4.9	--	**0.08**	<0.005	0.045	0.012	<0.05	--	--	--
SB6-15	8/97-1/98	15	2.2	<1.0	--	**0.058**	0.008	0.007	0.073	<0.05	--	--	--
SB7-15	8/97-1/98	15	7.9	2.3	--	<0.005	0.016	<0.005	0.073	<0.05	--	--	--
SB8-10	8/97-1/98	10	33	11	--	**0.25**	0.089	0.30	0.29	<0.23	--	--	--
SB9-10	8/97-1/98	10	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--

Table 2
Summary of Soil Sample Data
3635 13th Avenue, Oakland, California

Location ID	Date	Depth (feet bgs)	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	Naphthalene (mg/kg)	Lead (mg/kg)
SB-10	8/21/2003	12	100	38	--	**0.39**	<0.10	0.88	1.4	<1.0	--	--	--
		19	66	6.3	--	<0.005	0.075	0.047	0.13	<0.05	--	--	--
SB-11	8/21/2003	8	1.8	1.1	--	**0.10**	0.012	<0.005	<0.005	<0.05	--	--	--
		12	1.3	2.1	--	**0.05**	<0.005	<0.005	<0.005	<0.05	--	--	--
		19	150	27	--	**0.13**	0.11	0.25	0.18	<0.50	--	--	--
SB-12	10/9/2003	12	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
		18	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
SB-13	10/10/2003	20	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
SB-14	10/10/2003	16	74	98	--	<0.050	<0.005	<0.050	0.12	<0.50	--	--	--
		23	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
SB-15	10/10/2003	15	**660**	100	--	<0.20	**5.6**	1.3	1.9	<2.0	--	--	--
		19	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
SB-16	4/23/2007	10	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
		16	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
		20	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
		24	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
SB-17	4/23/2007	10	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
	4/23/2007	15	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
	4/23/2007	20	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	0.0052	<0.05	--	--
SB-18	4/23/2007	10	27	17	--	**0.068**	<0.005	0.018	<0.005	<0.005	<0.05	--	--
	4/23/2007	15	2.7	<1.0	--	**0.078**	<0.005	0.014	<0.005	<0.005	<0.05	--	--
	4/23/2007	19	<1.0	<1.0	--	0.013	<0.005	<0.005	<0.005	0.022	0.052	--	--
	4/23/2007	25	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	0.011	<0.05	--	--
SB-19	4/20/2007	9	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
	4/20/2007	15	12	9.8	--	**0.085**	<0.010	0.26	0.020	<0.010	<0.10	--	--
	4/20/2007	20	**160**	40	--	**0.12**	<0.010	0.28	0.082	0.061	<0.10	--	--
SB-20	4/20/2007	14	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	0.0085	<0.05	--	--
	4/20/2007	18	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	0.0095	<0.05	--	--
	4/20/2007	25	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
	4/20/2007	30	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
SB-21	4/20/2007	6	<1.0	4.7	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
	4/20/2007	10	**1,300**	**300**	--	<0.20	<0.20	**5.2**	1.0	<0.20	<2.0	--	--
	4/20/2007	15	3.8	<1.0	--	**0.56**	<0.025	0.086	0.056	<0.025	<0.025	--	--
	4/20/2007	26	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
	4/20/2007	35	<1.0	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	--	--
SB-22	4/20/2007	11	**4,900**	**1,400**	--	**78**	**280**	**150**	**830**	<10	<100	--	--
	4/20/2007	16	**200**	1.20	--	**1.4**	0.28	0.27	1.2	<0.10	<1.0	--	--
	4/20/2007	20	4.4	<1.0	--	**1.5**	<0.10	<0.10	<0.10	<0.10	<1.0	--	--
SB-23	4/20/2007	7.0	<1.0	**210**	--	<0.20	<0.20	**4.8**	**11**	<0.20	<2.0	--	--
	4/20/2007	11	**1,800**	**350**	--	**3.4**	**1.2**	**11**	**56**	<0.50	<5.0	--	--
	4/20/2007	15	**520**	**210**	--	**7.3**	**6.5**	**10**	**53**	<0.50	<5.0	--	--
	4/20/2007	21	6.9	31	--	**1.2**	<0.10	0.12	<0.10	<0.10	<1.0	--	--
SG-1-10	11/3/2008	10	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
SG-2-10	11/3/2008	10	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
SG-3-10	11/3/2008	10	**1,700**	**1,200**	<100	**3.1**	<1.0	**17**	**44**	<10	--	--	--

Table 2
Summary of Soil Sample Data
3635 13th Avenue, Oakland, California

Location ID	Date	Depth (feet bgs)	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	Naphthalene (mg/kg)	Lead (mg/kg)
EW-12	9/21/2013	12	<1.0	--	--	<5.0	<5.0	<5.0	<5.0	--	--	--	--
STKP (1-4)	9/21/2013	NM	39	--	--	**10**	**15**	**19**	**63**	--	--	--	--
STKP (5-8)	9/21/2013	NM	25	--	--	**6.5**	**9.6**	**12**	**40**	--	--	--	--
SG-4	6/22/2016	2	<1.0	2.2	6.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	26
	6/22/2016	4	<1.0	1.4	25	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	4.0
	6/22/2016	6	<1.0	2.1	21	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	15
	6/22/2016	8	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	2.9
	6/22/2016	9.5	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	7.0
SG-5	6/22/2016	2	<1.0	<1.0	15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	3.5
	6/22/2016	4	<1.0	14	1,300	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	17
	6/22/2016	6	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	3.3
	6/22/2016	8	<1.0	51	800	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	7.8
	6/22/2016	9.5	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	2.8
SG-6	6/22/2016	2	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	12
	6/22/2016	4	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	9.2
	6/22/2016	6	<1.0	<1.0	9.4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	6.5
	6/22/2016	8	<1.0	1.2	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	10
	6/22/2016	9.5	<1.0	<1.0	20	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	9.8
SG-7	6/22/2016	2	<1.0	<1.0	6.4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	6.2
	6/22/2016	4	<1.0	<1.0	11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	7.5
	6/22/2016	6	<1.0	<1.0	5.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	8.4
	6/22/2016	8	<1.0	<1.0	9.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	6.8
	6/22/2016	9.5	41	11	32	<0.0050	<0.0050	0.029	<0.0050	<0.0050	--	<0.0050	8.1
SG-8	6/22/2016	2	<1.0	11	190	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	31
	6/22/2016	4	<1.0	<1.0	23	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	21
	6/22/2016	6	<1.0	<1.0	5.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	7.4
	6/22/2016	8	16	3.9	11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	11
	6/22/2016	9.5	47	2.0	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	--	<0.010	7.3
SG-9	6/22/2016	2	<1.0	<1.0	7.3	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	9.8
	6/22/2016	4	<1.0	2.4	150	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	8.0
	6/22/2016	6	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	6.8
	6/22/2016	8	<1.0	<1.0	13	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	13
	6/22/2016	9.5	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	<0.0050	6.0
Comparison Values:													
Tier 1 ESL			100	230	5,100	0.044	2.9	1.4	2.3	0.023	0.075	0.033	80

Notes:

mg/kg	milligrams per kilogram
bgs	Below ground surface
MTBE	Methyl tertiary butyl ether
TPH-g	Total Petroleum Hydrocarbons as gasoline
TPH-d	Total Petroleum Hydrocarbons as diesel
TPH-mo	Total Petroleum Hydrocarbons as motor oil
TBA	Tert butyl alcohol
PAH	Polyaromatic hydrocarbons
--	Not Analyzed
NM	Not Measured
<	Less than
<MRL	Value less than method detection limit and comparison values
Bold	Value exceeds applicable screening level

Comparison Values:
Tier 1 ESL San Francisco Bay Regional Water Quality Control Board (RWQCB) Tier 1 Environmental Screening Levels (ESLs), Summary of Soil ESLs, February 2016

Table 3
Summary of Compounds Detected in Soil Vapor
3635 13th Avenue, Oakland, California

Sample Location	Date	Analyte	Result	Units
SG-1-5	06/30/16	No analytes dectected		
SG-2-5	06/30/16	No analytes dectected		
SG-3-5	06/30/16	MTBE	9.4	µg/m^3
		Benzene	7.1	µg/m^3
		Toluene	20	µg/m^3
		m,p-Xylene	4.1	µg/m^3
SG-4-5	06/30/16	MTBE	5.7	µg/m^3
		Toluene	12	µg/m^3
SG-5-5	06/30/16	No analytes dectected		
SG-6-5	06/30/16	TPH-g	2,200	µg/m^3
		MTBE	9.1	µg/m^3
		Toluene	36	µg/m^3
		Ethylbenzene	6.3	µg/m^3
		m,p-Xylene	14	µg/m^3
		o-Xylene	11	µg/m^3
SG-7-5	06/30/16	Toluene	29	µg/m^3
		Ethylbenzene	15	µg/m^3
		m,p-Xylene	65	µg/m^3
		o-Xylene	36	µg/m^3
SG-8-5	06/30/16	TPH-g	780	µg/m^3
		Benzene	10	µg/m^3
		Toluene	150	µg/m^3
		Ethylbenzene	24	µg/m^3
		m,p-Xylene	71	µg/m^3
		o-Xylene	22	µg/m^3
SG-9-5	06/30/16	TPH-g	780	µg/m^3
		MTBE	5.4	µg/m^3
		Benzene	17	µg/m^3
		Toluene	170	µg/m^3
		Ethylbenzene	34	µg/m^3
		m,p-Xylene	110	µg/m^3
		o-Xylene	48	µg/m^3

Abbreviations:

µg/m^3 = micrograms per cubic meter
mg/kg = milligram per kilogram
TPH-g = Total Petroleum Hydrocarbons as gasoline
TPH-d = Total Petroleum Hydrocarbons as diesel
TPH-mo = Total Petroleum Hydrocarbons as motor oil
MTBE = Methyl tert butyl ether

Table 4
Summary of Soil Vapor Sample Data
3635 13th Avenue, Oakland, California

Sample Location	Date	Depth (feet bgs)	TPH-g (µg/m³)	TPH-d (µg/m³)	MTBE (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethylbenzene (µg/m³)	Total Xylenes (µg/m³)	Naphthalene (µg/m³)	Oxygen (%)	Carbon Dioxide (%)	Methane (%)	He (%)
SG-1-5	02/15/13	5	<1,800	--	<7.3	<6.5	<7.7	<8.8	<27	--	--	--	--	--
	06/30/16	5	<520	<5,000	<4.6	<4.1	<4.8	<5.5	<5.5	<5.0	15	5.2	<0.00026	<0.13
SG-1-10	02/15/13	10	4,600	--	13	<6.5	<7.7	<8.8	<27	--	--	--	--	--
	06/30/16	10	Not sampled, soil vapor well saturated with groundwater.											
SG-2-5	02/15/13	5	<1,800	--	<7.3	<6.5	<7.7	<8.8	<27	--	--	--	--	--
	06/30/16	5	<560	<5,000	<4.9	<4.4	<5.2	<5.9	<5.9	<5.0	13	5.3	0.00065	<0.14
SG-2-10	02/15/13	10	<1,800	--	<7.3	<6.5	<7.7	<8.8	<27	--	--	--	--	--
	06/30/16	10	Not sampled, soil vapor well saturated with groundwater.											
SG-3-5	02/15/13	5	**6,400,000**	--	<2,000	**6,400**	<2,000	<2,000	<2,000	--	--	--	--	--
	06/30/16	5	<440	<5,000	9.4	7.1	20	<4.7	5.1	<5.0	15	5.7	<0.00022	<0.11
SG-3-10	02/15/13	10	Not sampled, soil vapor well saturated with groundwater.											
	06/30/16	10	Not sampled, soil vapor well saturated with groundwater.											
SG-4	06/30/16	5	<530	<5,000	5.7	<4.2	12	<5.7	<5.7	<5.0	19	2.0	<0.00026	<0.13
SG-5	06/30/16	5	<560	<5,000	<4.9	<4.4	<5.1	<5.9	<5.9	<5.0	19	1.1	<0.00027	<0.14
SG-6	06/30/16	5	2,200	<5,000	9.1	<3.9	36	6.3	25	<5.0	17	3.6	<0.00024	0.13
SG-7	06/30/16	5	<540	<5,000	<4.7	<4.2	29	15	101	<5.0	17	3.9	<0.00026	<0.13
SG-8	06/30/16	5	780	<5,000	<4.9	10	150	24	93	<5.0	17	3.8	<0.00027	<0.14
SG-9	06/30/16	5	780	<5,000	5.4	17	170	34	158	<5.0	19	1.2	<0.00027	<0.13
Comparison Values:														
Tier 1 ESL			50,000	68,000	5,400	48	160,000	560	52,000	41	--	--		--

Notes:

µg/m³	micrograms per cubic meter
bgs	below ground surface
TPH-g	Total Petroleum Hydrocarbons as gasoline
TPH-d	Total Petroleum Hydrocarbons as diesel
MTBE	Methyl tert butyl ether
--	No established comparison value
%	Percent volume of targeted analyte
Bold	Value exceeds applicable screening level

Comparison Values:
Tier 1 ESL San Francisco Bay Regional Water Quality Control Board (RWQCB) Tier 1 Environmental Screening Levels (ESLs), Summary of Vapor ESLs, February 2016

Table 5
Conceptual Site Model - Updated August 2016
Kia Sumner
3635 13th Avenue
Oakland, CA

SCM Element	SCM Sub-Element	Description	Figures & Tables Reference	Data Gap	How to Address Data Gap
Geology & Hydrogeology	Regional	The site is located in Oakland near by Highway 580. The near surface sediments of the area are mapped as Alluvial gravel, sand and clay (Qoa) deposits (Oakland East, CA 1997). According to information obtained from the U.S Geological Survey (USGS), the site is located at approximately 190 feet above mean sea level (amsl) with the local topography sloping gently to the southwest	Figure 1	None	n/a
	Site	**Geology:** Based on the logs of soil borings drilled at the site by AEI, sediments across the site are fairly consistent; consisting primarily of clay, silty clay, and sand content to a depth of at least 23 feet bgs, the maximum depth explored. Logs of borings for remediation wells installed in September 2007 and soil boring in April 2007 were consistent with prior observations. **Hydrology:** During the drilling conducted by AEI in 2007 April and September, groundwater was first observed in the temporary direct push borings at depths of approximately 16 to 19 feet bgs and stabilized at between approximately 16.8 to 19.5 feet bgs. The depth to water in the groundwater monitoring wells has generally ranged from approximately 4.43 to 20.32 feet bgs since the wells were installed. Based on the groundwater monitoring conducted at the site, groundwater flows fairly consistent in southeasterly direction at an approximate hydraulic gradient of $3x10^{-2}$ to $3.2x10^{-1}$ ft/ft.	Figure 2 & 3	None	n/a
Surface Water Bodies		The nearest surface water body is Central reservoir located approximately 2200 feet to the southeast.	Figure 1	None	n/a
Nearby Wells		In 2004, AEI conducted a receptor survey within 2,000-foot radius of the property and located 5 sites with groundwater wells. 4 sites were associated with a petroleum release with monitoring wells on site. The fifth is owned by East Bay Municipal Utilities District (EBMUD) and is a cathodic well that located approximately 1,000-feet southwest of the site. None of the wells are being used to supply drinking water. **Update:** In August 2016, AEI conducted a well and sensitive receptor survey with both Alameda County Public Work Agency (ACPWA) and Department of Water Resources (DWR). Search result will include irrigation, water supply, industrial, dewatering, and cathodic protection wells within a 1,500-foot radius of the site.	Site Conceptual Model & Work Plan for Additional Investigation (February 19, 2015) **Update:** Search result is currently pending. A new figure will be updated once AEI receives the result.	None	n/a
Potential Source and Release	On Site	**Former USTs:** One 1,000-gallon and one 500-gallon former fuel tanks, plus one 250-gallon waste oil tank was removed from the property in December 1992. Low concentration of petroleum hydrocarbons were detected in soil beneath the 500-gallon gasoline tank, but hydrocarbons ranging from gasoline to oil and grease were detected beneath the 250-gallon waste oil tank. Gasoline compounds were also detected beneath the south end of the two gasoline tanks. The tanks are considered to be the primary contaminant sources at the site.	Remedial Investigation and Interim Corrective Action Plan (July 19, 2004)	None	n/a

Table 5
Conceptual Site Model - Updated August 2016
Kia Sumner
3635 13th Avenue
Oakland, CA

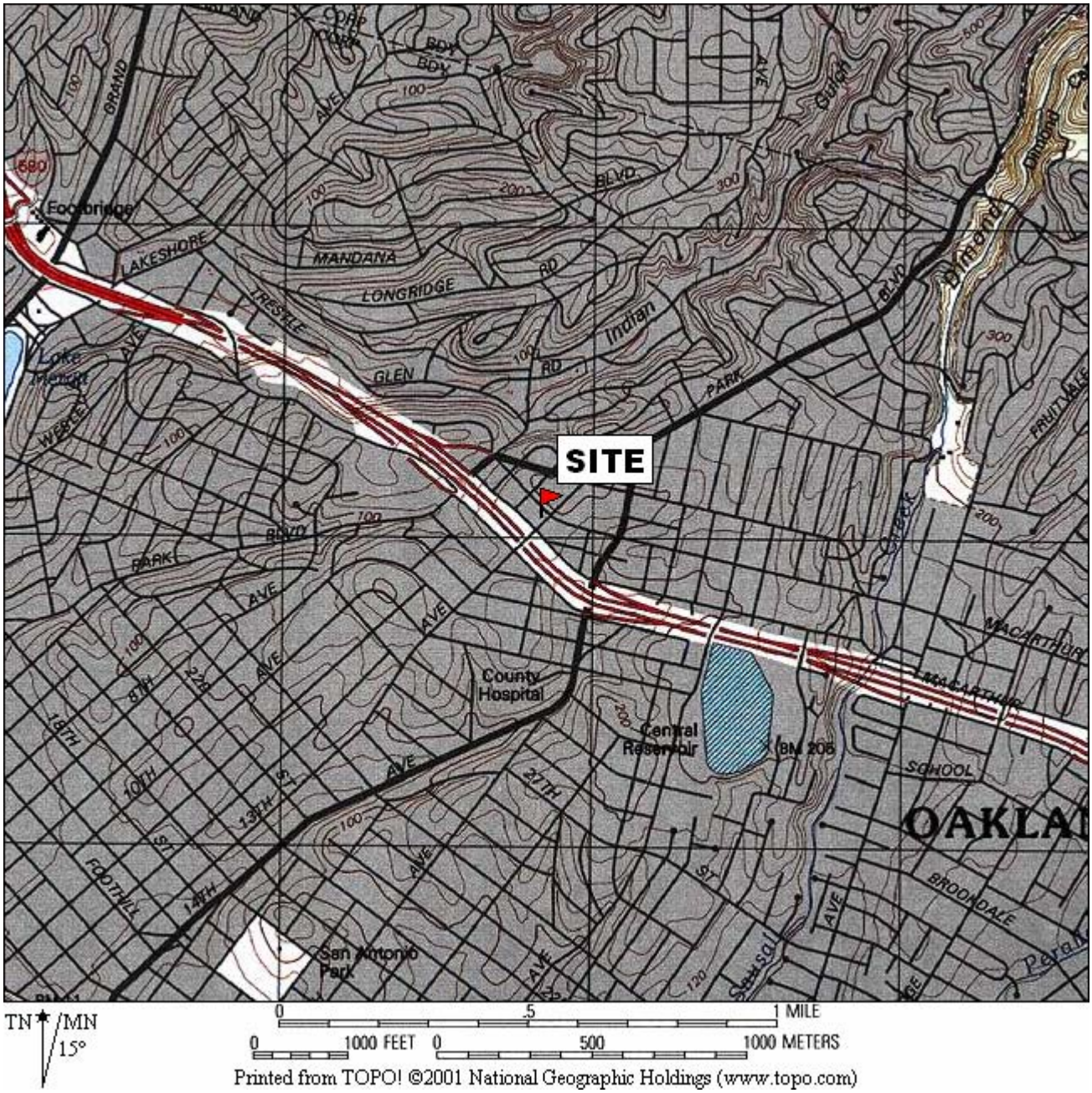
SCM Element	SCM Sub-Element	Description	Figures & Tables Reference	Data Gap	How to Address Data Gap
Release Occurrence	Fuel UST	The release of TPH-g, BTEX, and other gasoline constituents originated from the former 500 and 1,000 gallon gasoline USTs removed in 1992 near the northeastern side of the property. The exact cause of the release is not known, though typically such releases occur from failures of the UST itself or the associated piping and pump system.	Remedial Investigation and Interim Corrective Action Plan (July 19, 2004)	None	n/a
	Waste-Oil UST	In September 1993, AEI removed and disposed of approximately 360 cubic yards of contaminated soil from near the former waste oil UST. At the time of tank removal, the waste oil tank was reported as being heavily pitted and having numerous holes. Sidewall samples collected from this excavation indicated that only minor contaminant concentrations remained in the soil. The former 250-gallon waste oil UST was concluded to not pose a significant threat to the groundwater.	Contaminated Soil Over-Excavation Final Report November 18, 1993); Table 1.	None	n/a
Chemicals of potential concern (COPCs)		The primary chemicals of potential concern are gasoline and gasoline constituents [TPH-g, benzene, and BTEX] from the gasoline UST release. Naphthalene has not been sampled from the previous investigation events, but will be analyzed for future soil vapor samples. Both benzene and MTBE were detected during recent groundwater sampling events but the detected concentrations were below the Low Risk Closure Policy values. Benzene was detected in soil vapor sample SG-3 at 5 feet bgs. The chemicals of potential concern (COPCs) includes TPH-g, d, mo, the five wear metals (cadmium, chromium, nickel, lead, and zinc), semivolatile organic compounds (SVOCs), and polychlorinated biphenyl (PCBs). During the most recent site investgation, BTEX and Napthalene in soil and soil vapor were below the Low Risk Closure Policy values and have been removed as COPCs.	Figure 2; Table 2 (soil); Table 3 (soil vapor).	None	n/a
Nature and Extent of Impacts	Impacts in Soil	Gasoline impacted soil was confirmed on the east side of the property between former fuel tanks and former waste-oil tank. Minor benzene detection was discovered from the soil investigation on 13th Avenue. It appears that the gasoline constituents travelled vertically from its source (the UST) then spread laterally along the groundwater surface. Vertically, the top of the impacted zone begins at approximately 10 feet bgs and ends approximately 21 feet bgs. Table 1 shows the historical soil boring investigation data. Figure 3 shows the benzene concentration in soil from 9 to 12 feet bgs.	Figure 2; Table 2 (soil);	None	n/a
	Impacts in Groundwater	The dissolved phase gasoline-range plume is also confirmed on the east side of the property between former fuel tanks and former waste-oil tank. Benzene was found in monitoring wells MW-6, MW-2, MW-4, MW-5, and MW-7. MW-1 has shown low benzene concentration in the past sampling events. To further investigate if the plume has migrates southward, additional groundwater investigation will be conducted southwest of the apartment building. Naphthalene was not detected in soil or soil gas samples collected and analyzed, therefore naphthalene is likely not present in groundwater beneath the Site.	Figure 2; Semiannual Groundwater Monitoring and Sampling report, 1st Half 2016.	None	n/a
	Impacts in Vapor Phase	Soil gas sampling performed in June 2016 did not yeild petroelum hydrocarbons at concentrations above ESLs for the protection of residential indoor air.	Figure 2; Table 3 (soil vapor).	None	n/a

