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August 23, 2016

Semi-Annual Groundwater Monitoring and Sampling Report, First Half 2016

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:
AEI Consultants
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(408) 559-7600

August 19, 2016

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

Subject: Transmittal, Semi-Annual Groundwater Monitoring and Sampling Report
3635 13th Avenue, Oakland, California 94610
Toxics Case No. RO0000159

Dear Ms. Detterman:

Enclosed is the *Semi-Annual Groundwater Monitoring and Sampling Report, 1st Half 2016* 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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SIGNATURES

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

Wayne Hung, E.I.T.
Staff Engineer

Trent A. Weise, P.E.
Principal Engineer

1. INTRODUCTION

On behalf of Mr. Kia Sumner, AEI Consultants (AEI) has prepared this Semi-Annual Groundwater Monitoring and Sampling Report, First Half 2016 to document the monitoring event performed at 3635 13th Avenue, Oakland, California ("the Site"). Site assessment is being conducted in cooperation with the Alameda County Department of Environmental Health (ACDEH). The sampling activities and the results are discussed in detail below.

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. Figure 1 presents the Site location and vicinity. 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.

Seven groundwater monitoring wells have been installed at the Site, MW-1 through MW-7. Monitoring wells MW-1, MW-2, and MW-3 were installed in March 1994. In April 2007, four additional groundwater monitoring wells, MW-4 through MW-7, were installed. Table 1 presents a summary of groundwater monitoring well construction details. Periodic groundwater monitoring has been performed with the groundwater monitoring wells since their installation. Figure 2 presents the Site plan, including the monitoring well locations.

3. STATUS REPORT

This section provides a status report of activities conducted during the first semi-annual monitoring event and activities proposed for the second semi-annual event.

3.1 Activities Conducted

Activities performed during the first semi-annual period included:

- Performing semi-annual groundwater monitoring on May 24, 2016.
- Implementing the March 15, 2016 Work Plan, Additional Site Investigation including installing additional soil and soil vapor sampling performed on June 22, 2106.

3.2 Activities Proposed

Activities proposed for second semester of 2016 include:

- Performing semi-annual groundwater monitoring in November 2016.
- Implementing a remedial program to meet the requirements of the Low-Threat Underground Storage Tank Case Closure Program and continuing to work towards case closure.

4. MONITORING ACTIVITIES

AEI performed the first semi-annual groundwater sampling event on May 24, 2016, including measuring depth to water and collecting groundwater samples from each of the seven groundwater monitoring wells at the Site as described below.

Prior to purging and sampling the wells, groundwater elevations were measured in each of the monitoring wells at the Site. The well caps were removed and the wells were allowed to equilibrate with the atmosphere. The depth to water was then measured in each well to ± 0.01 foot using an electronic depth to water meter. Table 2 presents the depth to water measurements collected and the calculated groundwater elevations.

Following measuring the depth to groundwater, groundwater samples were collected. The wells were first purged using a submersible pump to a total volume of approximately three well volumes. During well purging, groundwater parameters of temperature, pH, specific conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) were measured at approximately five-minute intervals. The wells were purged until either three well volumes were achieved or significant well dewatering occurred. Visual estimates of turbidity were noted while purging the wells. Once three well volumes were purged or significant well dewatering was achieved, groundwater samples were collected from each well using a disposal bailer. Samples for volatile analytes were collected into 40 milliliter (mL) hydrochloric acid (HCl) preserved volatile organic analysis (VOA) vials, with zero headspace (no air bubbles). Groundwater samples collected were entered onto the chain-of-custody record and placed in an ice chilled cooler pending transportation to the laboratory. The samples were transported under proper chain of custody protocol to McCampbell Analytical, Inc. of Pittsburg, California (Department of Health Services Certification #1644) for analyses. Each groundwater sample collected was analyzed for methyl-tertiary butyl ether (MTBE), benzene, toluene, ethylbenzene, and total xylenes (collectively "BTEX compounds") for and total petroleum hydrocarbons as gasoline (TPH-g) using US EPA Testing Method 8260B, total petroleum hydrocarbons as diesel (TPH-d) and motor oil (TPH-mo) using US EPA Testing Method 8015M, with silica gel cleanup. Copies of the field forms for the groundwater monitoring event are included in Appendix A.