Table 5
Conceptual Site Model - Updated August 2016
Kia Sumner
3635 13th Avenue
Oakland, CA

SCM Element	SCM Sub-Element	Description	Figures & Tables Reference	Data Gap	How to Address Data Gap
Potential Receptors & Risks	On Site	Potable water is and will be provided by municipal sources for the foreseeable future, therefore direct contact with groundwater is not considered. Potential receptors at the site could include: -future construction workers via direct contact with soil or groundwater. A Site Management Plan which addresses how to deal with the potential contact of hydrocarbons or VOCs will be implemented during future construction activities at the site.	n/a	None	n/a
	Off Site	**Update:** To be determined once the most recent well & sensitive receptor survey is completed.	TBD	TBD	TBD

AEI Consultants
Environmental & Engineering Services

FIGURES



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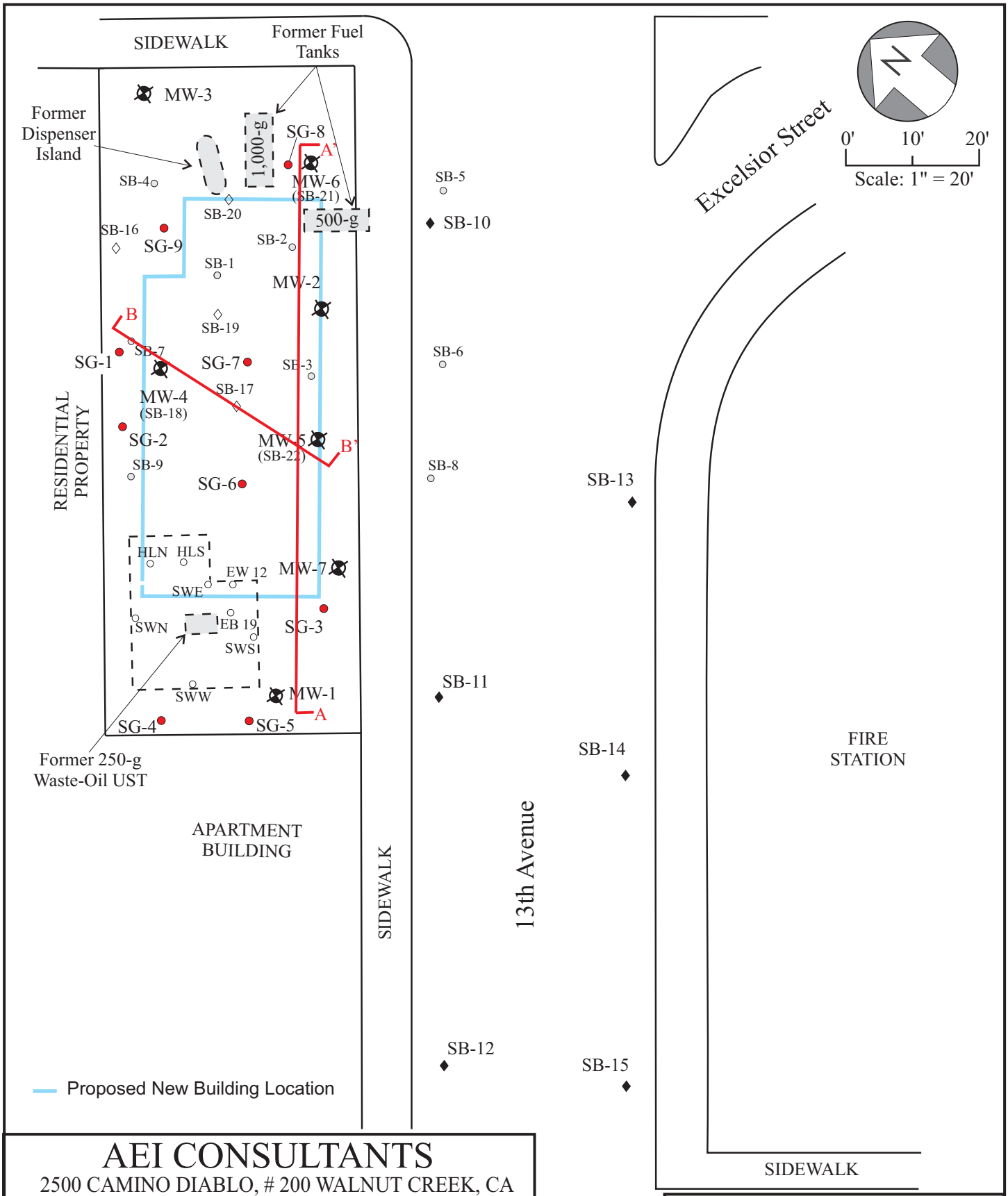
SITE LOCATION MAP

3635 13th AVENUE OAKLAND, CALIFORNIA	**FIGURE 1** PROJECT NO. 8499



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2500 CAMINO DIABLO, # 200 WALNUT CREEK, CA

SITE PLAN

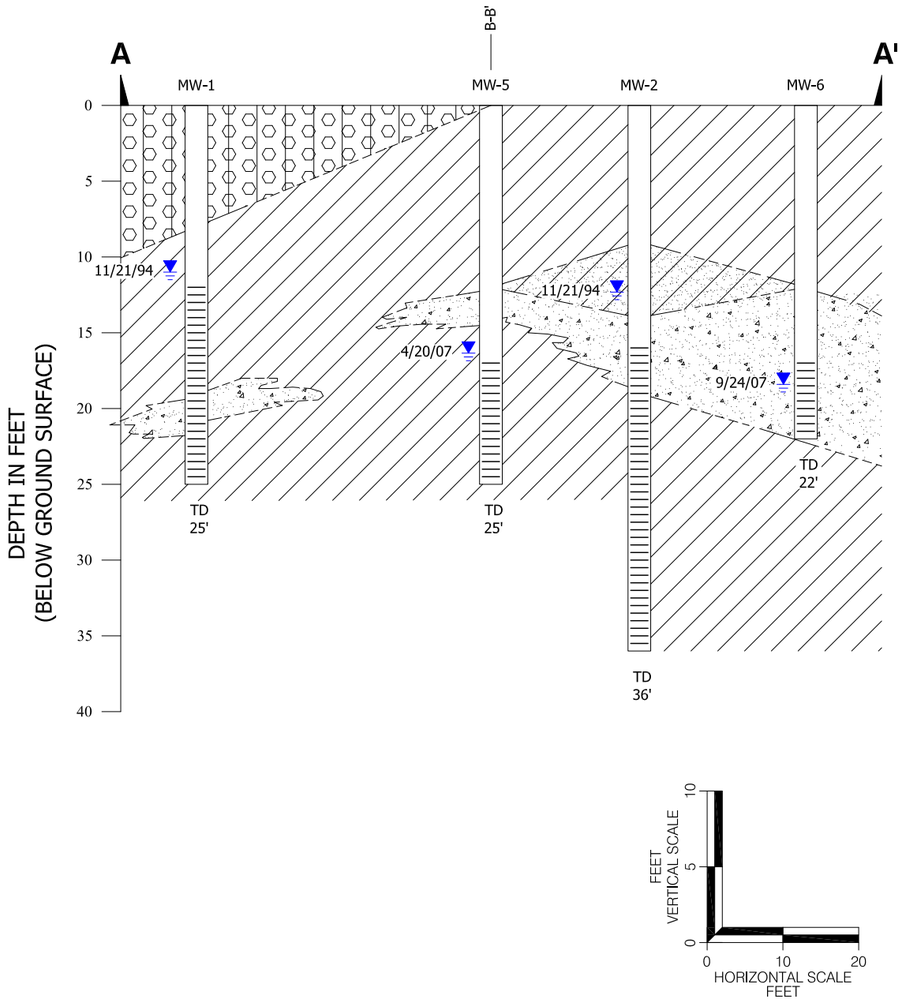
3635 13th Avenue
Oakland, California

FIGURE 2
AEI Project # 338841

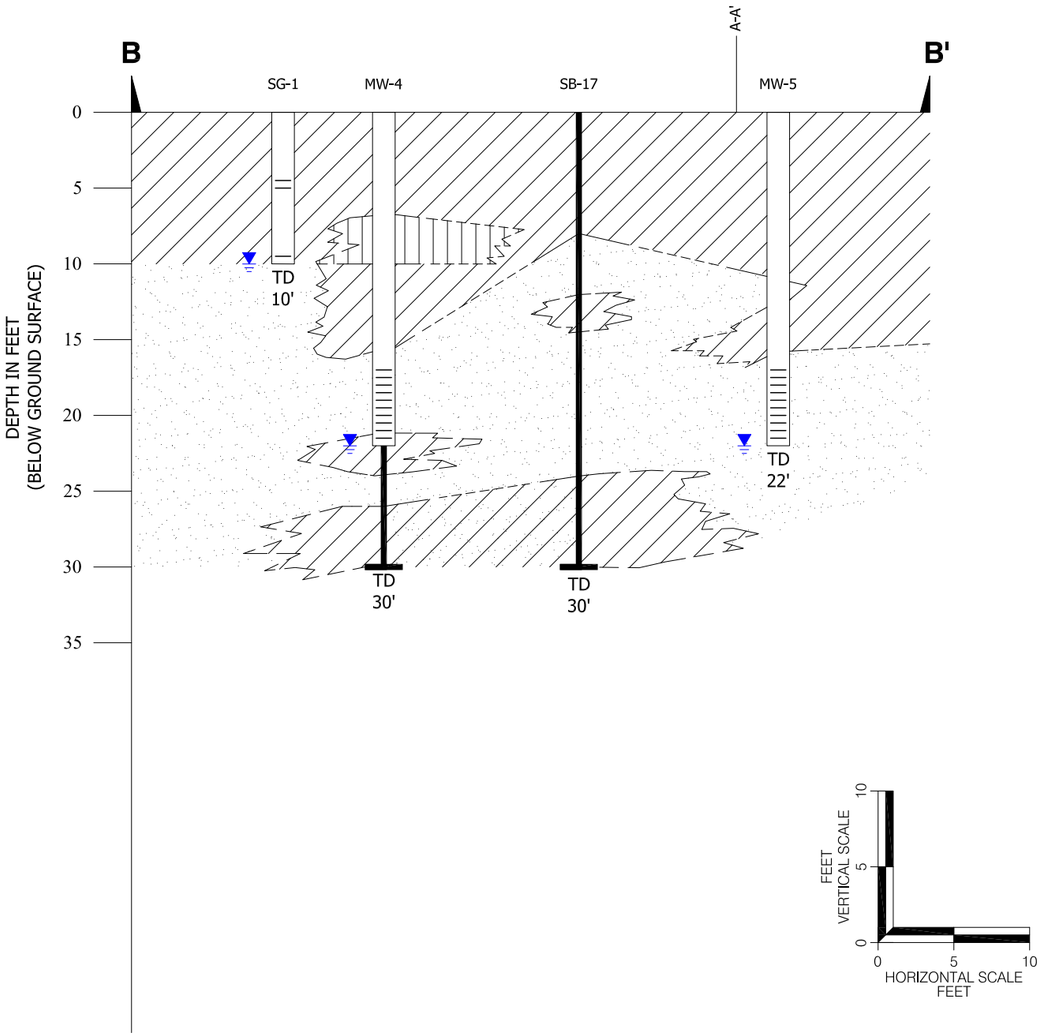
LEGEND (REV. 7/16)

- Monitoring Well
- Soil Boring 11/97 & 1/98
- Soil Boring 8/21 & 10/9-10 2003
- Soil Boring 4/07
- Soil Gas Probe 11/08 & 6/16
- Former Soil Excavation Area
- Soil Sample Collected From Soil Excavation
- Cross Section From Figure 3

CROSS-SECTION A-A'



CROSS-SECTION B-B'



LEGEND

- GM - Silty gravels, gravel-sand-silt mixtures
- CL - Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
- SP - Poorly-graded sands, gravelly sand, little or no fines
- SW - Well-graded sands, gravelly sands, little or no fines
- ML - Inorganic silts, very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
- SM - Silty sands, sand-silt mixtures

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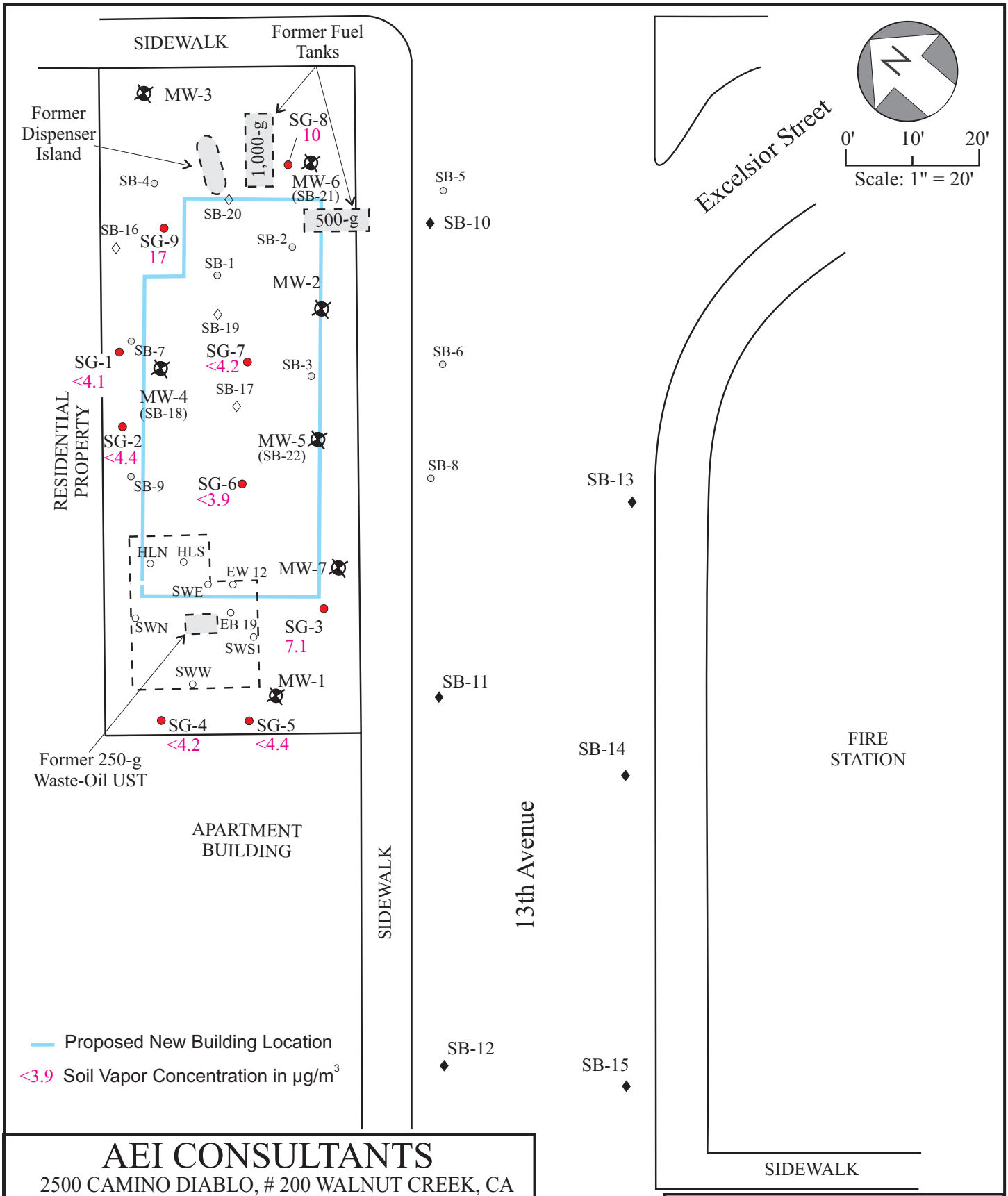
2500 Camino Diablo, Walnut Creek, California

GEOLOGIC CROSS-SECTIONS A-A' AND B-B'

Kia Sumner
3635 13th Avenue
Oakland, California

FIGURE 3
Project No. 338841



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2500 CAMINO DIABLO, # 200 WALNUT CREEK, CA

BENZENE CONCENTRATION IN SOIL VAPOR

3635 13th Avenue Oakland, California	FIGURE 4 AEI Project # 338841

LEGEND (REV. 7/16)

- Monitoring Well
- Soil Boring 11/97 & 1/98
- Soil Boring 8/21 & 10/9-10 2003
- Soil Boring 4/07
- Soil Gas Probe 11/08 & 6/16
- Former Soil Excavation Area
- Soil Sample Collected From Soil Excavation

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APPENDIX A
Permits

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

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

Application Approved on: 06/21/2016 By jamesy

Permit Numbers: W2016-0432 to W2016-0433
Permits Valid from 06/22/2016 to 06/23/2016

Application Id: 1466204530244
City of Project Site: Oakland
Site Location: 3635 13th Ave
Project Start Date: 06/22/2016
Completion Date: 06/23/2016
Assigned Inspector: Contact Marcelino Valpando at (510) 670-5760 or Marcelino@acpwa.org

Applicant: AEI Consultants - Jordan Vida
2500 Camino Diablo, Walnut Creek, CA 94597
Phone: 925-746-6023

Property Owner: Kia Sumner
1069 Oak Hill Road, Lafayette, CA 94549
Phone: 510-719-7002

Client: ** same as Property Owner **

Contact: Jordan Vida
Phone: --
Cell: 530-713-8036

Total Due: $530.00
Receipt Number: WR2016-0303 **Total Amount Paid:** $530.00
Payer Name : All Environmental, Inc. Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 6 Boreholes
Driller: Environmental Control Associates, Inc. - Lic #: 695970 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2016-0432	06/21/2016	09/20/2016	6	2.00 in.	10.00 ft

Specific Work Permit Conditions

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

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

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

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

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

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

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

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

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

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

Well Construction-Vapor monitoring well-Vapor monitoring well - 6 Wells
Driller: Environmental Control Associates, Inc. - Lic #: 695970 - Method: DP **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2016-0433	06/21/2016	09/20/2016	SG-4	2.00 in.	0.25 in.	1.00 ft	5.00 ft
W2016-0433	06/21/2016	09/20/2016	SG-5	2.00 in.	0.25 in.	1.00 ft	5.00 ft
W2016-0433	06/21/2016	09/20/2016	SG-6	2.00 in.	0.25 in.	1.00 ft	5.00 ft
W2016-0433	06/21/2016	09/20/2016	SG-7	2.00 in.	0.25 in.	1.00 ft	5.00 ft
W2016-0433	06/21/2016	09/20/2016	SG-8	2.00 in.	0.25 in.	1.00 ft	5.00 ft
W2016-0433	06/21/2016	09/20/2016	SG-9	2.00 in.	0.25 in.	1.00 ft	5.00 ft

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.

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

4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

5. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

6. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.

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

8. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

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

10. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

11. Vapor monitoring wells above water level constructed with tubing maybe be backfilled with pancake-batter consistency bentonite. Minimum surface seal thickness is two inches of cement grout around well box.

Vapor monitoring wells above water level constructed with pvc pipe shall have a minimum seal depth (Neat Cement Seal) of 2 feet below ground surface (BGS). Minimum surface seal thickness is two inches of cement grout around well box. All other conditions for monitoring well construction shall apply.

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APPENDIX B
Boring Logs

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BORING NUMBER SG-4

CLIENT Kia Sumner
PROJECT NAME 3635 13th Avenue
PROJECT NUMBER 338841
PROJECT LOCATION Oakland, California
DATE STARTED 6/22/16 **COMPLETED** 6/22/16
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct-Push
AT TIME OF DRILLING ---
LOGGED BY J.Vida **CHECKED BY** W. Hung
AT END OF DRILLING ---
NOTES
AFTER DRILLING --- NO GROUNDWATER ENCOUNTERED

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0.0						Casing Type: 1/4" Teflon Tubing
					0.1 TOPSOIL, GRASS	Well Box and surface completion
					SILT (ML), very dark brown (10YR2/2), soft, moist, trace roots	Neat Concrete
					1.0 SANDY SILT (ML), brown (10YR4/3), medium stiff, moist, medium sand	
2.5	SG-4-2		10.4			Hydrated bentonite
					4.0	
	SG-4-4		4.6		SILTY GRAVEL (GM), brown (10YR4/3), loose, moist, with fine gravel	Dry Bentonite
5.0						Probe Tip
	SG-4-6		18.2			#3 Monterey Sand
7.5						
	SG-4-8		77.7		8.5 SANDY SILT (ML), brown (10YR4/3), stiff to hard, moist, some mottling	
10.0	SG-4-9.5				10.0	
			61.3		Bottom of borehole at 10.0 feet.	

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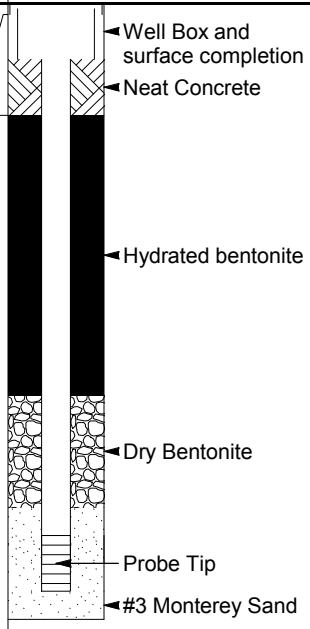
BORING NUMBER SG-5

CLIENT Kia Sumner
PROJECT NAME 3635 13th Avenue
PROJECT NUMBER 338841
PROJECT LOCATION Oakland, California
DATE STARTED 6/22/16 **COMPLETED** 6/22/16
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct-Push
AT TIME OF DRILLING ---
LOGGED BY J.Vida **CHECKED BY** W. Hung
AT END OF DRILLING ---
NOTES
AFTER DRILLING --- NO GROUNDWATER ENCOUNTERED

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0					0.1 TOPSOIL, GRASS
					SILT (ML), very dark brown (10YR2/2), soft, moist, trace roots
					1.0 SILTY GRAVEL (GM), brown (10YR4/3), loose, moist, with fine gravel
2.5	SG-5-2		54.6		
5.0	SG-5-4		25.9		
	SG-5-6		111.2		Sandy lense from 7 to 7.5 feet
7.5	SG-5-8		88.9		
10.0	SG-5-9.5		74.3		10.0

COMPLETION

Casing Type: 1/4" Teflon Tubing



Bottom of borehole at 10.0 feet.

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AEI Consultants

BORING NUMBER SG-6

CLIENT Kia Sumner
PROJECT NAME 3635 13th Avenue
PROJECT NUMBER 338841
PROJECT LOCATION Oakland, California
DATE STARTED 6/22/16 **COMPLETED** 6/22/16
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct-Push
AT TIME OF DRILLING ---
LOGGED BY J.Vida **CHECKED BY** W. Hung
AT END OF DRILLING ---
NOTES
AFTER DRILLING --- NO GROUNDWATER ENCOUNTERED

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0.0						Casing Type: 1/4" Teflon Tubing
					0.2 ASPHALT PAVEMENT	Well Box and surface completion
					0.5 SILTY GRAVEL (GM), very dark brown (10YR2/2), loose, moist, with fine gravel	Neat Concrete
					SILT (ML) with clay, very dark brown (10YR2/2), hard, moist, medium to high plasticity	
2.5	SG-6-2		21.6			Hydrated bentonite
					4.0 SANDY SILT (ML), yellowish brown (10YR5/4), medium stiff, moist, trace clay, medium plasticity, some mottling, trace medium sand	Dry Bentonite
5.0	SG-6-4		28.1			
						Probe Tip
7.5	SG-6-6		15.3			#3 Monterey Sand
	SG-6-8		37.9			
10.0	SG-6-9.5		42.2		10.0	

Bottom of borehole at 10.0 feet.

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BORING NUMBER SG-7

CLIENT Kia Sumner
PROJECT NAME 3635 13th Avenue
PROJECT NUMBER 338841
PROJECT LOCATION Oakland, California
DATE STARTED 6/22/16 **COMPLETED** 6/22/16
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct-Push
AT TIME OF DRILLING ---
LOGGED BY J.Vida **CHECKED BY** W. Hung
AT END OF DRILLING ---
NOTES
AFTER DRILLING --- NO GROUNDWATER ENCOUNTERED

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0.0						Casing Type: 1/4" Teflon Tubing
					0.2 ASPHALT PAVEMENT	Well Box and surface completion
					0.5 SILTY GRAVEL (GM), brown (10YR4/3), loose, moist, with fine gravel	Neat Concrete
					SILT (ML) with clay, very dark brown (10YR2/2), hard, moist, medium plasticity	
2.5	SG-7-2		52.9			Hydrated bentonite
					4.0 SANDY SILT (ML), yellowish brown (10YR5/4), medium stiff, moist, medium plasticity, mottling, trace sand	Dry Bentonite
5.0	SG-7-4		51.0			Probe Tip
						#3 Monterey Sand
7.5	SG-7-6		55.8			
	SG-7-8		50.2			
10.0	SG-7-9.5		122.7		10.0	

Bottom of borehole at 10.0 feet.

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BORING NUMBER SG-8

CLIENT Kia Sumner
PROJECT NAME 3635 13th Avenue
PROJECT NUMBER 338841
PROJECT LOCATION Oakland, California
DATE STARTED 6/22/16 **COMPLETED** 6/22/16
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct-Push
AT TIME OF DRILLING ---
LOGGED BY J.Vida **CHECKED BY** W. Hung
AT END OF DRILLING ---
NOTES
AFTER DRILLING --- NO GROUNDWATER ENCOUNTERED

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0.0						Casing Type: 1/4" Teflon Tubing
					0.2 ASPHALT PAVEMENT	Well Box and surface completion
					SANDY GRAVEL (GP), brown (10YR4/3), loose, moist, with fine gravel	Neat Concrete
					2.0	
2.5	SG-8-2		5.0		SANDY SILT (ML), yellowish brown (10YR5/8), soft to medium stiff, moist, low plasticity	Hydrated bentonite
	SG-8-4		3.7			Dry Bentonite
5.0						Probe Tip
	SG-8-6		9.3			#3 Monterey Sand
7.5						
	SG-8-8		52.3			
	SG-8-9.5		308.5			
10.0					10.0 Increased sand content at 10 feet, with odor	

Bottom of borehole at 10.0 feet.

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BORING NUMBER SG-9

CLIENT Kia Sumner
PROJECT NAME 3635 13th Avenue
PROJECT NUMBER 338841
PROJECT LOCATION Oakland, California
DATE STARTED 6/22/16 **COMPLETED** 6/22/16
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct-Push
AT TIME OF DRILLING ---
LOGGED BY J.Vida **CHECKED BY** W. Hung
AT END OF DRILLING ---
NOTES
AFTER DRILLING --- NO GROUNDWATER ENCOUNTERED

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0.0						Casing Type: 1/4" Teflon Tubing
					0.2 ASPHALT PAVEMENT	Well Box and surface completion
					0.5 SILTY GRAVEL (GM), very dark brown (10YR2/2), loose, moist, with fine gravel	Neat Concrete
					SANDY SILT (ML), brown (10YR4/3), medium stiff, moist, trace clay, medium plasticity	
2.5	SG-9-2		12.7			Hydrated bentonite
					4.0	
	SG-9-4		7.1		SILTY SAND (SM), brown (10YR4/3), medium dense, moist, fine sand	Dry Bentonite
5.0						Probe Tip
	SG-9-6		4.4			#3 Monterey Sand
					7.0	
7.5					SANDY SILT (ML), brown (10YR4/3), medium stiff to stiff, moist, medium plasticity	
	SG-9-8		16.0			
	SG-9-9.5		10.5			
10.0					10.0	

Bottom of borehole at 10.0 feet.

AEI Consultants
Environmental & Engineering Services

APPENDIX C

Laboratory Analytical Reports and Chain-of-Custody Documentation

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1606A69

Report Created for: AEI Consultants

2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597

Project Contact: Jordan Vida
Project P.O.: 111274
Project Name: 338841; Kia Summer

Project Received: 06/22/2016

Analytical Report reviewed & approved for release on 06/29/2016 by:

Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 338841; Kia Summer
WorkOrder: 1606A69

Glossary Abbreviation

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

McCampbell Analytical, Inc.
"When Quality Counts"

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

Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 338841; Kia Summer
WorkOrder: 1606A69

Analytical Qualifiers

S	Surrogate spike recovery outside accepted recovery limits
a3	sample diluted due to high organic content.
c2	surrogate recovery outside of the control limits due to matrix interference.
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9	no recognizable pattern
e2	diesel range compounds are significant; no recognizable pattern
e4/e11	gasoline range compounds are significant.; and/or stoddard solvent/mineral spirit (?)
e7	oil range compounds are significant
e11	stoddard solvent/mineral spirit (?)

Quality Control Qualifiers

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

McCampbell Analytical, Inc.
"When Quality Counts"

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

Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-2	1606A69-001A	Soil	06/22/2016 10:40	GC10	122699

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/27/2016 20:48
Benzene	ND	0.0050	1	06/27/2016 20:48
t-Butyl alcohol (TBA)	ND	0.050	1	06/27/2016 20:48
Diisopropyl ether (DIPE)	ND	0.0050	1	06/27/2016 20:48
Ethylbenzene	ND	0.0050	1	06/27/2016 20:48
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/27/2016 20:48
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/27/2016 20:48
Naphthalene	ND	0.0050	1	06/27/2016 20:48
Toluene	ND	0.0050	1	06/27/2016 20:48
Xylenes, Total	ND	0.0050	1	06/27/2016 20:48

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	06/27/2016 20:48
Toluene-d8	93	70-130	06/27/2016 20:48
4-BFB	85	70-130	06/27/2016 20:48
Benzene-d6	84	60-140	06/27/2016 20:48
Ethylbenzene-d10	93	60-140	06/27/2016 20:48
1,2-DCB-d4	76	60-140	06/27/2016 20:48

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-4	1606A69-002A	Soil	06/22/2016 10:50	GC10	122699

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/27/2016 21:31
Benzene	ND	0.0050	1	06/27/2016 21:31
t-Butyl alcohol (TBA)	ND	0.050	1	06/27/2016 21:31
Diisopropyl ether (DIPE)	ND	0.0050	1	06/27/2016 21:31
Ethylbenzene	ND	0.0050	1	06/27/2016 21:31
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/27/2016 21:31
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/27/2016 21:31
Naphthalene	ND	0.0050	1	06/27/2016 21:31
Toluene	ND	0.0050	1	06/27/2016 21:31
Xylenes, Total	ND	0.0050	1	06/27/2016 21:31

Surrogates	REC (%)	Limits	
Dibromofluoromethane	84	70-130	06/27/2016 21:31
Toluene-d8	92	70-130	06/27/2016 21:31
4-BFB	85	70-130	06/27/2016 21:31
Benzene-d6	87	60-140	06/27/2016 21:31
Ethylbenzene-d10	97	60-140	06/27/2016 21:31
1,2-DCB-d4	79	60-140	06/27/2016 21:31

Analyst(s): MW

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-6	1606A69-003A	Soil	06/22/2016 10:55	GC10	122699

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/27/2016 22:13
Benzene	ND	0.0050	1	06/27/2016 22:13
t-Butyl alcohol (TBA)	ND	0.050	1	06/27/2016 22:13
Diisopropyl ether (DIPE)	ND	0.0050	1	06/27/2016 22:13
Ethylbenzene	ND	0.0050	1	06/27/2016 22:13
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/27/2016 22:13
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/27/2016 22:13
Naphthalene	ND	0.0050	1	06/27/2016 22:13
Toluene	ND	0.0050	1	06/27/2016 22:13
Xylenes, Total	ND	0.0050	1	06/27/2016 22:13

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	06/27/2016 22:13
Toluene-d8	93	70-130	06/27/2016 22:13
4-BFB	85	70-130	06/27/2016 22:13
Benzene-d6	86	60-140	06/27/2016 22:13
Ethylbenzene-d10	95	60-140	06/27/2016 22:13
1,2-DCB-d4	79	60-140	06/27/2016 22:13

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-8	**1606A69-004A**	**Soil**	**06/22/2016 11:00**	**GC10**	**122699**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/27/2016 22:55
Benzene	ND	0.0050	1	06/27/2016 22:55
t-Butyl alcohol (TBA)	ND	0.050	1	06/27/2016 22:55
Diisopropyl ether (DIPE)	ND	0.0050	1	06/27/2016 22:55
Ethylbenzene	ND	0.0050	1	06/27/2016 22:55
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/27/2016 22:55
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/27/2016 22:55
Naphthalene	ND	0.0050	1	06/27/2016 22:55
Toluene	ND	0.0050	1	06/27/2016 22:55
Xylenes, Total	ND	0.0050	1	06/27/2016 22:55

Surrogates	REC (%)	Limits	
Dibromofluoromethane	87	70-130	06/27/2016 22:55
Toluene-d8	93	70-130	06/27/2016 22:55
4-BFB	86	70-130	06/27/2016 22:55
Benzene-d6	88	60-140	06/27/2016 22:55
Ethylbenzene-d10	98	60-140	06/27/2016 22:55
1,2-DCB-d4	81	60-140	06/27/2016 22:55

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-9.5	1606A69-005A	Soil	06/22/2016 11:05	GC10	122699

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/27/2016 23:36
Benzene	ND	0.0050	1	06/27/2016 23:36
t-Butyl alcohol (TBA)	ND	0.050	1	06/27/2016 23:36
Diisopropyl ether (DIPE)	ND	0.0050	1	06/27/2016 23:36
Ethylbenzene	ND	0.0050	1	06/27/2016 23:36
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/27/2016 23:36
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/27/2016 23:36
Naphthalene	ND	0.0050	1	06/27/2016 23:36
Toluene	ND	0.0050	1	06/27/2016 23:36
Xylenes, Total	ND	0.0050	1	06/27/2016 23:36

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	06/27/2016 23:36
Toluene-d8	92	70-130	06/27/2016 23:36
4-BFB	86	70-130	06/27/2016 23:36
Benzene-d6	84	60-140	06/27/2016 23:36
Ethylbenzene-d10	92	60-140	06/27/2016 23:36
1,2-DCB-d4	78	60-140	06/27/2016 23:36

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-2	1606A69-006A	Soil	06/22/2016 11:25	GC10	122699

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/28/2016 00:16
Benzene	ND	0.0050	1	06/28/2016 00:16
t-Butyl alcohol (TBA)	ND	0.050	1	06/28/2016 00:16
Diisopropyl ether (DIPE)	ND	0.0050	1	06/28/2016 00:16
Ethylbenzene	ND	0.0050	1	06/28/2016 00:16
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/28/2016 00:16
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 00:16
Naphthalene	ND	0.0050	1	06/28/2016 00:16
Toluene	ND	0.0050	1	06/28/2016 00:16
Xylenes, Total	ND	0.0050	1	06/28/2016 00:16

Surrogates	REC (%)	Limits	
Dibromofluoromethane	87	70-130	06/28/2016 00:16
Toluene-d8	93	70-130	06/28/2016 00:16
4-BFB	85	70-130	06/28/2016 00:16
Benzene-d6	84	60-140	06/28/2016 00:16
Ethylbenzene-d10	92	60-140	06/28/2016 00:16
1,2-DCB-d4	75	60-140	06/28/2016 00:16

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-4	1606A69-007A	Soil	06/22/2016 11:30	GC10	122699

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/28/2016 05:37
Benzene	ND	0.0050	1	06/28/2016 05:37
t-Butyl alcohol (TBA)	ND	0.050	1	06/28/2016 05:37
Diisopropyl ether (DIPE)	ND	0.0050	1	06/28/2016 05:37
Ethylbenzene	ND	0.0050	1	06/28/2016 05:37
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/28/2016 05:37
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 05:37
Naphthalene	ND	0.0050	1	06/28/2016 05:37
Toluene	ND	0.0050	1	06/28/2016 05:37
Xylenes, Total	ND	0.0050	1	06/28/2016 05:37

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	06/28/2016 05:37
Toluene-d8	94	70-130	06/28/2016 05:37
4-BFB	87	70-130	06/28/2016 05:37
Benzene-d6	84	60-140	06/28/2016 05:37
Ethylbenzene-d10	90	60-140	06/28/2016 05:37
1,2-DCB-d4	73	60-140	06/28/2016 05:37

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-6	1606A69-008A	Soil	06/22/2016 11:35	GC10	122699

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/28/2016 00:56
Benzene	ND	0.0050	1	06/28/2016 00:56
t-Butyl alcohol (TBA)	ND	0.050	1	06/28/2016 00:56
Diisopropyl ether (DIPE)	ND	0.0050	1	06/28/2016 00:56
Ethylbenzene	ND	0.0050	1	06/28/2016 00:56
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/28/2016 00:56
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 00:56
Naphthalene	ND	0.0050	1	06/28/2016 00:56
Toluene	ND	0.0050	1	06/28/2016 00:56
Xylenes, Total	ND	0.0050	1	06/28/2016 00:56

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	06/28/2016 00:56
Toluene-d8	93	70-130	06/28/2016 00:56
4-BFB	86	70-130	06/28/2016 00:56
Benzene-d6	84	60-140	06/28/2016 00:56
Ethylbenzene-d10	93	60-140	06/28/2016 00:56
1,2-DCB-d4	77	60-140	06/28/2016 00:56

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-8	**1606A69-009A**	**Soil**	**06/22/2016 11:40**	**GC10**	**122699**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/28/2016 04:58
Benzene	ND	0.0050	1	06/28/2016 04:58
t-Butyl alcohol (TBA)	ND	0.050	1	06/28/2016 04:58
Diisopropyl ether (DIPE)	ND	0.0050	1	06/28/2016 04:58
Ethylbenzene	ND	0.0050	1	06/28/2016 04:58
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/28/2016 04:58
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 04:58
Naphthalene	ND	0.0050	1	06/28/2016 04:58
Toluene	ND	0.0050	1	06/28/2016 04:58
Xylenes, Total	ND	0.0050	1	06/28/2016 04:58

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	06/28/2016 04:58
Toluene-d8	94	70-130	06/28/2016 04:58
4-BFB	86	70-130	06/28/2016 04:58
Benzene-d6	86	60-140	06/28/2016 04:58
Ethylbenzene-d10	93	60-140	06/28/2016 04:58
1,2-DCB-d4	75	60-140	06/28/2016 04:58

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-9.5	1606A69-010A	Soil	06/22/2016 11:45	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/28/2016 01:37
Benzene	ND	0.0050	1	06/28/2016 01:37
t-Butyl alcohol (TBA)	ND	0.050	1	06/28/2016 01:37
Diisopropyl ether (DIPE)	ND	0.0050	1	06/28/2016 01:37
Ethylbenzene	ND	0.0050	1	06/28/2016 01:37
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/28/2016 01:37
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 01:37
Naphthalene	ND	0.0050	1	06/28/2016 01:37
Toluene	ND	0.0050	1	06/28/2016 01:37
Xylenes, Total	ND	0.0050	1	06/28/2016 01:37

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	06/28/2016 01:37
Toluene-d8	92	70-130	06/28/2016 01:37
4-BFB	87	70-130	06/28/2016 01:37
Benzene-d6	84	60-140	06/28/2016 01:37
Ethylbenzene-d10	94	60-140	06/28/2016 01:37
1,2-DCB-d4	77	60-140	06/28/2016 01:37

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-2	1606A69-011A	Soil	06/22/2016 09:00	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 04:18
Ethylbenzene	ND	0.0050	1	06/28/2016 04:18
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 04:18
Naphthalene	ND	0.0050	1	06/28/2016 04:18
Xylenes, Total	ND	0.0050	1	06/28/2016 04:18

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	06/28/2016 04:18
Toluene-d8	93	70-130	06/28/2016 04:18
4-BFB	85	70-130	06/28/2016 04:18
Benzene-d6	80	60-140	06/28/2016 04:18
Ethylbenzene-d10	86	60-140	06/28/2016 04:18
1,2-DCB-d4	72	60-140	06/28/2016 04:18

Analyst(s): MW

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-4	1606A69-012A	Soil	06/22/2016 09:10	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 02:17
Ethylbenzene	ND	0.0050	1	06/28/2016 02:17
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 02:17
Naphthalene	ND	0.0050	1	06/28/2016 02:17
Xylenes, Total	ND	0.0050	1	06/28/2016 02:17

Surrogates	REC (%)	Limits	
Dibromofluoromethane	87	70-130	06/28/2016 02:17
Toluene-d8	91	70-130	06/28/2016 02:17
4-BFB	85	70-130	06/28/2016 02:17
Benzene-d6	83	60-140	06/28/2016 02:17
Ethylbenzene-d10	91	60-140	06/28/2016 02:17
1,2-DCB-d4	75	60-140	06/28/2016 02:17

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-6	1606A69-013A	Soil	06/22/2016 09:15	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 02:58
Ethylbenzene	ND	0.0050	1	06/28/2016 02:58
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 02:58
Naphthalene	ND	0.0050	1	06/28/2016 02:58
Xylenes, Total	ND	0.0050	1	06/28/2016 02:58

Surrogates	REC (%)	Limits	
Dibromofluoromethane	87	70-130	06/28/2016 02:58
Toluene-d8	93	70-130	06/28/2016 02:58
4-BFB	90	70-130	06/28/2016 02:58
Benzene-d6	84	60-140	06/28/2016 02:58
Ethylbenzene-d10	93	60-140	06/28/2016 02:58
1,2-DCB-d4	76	60-140	06/28/2016 02:58

Analyst(s): MW

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-8	1606A69-014A	Soil	06/22/2016 09:20	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 03:38
Ethylbenzene	ND	0.0050	1	06/28/2016 03:38
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 03:38
Naphthalene	ND	0.0050	1	06/28/2016 03:38
Xylenes, Total	ND	0.0050	1	06/28/2016 03:38

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	84		70-130	06/28/2016 03:38
Toluene-d8	100		70-130	06/28/2016 03:38
4-BFB	136	S	70-130	06/28/2016 03:38
Benzene-d6	83		60-140	06/28/2016 03:38
Ethylbenzene-d10	94		60-140	06/28/2016 03:38
1,2-DCB-d4	75		60-140	06/28/2016 03:38

Analyst(s): MW Analytical Comments: c2

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-9.5	1606A69-015A	Soil	06/22/2016 09:25	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.010	2	06/28/2016 14:52
Ethylbenzene	ND	0.010	2	06/28/2016 14:52
Methyl-t-butyl ether (MTBE)	ND	0.010	2	06/28/2016 14:52
Naphthalene	ND	0.010	2	06/28/2016 14:52
Xylenes, Total	ND	0.010	2	06/28/2016 14:52

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	87		70-130	06/28/2016 14:52
Toluene-d8	99		70-130	06/28/2016 14:52
4-BFB	373	S	70-130	06/28/2016 14:52
Benzene-d6	102		60-140	06/28/2016 14:52
Ethylbenzene-d10	108		60-140	06/28/2016 14:52
1,2-DCB-d4	102		60-140	06/28/2016 14:52

Analyst(s): MW Analytical Comments: c2,a3

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-2	1606A69-016A	Soil	06/22/2016 10:00	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 15:35
Ethylbenzene	ND	0.0050	1	06/28/2016 15:35
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 15:35
Naphthalene	ND	0.0050	1	06/28/2016 15:35
Xylenes, Total	ND	0.0050	1	06/28/2016 15:35

Surrogates	REC (%)	Limits	
Dibromofluoromethane	85	70-130	06/28/2016 15:35
Toluene-d8	95	70-130	06/28/2016 15:35
4-BFB	90	70-130	06/28/2016 15:35
Benzene-d6	94	60-140	06/28/2016 15:35
Ethylbenzene-d10	106	60-140	06/28/2016 15:35
1,2-DCB-d4	82	60-140	06/28/2016 15:35

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-4	1606A69-017A	Soil	06/22/2016 10:05	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 16:17
Ethylbenzene	ND	0.0050	1	06/28/2016 16:17
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 16:17
Naphthalene	ND	0.0050	1	06/28/2016 16:17
Xylenes, Total	ND	0.0050	1	06/28/2016 16:17

Surrogates	REC (%)	Limits	
Dibromofluoromethane	87	70-130	06/28/2016 16:17
Toluene-d8	94	70-130	06/28/2016 16:17
4-BFB	90	70-130	06/28/2016 16:17
Benzene-d6	90	60-140	06/28/2016 16:17
Ethylbenzene-d10	98	60-140	06/28/2016 16:17
1,2-DCB-d4	79	60-140	06/28/2016 16:17

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-6	1606A69-018A	Soil	06/22/2016 10:10	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 17:01
Ethylbenzene	ND	0.0050	1	06/28/2016 17:01
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 17:01
Naphthalene	ND	0.0050	1	06/28/2016 17:01
Xylenes, Total	ND	0.0050	1	06/28/2016 17:01

Surrogates	REC (%)	Limits	
Dibromofluoromethane	87	70-130	06/28/2016 17:01
Toluene-d8	93	70-130	06/28/2016 17:01
4-BFB	89	70-130	06/28/2016 17:01
Benzene-d6	89	60-140	06/28/2016 17:01
Ethylbenzene-d10	98	60-140	06/28/2016 17:01
1,2-DCB-d4	80	60-140	06/28/2016 17:01

Analyst(s): KF

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-8	1606A69-019A	Soil	06/22/2016 10:15	GC10	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 17:45
Ethylbenzene	ND	0.0050	1	06/28/2016 17:45
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 17:45
Naphthalene	ND	0.0050	1	06/28/2016 17:45
Xylenes, Total	ND	0.0050	1	06/28/2016 17:45

Surrogates	REC (%)	Limits	
Dibromofluoromethane	88	70-130	06/28/2016 17:45
Toluene-d8	94	70-130	06/28/2016 17:45
4-BFB	89	70-130	06/28/2016 17:45
Benzene-d6	90	60-140	06/28/2016 17:45
Ethylbenzene-d10	99	60-140	06/28/2016 17:45
1,2-DCB-d4	79	60-140	06/28/2016 17:45

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-9.5	1606A69-020A	Soil	06/22/2016 10:20	GC28	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 15:48
Ethylbenzene	ND	0.0050	1	06/28/2016 15:48
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 15:48
Naphthalene	ND	0.0050	1	06/28/2016 15:48
Xylenes, Total	ND	0.0050	1	06/28/2016 15:48

Surrogates	REC (%)	Limits	
Dibromofluoromethane	98	70-130	06/28/2016 15:48
Toluene-d8	99	70-130	06/28/2016 15:48
4-BFB	79	70-130	06/28/2016 15:48
Benzene-d6	91	60-140	06/28/2016 15:48
Ethylbenzene-d10	113	60-140	06/28/2016 15:48
1,2-DCB-d4	89	60-140	06/28/2016 15:48