Purged groundwater generated during the sampling event is 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.

5. SUMMARY OF RESULTS

This section provides a summary of the results of the groundwater monitoring performed during the first semi-annual monitoring event.

5.1 Groundwater Level Elevations

Groundwater elevations measured during the event were generally consistent with previous monitoring events. Groundwater elevation data is summarized in Table 2. Groundwater elevation contour is shown on Figure 3. Groundwater elevations are generally consistent with previous monitoring events, with groundwater flow direction generally towards the south-southeast.

5.2 Groundwater Sample Results

Table 3 presents a summary of compounds detected in groundwater samples collected and analyzed during the first semi-annual groundwater monitoring event for 2016. Table 4 presents a summary of current and historical results for select compounds. Petroleum hydrocarbons continue to be detected in six of the seven groundwater monitoring wells. Consistent with previous groundwater monitoring events, no petroleum hydrocarbons were detected in MW-3. The results can be summarized as follows:

- TPH-g and TPH-d were observed at maximum concentrations of 4,200 micrograms per liter (µg/L) and 620 µg/L, respectively.
- Methyl tyert butyl ether (MTBE) was detected at concentrations ranging from 5.8 µg/L to 80 µg/L.
- Benzene was detected at concentrations ranging from 120 µg/L to 4,600 µg/L.

Figures 5 and 6 present groundwater concentrations and isoconcentration contours for TPHg and benzene, respectively. In general the extent of TPHg and benzene in groundwater is stable or decreasing across the existing plume extents. Laboratory analytical reports and chain of custody documentation are included in Appendix B.

6. Conclusions and Recommendations

The VOC concentrations in groundwater have generally increased compared to the data from the second half of 2015. Overall, the increased concentrations are consistent with the historical concentrations detected. Based on the consistent data, AEI recommends continued semi-annual groundwater monitoring, performed in the second and fourth quarters of the year.

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

AEI Consultants
Environmental & Engineering Services

TABLES

Table 1

Summary of Well Construction Details

3635 13th Avenue, Oakland, California

Well ID	Date Installed	Casing Elevation (feet NAVD 88)	Nominal Diameter (inch)	Total Depth (feet bgs)	Screen Interval (feet bgs)	Sand Pack Interval (feet bgs)	Bentonite Seal Interval (feet bgs)	Cement Grout Interval (feet bgs)	Casing Material
MW-1	03/24/94	197.28	2	25	12 - 25	11 - 25	10 - 11	0.5 - 10	SCH40 PVC
MW-2	03/24/94	198.93	2	36	16 - 36	15 - 36	14 - 15	0.5 - 14	SCH40 PVC
MW-3	03/24/94	201.46	2	36.5	15.5 - 36	14 - 36.5	13.5 - 14.5	0.5 - 13.5	SCH40 PVC
MW-4	09/07/07	200.23	2	22	17 - 22	16 - 22	15 - 16	0.5 - 15	SCH40 PVC
MW-5	09/07/07	198.52	2	22	17 - 22	16 - 22	15 - 16	0.5 - 15	SCH40 PVC
MW-6	09/07/07	200.20	2	22	17 - 22	16 - 22	15 - 16	0.5 - 15	SCH40 PVC
MW-7	11/03/08	NM	2	22	17 - 22	16 - 22	15 - 16	1 - 15	SCH40 PVC