Analyst(s): GM

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-2	1606A69-021A	Soil	06/22/2016 08:25	GC28	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 16:29
Ethylbenzene	ND	0.0050	1	06/28/2016 16:29
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 16:29
Naphthalene	ND	0.0050	1	06/28/2016 16:29
Xylenes, Total	ND	0.0050	1	06/28/2016 16:29

Surrogates	REC (%)	Limits	
Dibromofluoromethane	98	70-130	06/28/2016 16:29
Toluene-d8	99	70-130	06/28/2016 16:29
4-BFB	82	70-130	06/28/2016 16:29
Benzene-d6	91	60-140	06/28/2016 16:29
Ethylbenzene-d10	113	60-140	06/28/2016 16:29
1,2-DCB-d4	89	60-140	06/28/2016 16:29

Analyst(s): GM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-4	1606A69-022A	Soil	06/22/2016 08:35	GC28	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 17:10
Ethylbenzene	ND	0.0050	1	06/28/2016 17:10
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 17:10
Naphthalene	ND	0.0050	1	06/28/2016 17:10
Xylenes, Total	ND	0.0050	1	06/28/2016 17:10

Surrogates	REC (%)	Limits	
Dibromofluoromethane	100	70-130	06/28/2016 17:10
Toluene-d8	98	70-130	06/28/2016 17:10
4-BFB	80	70-130	06/28/2016 17:10
Benzene-d6	88	60-140	06/28/2016 17:10
Ethylbenzene-d10	109	60-140	06/28/2016 17:10
1,2-DCB-d4	87	60-140	06/28/2016 17:10

Analyst(s): GM

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-6	1606A69-023A	Soil	06/22/2016 08:40	GC28	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 17:51
Ethylbenzene	ND	0.0050	1	06/28/2016 17:51
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 17:51
Naphthalene	ND	0.0050	1	06/28/2016 17:51
Xylenes, Total	ND	0.0050	1	06/28/2016 17:51

Surrogates	REC (%)	Limits	
Dibromofluoromethane	99	70-130	06/28/2016 17:51
Toluene-d8	99	70-130	06/28/2016 17:51
4-BFB	79	70-130	06/28/2016 17:51
Benzene-d6	89	60-140	06/28/2016 17:51
Ethylbenzene-d10	110	60-140	06/28/2016 17:51
1,2-DCB-d4	88	60-140	06/28/2016 17:51

Analyst(s): GM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-8	1606A69-024A	Soil	06/22/2016 08:45	GC16	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 16:03
Ethylbenzene	ND	0.0050	1	06/28/2016 16:03
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 16:03
Naphthalene	ND	0.0050	1	06/28/2016 16:03
Xylenes, Total	ND	0.0050	1	06/28/2016 16:03

Surrogates	REC (%)	Limits	
Dibromofluoromethane	102	70-130	06/28/2016 16:03
Toluene-d8	107	70-130	06/28/2016 16:03
4-BFB	86	70-130	06/28/2016 16:03
Benzene-d6	115	60-140	06/28/2016 16:03
Ethylbenzene-d10	124	60-140	06/28/2016 16:03
1,2-DCB-d4	85	60-140	06/28/2016 16:03

Analyst(s): KF

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-9.5	1606A69-025A	Soil	06/22/2016 08:50	GC16	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 16:45
Ethylbenzene	ND	0.0050	1	06/28/2016 16:45
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 16:45
Naphthalene	ND	0.0050	1	06/28/2016 16:45
Xylenes, Total	ND	0.0050	1	06/28/2016 16:45
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	102	70-130		06/28/2016 16:45
Toluene-d8	109	70-130		06/28/2016 16:45
4-BFB	91	70-130		06/28/2016 16:45
Benzene-d6	111	60-140		06/28/2016 16:45
Ethylbenzene-d10	116	60-140		06/28/2016 16:45
1,2-DCB-d4	87	60-140		06/28/2016 16:45

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-2	1606A69-026A	Soil	06/22/2016 09:30	GC16	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 17:27
Ethylbenzene	ND	0.0050	1	06/28/2016 17:27
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 17:27
Naphthalene	ND	0.0050	1	06/28/2016 17:27
Xylenes, Total	ND	0.0050	1	06/28/2016 17:27
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	102	70-130		06/28/2016 17:27
Toluene-d8	110	70-130		06/28/2016 17:27
4-BFB	89	70-130		06/28/2016 17:27
Benzene-d6	116	60-140		06/28/2016 17:27
Ethylbenzene-d10	127	60-140		06/28/2016 17:27
1,2-DCB-d4	90	60-140		06/28/2016 17:27

Analyst(s): KF

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-4	1606A69-027A	Soil	06/22/2016 09:35	GC16	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 20:21
Ethylbenzene	ND	0.0050	1	06/28/2016 20:21
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 20:21
Naphthalene	ND	0.0050	1	06/28/2016 20:21
Xylenes, Total	ND	0.0050	1	06/28/2016 20:21
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	102	70-130		06/28/2016 20:21
Toluene-d8	110	70-130		06/28/2016 20:21
4-BFB	92	70-130		06/28/2016 20:21
Benzene-d6	110	60-140		06/28/2016 20:21
Ethylbenzene-d10	118	60-140		06/28/2016 20:21
1,2-DCB-d4	83	60-140		06/28/2016 20:21

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-6	1606A69-028A	Soil	06/22/2016 09:40	GC16	122714

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 21:02
Ethylbenzene	ND	0.0050	1	06/28/2016 21:02
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 21:02
Naphthalene	ND	0.0050	1	06/28/2016 21:02
Xylenes, Total	ND	0.0050	1	06/28/2016 21:02
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	102	70-130		06/28/2016 21:02
Toluene-d8	109	70-130		06/28/2016 21:02
4-BFB	85	70-130		06/28/2016 21:02
Benzene-d6	112	60-140		06/28/2016 21:02
Ethylbenzene-d10	119	60-140		06/28/2016 21:02
1,2-DCB-d4	84	60-140		06/28/2016 21:02

Analyst(s): KF

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/29/16	**Analytical Method:**	SW8260B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-8	**1606A69-029A**	**Soil**	**06/22/2016 09:45**	**GC28**	**122981**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/29/2016 12:56
Ethylbenzene	ND	0.0050	1	06/29/2016 12:56
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/29/2016 12:56
Naphthalene	ND	0.0050	1	06/29/2016 12:56
Xylenes, Total	ND	0.0050	1	06/29/2016 12:56

Surrogates	REC (%)	Limits	
Dibromofluoromethane	94	70-130	06/29/2016 12:56
Toluene-d8	100	70-130	06/29/2016 12:56
4-BFB	81	70-130	06/29/2016 12:56
Benzene-d6	78	60-140	06/29/2016 12:56
Ethylbenzene-d10	99	60-140	06/29/2016 12:56
1,2-DCB-d4	76	60-140	06/29/2016 12:56

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-9.5	**1606A69-030A**	**Soil**	**06/22/2016 09:50**	**GC16**	**122715**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/28/2016 22:24
Ethylbenzene	**0.029**	0.0050	1	06/28/2016 22:24
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/28/2016 22:24
Naphthalene	ND	0.0050	1	06/28/2016 22:24
Xylenes, Total	ND	0.0050	1	06/28/2016 22:24

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	105		70-130	06/28/2016 22:24
Toluene-d8	101		70-130	06/28/2016 22:24
4-BFB	281	S	70-130	06/28/2016 22:24
Benzene-d6	106		60-140	06/28/2016 22:24
Ethylbenzene-d10	119		60-140	06/28/2016 22:24
1,2-DCB-d4	83		60-140	06/28/2016 22:24

Analyst(s): KF Analytical Comments: c2

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-2	**1606A69-001A**	**Soil**	**06/22/2016 10:40**	**GC17**	**122915**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	06/27/2016 19:50
Acenaphthylene	ND	0.010	1	06/27/2016 19:50
Anthracene	ND	0.010	1	06/27/2016 19:50
Benzo (a) anthracene	ND	0.010	1	06/27/2016 19:50
Benzo (a) pyrene	ND	0.010	1	06/27/2016 19:50
Benzo (b) fluoranthene	ND	0.010	1	06/27/2016 19:50
Benzo (g,h,i) perylene	ND	0.010	1	06/27/2016 19:50
Benzo (k) fluoranthene	ND	0.010	1	06/27/2016 19:50
Chrysene	ND	0.010	1	06/27/2016 19:50
Dibenzo (a,h) anthracene	ND	0.010	1	06/27/2016 19:50
Fluoranthene	ND	0.010	1	06/27/2016 19:50
Fluorene	ND	0.010	1	06/27/2016 19:50
Indeno (1,2,3-cd) pyrene	ND	0.010	1	06/27/2016 19:50
1-Methylnaphthalene	ND	0.010	1	06/27/2016 19:50
2-Methylnaphthalene	ND	0.010	1	06/27/2016 19:50
Naphthalene	ND	0.010	1	06/27/2016 19:50
Phenanthrene	**0.012**	0.010	1	06/27/2016 19:50
Pyrene	ND	0.010	1	06/27/2016 19:50

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	73	30-130	06/27/2016 19:50
2-Fluorobiphenyl	73	30-130	06/27/2016 19:50

Analyst(s): REB

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-4	1606A69-002A	Soil	06/22/2016 10:50	GC17	122915

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.050	5	06/27/2016 20:20
Acenaphthylene	ND	0.050	5	06/27/2016 20:20
Anthracene	ND	0.050	5	06/27/2016 20:20
Benzo (a) anthracene	ND	0.050	5	06/27/2016 20:20
Benzo (a) pyrene	ND	0.050	5	06/27/2016 20:20
Benzo (b) fluoranthene	ND	0.050	5	06/27/2016 20:20
Benzo (g,h,i) perylene	ND	0.050	5	06/27/2016 20:20
Benzo (k) fluoranthene	ND	0.050	5	06/27/2016 20:20
Chrysene	ND	0.050	5	06/27/2016 20:20
Dibenzo (a,h) anthracene	ND	0.050	5	06/27/2016 20:20
Fluoranthene	ND	0.050	5	06/27/2016 20:20
Fluorene	ND	0.050	5	06/27/2016 20:20
Indeno (1,2,3-cd) pyrene	ND	0.050	5	06/27/2016 20:20
1-Methylnaphthalene	ND	0.050	5	06/27/2016 20:20
2-Methylnaphthalene	ND	0.050	5	06/27/2016 20:20
Naphthalene	ND	0.050	5	06/27/2016 20:20
Phenanthrene	ND	0.050	5	06/27/2016 20:20
Pyrene	ND	0.050	5	06/27/2016 20:20

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	81	30-130	06/27/2016 20:20
2-Fluorobiphenyl	79	30-130	06/27/2016 20:20

Analyst(s): REB Analytical Comments: a3

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-6	**1606A69-003A**	**Soil**	**06/22/2016 10:55**	**GC17**	**122915**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	06/27/2016 20:49
Acenaphthylene	ND	0.010	1	06/27/2016 20:49
Anthracene	ND	0.010	1	06/27/2016 20:49
Benzo (a) anthracene	ND	0.010	1	06/27/2016 20:49
Benzo (a) pyrene	ND	0.010	1	06/27/2016 20:49
Benzo (b) fluoranthene	ND	0.010	1	06/27/2016 20:49
Benzo (g,h,i) perylene	**0.032**	0.010	1	06/27/2016 20:49
Benzo (k) fluoranthene	ND	0.010	1	06/27/2016 20:49
Chrysene	ND	0.010	1	06/27/2016 20:49
Dibenzo (a,h) anthracene	ND	0.010	1	06/27/2016 20:49
Fluoranthene	ND	0.010	1	06/27/2016 20:49
Fluorene	ND	0.010	1	06/27/2016 20:49
Indeno (1,2,3-cd) pyrene	ND	0.010	1	06/27/2016 20:49
1-Methylnaphthalene	ND	0.010	1	06/27/2016 20:49
2-Methylnaphthalene	ND	0.010	1	06/27/2016 20:49
Naphthalene	ND	0.010	1	06/27/2016 20:49
Phenanthrene	ND	0.010	1	06/27/2016 20:49
Pyrene	ND	0.010	1	06/27/2016 20:49

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	81	30-130	06/27/2016 20:49
2-Fluorobiphenyl	81	30-130	06/27/2016 20:49

Analyst(s): REB

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-8	1606A69-004A	Soil	06/22/2016 11:00	GC17	122915

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	06/27/2016 21:19
Acenaphthylene	ND	0.010	1	06/27/2016 21:19
Anthracene	ND	0.010	1	06/27/2016 21:19
Benzo (a) anthracene	ND	0.010	1	06/27/2016 21:19
Benzo (a) pyrene	ND	0.010	1	06/27/2016 21:19
Benzo (b) fluoranthene	ND	0.010	1	06/27/2016 21:19
Benzo (g,h,i) perylene	ND	0.010	1	06/27/2016 21:19
Benzo (k) fluoranthene	ND	0.010	1	06/27/2016 21:19
Chrysene	ND	0.010	1	06/27/2016 21:19
Dibenzo (a,h) anthracene	ND	0.010	1	06/27/2016 21:19
Fluoranthene	ND	0.010	1	06/27/2016 21:19
Fluorene	ND	0.010	1	06/27/2016 21:19
Indeno (1,2,3-cd) pyrene	ND	0.010	1	06/27/2016 21:19
1-Methylnaphthalene	ND	0.010	1	06/27/2016 21:19
2-Methylnaphthalene	ND	0.010	1	06/27/2016 21:19
Naphthalene	ND	0.010	1	06/27/2016 21:19
Phenanthrene	ND	0.010	1	06/27/2016 21:19
Pyrene	ND	0.010	1	06/27/2016 21:19

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	84	30-130	06/27/2016 21:19
2-Fluorobiphenyl	85	30-130	06/27/2016 21:19

Analyst(s): REB

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-9.5	1606A69-005A	Soil	06/22/2016 11:05	GC17	122915

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	06/27/2016 21:48
Acenaphthylene	ND	0.010	1	06/27/2016 21:48
Anthracene	ND	0.010	1	06/27/2016 21:48
Benzo (a) anthracene	ND	0.010	1	06/27/2016 21:48
Benzo (a) pyrene	ND	0.010	1	06/27/2016 21:48
Benzo (b) fluoranthene	ND	0.010	1	06/27/2016 21:48
Benzo (g,h,i) perylene	ND	0.010	1	06/27/2016 21:48
Benzo (k) fluoranthene	ND	0.010	1	06/27/2016 21:48
Chrysene	ND	0.010	1	06/27/2016 21:48
Dibenzo (a,h) anthracene	ND	0.010	1	06/27/2016 21:48
Fluoranthene	ND	0.010	1	06/27/2016 21:48
Fluorene	ND	0.010	1	06/27/2016 21:48
Indeno (1,2,3-cd) pyrene	ND	0.010	1	06/27/2016 21:48
1-Methylnaphthalene	ND	0.010	1	06/27/2016 21:48
2-Methylnaphthalene	ND	0.010	1	06/27/2016 21:48
Naphthalene	ND	0.010	1	06/27/2016 21:48
Phenanthrene	ND	0.010	1	06/27/2016 21:48
Pyrene	ND	0.010	1	06/27/2016 21:48

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	84	30-130	06/27/2016 21:48
2-Fluorobiphenyl	83	30-130	06/27/2016 21:48

Analyst(s): REB

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-2	1606A69-006A	Soil	06/22/2016 11:25	GC17	122915

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.050	5	06/27/2016 22:17
Acenaphthylene	ND	0.050	5	06/27/2016 22:17
Anthracene	ND	0.050	5	06/27/2016 22:17
Benzo (a) anthracene	ND	0.050	5	06/27/2016 22:17
Benzo (a) pyrene	ND	0.050	5	06/27/2016 22:17
Benzo (b) fluoranthene	ND	0.050	5	06/27/2016 22:17
Benzo (g,h,i) perylene	ND	0.050	5	06/27/2016 22:17
Benzo (k) fluoranthene	ND	0.050	5	06/27/2016 22:17
Chrysene	ND	0.050	5	06/27/2016 22:17
Dibenzo (a,h) anthracene	ND	0.050	5	06/27/2016 22:17
Fluoranthene	ND	0.050	5	06/27/2016 22:17
Fluorene	ND	0.050	5	06/27/2016 22:17
Indeno (1,2,3-cd) pyrene	ND	0.050	5	06/27/2016 22:17
1-Methylnaphthalene	ND	0.050	5	06/27/2016 22:17
2-Methylnaphthalene	ND	0.050	5	06/27/2016 22:17
Naphthalene	ND	0.050	5	06/27/2016 22:17
Phenanthrene	ND	0.050	5	06/27/2016 22:17
Pyrene	ND	0.050	5	06/27/2016 22:17

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	81	30-130	06/27/2016 22:17
2-Fluorobiphenyl	78	30-130	06/27/2016 22:17

Analyst(s): REB Analytical Comments: a3

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-4	1606A69-007A	Soil	06/22/2016 11:30	GC17	122915

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.50	50	06/27/2016 22:46
Acenaphthylene	ND	0.50	50	06/27/2016 22:46
Anthracene	ND	0.50	50	06/27/2016 22:46
Benzo (a) anthracene	ND	0.50	50	06/27/2016 22:46
Benzo (a) pyrene	ND	0.50	50	06/27/2016 22:46
Benzo (b) fluoranthene	ND	0.50	50	06/27/2016 22:46
Benzo (g,h,i) perylene	ND	0.50	50	06/27/2016 22:46
Benzo (k) fluoranthene	ND	0.50	50	06/27/2016 22:46
Chrysene	ND	0.50	50	06/27/2016 22:46
Dibenzo (a,h) anthracene	ND	0.50	50	06/27/2016 22:46
Fluoranthene	ND	0.50	50	06/27/2016 22:46
Fluorene	ND	0.50	50	06/27/2016 22:46
Indeno (1,2,3-cd) pyrene	ND	0.50	50	06/27/2016 22:46
1-Methylnaphthalene	ND	0.50	50	06/27/2016 22:46
2-Methylnaphthalene	ND	0.50	50	06/27/2016 22:46
Naphthalene	ND	0.50	50	06/27/2016 22:46
Phenanthrene	ND	0.50	50	06/27/2016 22:46
Pyrene	ND	0.50	50	06/27/2016 22:46

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	79	30-130	06/27/2016 22:46
2-Fluorobiphenyl	80	30-130	06/27/2016 22:46

Analyst(s): REB Analytical Comments: a3

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-6	1606A69-008A	Soil	06/22/2016 11:35	GC17	122915

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	06/27/2016 23:15
Acenaphthylene	ND	0.010	1	06/27/2016 23:15
Anthracene	ND	0.010	1	06/27/2016 23:15
Benzo (a) anthracene	ND	0.010	1	06/27/2016 23:15
Benzo (a) pyrene	ND	0.010	1	06/27/2016 23:15
Benzo (b) fluoranthene	ND	0.010	1	06/27/2016 23:15
Benzo (g,h,i) perylene	ND	0.010	1	06/27/2016 23:15
Benzo (k) fluoranthene	ND	0.010	1	06/27/2016 23:15
Chrysene	ND	0.010	1	06/27/2016 23:15
Dibenzo (a,h) anthracene	ND	0.010	1	06/27/2016 23:15
Fluoranthene	ND	0.010	1	06/27/2016 23:15
Fluorene	ND	0.010	1	06/27/2016 23:15
Indeno (1,2,3-cd) pyrene	ND	0.010	1	06/27/2016 23:15
1-Methylnaphthalene	ND	0.010	1	06/27/2016 23:15
2-Methylnaphthalene	ND	0.010	1	06/27/2016 23:15
Naphthalene	ND	0.010	1	06/27/2016 23:15
Phenanthrene	ND	0.010	1	06/27/2016 23:15
Pyrene	ND	0.010	1	06/27/2016 23:15

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	80	30-130	06/27/2016 23:15
2-Fluorobiphenyl	82	30-130	06/27/2016 23:15

Analyst(s): REB

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-8	1606A69-009A	Soil	06/22/2016 11:40	GC17	122915

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.50	50	06/27/2016 23:44
Acenaphthylene	ND	0.50	50	06/27/2016 23:44
Anthracene	ND	0.50	50	06/27/2016 23:44
Benzo (a) anthracene	ND	0.50	50	06/27/2016 23:44
Benzo (a) pyrene	ND	0.50	50	06/27/2016 23:44
Benzo (b) fluoranthene	ND	0.50	50	06/27/2016 23:44
Benzo (g,h,i) perylene	ND	0.50	50	06/27/2016 23:44
Benzo (k) fluoranthene	ND	0.50	50	06/27/2016 23:44
Chrysene	ND	0.50	50	06/27/2016 23:44
Dibenzo (a,h) anthracene	ND	0.50	50	06/27/2016 23:44
Fluoranthene	ND	0.50	50	06/27/2016 23:44
Fluorene	ND	0.50	50	06/27/2016 23:44
Indeno (1,2,3-cd) pyrene	ND	0.50	50	06/27/2016 23:44
1-Methylnaphthalene	ND	0.50	50	06/27/2016 23:44
2-Methylnaphthalene	ND	0.50	50	06/27/2016 23:44
Naphthalene	ND	0.50	50	06/27/2016 23:44
Phenanthrene	ND	0.50	50	06/27/2016 23:44
Pyrene	ND	0.50	50	06/27/2016 23:44

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	81	30-130	06/27/2016 23:44
2-Fluorobiphenyl	72	30-130	06/27/2016 23:44

Analyst(s): REB

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B
Date Prepared:	6/27/16	**Analytical Method:**	SW8270C-SIM
Project:	338841; Kia Summer	**Unit:**	mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-9.5	1606A69-010A	Soil	06/22/2016 11:45	GC17	122915

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	06/28/2016 00:13
Acenaphthylene	ND	0.010	1	06/28/2016 00:13
Anthracene	ND	0.010	1	06/28/2016 00:13
Benzo (a) anthracene	ND	0.010	1	06/28/2016 00:13
Benzo (a) pyrene	ND	0.010	1	06/28/2016 00:13
Benzo (b) fluoranthene	ND	0.010	1	06/28/2016 00:13
Benzo (g,h,i) perylene	ND	0.010	1	06/28/2016 00:13
Benzo (k) fluoranthene	ND	0.010	1	06/28/2016 00:13
Chrysene	ND	0.010	1	06/28/2016 00:13
Dibenzo (a,h) anthracene	ND	0.010	1	06/28/2016 00:13
Fluoranthene	ND	0.010	1	06/28/2016 00:13
Fluorene	ND	0.010	1	06/28/2016 00:13
Indeno (1,2,3-cd) pyrene	ND	0.010	1	06/28/2016 00:13
1-Methylnaphthalene	ND	0.010	1	06/28/2016 00:13
2-Methylnaphthalene	ND	0.010	1	06/28/2016 00:13
Naphthalene	ND	0.010	1	06/28/2016 00:13
Phenanthrene	ND	0.010	1	06/28/2016 00:13
Pyrene	ND	0.010	1	06/28/2016 00:13

Surrogates	REC (%)	Limits	
1-Fluoronaphthalene	77	30-130	06/28/2016 00:13
2-Fluorobiphenyl	81	30-130	06/28/2016 00:13

Analyst(s): REB

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-2	**1606A69-001A**	**Soil**	**06/22/2016 10:40**	**GC19**	**122872**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/28/2016 07:00
MTBE	---	0.050	1	06/28/2016 07:00
Benzene	---	0.0050	1	06/28/2016 07:00
Toluene	---	0.0050	1	06/28/2016 07:00
Ethylbenzene	---	0.0050	1	06/28/2016 07:00
Xylenes	---	0.015	1	06/28/2016 07:00