Notes/Abbreviations

bgs = below ground surface

SCH40 PVC = schedule 40 polyvinyl chloride

NM = Not Measured

NAVD 88 = North American Vertical Datum of 1988

*Monitoring Well elevation for MW-1 through MW-3 was resurveyed on 11/7/08

Table 2

Summary of Groundwater Elevation Measurements

3635 13th Avenue, Oakland, California

Well ID	Date	Well TOC Elevation (feet NAVD 88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet msl)
MW-1	11/22/94	194.75	10.92	183.83
	02/23/95		10.58	184.17
	05/24/95		10.94	183.81
	08/18/95		14.52	180.23
	02/07/96		4.43	190.32
	09/06/96		13.60	181.15
	06/19/97		13.07	181.68
	01/24/02		9.53	185.22
	07/15/03		12.85	181.90
	10/10/03		14.58	180.17
	04/06/04		10.92	183.83
	07/09/04		14.34	180.41
	10/08/04		15.30	179.45
	04/02/07		12.19	182.56
	07/02/07		13.28	181.47
	10/03/07		17.05	177.70
	01/09/08	197.28	6.74	190.54
	04/04/08		13.16	184.12
	07/07/08		15.84	181.44
	10/16/08		17.54	179.74
	1/29/2013 [1]		11.36	185.92
	12/16/13		19.04	178.24
	04/17/14		10.11	187.17
	11/04/14		19.27	178.01
	05/29/15		16.07	181.21
	11/20/15		NM	NM
	05/24/16		**13.79**	**183.49**
MW-2	11/22/94	196.44	12.54	183.90
	02/23/95		12.35	184.09
	05/24/95		12.11	184.33
	08/18/95		16.25	180.19
	02/07/96		9.34	187.10
	09/06/96		15.22	181.22
	06/19/97		13.33	183.11
	01/24/02		9.72	186.72
	07/15/03		12.42	184.02
	10/10/03		13.79	182.65
	04/06/04		10.55	185.89
	07/09/04		13.78	182.66
	10/08/04		14.78	181.66
	04/02/07		11.32	185.12
	07/02/07		13.18	183.26
	10/03/07		16.71	179.73
	01/09/08	198.93	8.48	190.45
	04/04/08		12.60	186.33

Table 2

Summary of Groundwater Elevation Measurements

3635 13th Avenue, Oakland, California

Well ID	Date	Well TOC Elevation (feet NAVD 88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet msl)
MW-2	07/07/08		15.49	183.44
	10/16/08		17.22	181.71
	1/29/2013 [1]		12.89	186.04
	12/16/13		18.72	180.21
	04/17/14		10.30	188.63
	11/04/14		18.65	180.28
	05/29/15		15.57	183.36
	11/20/15		NM	NM
	05/24/16		**13.32**	**185.61**
MW-3	11/22/94	198.93	11.53	187.40
	02/23/95		11.89	187.04
	05/24/95		12.71	186.22
	08/18/95		16.14	182.79
	02/07/96		6.22	192.71
	09/06/96		13.51	185.42
	06/19/97		12.46	186.47
	01/24/02		10.08	188.85
	07/15/03		12.45	186.48
	10/10/03		14.00	184.93
	04/06/04		10.78	188.15
	07/09/04		14.14	184.79
	10/08/04		14.99	183.94
	04/02/07		11.87	187.06
	07/02/07		14.45	184.48
	10/03/07		17.10	181.83
	01/09/08	201.46	9.42	192.04
	04/04/08		15.16	186.30
	07/07/08		15.63	185.83
	10/16/08		17.53	183.93
	1/29/2013 [1]		12.15	189.31
	12/16/13		19.20	182.26
	04/17/14		12.56	188.90
	11/04/14		19.17	182.29
	05/29/15		16.33	185.13
	11/20/15		NM	NM
	05/24/16		**13.98**	**187.48**
MW-4	10/03/07	200.23	17.21	183.02
	01/09/08		9.20	191.03
	04/04/08		13.63	186.60
	07/07/08		16.18	184.05
	10/16/08		17.81	182.42
	1/29/2013 [1]		11.66	188.57
	12/16/13		20.44	179.79
	04/17/14		10.97	189.26
	11/04/14		20.78	179.45