Surrogates	REC (%)	Limits	
2-Fluorotoluene	110	70-130	06/28/2016 07:00

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-4	**1606A69-002A**	**Soil**	**06/22/2016 10:50**	**GC19**	**122872**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/28/2016 00:51
MTBE	---	0.050	1	06/28/2016 00:51
Benzene	---	0.0050	1	06/28/2016 00:51
Toluene	---	0.0050	1	06/28/2016 00:51
Ethylbenzene	---	0.0050	1	06/28/2016 00:51
Xylenes	---	0.015	1	06/28/2016 00:51

Surrogates	REC (%)	Limits	
2-Fluorotoluene	105	70-130	06/28/2016 00:51

Analyst(s): HD

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-6	1606A69-003A	Soil	06/22/2016 10:55	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 19:12
MTBE	---	0.050	1	06/24/2016 19:12
Benzene	---	0.0050	1	06/24/2016 19:12
Toluene	---	0.0050	1	06/24/2016 19:12
Ethylbenzene	---	0.0050	1	06/24/2016 19:12
Xylenes	---	0.015	1	06/24/2016 19:12

Surrogates	REC (%)	Limits	
2-Fluorotoluene	96	70-130	06/24/2016 19:12

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-8	1606A69-004A	Soil	06/22/2016 11:00	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 19:43
MTBE	---	0.050	1	06/24/2016 19:43
Benzene	---	0.0050	1	06/24/2016 19:43
Toluene	---	0.0050	1	06/24/2016 19:43
Ethylbenzene	---	0.0050	1	06/24/2016 19:43
Xylenes	---	0.015	1	06/24/2016 19:43

Surrogates	REC (%)	Limits	
2-Fluorotoluene	96	70-130	06/24/2016 19:43

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-9.5	1606A69-005A	Soil	06/22/2016 11:05	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 20:14
MTBE	---	0.050	1	06/24/2016 20:14
Benzene	---	0.0050	1	06/24/2016 20:14
Toluene	---	0.0050	1	06/24/2016 20:14
Ethylbenzene	---	0.0050	1	06/24/2016 20:14
Xylenes	---	0.015	1	06/24/2016 20:14

Surrogates	REC (%)	Limits	
2-Fluorotoluene	92	70-130	06/24/2016 20:14

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-2	1606A69-006A	Soil	06/22/2016 11:25	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 20:44
MTBE	---	0.050	1	06/24/2016 20:44
Benzene	---	0.0050	1	06/24/2016 20:44
Toluene	---	0.0050	1	06/24/2016 20:44
Ethylbenzene	---	0.0050	1	06/24/2016 20:44
Xylenes	---	0.015	1	06/24/2016 20:44

Surrogates	REC (%)	Limits	
2-Fluorotoluene	101	70-130	06/24/2016 20:44

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-4	1606A69-007A	Soil	06/22/2016 11:30	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 21:15
MTBE	---	0.050	1	06/24/2016 21:15
Benzene	---	0.0050	1	06/24/2016 21:15
Toluene	---	0.0050	1	06/24/2016 21:15
Ethylbenzene	---	0.0050	1	06/24/2016 21:15
Xylenes	---	0.015	1	06/24/2016 21:15

Surrogates	REC (%)	Limits	
2-Fluorotoluene	104	70-130	06/24/2016 21:15

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-6	1606A69-008A	Soil	06/22/2016 11:35	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 21:45
MTBE	---	0.050	1	06/24/2016 21:45
Benzene	---	0.0050	1	06/24/2016 21:45
Toluene	---	0.0050	1	06/24/2016 21:45
Ethylbenzene	---	0.0050	1	06/24/2016 21:45
Xylenes	---	0.015	1	06/24/2016 21:45

Surrogates	REC (%)	Limits	
2-Fluorotoluene	104	70-130	06/24/2016 21:45

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-8	1606A69-009A	Soil	06/22/2016 11:40	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 22:15
MTBE	---	0.050	1	06/24/2016 22:15
Benzene	---	0.0050	1	06/24/2016 22:15
Toluene	---	0.0050	1	06/24/2016 22:15
Ethylbenzene	---	0.0050	1	06/24/2016 22:15
Xylenes	---	0.015	1	06/24/2016 22:15

Surrogates	REC (%)	Limits	
2-Fluorotoluene	104	70-130	06/24/2016 22:15

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-9.5	1606A69-010A	Soil	06/22/2016 11:45	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 22:45
MTBE	---	0.050	1	06/24/2016 22:45
Benzene	---	0.0050	1	06/24/2016 22:45
Toluene	---	0.0050	1	06/24/2016 22:45
Ethylbenzene	---	0.0050	1	06/24/2016 22:45
Xylenes	---	0.015	1	06/24/2016 22:45

Surrogates	REC (%)	Limits	
2-Fluorotoluene	100	70-130	06/24/2016 22:45

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-2	1606A69-011A	Soil	06/22/2016 09:00	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 23:16
MTBE	---	0.050	1	06/24/2016 23:16
Benzene	---	0.0050	1	06/24/2016 23:16
Toluene	---	0.0050	1	06/24/2016 23:16
Ethylbenzene	---	0.0050	1	06/24/2016 23:16
Xylenes	---	0.015	1	06/24/2016 23:16

Surrogates	REC (%)	Limits	
2-Fluorotoluene	100	70-130	06/24/2016 23:16

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-4	1606A69-012A	Soil	06/22/2016 09:10	GC7	122702

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/24/2016 23:46
MTBE	---	0.050	1	06/24/2016 23:46
Benzene	---	0.0050	1	06/24/2016 23:46
Toluene	---	0.0050	1	06/24/2016 23:46
Ethylbenzene	---	0.0050	1	06/24/2016 23:46
Xylenes	---	0.015	1	06/24/2016 23:46

Surrogates	REC (%)	Limits	
2-Fluorotoluene	97	70-130	06/24/2016 23:46

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-6	**1606A69-013A**	**Soil**	**06/22/2016 09:15**	**GC19**	**122872**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/27/2016 22:15
MTBE	---	0.050	1	06/27/2016 22:15
Benzene	---	0.0050	1	06/27/2016 22:15
Toluene	---	0.0050	1	06/27/2016 22:15
Ethylbenzene	---	0.0050	1	06/27/2016 22:15
Xylenes	---	0.015	1	06/27/2016 22:15

Surrogates	REC (%)	Limits	
2-Fluorotoluene	100	70-130	06/27/2016 22:15

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-8	**1606A69-014A**	**Soil**	**06/22/2016 09:20**	**GC19**	**122702**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**16**	1.0	1	06/25/2016 18:31
MTBE	---	0.050	1	06/25/2016 18:31
Benzene	---	0.0050	1	06/25/2016 18:31
Toluene	---	0.0050	1	06/25/2016 18:31
Ethylbenzene	---	0.0050	1	06/25/2016 18:31
Xylenes	---	0.015	1	06/25/2016 18:31

Surrogates	REC (%)	Limits	
2-Fluorotoluene	93	70-130	06/25/2016 18:31

Analyst(s): IA Analytical Comments: d7,d9

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-9.5	**1606A69-015A**	**Soil**	**06/22/2016 09:25**	**GC19**	**122702**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**47**	10	10	06/28/2016 17:41
MTBE	**---**	0.50	10	06/28/2016 17:41
Benzene	**---**	0.050	10	06/28/2016 17:41
Toluene	**---**	0.050	10	06/28/2016 17:41
Ethylbenzene	**---**	0.050	10	06/28/2016 17:41
Xylenes	**---**	0.15	10	06/28/2016 17:41

Surrogates	REC (%)	Limits	
2-Fluorotoluene	109	70-130	06/28/2016 17:41

Analyst(s): IA Analytical Comments: d7,d9

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-2	**1606A69-016A**	**Soil**	**06/22/2016 10:00**	**GC19**	**122702**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 19:34
MTBE	**---**	0.050	1	06/25/2016 19:34
Benzene	**---**	0.0050	1	06/25/2016 19:34
Toluene	**---**	0.0050	1	06/25/2016 19:34
Ethylbenzene	**---**	0.0050	1	06/25/2016 19:34
Xylenes	**---**	0.015	1	06/25/2016 19:34

Surrogates	REC (%)	Limits	
2-Fluorotoluene	97	70-130	06/25/2016 19:34

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-4	1606A69-017A	Soil	06/22/2016 10:05	GC19	122719

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 20:05
MTBE	---	0.050	1	06/25/2016 20:05
Benzene	---	0.0050	1	06/25/2016 20:05
Toluene	---	0.0050	1	06/25/2016 20:05
Ethylbenzene	---	0.0050	1	06/25/2016 20:05
Xylenes	---	0.015	1	06/25/2016 20:05

Surrogates	REC (%)	Limits	
2-Fluorotoluene	97	70-130	06/25/2016 20:05

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-6	1606A69-018A	Soil	06/22/2016 10:10	GC19	122719

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 20:36
MTBE	---	0.050	1	06/25/2016 20:36
Benzene	---	0.0050	1	06/25/2016 20:36
Toluene	---	0.0050	1	06/25/2016 20:36
Ethylbenzene	---	0.0050	1	06/25/2016 20:36
Xylenes	---	0.015	1	06/25/2016 20:36

Surrogates	REC (%)	Limits	
2-Fluorotoluene	97	70-130	06/25/2016 20:36

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-8	**1606A69-019A**	**Soil**	**06/22/2016 10:15**	**GC19**	**122719**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 21:07
MTBE	---	0.050	1	06/25/2016 21:07
Benzene	---	0.0050	1	06/25/2016 21:07
Toluene	---	0.0050	1	06/25/2016 21:07
Ethylbenzene	---	0.0050	1	06/25/2016 21:07
Xylenes	---	0.015	1	06/25/2016 21:07

Surrogates	REC (%)	Limits	
2-Fluorotoluene	99	70-130	06/25/2016 21:07

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-9.5	**1606A69-020A**	**Soil**	**06/22/2016 10:20**	**GC19**	**122719**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 21:38
MTBE	---	0.050	1	06/25/2016 21:38
Benzene	---	0.0050	1	06/25/2016 21:38
Toluene	---	0.0050	1	06/25/2016 21:38
Ethylbenzene	---	0.0050	1	06/25/2016 21:38
Xylenes	---	0.015	1	06/25/2016 21:38

Surrogates	REC (%)	Limits	
2-Fluorotoluene	98	70-130	06/25/2016 21:38

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-2	1606A69-021A	Soil	06/22/2016 08:25	GC19	122719

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 22:09
MTBE	---	0.050	1	06/25/2016 22:09
Benzene	---	0.0050	1	06/25/2016 22:09
Toluene	---	0.0050	1	06/25/2016 22:09
Ethylbenzene	---	0.0050	1	06/25/2016 22:09
Xylenes	---	0.015	1	06/25/2016 22:09

Surrogates	REC (%)	Limits	
2-Fluorotoluene	101	70-130	06/25/2016 22:09

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-4	1606A69-022A	Soil	06/22/2016 08:35	GC19	122719

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 22:40
MTBE	---	0.050	1	06/25/2016 22:40
Benzene	---	0.0050	1	06/25/2016 22:40
Toluene	---	0.0050	1	06/25/2016 22:40
Ethylbenzene	---	0.0050	1	06/25/2016 22:40
Xylenes	---	0.015	1	06/25/2016 22:40

Surrogates	REC (%)	Limits	
2-Fluorotoluene	105	70-130	06/25/2016 22:40

Analyst(s): IA

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-6	1606A69-023A	Soil	06/22/2016 08:40	GC19	122719

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 23:11
MTBE	---	0.050	1	06/25/2016 23:11
Benzene	---	0.0050	1	06/25/2016 23:11
Toluene	---	0.0050	1	06/25/2016 23:11
Ethylbenzene	---	0.0050	1	06/25/2016 23:11
Xylenes	---	0.015	1	06/25/2016 23:11

Surrogates	REC (%)	Limits	
2-Fluorotoluene	97	70-130	06/25/2016 23:11

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-8	1606A69-024A	Soil	06/22/2016 08:45	GC19	122719

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 23:41
MTBE	---	0.050	1	06/25/2016 23:41
Benzene	---	0.0050	1	06/25/2016 23:41
Toluene	---	0.0050	1	06/25/2016 23:41
Ethylbenzene	---	0.0050	1	06/25/2016 23:41
Xylenes	---	0.015	1	06/25/2016 23:41

Surrogates	REC (%)	Limits	
2-Fluorotoluene	98	70-130	06/25/2016 23:41

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-9.5	1606A69-025A	Soil	06/22/2016 08:50	GC19	122940

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/29/2016 08:10
MTBE	---	0.050	1	06/29/2016 08:10
Benzene	---	0.0050	1	06/29/2016 08:10
Toluene	---	0.0050	1	06/29/2016 08:10
Ethylbenzene	---	0.0050	1	06/29/2016 08:10
Xylenes	---	0.015	1	06/29/2016 08:10

Surrogates	REC (%)	Limits	
2-Fluorotoluene	97	70-130	06/29/2016 08:10

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-2	1606A69-026A	Soil	06/22/2016 09:30	GC7	122719

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 11:40
MTBE	---	0.050	1	06/25/2016 11:40
Benzene	---	0.0050	1	06/25/2016 11:40
Toluene	---	0.0050	1	06/25/2016 11:40
Ethylbenzene	---	0.0050	1	06/25/2016 11:40
Xylenes	---	0.015	1	06/25/2016 11:40

Surrogates	REC (%)	Limits	
2-Fluorotoluene	99	70-130	06/25/2016 11:40

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-4	1606A69-027A	Soil	06/22/2016 09:35	GC7	122719

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 12:11
MTBE	---	0.050	1	06/25/2016 12:11
Benzene	---	0.0050	1	06/25/2016 12:11
Toluene	---	0.0050	1	06/25/2016 12:11
Ethylbenzene	---	0.0050	1	06/25/2016 12:11
Xylenes	---	0.015	1	06/25/2016 12:11

Surrogates	REC (%)	Limits	
2-Fluorotoluene	95	70-130	06/25/2016 12:11

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-6	1606A69-028A	Soil	06/22/2016 09:40	GC7	122719

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 12:43
MTBE	---	0.050	1	06/25/2016 12:43
Benzene	---	0.0050	1	06/25/2016 12:43
Toluene	---	0.0050	1	06/25/2016 12:43
Ethylbenzene	---	0.0050	1	06/25/2016 12:43
Xylenes	---	0.015	1	06/25/2016 12:43

Surrogates	REC (%)	Limits	
2-Fluorotoluene	98	70-130	06/25/2016 12:43

Analyst(s): IA

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW5030B
Date Prepared:	6/22/16-6/28/16	**Analytical Method:**	SW8021B/8015Bm
Project:	338841; Kia Summer	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-8	**1606A69-029A**	**Soil**	**06/22/2016 09:45**	**GC7**	**122719**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	06/25/2016 13:15
MTBE	---	0.050	1	06/25/2016 13:15
Benzene	---	0.0050	1	06/25/2016 13:15
Toluene	---	0.0050	1	06/25/2016 13:15
Ethylbenzene	---	0.0050	1	06/25/2016 13:15
Xylenes	---	0.015	1	06/25/2016 13:15

Surrogates	REC (%)	Limits	
2-Fluorotoluene	96	70-130	06/25/2016 13:15

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-9.5	**1606A69-030A**	**Soil**	**06/22/2016 09:50**	**GC3**	**122719**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**41**	1.0	1	06/24/2016 13:47
MTBE	---	0.050	1	06/24/2016 13:47
Benzene	---	0.0050	1	06/24/2016 13:47
Toluene	---	0.0050	1	06/24/2016 13:47
Ethylbenzene	---	0.0050	1	06/24/2016 13:47
Xylenes	---	0.015	1	06/24/2016 13:47

Surrogates	REC (%)	Limits	
2-Fluorotoluene	97	70-130	06/24/2016 13:47

Analyst(s): IA Analytical Comments: d7,d9

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Analytical Report

Client: AEI Consultants
Date Received: 6/22/16 16:00
Date Prepared: 6/22/16
Project: 338841; Kia Summer

WorkOrder: 1606A69
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-2	1606A69-001A	Soil	06/22/2016 10:40	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**26**	0.50	1	06/24/2016 20:34

Surrogates	REC (%)	Limits	
Terbium	123	70-130	06/24/2016 20:34

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-4	1606A69-002A	Soil	06/22/2016 10:50	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**4.0**	0.50	1	06/24/2016 20:40

Surrogates	REC (%)	Limits	
Terbium	120	70-130	06/24/2016 20:40

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-6	1606A69-003A	Soil	06/22/2016 10:55	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**15**	0.50	1	06/24/2016 22:07

Surrogates	REC (%)	Limits	
Terbium	118	70-130	06/24/2016 22:07

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-8	1606A69-004A	Soil	06/22/2016 11:00	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**2.9**	0.50	1	06/24/2016 22:13

Surrogates	REC (%)	Limits	
Terbium	117	70-130	06/24/2016 22:13

Analyst(s): BBO

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3050B
Date Prepared:	6/22/16	**Analytical Method:**	SW6020
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-9.5	1606A69-005A	Soil	06/22/2016 11:05	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**7.0**	0.50	1	06/24/2016 22:19

Surrogates	REC (%)	Limits	
Terbium	117	70-130	06/24/2016 22:19

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-2	1606A69-006A	Soil	06/22/2016 11:25	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**3.5**	0.50	1	06/24/2016 22:26

Surrogates	REC (%)	Limits	
Terbium	117	70-130	06/24/2016 22:26

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-4	1606A69-007A	Soil	06/22/2016 11:30	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**17**	0.50	1	06/24/2016 22:50

Surrogates	REC (%)	Limits	
Terbium	117	70-130	06/24/2016 22:50

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-6	1606A69-008A	Soil	06/22/2016 11:35	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**3.3**	0.50	1	06/24/2016 22:56

Surrogates	REC (%)	Limits	
Terbium	120	70-130	06/24/2016 22:56

Analyst(s): BBO

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3050B
Date Prepared:	6/22/16	**Analytical Method:**	SW6020
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-8	1606A69-009A	Soil	06/22/2016 11:40	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**7.8**	0.50	1	06/24/2016 23:02

Surrogates	REC (%)	Limits	
Terbium	119	70-130	06/24/2016 23:02

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-9.5	1606A69-010A	Soil	06/22/2016 11:45	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**2.8**	0.50	1	06/24/2016 23:08

Surrogates	REC (%)	Limits	
Terbium	123	70-130	06/24/2016 23:08

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-2	1606A69-011A	Soil	06/22/2016 09:00	ICP-MS3	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**31**	0.50	1	06/25/2016 02:45

Surrogates	REC (%)	Limits	
Terbium	108	70-130	06/25/2016 02:45

Analyst(s): DVH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-4	1606A69-012A	Soil	06/22/2016 09:10	ICP-MS1	122709

Analytes	Result	RL	DF	Date Analyzed
Lead	**21**	0.50	1	06/24/2016 23:14

Surrogates	REC (%)	Limits	
Terbium	119	70-130	06/24/2016 23:14

Analyst(s): BBO

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3050B
Date Prepared:	6/22/16	**Analytical Method:**	SW6020
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-6	1606A69-013A	Soil	06/22/2016 09:15	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**7.4**	0.50	1	06/24/2016 23:20

Surrogates	REC (%)	Limits	
Terbium	115	70-130	06/24/2016 23:20

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-8	1606A69-014A	Soil	06/22/2016 09:20	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**11**	0.50	1	06/24/2016 23:27

Surrogates	REC (%)	Limits	
Terbium	111	70-130	06/24/2016 23:27

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-9.5	1606A69-015A	Soil	06/22/2016 09:25	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**7.3**	0.50	1	06/24/2016 23:33

Surrogates	REC (%)	Limits	
Terbium	111	70-130	06/24/2016 23:33

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-2	1606A69-016A	Soil	06/22/2016 10:00	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**9.8**	0.50	1	06/24/2016 23:39

Surrogates	REC (%)	Limits	
Terbium	114	70-130	06/24/2016 23:39

Analyst(s): BBO

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3050B
Date Prepared:	6/22/16	**Analytical Method:**	SW6020
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-4	1606A69-017A	Soil	06/22/2016 10:05	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**8.0**	0.50	1	06/24/2016 23:45

Surrogates	REC (%)	Limits	
Terbium	113	70-130	06/24/2016 23:45

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-6	1606A69-018A	Soil	06/22/2016 10:10	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**6.8**	0.50	1	06/25/2016 00:10

Surrogates	REC (%)	Limits	
Terbium	117	70-130	06/25/2016 00:10

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-8	1606A69-019A	Soil	06/22/2016 10:15	ICP-MS3	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**13**	0.50	1	06/25/2016 03:10

Surrogates	REC (%)	Limits	
Terbium	115	70-130	06/25/2016 03:10

Analyst(s): DVH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-9.5	1606A69-020A	Soil	06/22/2016 10:20	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**6.0**	0.50	1	06/25/2016 00:16

Surrogates	REC (%)	Limits	
Terbium	119	70-130	06/25/2016 00:16

Analyst(s): BBO

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3050B
Date Prepared:	6/22/16	**Analytical Method:**	SW6020
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-2	1606A69-021A	Soil	06/22/2016 08:25	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**12**	0.50	1	06/25/2016 00:22

Surrogates	REC (%)	Limits	
Terbium	126	70-130	06/25/2016 00:22

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-4	1606A69-022A	Soil	06/22/2016 08:35	ICP-MS3	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**9.2**	0.50	1	06/25/2016 02:39

Surrogates	REC (%)	Limits	
Terbium	112	70-130	06/25/2016 02:39

Analyst(s): DVH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-6	1606A69-023A	Soil	06/22/2016 08:40	ICP-MS3	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**6.5**	0.50	1	06/25/2016 03:16

Surrogates	REC (%)	Limits	
Terbium	111	70-130	06/25/2016 03:16

Analyst(s): DVH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-8	1606A69-024A	Soil	06/22/2016 08:45	ICP-MS3	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**10**	0.50	1	06/25/2016 03:23

Surrogates	REC (%)	Limits	
Terbium	111	70-130	06/25/2016 03:23

Analyst(s): DVH

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3050B
Date Prepared:	6/22/16	**Analytical Method:**	SW6020
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-9.5	1606A69-025A	Soil	06/22/2016 08:50	ICP-MS3	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**9.8**	0.50	1	06/25/2016 03:29

Surrogates	REC (%)	Limits	
Terbium	108	70-130	06/25/2016 03:29

Analyst(s): DVH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-2	1606A69-026A	Soil	06/22/2016 09:30	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**6.2**	0.50	1	06/25/2016 00:28

Surrogates	REC (%)	Limits	
Terbium	112	70-130	06/25/2016 00:28

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-4	1606A69-027A	Soil	06/22/2016 09:35	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**7.5**	0.50	1	06/25/2016 00:34

Surrogates	REC (%)	Limits	
Terbium	109	70-130	06/25/2016 00:34

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-6	1606A69-028A	Soil	06/22/2016 09:40	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**8.4**	0.50	1	06/25/2016 00:40

Surrogates	REC (%)	Limits	
Terbium	106	70-130	06/25/2016 00:40

Analyst(s): BBO

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3050B
Date Prepared:	6/22/16	**Analytical Method:**	SW6020
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-8	1606A69-029A	Soil	06/22/2016 09:45	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**6.8**	0.50	1	06/25/2016 00:46

Surrogates	REC (%)	Limits	
Terbium	106	70-130	06/25/2016 00:46

Analyst(s): BBO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-9.5	1606A69-030A	Soil	06/22/2016 09:50	ICP-MS1	122713

Analytes	Result	RL	DF	Date Analyzed
Lead	**8.1**	0.50	1	06/24/2016 09:49

Surrogates	REC (%)	Limits	
Terbium	116	70-130	06/24/2016 09:49

Analyst(s): DVH

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-2	1606A69-001A	Soil	06/22/2016 10:40	GC6B	122664

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2.2**	1.0	1	06/24/2016 14:38
TPH-Motor Oil (C18-C36)	**6.2**	5.0	1	06/24/2016 14:38

Surrogates	REC (%)	Limits	
C9	86	70-130	06/24/2016 14:38

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-4	1606A69-002A	Soil	06/22/2016 10:50	GC6A	122664

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1.4**	1.0	1	06/24/2016 14:38
TPH-Motor Oil (C18-C36)	**25**	5.0	1	06/24/2016 14:38

Surrogates	REC (%)	Limits	
C9	88	70-130	06/24/2016 14:38

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-6	1606A69-003A	Soil	06/22/2016 10:55	GC6B	122664

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2.1**	1.0	1	06/24/2016 15:17
TPH-Motor Oil (C18-C36)	**21**	5.0	1	06/24/2016 15:17

Surrogates	REC (%)	Limits	
C9	86	70-130	06/24/2016 15:17

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

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-8	**1606A69-004A**	**Soil**	**06/22/2016 11:00**	**GC6A**	**122664**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 16:34
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/24/2016 16:34

Surrogates	REC (%)	Limits	
C9	87	70-130	06/24/2016 16:34

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-4-9.5	**1606A69-005A**	**Soil**	**06/22/2016 11:05**	**GC6B**	**122717**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 16:34
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/24/2016 16:34

Surrogates	REC (%)	Limits	
C9	86	70-130	06/24/2016 16:34

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-2	**1606A69-006A**	**Soil**	**06/22/2016 11:25**	**GC6B**	**122717**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 17:13
TPH-Motor Oil (C18-C36)	**15**	5.0	1	06/24/2016 17:13

Surrogates	REC (%)	Limits	
C9	86	70-130	06/24/2016 17:13

Analyst(s): TK Analytical Comments: e7

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-4	1606A69-007A	Soil	06/22/2016 11:30	GC2B	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**14**	10	10	06/25/2016 05:47
TPH-Motor Oil (C18-C36)	**1300**	50	10	06/25/2016 05:47

Surrogates	REC (%)	Limits	
C9	118	70-130	06/25/2016 05:47

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-6	1606A69-008A	Soil	06/22/2016 11:35	GC6A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 17:13
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/24/2016 17:13

Surrogates	REC (%)	Limits	
C9	88	70-130	06/24/2016 17:13

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-8	1606A69-009A	Soil	06/22/2016 11:40	GC2A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**51**	50	50	06/24/2016 06:17
TPH-Motor Oil (C18-C36)	**800**	250	50	06/24/2016 06:17

Surrogates	REC (%)	Limits	
C9	101	70-130	06/24/2016 06:17

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

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-5-9.5	1606A69-010A	Soil	06/22/2016 11:45	GC6A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 17:58
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/24/2016 17:58

Surrogates	REC (%)	Limits	
C9	93	70-130	06/24/2016 17:58

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-2	1606A69-011A	Soil	06/22/2016 09:00	GC11B	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**11**	10	10	06/28/2016 01:52
TPH-Motor Oil (C18-C36)	**190**	50	10	06/28/2016 01:52

Surrogates	REC (%)	Limits	
C9	99	70-130	06/28/2016 01:52

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-4	1606A69-012A	Soil	06/22/2016 09:10	GC6A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 18:37
TPH-Motor Oil (C18-C36)	**23**	5.0	1	06/24/2016 18:37

Surrogates	REC (%)	Limits	
C9	88	70-130	06/24/2016 18:37

Analyst(s): TK Analytical Comments: e7

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-6	1606A69-013A	Soil	06/22/2016 09:15	GC6A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 19:54
TPH-Motor Oil (C18-C36)	**5.2**	5.0	1	06/24/2016 19:54

Surrogates	REC (%)	Limits	
C9	88	70-130	06/24/2016 19:54

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-8	1606A69-014A	Soil	06/22/2016 09:20	GC6B	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**3.9**	1.0	1	06/24/2016 21:12
TPH-Motor Oil (C18-C36)	**11**	5.0	1	06/24/2016 21:12

Surrogates	REC (%)	Limits	
C9	89	70-130	06/24/2016 21:12

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-8-9.5	1606A69-015A	Soil	06/22/2016 09:25	GC6A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2.0**	1.0	1	06/24/2016 21:12
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/24/2016 21:12

Surrogates	REC (%)	Limits	
C9	89	70-130	06/24/2016 21:12

Analyst(s): TK Analytical Comments: e4/e11

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-2	1606A69-016A	Soil	06/22/2016 10:00	GC6B	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 22:29
TPH-Motor Oil (C18-C36)	**7.3**	5.0	1	06/24/2016 22:29

Surrogates	REC (%)	Limits	
C9	87	70-130	06/24/2016 22:29

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-4	1606A69-017A	Soil	06/22/2016 10:05	GC2B	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2.4**	2.0	2	06/25/2016 00:43
TPH-Motor Oil (C18-C36)	**150**	10	2	06/25/2016 00:43

Surrogates	REC (%)	Limits	
C9	115	70-130	06/25/2016 00:43

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-6	1606A69-018A	Soil	06/22/2016 10:10	GC6A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 22:29
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/24/2016 22:29

Surrogates	REC (%)	Limits	
C9	91	70-130	06/24/2016 22:29

Analyst(s): TK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-8	1606A69-019A	Soil	06/22/2016 10:15	GC6B	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 23:47
TPH-Motor Oil (C18-C36)	**13**	5.0	1	06/24/2016 23:47

Surrogates	REC (%)	Limits	
C9	88	70-130	06/24/2016 23:47

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-9-9.5	1606A69-020A	Soil	06/22/2016 10:20	GC6A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/24/2016 23:47
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/24/2016 23:47

Surrogates	REC (%)	Limits	
C9	90	70-130	06/24/2016 23:47

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-2	1606A69-021A	Soil	06/22/2016 08:25	GC9b	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/26/2016 21:24
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/26/2016 21:24

Surrogates	REC (%)	Limits	
C9	88	70-130	06/26/2016 21:24

Analyst(s): TK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-4	1606A69-022A	Soil	06/22/2016 08:35	GC39A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/23/2016 21:48
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/23/2016 21:48

Surrogates	REC (%)	Limits	
C9	109	70-130	06/23/2016 21:48

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-6	1606A69-023A	Soil	06/22/2016 08:40	GC9a	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/26/2016 20:06
TPH-Motor Oil (C18-C36)	**9.4**	5.0	1	06/26/2016 20:06

Surrogates	REC (%)	Limits	
C9	104	70-130	06/26/2016 20:06

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-8	1606A69-024A	Soil	06/22/2016 08:45	GC2A	122717

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1.2**	1.0	1	06/24/2016 03:45
TPH-Motor Oil (C18-C36)	**16**	5.0	1	06/24/2016 03:45

Surrogates	REC (%)	Limits	
C9	93	70-130	06/24/2016 03:45

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

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-6-9.5	1606A69-025A	Soil	06/22/2016 08:50	GC9a	122718

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/27/2016 12:29
TPH-Motor Oil (C18-C36)	**20**	5.0	1	06/27/2016 12:29

Surrogates	REC (%)	Limits	
C9	113	70-130	06/27/2016 12:29

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-2	1606A69-026A	Soil	06/22/2016 09:30	GC9a	122718

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/26/2016 21:24
TPH-Motor Oil (C18-C36)	**6.4**	5.0	1	06/26/2016 21:24

Surrogates	REC (%)	Limits	
C9	103	70-130	06/26/2016 21:24

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-4	1606A69-027A	Soil	06/22/2016 09:35	GC9a	122718

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/26/2016 22:41
TPH-Motor Oil (C18-C36)	**11**	5.0	1	06/26/2016 22:41

Surrogates	REC (%)	Limits	
C9	112	70-130	06/26/2016 22:41

Analyst(s): TK Analytical Comments: e7

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Received:	6/22/16 16:00	**Extraction Method:**	SW3550B/3630C
Date Prepared:	6/22/16	**Analytical Method:**	SW8015B
Project:	338841; Kia Summer	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-6	1606A69-028A	Soil	06/22/2016 09:40	GC9b	122718

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/26/2016 20:06
TPH-Motor Oil (C18-C36)	**5.6**	5.0	1	06/26/2016 20:06

Surrogates	REC (%)	Limits	
C9	88	70-130	06/26/2016 20:06

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-8	1606A69-029A	Soil	06/22/2016 09:45	GC9a	122718

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/26/2016 23:59
TPH-Motor Oil (C18-C36)	**9.1**	5.0	1	06/26/2016 23:59

Surrogates	REC (%)	Limits	
C9	102	70-130	06/26/2016 23:59

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SG-7-9.5	1606A69-030A	Soil	06/22/2016 09:50	GC39A	122718

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**11**	1.0	1	06/27/2016 11:56
TPH-Motor Oil (C18-C36)	**32**	5.0	1	06/27/2016 11:56

Surrogates	REC (%)	Limits	
C9	111	70-130	06/27/2016 11:56

Analyst(s): TD Analytical Comments: e7,e11

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122699
Date Analyzed:	6/22/16	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122699 1606A55-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
tert-Amyl methyl ether (TAME)	ND	0.0407	0.0050	0.050	-	81	53-116
Benzene	ND	0.0499	0.0050	0.050	-	100	63-137
t-Butyl alcohol (TBA)	ND	0.156	0.050	0.20	-	78	41-135
Diisopropyl ether (DIPE)	ND	0.0423	0.0050	0.050	-	85	52-129
Ethylbenzene	ND	0.0507	0.0050	0.050	-	101	74-142
Ethyl tert-butyl ether (ETBE)	ND	0.0423	0.0050	0.050	-	85	53-125
Methyl-t-butyl ether (MTBE)	ND	0.0425	0.0050	0.050	-	85	58-122
Naphthalene	ND	0.0232	0.0050	0.050	-	47	23-73
Toluene	ND	0.0529	0.0050	0.050	-	106	76-130
Xylenes, Total	ND	0.151	0.0050	0.15	-	101	70-130
Surrogate Recovery							
Dibromofluoromethane	0.109	0.108		0.12	87	87	70-130
Toluene-d8	0.118	0.118		0.12	95	94	70-130
4-BFB	0.0112	0.0110		0.012	90	88	70-130
Benzene-d6	0.0987	0.105		0.10	99	105	60-140
Ethylbenzene-d10	0.113	0.115		0.10	113	115	60-140
1,2-DCB-d4	0.0880	0.0863		0.10	88	86	60-140

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122699
Date Analyzed:	6/22/16	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122699 1606A55-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0349	0.0349	0.050	ND	70	70	53-116	0	20
Benzene	0.0425	0.0429	0.050	ND	85	86	63-137	0.883	20
t-Butyl alcohol (TBA)	0.122	0.121	0.20	ND	61	61	41-135	0	20
Diisopropyl ether (DIPE)	0.0366	0.0371	0.050	ND	73	74	52-129	1.41	20
Ethylbenzene	0.0435	0.0440	0.050	ND	87	88	74-142	1.20	20
Ethyl tert-butyl ether (ETBE)	0.0365	0.0371	0.050	ND	73	74	53-125	1.58	20
Methyl-t-butyl ether (MTBE)	0.0367	0.0367	0.050	ND	73	73	58-122	0	20
Naphthalene	0.0222	0.0221	0.050	ND	44	44	23-73	0	20
Toluene	0.0447	0.0450	0.050	ND	89	90	76-130	0.666	20
Xylenes, Total	0.133	0.133	0.15	ND	89	89	70-130	0	20
Surrogate Recovery									
Dibromofluoromethane	0.110	0.111	0.12		88	89	70-130	0.603	20
Toluene-d8	0.117	0.118	0.12		93	95	70-130	1.19	20
4-BFB	0.0111	0.0111	0.012		89	89	70-130	0	20
Benzene-d6	0.0876	0.0889	0.10		88	89	60-140	1.58	20
Ethylbenzene-d10	0.0962	0.0992	0.10		96	99	60-140	3.02	20
1,2-DCB-d4	0.0791	0.0790	0.10		79	79	60-140	0	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122714
Date Analyzed:	6/24/16	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122714 1606A69-027AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
tert-Amyl methyl ether (TAME)	ND	0.0362	0.0050	0.050	-	72	53-116
Benzene	ND	0.0457	0.0050	0.050	-	91	63-137
t-Butyl alcohol (TBA)	ND	0.172	0.050	0.20	-	86	41-135
Diisopropyl ether (DIPE)	ND	0.0400	0.0050	0.050	-	80	52-129
Ethylbenzene	ND	0.0584	0.0050	0.050	-	117	74-142
Ethyl tert-butyl ether (ETBE)	ND	0.0404	0.0050	0.050	-	81	53-125
Methyl-t-butyl ether (MTBE)	ND	0.0438	0.0050	0.050	-	88	58-122
Naphthalene	ND	0.0255	0.0050	0.050	-	51	23-73
Toluene	ND	0.0522	0.0050	0.050	-	104	76-130
Xylenes, Total	ND	0.167	0.0050	0.15	-	112	70-130
Surrogate Recovery							
Dibromofluoromethane	0.112	0.114		0.12	90	91	70-130
Toluene-d8	0.128	0.129		0.12	103	103	70-130
4-BFB	0.0105	0.0116		0.012	84	93	70-130
Benzene-d6	0.0920	0.0968		0.10	92	97	60-140
Ethylbenzene-d10	0.117	0.123		0.10	117	123	60-140
1,2-DCB-d4	0.0878	0.0926		0.10	88	93	60-140

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122714
Date Analyzed:	6/24/16	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122714 1606A69-027AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0303	0.0343	0.050	ND	61	69	53-116	12.4	20
Benzene	0.0395	0.0425	0.050	ND	79	85	63-137	7.25	20
t-Butyl alcohol (TBA)	0.144	0.167	0.20	ND	72	84	41-135	15.1	20
Diisopropyl ether (DIPE)	0.0331	0.0370	0.050	ND	66	74	52-129	11.2	20
Ethylbenzene	0.0502	0.0534	0.050	ND	100	107	74-142	6.25	20
Ethyl tert-butyl ether (ETBE)	0.0336	0.0382	0.050	ND	67	76	53-125	12.8	20
Methyl-t-butyl ether (MTBE)	0.0373	0.0427	0.050	ND	75	85	58-122	13.4	20
Naphthalene	0.0252	0.0264	0.050	ND	50	53	23-73	4.69	20
Toluene	0.0438	0.0476	0.050	ND	88	95	76-130	8.36	20
Xylenes, Total	0.151	0.158	0.15	ND	101	106	70-130	4.95	20
Surrogate Recovery									
Dibromofluoromethane	0.117	0.118	0.12		93	94	70-130	1.05	20
Toluene-d8	0.124	0.124	0.12		99	99	70-130	0	20
4-BFB	0.0114	0.0113	0.012		91	91	70-130	0	20
Benzene-d6	0.0843	0.0906	0.10		84	91	60-140	7.24	20
Ethylbenzene-d10	0.107	0.114	0.10		107	114	60-140	6.72	20
1,2-DCB-d4	0.0835	0.0882	0.10		83	88	60-140	5.49	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122715
Date Analyzed:	6/24/16	**Extraction Method:**	SW5030B
Instrument:	GC16, GC28	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122715 1606A69-030AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Benzene	ND	0.0459	0.0050	0.050	-	92	63-137
Ethylbenzene	ND	0.0589	0.0050	0.050	-	118	74-142
Methyl-t-butyl ether (MTBE)	ND	0.0444	0.0050	0.050	-	89	58-122
Naphthalene	ND	0.0261	0.0050	0.050	-	52	23-73
Xylenes, Total	ND	0.169	0.0050	0.15	-	113	70-130
Surrogate Recovery							
Dibromofluoromethane	0.109	0.114		0.12	87	91	70-130
Toluene-d8	0.117	0.128		0.12	94	103	70-130
4-BFB	0.00930	0.0116		0.012	74	93	70-130
Benzene-d6	0.0938	0.0959		0.10	94	96	60-140
Ethylbenzene-d10	0.111	0.122		0.10	111	122	60-140
1,2-DCB-d4	0.0772	0.0926		0.10	77	93	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzene	0.0436	0.0447	0.050	ND	79	81	63-137	2.68	20
Ethylbenzene	0.0742	0.0687	0.050	0.02892	91	80	74-142	7.64	20
Methyl-t-butyl ether (MTBE)	0.0550	0.0429	0.050	ND	110	86	58-122	24.6,F1	20
Naphthalene	0.0715	0.0597	0.050	ND	143,F1	119,F1	23-73	18.0	20
Xylenes, Total	0.153	0.153	0.15	ND	102	102	70-130	0	20
Surrogate Recovery									
Dibromofluoromethane	0.116	0.115	0.12		93	92	70-130	1.19	20
Toluene-d8	0.124	0.126	0.12		99	101	70-130	1.89	20
4-BFB	0.0244	0.0207	0.012		195,F3	166,F3	70-130	16.1	20
Benzene-d6	0.0873	0.0898	0.10		87	90	60-140	2.81	20
Ethylbenzene-d10	0.110	0.109	0.10		110	109	60-140	0.701	20
1,2-DCB-d4	0.0853	0.0864	0.10		85	86	60-140	1.25	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/28/16	**BatchID:**	122981
Date Analyzed:	6/29/16	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122981 1606D36-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Benzene	ND	0.0407	0.0050	0.050	-	81	63-137
Ethylbenzene	ND	0.0523	0.0050	0.050	-	105	74-142
Methyl-t-butyl ether (MTBE)	ND	0.0387	0.0050	0.050	-	77	58-122
Naphthalene	ND	0.0238	0.0050	0.050	-	48	23-73
Xylenes, Total	ND	0.153	0.0050	0.15	-	102	70-130
Surrogate Recovery							
Dibromofluoromethane	0.114	0.114		0.12	91	92	70-130
Toluene-d8	0.126	0.127		0.12	101	102	70-130
4-BFB	0.0101	0.0115		0.012	81	92	70-130
Benzene-d6	0.0963	0.0844		0.10	96	84	60-140
Ethylbenzene-d10	0.120	0.109		0.10	120	109	60-140
1,2-DCB-d4	0.0889	0.0846		0.10	89	85	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzene	0.0358	0.0351	0.050	ND	72	70	63-137	2.22	20
Ethylbenzene	0.0375	0.0366	0.050	ND	75	73,F1	74-142	2.49	20
Methyl-t-butyl ether (MTBE)	0.0280	0.0288	0.050	ND	56,F1	57,F1	58-122	2.57	20
Naphthalene	0.0166	0.0180	0.050	ND	33	36	23-73	8.10	20
Xylenes, Total	0.108	0.107	0.15	ND	72	71	70-130	1.05	20
Surrogate Recovery									
Dibromofluoromethane	0.108	0.109	0.12		86	87	70-130	1.32	20
Toluene-d8	0.119	0.117	0.12		95	94	70-130	1.62	20
4-BFB	0.0112	0.0111	0.012		90	89	70-130	0.680	20
Benzene-d6	0.0754	0.0727	0.10		75	73	60-140	3.58	20
Ethylbenzene-d10	0.0847	0.0813	0.10		85	81	60-140	4.08	20
1,2-DCB-d4	0.0674	0.0662	0.10		67	66	60-140	1.76	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/27/16	**BatchID:**	122915
Date Analyzed:	6/27/16	**Extraction Method:**	SW3550B
Instrument:	GC17	**Analytical Method:**	SW8270C-SIM
Matrix:	Soil	**Unit:**	mg/kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122915 1606A69-002AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.152	0.010	0.20	-	76	23-129
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Chrysene	ND	0.155	0.010	0.20	-	77	38-104
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.166	0.010	0.20	-	83	59-106
2-Methylnaphthalene	ND	0.159	0.010	0.20	-	79	54-108
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.162	0.010	0.20	-	81	48-107
Pyrene	ND	0.152	0.010	0.20	-	76	40-104
Surrogate Recovery							
1-Fluoronaphthalene	0.367	0.346		0.50	73	69	63-123
2-Fluorobiphenyl	0.367	0.354		0.50	73	71	55-127

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	NR	NR		ND<0.05	NR	NR	-	NR	
Chrysene	NR	NR		ND<0.05	NR	NR	-	NR	
1-Methylnaphthalene	NR	NR		ND<0.05	NR	NR	-	NR	
2-Methylnaphthalene	NR	NR		ND<0.05	NR	NR	-	NR	
Phenanthrene	NR	NR		ND<0.05	NR	NR	-	NR	
Pyrene	NR	NR		ND<0.05	NR	NR	-	NR	
Surrogate Recovery									
1-Fluoronaphthalene	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122702
Date Analyzed:	6/23/16	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122702 1606A12-012AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.616	0.40	0.60	-	103	70-130
MTBE	ND	0.0937	0.050	0.10	-	94	70-130
Benzene	ND	0.0915	0.0050	0.10	-	92	70-130
Toluene	ND	0.0958	0.0050	0.10	-	96	70-130
Ethylbenzene	ND	0.0970	0.0050	0.10	-	97	70-130
Xylenes	ND	0.294	0.015	0.30	-	98	70-130
Surrogate Recovery							
2-Fluorotoluene	0.100	0.0968		0.10	101	97	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.521	0.518	0.60	ND	87	86	70-130	0.464	20
MTBE	0.0828	0.0833	0.10	ND	80	81	70-130	0.528	20
Benzene	0.0878	0.0888	0.10	ND	88	89	70-130	1.06	20
Toluene	0.0894	0.0913	0.10	ND	89	91	70-130	2.05	20
Ethylbenzene	0.0921	0.0941	0.10	ND	92	94	70-130	2.17	20
Xylenes	0.277	0.283	0.30	ND	92	94	70-130	2.24	20
Surrogate Recovery									
2-Fluorotoluene	0.0916	0.0939	0.10		92	94	70-130	2.47	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122719
Date Analyzed:	6/23/16	**Extraction Method:**	SW5030B
Instrument:	GC19	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122719 1606A74-004AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.576	0.40	0.60	-	96	70-130
MTBE	ND	0.0949	0.050	0.10	-	95	70-130
Benzene	ND	0.104	0.0050	0.10	-	104	70-130
Toluene	ND	0.106	0.0050	0.10	-	106	70-130
Ethylbenzene	ND	0.108	0.0050	0.10	-	108	70-130
Xylenes	ND	0.325	0.015	0.30	-	108	70-130
Surrogate Recovery							
2-Fluorotoluene	0.106	0.110		0.10	106	110	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		ND	NR	NR	-	NR	
MTBE	NR	NR		ND	NR	NR	-	NR	
Benzene	NR	NR		ND	NR	NR	-	NR	
Toluene	NR	NR		ND	NR	NR	-	NR	
Ethylbenzene	NR	NR		ND	NR	NR	-	NR	
Xylenes	NR	NR		ND	NR	NR	-	NR	
Surrogate Recovery									
2-Fluorotoluene	NR	NR			NR	NR	-	NR	

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/27/16	**BatchID:**	122872
Date Analyzed:	6/28/16	**Extraction Method:**	SW5030B
Instrument:	GC19	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122872 1606C28-004AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.594	0.40	0.60	-	99	70-130
MTBE	ND	0.0966	0.050	0.10	-	97	70-130
Benzene	ND	0.103	0.0050	0.10	-	103	70-130
Toluene	ND	0.104	0.0050	0.10	-	104	70-130
Ethylbenzene	ND	0.105	0.0050	0.10	-	105	70-130
Xylenes	ND	0.318	0.015	0.30	-	106	70-130
Surrogate Recovery							
2-Fluorotoluene	0.105	0.106		0.10	105	106	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		ND<80	NR	NR	-	NR	
MTBE	NR	NR		ND<10	NR	NR	-	NR	
Benzene	NR	NR		ND<1	NR	NR	-	NR	
Toluene	NR	NR		ND<1	NR	NR	-	NR	
Ethylbenzene	NR	NR		ND<1	NR	NR	-	NR	
Xylenes	NR	NR		3.9	NR	NR	-	NR	
Surrogate Recovery									
2-Fluorotoluene	NR	NR			NR	NR	-	NR	

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

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

Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/27/16	**BatchID:**	122940
Date Analyzed:	6/28/16	**Extraction Method:**	SW5030B
Instrument:	GC19	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122940 1606C77-003AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.588	0.40	0.60	-	98	70-130
MTBE	ND	0.101	0.050	0.10	-	101	70-130
Benzene	ND	0.101	0.0050	0.10	-	101	70-130
Toluene	ND	0.103	0.0050	0.10	-	103	70-130
Ethylbenzene	ND	0.106	0.0050	0.10	-	105	70-130
Xylenes	ND	0.320	0.015	0.30	-	107	70-130
Surrogate Recovery							
2-Fluorotoluene	0.107	0.104		0.10	107	104	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.528	0.519	0.60	ND	88	86	70-130	1.64	20
MTBE	0.0861	0.0868	0.10	ND	86	87	70-130	0.796	20
Benzene	0.0898	0.0923	0.10	ND	90	92	70-130	2.71	20
Toluene	0.0927	0.0948	0.10	ND	93	95	70-130	2.29	20
Ethylbenzene	0.0946	0.0970	0.10	ND	95	97	70-130	2.50	20
Xylenes	0.284	0.291	0.30	ND	95	97	70-130	2.58	20
Surrogate Recovery									
2-Fluorotoluene	0.0946	0.0967	0.10		95	97	70-130	2.15	20

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122709
Date Analyzed:	6/23/16	**Extraction Method:**	SW3050B
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122709 1606A70-009AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Lead	ND	52.3	0.50	50	-	105	75-125
Surrogate Recovery							
Terbium	526	549		500	105	110	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	57.2	57.4	50	5.890	103	103	75-125	0	20
Surrogate Recovery									
Terbium	531	534	500		106	107	70-130	0.676	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	6.08	5.890	3.23	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.

(Cont.)

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122713
Date Analyzed:	6/24/16	**Extraction Method:**	SW3050B
Instrument:	ICP-MS1	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122713 1606A69-030AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Lead	ND	49.2	0.50	50	-	98	75-125
Surrogate Recovery							
Terbium	556	547		500	111	109	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	66.3	69.8	50	8.064	116	124	75-125	5.21	20
Surrogate Recovery									
Terbium	630	641	500		126	128	70-130	1.81	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	8.33	8.064	3.30	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122664
Date Analyzed:	6/23/16	**Extraction Method:**	SW3550B/3630C
Instrument:	GC39B	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122664 1606A18-011AMS/MSD

QC Report for SW8015B with Silica Gel Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	41.4	1.0	40	-	103	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	23.2	23.4		25	93	93	62-139

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	42.2	41.7	40	ND	105	104	70-130	1.20	30
Surrogate Recovery									
C9	23.6	23.3	25		94	93	70-130	1.07	30

(Cont.)

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QA/QC Officer

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122717
Date Analyzed:	6/23/16	**Extraction Method:**	SW3550B/3630C
Instrument:	GC39A	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122717 1606A69-022AMS/MSD

QC Report for SW8015B with Silica Gel Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	41.1	1.0	40	-	103	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	27.0	27.3		25	108	109	62-139

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	36.6	42.3	40	ND	92	106	70-130	14.3	30
Surrogate Recovery									
C9	27.2	27.3	25		109	109	70-130	0	30

(Cont.)

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QA/QC Officer

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

Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1606A69
Date Prepared:	6/22/16	**BatchID:**	122718
Date Analyzed:	6/23/16	**Extraction Method:**	SW3550B/3630C
Instrument:	GC39A	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338841; Kia Summer	**Sample ID:**	MB/LCS-122718 1606A69-025AMS/MSD

QC Report for SW8015B with Silica Gel Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	40.4	1.0	40	-	101	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	27.2	26.9		25	109	108	62-139

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

NELAP 4033ORELAP

QA/QC Officer

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1606A69 **ClientCode: AEL**

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

Report to:
Jordan Vida
AEI Consultants
2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597
(925) 321-3561 FAX: (925) 283-6121

Email: jvida@aeiconsultants.com
cc/3rd Party: whung@aeiconsultants.com;
PO: 111274
ProjectNo: 338841; Kia Summer

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

Requested TAT: 5 days;

Date Received: **06/22/2016**
Date Logged: **06/22/2016**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1606A69-001	SG-4-2	Soil	6/22/2016 10:40	☐	A	A	A	A	A	A						
1606A69-002	SG-4-4	Soil	6/22/2016 10:50	☐	A	A	A	A		A						
1606A69-003	SG-4-6	Soil	6/22/2016 10:55	☐	A	A	A	A		A						
1606A69-004	SG-4-8	Soil	6/22/2016 11:00	☐	A	A	A	A		A						
1606A69-005	SG-4-9.5	Soil	6/22/2016 11:05	☐	A	A	A	A		A						
1606A69-006	SG-5-2	Soil	6/22/2016 11:25	☐	A	A	A	A		A						
1606A69-007	SG-5-4	Soil	6/22/2016 11:30	☐	A	A	A	A		A						
1606A69-008	SG-5-6	Soil	6/22/2016 11:35	☐	A	A	A	A		A						
1606A69-009	SG-5-8	Soil	6/22/2016 11:40	☐	A	A	A	A		A						
1606A69-010	SG-5-9.5	Soil	6/22/2016 11:45	☐	A	A	A	A		A						
1606A69-011	SG-8-2	Soil	6/22/2016 9:00	☐	A		A	A		A						
1606A69-012	SG-8-4	Soil	6/22/2016 9:10	☐	A		A	A		A						
1606A69-013	SG-8-6	Soil	6/22/2016 9:15	☐	A		A	A		A						
1606A69-014	SG-8-8	Soil	6/22/2016 9:20	☐	A		A	A		A						
1606A69-015	SG-8-9.5	Soil	6/22/2016 9:25	☐	A		A	A		A						

Test Legend:

1	8260VOC_S	2	8270_PNA_S	3	G-MBTEX_S	4	PBMS_TTLC_S
5	PREDF REPORT	6	TPH(DMO)WSG_S	7		8	
9		10		11		12	

Prepared by: Agustina Venegas

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 014A, 015A, 016A, 017A, 018A, 019A, 020A, 021A, 022A, 023A, 024A, 025A, 026A, 027A, 028A, 029A, 030A contain testgroup.

Comments:

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

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1606A69 **ClientCode: AEL**

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Report to:
Jordan Vida
AEI Consultants
2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597
(925) 321-3561 FAX: (925) 283-6121

Email: jvida@aeiconsultants.com
cc/3rd Party: whung@aeiconsultants.com;
PO: 111274
ProjectNo: 338841; Kia Summer

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

Requested TAT: 5 days;

Date Received: **06/22/2016**
Date Logged: **06/22/2016**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1606A69-016	SG-9-2	Soil	6/22/2016 10:00	☐	A		A	A		A						
1606A69-017	SG-9-4	Soil	6/22/2016 10:05	☐	A		A	A		A						
1606A69-018	SG-9-6	Soil	6/22/2016 10:10	☐	A		A	A		A						
1606A69-019	SG-9-8	Soil	6/22/2016 10:15	☐	A		A	A		A						
1606A69-020	SG-9-9.5	Soil	6/22/2016 10:20	☐	A		A	A		A						
1606A69-021	SG-6-2	Soil	6/22/2016 8:25	☐	A		A	A		A						
1606A69-022	SG-6-4	Soil	6/22/2016 8:35	☐	A		A	A		A						
1606A69-023	SG-6-6	Soil	6/22/2016 8:40	☐	A		A	A		A						
1606A69-024	SG-6-8	Soil	6/22/2016 8:45	☐	A		A	A		A						
1606A69-025	SG-6-9.5	Soil	6/22/2016 8:50	☐	A		A	A		A						
1606A69-026	SG-7-2	Soil	6/22/2016 9:30	☐	A		A	A		A						
1606A69-027	SG-7-4	Soil	6/22/2016 9:35	☐	A		A	A		A						
1606A69-028	SG-7-6	Soil	6/22/2016 9:40	☐	A		A	A		A						
1606A69-029	SG-7-8	Soil	6/22/2016 9:45	☐	A		A	A		A						
1606A69-030	SG-7-9.5	Soil	6/22/2016 9:50	☐	A		A	A		A						

Test Legend:

1	8260VOC_S	2	8270_PNA_S	3	G-MBTEX_S	4	PBMS_TTLC_S
5	PREDF REPORT	6	TPH(DMO)WSG_S	7		8	
9		10		11		12	

Prepared by: Agustina Venegas

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 014A, 015A, 016A, 017A, 018A, 019A, 020A, 021A, 022A, 023A, 024A, 025A, 026A, 027A, 028A, 029A, 030A contain testgroup.

Comments:

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

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WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS
Project: 338841; Kia Summer
Comments:

QC Level: LEVEL 2
Client Contact: Jordan Vida
Contact's Email: jvida@aeiconsultants.com

Work Order: 1606A69
Date Logged: 6/22/2016

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-001A	SG-4-2	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 10:40	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-002A	SG-4-4	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 10:50	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-003A	SG-4-6	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 10:55	5 days		☐	

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

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS
Project: 338841; Kia Summer
Comments:

QC Level: LEVEL 2
Client Contact: Jordan Vida
Contact's Email: jvida@aeiconsultants.com

Work Order: 1606A69
Date Logged: 6/22/2016

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-003A	SG-4-6	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	☐	6/22/2016 10:55	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-004A	SG-4-8	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 11:00	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-005A	SG-4-9.5	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 11:05	5 days		☐	

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

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WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS
Project: 338841; Kia Summer
Comments:

QC Level: LEVEL 2
Client Contact: Jordan Vida
Contact's Email: jvida@aeiconsultants.com

Work Order: 1606A69
Date Logged: 6/22/2016

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-005A	SG-4-9.5	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	☐	6/22/2016 11:05	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-006A	SG-5-2	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 11:25	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-007A	SG-5-4	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 11:30	5 days		☐	

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

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

WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS
Project: 338841; Kia Summer
Comments:

QC Level: LEVEL 2
Client Contact: Jordan Vida
Contact's Email: jvida@aeiconsultants.com

Work Order: 1606A69
Date Logged: 6/22/2016

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

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-007A	SG-5-4	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	☐	6/22/2016 11:30	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-008A	SG-5-6	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 11:35	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-009A	SG-5-8	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 11:40	5 days		☐	

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-009A	SG-5-8	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	☐	6/22/2016 11:40	5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-010A	SG-5-9.5	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 11:45	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8270C (PAHs/PNAs)			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene, Xylenes, Total>			☐		5 days		☐	
1606A69-011A	SG-8-2	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:00	5 days		☐	

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

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-011A	SG-8-2	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	☐	6/22/2016 9:00	5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-012A	SG-8-4	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:10	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-013A	SG-8-6	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:15	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-014A	SG-8-8	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:20	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	

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

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QC Level: LEVEL 2
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Date Logged: 6/22/2016

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-015A	SG-8-9.5	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:25	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-016A	SG-9-2	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 10:00	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-017A	SG-9-4	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 10:05	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-018A	SG-9-6	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 10:10	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-018A	SG-9-6	Soil	SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>	1	Acetate Liner	☐	6/22/2016 10:10	5 days		☐	
1606A69-019A	SG-9-8	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 10:15	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-020A	SG-9-9.5	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 10:20	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-021A	SG-6-2	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 8:25	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-022A	SG-6-4	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 8:35	5 days		☐	

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-022A	SG-6-4	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	☐	6/22/2016 8:35	5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-023A	SG-6-6	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 8:40	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-024A	SG-6-8	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 8:45	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-025A	SG-6-9.5	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 8:50	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-026A	SG-7-2	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:30	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-027A	SG-7-4	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:35	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-028A	SG-7-6	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:40	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	
1606A69-029A	SG-7-8	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:45	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1606A69-029A	SG-7-8	Soil	SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>	1	Acetate Liner	☐	6/22/2016 9:45	5 days		☐	
1606A69-030A	SG-7-9.5	Soil	SW6020 (Lead)	1	Acetate Liner	☐	6/22/2016 9:50	5 days		☐	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			☐		5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Xylenes, Total>			☐		5 days		☐	

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1L0164169

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CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☒

GeoTracker EDF ☒ PDF ☐ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ UST Clean Up Fund Project ☐ ; Claim #_____

Report To: Jordan Vida, Wayne Hung **Bill To:** AEI

Company: AEI Consultants

whung@aeiconsultants.com

E-Mail: jvida@aeiconsultants.com

Tele: (925) 746-6000 **Fax:** (925)746-6099

Project #: 338841 **Project Name:** Kia Sumner

Project Location: 3635 13th Avenue, Oakland, CA **Purchase Order#:** 111274

Sampler Signature: JVT

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other: Ice	TPH as gas, diesel, motor oil by EPA 8015 with silica gel clean-up	BTEX and MTBE by EPA Method 8260	Naphthalene by EPA 8260 + 5 OXY	Lead by EPA 6020	Polyaromatic Hydrocarbons (PAHs) by 8270 – Selected Ion Monitoring (SIM)	HOLD
SG-4-2		6/22	1040	1					X						X	X	X	X	X	X	
SG-4-4			1050						X						X	X	X	X	X	X	
SG-4-6			1055						X						X	X	X	X	X	X	
SG-4-8			1100						X						X	X	X	X	X	X	
SG-4-9.5			1105						X						X	X	X	X	X	X	
SG-5-2			1125						X						X	X	X	X	X	X	
SG-5-4			1130						X						X	X	X	X	X	X	
SG-5-6			1135						X						X	X	X	X	X	X	
SG-5-8			1140						X						X	X	X	X	X	X	
SG-5-9.5			1145						X						X	X	X	X	X	X	

Analysis Request

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

Relinquished By:	Date:	Time:	Received By:
JVT	6/22/16	1500	
Relinquished By:	Date:	Time:	Received By:
	6-22-16	1600	
Relinquished By:	Date:	Time:	Received By:

ICE/t° 5.4
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

COMMENTS:

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

McCampbell Analytical, Inc.

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

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☒

GeoTracker EDF ☒ PDF ☐ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ UST Clean Up Fund Project ☐; Claim #_____

Report To: Jordan Vida, Wayne Hung **Bill To:** AEI

Company: AEI Consultants

whung@aeiconsultants.com

E-Mail: jvida@aeiconsultants.com

Tele: (925) 746-6000 **Fax:** (925)746-6099

Project #: 338841 **Project Name:** Kia Sumner

Project Location: 3635 13th Avenue, Oakland, CA **Purchase Order#:** 111274

Sampler Signature:

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other (Ice)	Analysis Request: TPH as gas, diesel, motor oil by EPA 8015 with silica gel clean-up	BTEX and MTBE by EPA Method 8260	Naphthalene by EPA 8260	Lead by EPA 6020	Polyaromatic Hydrocarbons (PAHs) by 8270 – Selected Ion Monitoring (SIM)	HOLD
SG-8-2		6/22	0900	1					X						X	X	X	X	X		
SG-8-4			0910						X						X	X	X	X	X		
SG-8-6			0915						X						X	X	X	X	X		
SG-8-8			0920						X						X	X	X	X	X		
SG-8-9.5			0925						X						X	X	X	X	X		
SG-9-2			1000						X						X	X	X	X	X		
SG-9-4			1005						X						X	X	X	X	X		
SG-9-6			1010						X						X	X	X	X	X		
SG-9-8			1015						X						X	X	X	X	X		
SG-9-9.5			1020						X						X	X	X	X	X		

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Relinquished By:	Date:	Time:	Received By:
	6/22/16	1500	
Relinquished By:	Date:	Time:	Received By:
	6-22-16	1600	
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____ COMMENTS:
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

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CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☐

GeoTracker EDF ☒ PDF ☐ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ UST Clean Up Fund Project ☐; Claim #_____

Report To: Jordan Vida, Wayne Hung **Bill To:** AEI

Company: AEI Consultants

whung@aeiconsultants.com

E-Mail: jvida@aeiconsultants.com

Tele: (925) 746-6000 **Fax:** (925)746-6099

Project #: 338841 **Project Name:** Kia Sumner

Project Location: 3635 13th Avenue, Oakland, CA **Purchase Order#:** 111274

Sampler Signature: JN

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other 14	Analysis Request: TPH as gas, diesel, motor oil by EPA 8015 with silica gel clean-up	BTEX and MTBE by EPA Method 8260	Naphthalene by EPA 8260	Lead by EPA 6020	Polyaromatic Hydrocarbons (PAHs) by 8270 – Selected Ion Monitoring (SIM)	HOLD
SG-6-2		6/22	0825	1					X						X	X	X	X	X		
SG-6-4			0835						X						X	X	X	X	X		
SG-6-6			0840						X						X	X	X	X	X		
SG-6-8			0845						X						X	X	X	X	X		
SG-6-9.5			0850						X						X	X	X	X	X		
SG-7-2			0930						X						X	X	X	X	X		
SG-7-4			0935						X						X	X	X	X	X		
SG-7-6			0940						X						X	X	X	X	X		
SG-7-8			0945						X						X	X	X	X	X		
SG-7-9.5			0950						X						X	X	X	X	X		

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

Relinquished By:	Date:	Time:	Received By:
JN	6/22/16	1500	
Relinquished By:	Date:	Time:	Received By:
	6-22-16	1600	
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____ COMMENTS:

GOOD CONDITION_____

HEAD SPACE ABSENT_____

DECHLORINATED IN LAB_____

APPROPRIATE CONTAINERS_____

PRESERVED IN LAB_____

VOAS O&G METALS OTHER HAZARDOUS:

PRESERVATION_____ pH<2_____

McCampbell Analytical, Inc.

From: McCampbell Analytical, Inc. <main@mccampbell.com>
Sent: Wednesday, June 22, 2016 7:12 PM
To: 'Jordan Vida'
Cc: main@mccampbell.com
Subject: RE: 3635 13th Avenue, Oakland

Jordan,

I will add these analysis to the desired samples.

Thank you,
Agustina

-----Original Message-----
From: Jordan Vida [mailto:jvida@aeiconsultants.com]
Sent: Wednesday, June 22, 2016 6:58 PM
To: McCampbell Analytical, Analytical Inc.
Cc: Wayne Hung
Subject: 3635 13th Avenue, Oakland

Hello,

I had a courier pick up the soil samples. I need to add: fuel oxygenates by 8260 for all of the SB-4 and SB-5 samples (10 total). We also need the EDF report.

Thank you

Sent from my iPhone=

McCampbell Analytical, Inc.
"When Quality Counts"

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

Sample Receipt Checklist

Client Name:	**AEI Consultants**	Date and Time Received:	**6/22/2016 16:00**
Project Name:	**338841; Kia Summer**	Date Logged:	**6/22/2016**
WorkOrder №:	**1606A69** Matrix: Soil	Received by:	Agustina Venegas
Carrier:	Bernie Cummins (MAI Courier)	Logged by:	Agustina Venegas

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	
Sample/Temp Blank temperature	Temp: 5.4°C				NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☑	No	☐	
	(Ice Type: WET ICE)				

UCMR3 Samples:

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

Comments:

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8/18/2016

Jordan Vida
AEI Consultants, Inc.
2500 Camino Diablo
Suite 200
Walnut Creek CA 94597

Project Name: Kia Summer
Project #: 338841
Workorder #: 1607039BR2

Dear Jordan Vida

The following report includes the data for the above referenced project for sample(s) received on 7/1/2016 at Air Toxics Ltd.

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

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

Regards,

Kelly Buettner

Project Manager

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WORK ORDER #: 1607039BR2

Work Order Summary

CLIENT:	Jordan Vida AEI Consultants, Inc. 2500 Camino Diablo Suite 200 Walnut Creek, CA 94597	**BILL TO:**	Accounts Payable- Walnut Creek AEI Consultants, Inc. 2500 Camino Diablo Suite 200 Walnut Creek, CA 94597
PHONE:	925-283-6000	**P.O. #**	111877
FAX:	925-283-6121	**PROJECT #**	338841 Kia Summer
DATE RECEIVED:	07/01/2016	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	07/09/2016		
DATE REISSUED:	08/18/2016		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-1 (s)	Modified ASTM D-1946	6.5 "Hg	14.7 psi
02A	SG-2 (s)	Modified ASTM D-1946	8.2 "Hg	14.6 psi
03A	SG-3 (s)	Modified ASTM D-1946	2.6 "Hg	14.4 psi
04A	SG-4	Modified ASTM D-1946	6.9 "Hg	14.8 psi
05A	SG-5	Modified ASTM D-1946	8 "Hg	14.7 psi
06A	SG-6	Modified ASTM D-1946	5.1 "Hg	14.9 psi
07A	SG-7	Modified ASTM D-1946	7.1 "Hg	14.7 psi
08A	SG-8	Modified ASTM D-1946	7.6 "Hg	15.1 psi
09A	SG-9	Modified ASTM D-1946	7.6 "Hg	14.8 psi
10A	Lab Blank	Modified ASTM D-1946	NA	NA
10B	Lab Blank	Modified ASTM D-1946	NA	NA
11A	LCS	Modified ASTM D-1946	NA	NA
11AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 08/18/16

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
AEI Consultants, Inc.
Workorder# 1607039BR2

Nine 1 Liter Summa Canister samples were received on July 01, 2016. The laboratory performed analysis via Modified ASTM Method D-1946 for Oxygen and Carbon Dioxide in air using GC/TCD. The method involves direct injection of 1.0 mL of sample.

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

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

Receiving Notes

The Chain of Custody (COC) information for sample SG-9 did not match the information on the canister with regard to canister identification. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

The work order was reissued on July 22, 2016 to amend the analyte list to include Helium. Since Helium was not originally included in the analyte list and samples have already been analyzed, a Nitrogen laboratory blank for Helium was not analyzed prior to analyzing samples. However, the first sample (SG-1 (s)) that was analyzed in the batch was non-detect above the reporting limit for Helium indicating a clean system.

The workorder was reissued on August 18, 2016 to report Methane per client request.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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

Client Sample ID: SG-1 (s)

Lab ID#: 1607039BR2-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	15
Carbon Dioxide	0.026	5.2

Client Sample ID: SG-2 (s)

Lab ID#: 1607039BR2-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.27	13
Methane	0.00027	0.00065
Carbon Dioxide	0.027	5.3

Client Sample ID: SG-3 (s)

Lab ID#: 1607039BR2-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	15
Carbon Dioxide	0.022	5.7

Client Sample ID: SG-4

Lab ID#: 1607039BR2-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	19
Carbon Dioxide	0.026	2.0

Client Sample ID: SG-5

Lab ID#: 1607039BR2-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.27	19
Carbon Dioxide	0.027	1.1

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

Client Sample ID: SG-6

Lab ID#: 1607039BR2-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Carbon Dioxide	0.024	3.6
Helium	0.12	0.13

Client Sample ID: SG-7

Lab ID#: 1607039BR2-07A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	17
Carbon Dioxide	0.026	3.9

Client Sample ID: SG-8

Lab ID#: 1607039BR2-08A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.27	17
Carbon Dioxide	0.027	3.8

Client Sample ID: SG-9

Lab ID#: 1607039BR2-09A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.27	19
Carbon Dioxide	0.027	1.2

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Client Sample ID: SG-1 (s)

Lab ID#: 1607039BR2-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070706**	**Date of Collection: 6/30/16 2:57:00 PM**	
Dil. Factor:	**2.56**	**Date of Analysis: 7/7/16 10:38 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	15
Methane	0.00026	Not Detected
Carbon Dioxide	0.026	5.2
Helium	0.13	Not Detected

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG-2 (s)

Lab ID#: 1607039BR2-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070707**	**Date of Collection: 6/30/16 2:34:00 PM**	
Dil. Factor:	**2.74**	**Date of Analysis: 7/7/16 11:01 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.27	13
Methane	0.00027	0.00065
Carbon Dioxide	0.027	5.3
Helium	0.14	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-3 (s)

Lab ID#: 1607039BR2-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070708**	**Date of Collection: 6/30/16 1:53:00 PM**	
Dil. Factor:	**2.17**	**Date of Analysis: 7/7/16 11:37 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	15
Methane	0.00022	Not Detected
Carbon Dioxide	0.022	5.7
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-4

Lab ID#: 1607039BR2-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070709**	**Date of Collection: 6/30/16 1:21:00 PM**	
Dil. Factor:	**2.61**	**Date of Analysis: 7/7/16 12:00 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	19
Methane	0.00026	Not Detected
Carbon Dioxide	0.026	2.0
Helium	0.13	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-5

Lab ID#: 1607039BR2-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070710**	**Date of Collection: 6/30/16 12:36:00 PM**	
Dil. Factor:	**2.72**	**Date of Analysis: 7/7/16 12:23 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.27	19
Methane	0.00027	Not Detected
Carbon Dioxide	0.027	1.1
Helium	0.14	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-6

Lab ID#: 1607039BR2-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070711**	**Date of Collection: 6/30/16 12:07:00 PM**	
Dil. Factor:	**2.43**	**Date of Analysis: 7/7/16 12:47 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	3.6
Helium	0.12	0.13

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-7

Lab ID#: 1607039BR2-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070712**	**Date of Collection: 6/30/16 11:41:00 AM**	
Dil. Factor:	**2.62**	**Date of Analysis: 7/7/16 01:27 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	17
Methane	0.00026	Not Detected
Carbon Dioxide	0.026	3.9
Helium	0.13	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-8

Lab ID#: 1607039BR2-08A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070713**	**Date of Collection:**	**6/30/16 11:15:00 AM**
Dil. Factor:	**2.71**	**Date of Analysis:**	**7/7/16 01:54 PM**

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.27	17
Methane	0.00027	Not Detected
Carbon Dioxide	0.027	3.8
Helium	0.14	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: SG-9

Lab ID#: 1607039BR2-09A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070714**	**Date of Collection: 6/30/16 10:44:00 AM**	
Dil. Factor:	**2.68**	**Date of Analysis: 7/7/16 02:17 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.27	19
Methane	0.00027	Not Detected
Carbon Dioxide	0.027	1.2
Helium	0.13	Not Detected

Container Type: 1 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1607039BR2-10A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10070705**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/7/16 10:13 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Carbon Dioxide	0.010	Not Detected
Methane	0.00010	Not Detected

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1607039BR2-10B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070715c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/7/16 03:04 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1607039BR2-11A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/7/16 09:47 AM**	

Compound	%Recovery	Method Limits
Oxygen	98	85-115
Methane	102	85-115
Carbon Dioxide	100	85-115
Helium	102	85-115

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1607039BR2-11AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10070719**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/7/16 04:53 PM**	

Compound	%Recovery	Method Limits
Oxygen	97	85-115
Methane	101	85-115
Carbon Dioxide	100	85-115
Helium	102	85-115

Container Type: NA - Not Applicable

eurofins | Air Toxics

7/11/2016

Jordan Vida
AEI Consultants, Inc.
2500 Camino Diablo
Suite 200
Walnut Creek CA 94597

Project Name: Kia Summer
Project #: 338841
Workorder #: 1607039A

Dear Jordan Vida

The following report includes the data for the above referenced project for sample(s) received on 7/1/2016 at Air Toxics Ltd.

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

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

Regards,

Kyle Vagadori

Project Manager

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WORK ORDER #: 1607039A

Work Order Summary

CLIENT:	Jordan Vida AEI Consultants, Inc. 2500 Camino Diablo Suite 200 Walnut Creek, CA 94597	**BILL TO:**	Accounts Payable- Walnut Creek AEI Consultants, Inc. 2500 Camino Diablo Suite 200 Walnut Creek, CA 94597
PHONE:	925-283-6000	**P.O. #**	111877
FAX:	925-283-6121	**PROJECT #**	338841 Kia Summer
DATE RECEIVED:	07/01/2016	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	07/11/2016		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-1 (s)	TO-15	6.5 "Hg	14.7 psi
02A	SG-2 (s)	TO-15	8.2 "Hg	14.6 psi
03A	SG-3 (s)	TO-15	2.6 "Hg	14.4 psi
04A	SG-4	TO-15	6.9 "Hg	14.8 psi
05A	SG-5	TO-15	8 "Hg	14.7 psi
06A	SG-6	TO-15	5.1 "Hg	14.9 psi
07A	SG-7	TO-15	7.1 "Hg	14.7 psi
08A	SG-8	TO-15	7.6 "Hg	15.1 psi
09A	SG-9	TO-15	7.6 "Hg	14.8 psi
10A	Lab Blank	TO-15	NA	NA
11A	CCV	TO-15	NA	NA
12A	LCS	TO-15	NA	NA
12AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Mayo DATE: 07/11/16

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
AEI Consultants, Inc.
Workorder# 1607039A

Nine 1 Liter Summa Canister samples were received on July 01, 2016. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

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

Receiving Notes

The Chain of Custody (COC) information for sample SG-9 did not match the information on the canister with regard to canister identification. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

Analytical Notes

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

Definition of Data Qualifying Flags

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

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

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

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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

Client Sample ID: SG-1 (s)

Lab ID#: 1607039A-01A

No Detections Were Found.

Client Sample ID: SG-2 (s)

Lab ID#: 1607039A-02A

No Detections Were Found.

Client Sample ID: SG-3 (s)

Lab ID#: 1607039A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.1	2.6	3.9	9.4
Benzene	1.1	2.2	3.5	7.1
Toluene	1.1	5.3	4.1	20
m,p-Xylene	1.1	1.2	4.7	5.1

Client Sample ID: SG-4

Lab ID#: 1607039A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.3	1.6	4.7	5.7
Toluene	1.3	3.1	4.9	12

Client Sample ID: SG-5

Lab ID#: 1607039A-05A

No Detections Were Found.

Client Sample ID: SG-6

Lab ID#: 1607039A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.2	2.5	4.4	9.1
Toluene	1.2	9.5	4.6	36
Ethyl Benzene	1.2	1.4	5.3	6.3

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

Client Sample ID: SG-6

Lab ID#: 1607039A-06A

m,p-Xylene	1.2	3.3	5.3	14
o-Xylene	1.2	2.4	5.3	11
TPH ref. to Gasoline (MW=100)	120	530	500	2200

Client Sample ID: SG-7

Lab ID#: 1607039A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	1.3	7.8	4.9	29
Ethyl Benzene	1.3	3.5	5.7	15
m,p-Xylene	1.3	15	5.7	65
o-Xylene	1.3	8.4	5.7	36

Client Sample ID: SG-8

Lab ID#: 1607039A-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.4	3.3	4.3	10
Toluene	1.4	40	5.1	150
Ethyl Benzene	1.4	5.6	5.9	24
m,p-Xylene	1.4	16	5.9	71
o-Xylene	1.4	5.2	5.9	22
TPH ref. to Gasoline (MW=100)	140	190	560	780

Client Sample ID: SG-9

Lab ID#: 1607039A-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.3	1.5	4.8	5.4
Benzene	1.3	5.2	4.3	17
Toluene	1.3	44	5.1	170
Ethyl Benzene	1.3	7.8	5.8	34
m,p-Xylene	1.3	26	5.8	110
o-Xylene	1.3	11	5.8	48

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

Client Sample ID: SG-9

Lab ID#: 1607039A-09A

TPH ref. to Gasoline (MW=100)	130	190	550	780

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Client Sample ID: SG-1 (s)

Lab ID#: 1607039A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070614**	**Date of Collection: 6/30/16 2:57:00 PM**	
Dil. Factor:	**2.55**	**Date of Analysis: 7/6/16 11:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.3	Not Detected	4.6	Not Detected
Benzene	1.3	Not Detected	4.1	Not Detected
Toluene	1.3	Not Detected	4.8	Not Detected
Ethyl Benzene	1.3	Not Detected	5.5	Not Detected
m,p-Xylene	1.3	Not Detected	5.5	Not Detected
o-Xylene	1.3	Not Detected	5.5	Not Detected
TPH ref. to Gasoline (MW=100)	130	Not Detected	520	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG-2 (s)

Lab ID#: 1607039A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070615**	**Date of Collection: 6/30/16 2:34:00 PM**	
Dil. Factor:	**2.74**	**Date of Analysis: 7/6/16 11:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.4	Not Detected	4.9	Not Detected
Benzene	1.4	Not Detected	4.4	Not Detected
Toluene	1.4	Not Detected	5.2	Not Detected
Ethyl Benzene	1.4	Not Detected	5.9	Not Detected
m,p-Xylene	1.4	Not Detected	5.9	Not Detected
o-Xylene	1.4	Not Detected	5.9	Not Detected
TPH ref. to Gasoline (MW=100)	140	Not Detected	560	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SG-3 (s)

Lab ID#: 1607039A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070616**	**Date of Collection: 6/30/16 1:53:00 PM**	
Dil. Factor:	**2.17**	**Date of Analysis: 7/7/16 12:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.1	2.6	3.9	9.4
Benzene	1.1	2.2	3.5	7.1
Toluene	1.1	5.3	4.1	20
Ethyl Benzene	1.1	Not Detected	4.7	Not Detected
m,p-Xylene	1.1	1.2	4.7	5.1
o-Xylene	1.1	Not Detected	4.7	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SG-4

Lab ID#: 1607039A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070617**	**Date of Collection: 6/30/16 1:21:00 PM**	
Dil. Factor:	**2.61**	**Date of Analysis: 7/7/16 12:29 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.3	1.6	4.7	5.7
Benzene	1.3	Not Detected	4.2	Not Detected
Toluene	1.3	3.1	4.9	12
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
TPH ref. to Gasoline (MW=100)	130	Not Detected	530	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SG-5

Lab ID#: 1607039A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070618**	**Date of Collection: 6/30/16 12:36:00 PM**	
Dil. Factor:	**2.73**	**Date of Analysis: 7/7/16 12:56 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.4	Not Detected	4.9	Not Detected
Benzene	1.4	Not Detected	4.4	Not Detected
Toluene	1.4	Not Detected	5.1	Not Detected
Ethyl Benzene	1.4	Not Detected	5.9	Not Detected
m,p-Xylene	1.4	Not Detected	5.9	Not Detected
o-Xylene	1.4	Not Detected	5.9	Not Detected
TPH ref. to Gasoline (MW=100)	140	Not Detected	560	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG-6

Lab ID#: 1607039A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070619**	**Date of Collection: 6/30/16 12:07:00 PM**	
Dil. Factor:	**2.43**	**Date of Analysis: 7/7/16 01:23 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.2	2.5	4.4	9.1
Benzene	1.2	Not Detected	3.9	Not Detected
Toluene	1.2	9.5	4.6	36
Ethyl Benzene	1.2	1.4	5.3	6.3
m,p-Xylene	1.2	3.3	5.3	14
o-Xylene	1.2	2.4	5.3	11
TPH ref. to Gasoline (MW=100)	120	530	500	2200

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SG-7

Lab ID#: 1607039A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070620**	**Date of Collection: 6/30/16 11:41:00 AM**	
Dil. Factor:	**2.62**	**Date of Analysis: 7/7/16 01:49 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.3	Not Detected	4.7	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
Toluene	1.3	7.8	4.9	29
Ethyl Benzene	1.3	3.5	5.7	15
m,p-Xylene	1.3	15	5.7	65
o-Xylene	1.3	8.4	5.7	36
TPH ref. to Gasoline (MW=100)	130	Not Detected	540	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SG-8

Lab ID#: 1607039A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070621**	**Date of Collection: 6/30/16 11:15:00 AM**	
Dil. Factor:	**2.72**	**Date of Analysis: 7/7/16 02:16 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.4	Not Detected	4.9	Not Detected
Benzene	1.4	3.3	4.3	10
Toluene	1.4	40	5.1	150
Ethyl Benzene	1.4	5.6	5.9	24
m,p-Xylene	1.4	16	5.9	71
o-Xylene	1.4	5.2	5.9	22
TPH ref. to Gasoline (MW=100)	140	190	560	780

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG-9

Lab ID#: 1607039A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070622**	**Date of Collection: 6/30/16 10:44:00 AM**	
Dil. Factor:	**2.69**	**Date of Analysis: 7/7/16 02:43 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	1.3	1.5	4.8	5.4
Benzene	1.3	5.2	4.3	17
Toluene	1.3	44	5.1	170
Ethyl Benzene	1.3	7.8	5.8	34
m,p-Xylene	1.3	26	5.8	110
o-Xylene	1.3	11	5.8	48
TPH ref. to Gasoline (MW=100)	130	190	550	780

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1607039A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/6/16 11:51 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected

Container Type: NA - Not Applicable

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

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Client Sample ID: CCV

Lab ID#: 1607039A-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/6/16 09:24 AM**	

Compound	%Recovery
Methyl tert-butyl ether	96
Benzene	101
Toluene	99
Ethyl Benzene	100
m,p-Xylene	99
o-Xylene	96
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: LCS

Lab ID#: 1607039A-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/6/16 10:09 AM**	

Compound	%Recovery	Method Limits
Methyl tert-butyl ether	94	70-130
Benzene	99	70-130
Toluene	97	70-130
Ethyl Benzene	93	70-130
m,p-Xylene	92	70-130
o-Xylene	93	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

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

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Client Sample ID: LCSD

Lab ID#: 1607039A-12AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a070604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/6/16 10:36 AM**	

Compound	%Recovery	Method Limits
Methyl tert-butyl ether	90	70-130
Benzene	99	70-130
Toluene	95	70-130
Ethyl Benzene	92	70-130
m,p-Xylene	92	70-130
o-Xylene	94	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	98	70-130

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7/21/2016

Jordan Vida
AEI Consultants, Inc.
2500 Camino Diablo
Suite 200
Walnut Creek CA 94597

Project Name: KIA Summer
Project #: 338841
Workorder #: 1607021R1

Dear Jordan Vida

The following report includes the data for the above referenced project for sample(s) received on 7/1/2016 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-17 VI are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

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

Regards,

Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1607021R1

Work Order Summary

CLIENT:	Jordan Vida AEI Consultants, Inc. 2500 Camino Diablo Suite 200 Walnut Creek, CA 94597	**BILL TO:**	Accounts Payable- Walnut Creek AEI Consultants, Inc. 2500 Camino Diablo Suite 200 Walnut Creek, CA 94597
PHONE:	925-283-6000	**P.O. #**	111877
FAX:	925-283-6121	**PROJECT #**	338841 KIA Summer
DATE RECEIVED:	07/01/2016	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	07/11/2016		
DATE REISSUED:	07/21/2016		

FRACTION #	NAME	TEST
01A	SG-1 (s)	Modified TO-17 VI
02A	SG-2 (s)	Modified TO-17 VI
03A	SG-3 (s)	Modified TO-17 VI
04A	SG-4	Modified TO-17 VI
05A	SG-5	Modified TO-17 VI
06A	SG-6	Modified TO-17 VI
07A	SG-7	Modified TO-17 VI
08A	SG-8	Modified TO-17 VI
09A	SG-9	Modified TO-17 VI
10A	Lab Blank	Modified TO-17 VI
11A	CCV	Modified TO-17 VI
12A	LCS	Modified TO-17 VI
12AA	LCSD	Modified TO-17 VI

CERTIFIED BY: Heidi Mayo DATE: 07/21/16

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-15-9, UT NELAP CA0093332015-6, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2015, Expiration date: 10/17/2016.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
AEI Consultants, Inc.
Workorder# 1607021R1

Nine TO-17 VI Tube samples were received on July 01, 2016. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 'VI' sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for compound separation and detection.

A modification that may be applied to EPA Method TO-17 at the client's discretion is the requirement to transport sorbent tubes at 4 deg C. Laboratory studies demonstrate a high level of stability for VOCs on the TO-17 'VI' tube at room temperature for periods of up to 14 days. Tubes can be shipped to and from the field site at ambient conditions as long as the 14-day sample hold time is upheld. Trip blanks and field surrogate spikes are used as additional control measures to monitor recovery and background contribution during tube transport.

Since the TO-17 VI application significantly extends the scope of target compounds addressed in EPA Method TO-15 and TO-17, the laboratory has implemented several method modifications outlined in the table below. Specific project requirements may over-ride the laboratory modifications.

Requirement	***TO-17***	***ATL Modifications***
Initial Calibration	%RSD</=30% with 2 allowed out up to 40%	VOC list: %RSD</=30% with 2 allowed out up to 40% SVOC list: %RSD</=30% with 2 allowed out up to 40%
Daily Calibration	%D for each target compound within +/-30%.	Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene within +/-40%D
Audit Accuracy	70-130%	Second source recovery limits for Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene = 60-140%.
Distributed Volume Pairs	Collection of distributed volume pairs required for monitoring ambient air to insure high quality.	If site is well-characterized or performance previously verified, single tube sampling may be appropriate. Distributed pairs may be impractical for soil gas collection due to configuration and volume constraints.
Analytical Precision	</=20% RPD	<30% RPD for Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene.

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4±2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

Sampling volume was supplied by the client. A sampling volume of 0.200 L was used to convert ng to ug/m3 for the associated Lab Blank.

The reported CCV and LCS for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

The workorder was reissued on 7/21/16 to report TPH referenced to diesel per client's request.

Results for TPH referenced to diesel were calculated using the CCV analyzed on 7/11/16.

Definition of Data Qualifying Flags

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

B - Compound present in blank (subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

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

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: SG-1 (s)

Lab ID#: 1607021R1-01A

No Detections Were Found.

Client Sample ID: SG-2 (s)

Lab ID#: 1607021R1-02A

No Detections Were Found.

Client Sample ID: SG-3 (s)

Lab ID#: 1607021R1-03A

No Detections Were Found.

Client Sample ID: SG-4

Lab ID#: 1607021R1-04A

No Detections Were Found.

Client Sample ID: SG-5

Lab ID#: 1607021R1-05A

No Detections Were Found.

Client Sample ID: SG-6

Lab ID#: 1607021R1-06A

No Detections Were Found.

Client Sample ID: SG-7

Lab ID#: 1607021R1-07A

No Detections Were Found.

Client Sample ID: SG-8

Lab ID#: 1607021R1-08A

No Detections Were Found.

Client Sample ID: SG-9

Lab ID#: 1607021R1-09A

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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: SG-9

Lab ID#: 1607021R1-09A

No Detections Were Found.

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Client Sample ID: SG-1 (s)

Lab ID#: 1607021R1-01A

EPA METHOD TO-17

File Name:	**6070709**	**Date of Extraction: NA**	**Date of Collection: 6/30/16 3:02:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 05:05 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	91	50-150

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Client Sample ID: SG-2 (s)

Lab ID#: 1607021R1-02A

EPA METHOD TO-17

File Name:	**6070710**	**Date of Extraction: NA**	**Date of Collection: 6/30/16 2:40:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 05:45 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	84	50-150

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Client Sample ID: SG-3 (s)
Lab ID#: 1607021R1-03A
EPA METHOD TO-17

File Name:	**6070711**	**Date of Extraction: NA**	**Date of Collection: 6/30/16 1:59:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 06:24 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	99	50-150

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Client Sample ID: SG-4
Lab ID#: 1607021R1-04A
EPA METHOD TO-17

File Name:	**6070712**	**Date of Extraction: NA**	**Date of Collection: 6/30/16 1:27:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 07:04 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	79	50-150

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Client Sample ID: SG-5
Lab ID#: 1607021R1-05A
EPA METHOD TO-17

File Name:	**6070713**	**Date of Extraction: NA**	**Date of Collection: 6/30/16 12:39:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 07:44 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	93	50-150

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Client Sample ID: SG-6
Lab ID#: 1607021R1-06A
EPA METHOD TO-17

File Name:	**6070714**	**Date of Extraction: NA**	**Date of Collection: 6/30/16 12:14:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 08:23 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	99	50-150

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Client Sample ID: SG-7
Lab ID#: 1607021R1-07A
EPA METHOD TO-17

File Name:	**6070715**	**Date of Extraction: NA**	**Date of Collection: 6/30/16 11:47:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 09:03 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	99	50-150

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Client Sample ID: SG-8
Lab ID#: 1607021R1-08A
EPA METHOD TO-17

File Name:	**6070716**	**Date of Extraction: NA**	**Date of Collection: 6/30/16 11:20:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 09:42 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	103	50-150

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Client Sample ID: SG-9
Lab ID#: 1607021R1-09A
EPA METHOD TO-17

File Name:	**6070717**	**Date of Extraction: NA**	**Date of Collection: 6/30/16 10:50:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 10:22 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	84	50-150

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Client Sample ID: Lab Blank

Lab ID#: 1607021R1-10A

EPA METHOD TO-17

File Name:	**6070708**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 03:29 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	5.0	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	5000	Not Detected	Not Detected
TPH (Gasoline Range)	1000	5000	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	103	50-150

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Client Sample ID: CCV
Lab ID#: 1607021R1-11A
EPA METHOD TO-17

File Name:	**6070703**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 11:31 AM**

Compound	%Recovery
Naphthalene	91
TPH (Diesel Range C10-C22)	123
TPH (Gasoline Range)	107

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	102	50-150

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Client Sample ID: LCS
Lab ID#: 1607021R1-12A
EPA METHOD TO-17

File Name:	**6070705**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 12:51 PM**

Compound	%Recovery	Method Limits
Naphthalene	129	70-130
TPH (Diesel Range C10-C22)	Not Spiked	60-140
TPH (Gasoline Range)	Not Spiked	60-140

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	99	50-150

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Client Sample ID: LCSD
Lab ID#: 1607021R1-12AA
EPA METHOD TO-17

File Name:	**6070707**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/16 02:49 PM**

Compound	%Recovery	Method Limits
Naphthalene	123	70-130
TPH (Diesel Range C10-C22)	Not Spiked	60-140
TPH (Gasoline Range)	Not Spiked	60-140

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	102	50-150