Table 2

Summary of Groundwater Elevation Measurements

3635 13th Avenue, Oakland, California

Well ID	Date	Well TOC Elevation (feet NAVD 88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet msl)
MW-4	05/29/15		16.53	183.70
	11/20/15		NM	NM
	05/24/16		**15.30**	**184.93**
MW-5	10/03/07	198.52	17.44	181.08
	01/09/08		10.01	188.51
	04/04/08		11.78	186.74
	07/07/08		15.53	182.99
	10/16/08		17.89	180.63
	1/29/2013 [1]		13.21	185.31
	12/16/13		18.65	179.87
	04/17/14		16.32	182.20
	11/04/14		19.53	178.99
	05/29/15		16.37	182.15
	11/20/15		NM	NM
	05/24/16		**13.91**	**184.61**
MW-6	10/03/07	200.20	18.46	181.74
	01/09/08		11.93	188.27
	04/04/08		15.69	184.51
	07/07/08		14.84	185.36
	10/16/08		18.95	181.25
	1/29/2013 [1]		17.62	182.58
	12/16/13		19.60	180.60
	04/17/14		17.38	182.82
	11/04/14		18.73	181.47
	05/29/15		15.26	184.94
	11/20/15		NM	NM
	05/24/16		**13.36**	**186.84**
MW-7	1/29/2013 [1]	NM	19.07	NM
	12/16/13		19.49	NM
	04/17/14		10.54	NM
	11/04/14		20.32	NM
	05/29/15		15.71	NM
	11/20/15		NM	NM
	05/24/16		**18.09**	**NM**

Notes/Abbreviations

ft msl = feet above mean sea level

BTOC = Below top of well casing

NM = Not Measured

NAVD 88 = North American Vertical Datum of 1988

Table 3

Summary of Compounds Detected - May 2016

3635 13th Avenue, Oakland, California

Sample Location	Date	Analyte	Result	Units
MW-1	05/24/16	TPH-g	180	µg/L
		TPH-d	68	µg/L
		MTBE	5.8	µg/L
		Ethylbenzene	12	µg/L
		Xylenes	2.7	µg/L
MW-2	05/24/16	TPH-g	590	µg/L
		TPH-d	360	µg/L
		MTBE	19	µg/L
		Benzene	120	µg/L
		Toluene	5.7	µg/L
		Ethylbenzene	18	µg/L
		Xylenes	8.9	µg/L
MW-3	05/24/16	No analytes detected		
MW-4	05/24/16	TPH-g	870	µg/L
		TPH-d	410	µg/L
		MTBE	56	µg/L
		Xylenes	47	µg/L
MW-5	05/24/16	TPH-g	4,200	µg/L
		TPH-d	210	µg/L
		MTBE	42	µg/L
		Benzene	1,500	µg/L
		Toluene	65	µg/L
		Ethylbenzene	150	µg/L
		Xylenes	440	µg/L
MW-6	05/24/16	TPH-g	1,200	µg/L
		TPH-d	420	µg/L
		MTBE	80	µg/L
		Benzene	130	µg/L
		Toluene	16	µg/L
		Ethylbenzene	16	µg/L
		Xylenes	30	µg/L
MW-7	05/24/16	TPH-g	3,000	µg/L
		TPH-d	620	µg/L
		Benzene	4,600	µg/L

Abbreviations:

µg/L = micrograms per liter

TPH-g = Total Petroleum Hydrocarbons as gasoline

TPH-d = Total Petroleum Hydrocarbons as diesel

MTBE = Methyl tertiary butyl ether

Table 4

Summary of Groundwater Analytical Results

3635 13th Avenue, Oakland, California

Sample ID	Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
MW - 1	11/22/94	210	<50	-	<0.5	<0.5	<0.5	2.3
	02/23/95	140	<50	-	<0.5	<0.5	0.6	1.5
	05/24/95	<50	<50	-	<0.5	<0.5	<0.5	<0.5
	08/18/95	2800	<50	-	25	6.2	22	30
	02/07/96	<50	<50	-	<0.5	<0.5	<0.5	<0.5
	09/06/96	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	06/19/97	630	400	15	25	9.7	100	14
	01/24/02	60	<50	<5.0	3.3	2.8	2.0	6.0
	07/15/03	87	<50	<5.0	15	4.9	3.3	9.2
	10/10/03	81	110	<5.0	<0.5	0.62	0.57	0.5
	04/06/04	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	07/09/04	130	80	<35	<0.5	<0.5	2.8	0.78
	10/08/04	260	120	24	3.0	2.9	8.3	10
	04/02/07	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	07/02/07	150	79	<25	<0.5	1.0	<0.5	<0.5
	10/03/07	<50	<50	5.8	<0.5	<0.5	<0.5	<0.5
	01/09/08	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	04/04/08	130	-	<10	<0.5	1.2	22	0.93
	07/07/08	<50	<50	11	<0.5	<0.5	<0.5	<0.5
	10/16/08	70	<50	6.3	<0.5	<0.5	<0.5	<0.5
	1/29/2013 [1]	<50	<50	<5.0	3.6	<0.5	<0.5	<0.5
	12/16/13	110	-	46	<0.5	1.2	0.7	<0.5
	04/17/14	<50	-	<0.5	<0.5	<0.5	<0.5	<0.5
	11/04/14	97	-	1.1	21	<0.5	3.2	2.3
	05/29/15	<50	-	<0.5	<0.5	<0.5	1.1	<0.5
	11/20/15	120	<50	0.62	<0.50	<0.50	<0.50	<0.50
	05/24/16	**180**	**68**	**5.8**	**<0.50**	**<0.50**	**12**	**2.7**
MW - 2	11/22/94	11,000	<50	-	35	21	7	50
	02/23/95	4,000	<50	-	<0.5	<0.5	3	6
	05/24/95	8,600	<50	-	95	37	37	70
	08/18/95	7,200	<50	-	43	21	21	71
	02/07/96	11,000	<50	-	17	9	9	25
	09/06/96	15,000	1,900	ND	4,300	920	460	1,600
	06/19/97	26,000	2,900	<200	5,300	1,500	910	3,200
	01/24/02	34,000	5,300	<200	3,100	1,100	1,100	2,900
	07/15/03	18,000	6,600	<1000	2,300	310	690	1,600
	10/10/03	19,000	1,800	<500	2,700	460	850	1,800
	04/06/04	6,900	1,300	<200	1,100	100	380	780
	07/09/04	17,000	4,400	<450	2,800	240	710	1,300
	10/08/04	6,900	890	<150	1,500	240	340	670
	04/02/07	21,000	4,300	<450	2,000	300	1,000	1,700
	07/02/07	5,100	750	<180	260	21	320	370
	10/03/07	8,600	1,500	<300	1,700	140	520	790
	01/09/08	38,000	48,000	<400	3,000	380	1,200	1,900
	04/04/08	5,100	-	<130	1,000	72	120	330
	07/07/08	5,600	920	<130	930	52	250	320
	10/16/08	12,000	770	<250	1,400	110	400	470
	1/29/2013 [1]	6,600	1,100	<250	540	110	430	460
	12/16/13	3,600	-	20	160	20	120	129
	04/17/14	4,800	-	26	500	16	270	97
	11/04/14	2,100	-	25	150	27	120	84
	05/29/15	38,000	-	24	1,300	150	530	316
	11/20/15	780	290	12	17	2.8	28	22
	05/24/16	**590**	**360**	**19**	**120**	**5.7**	**18**	**8.9**

Table 4

Summary of Groundwater Analytical Results

3635 13th Avenue, Oakland, California

Sample ID	Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
MW - 3	11/22/94	200	<50	-	<0.5	<0.5	<0.5	2
	02/23/95	1500	<50	-	6.6	6.4	4.2	13
	05/24/95	710	<50	-	2.5	3.2	3.1	16
	08/18/95	310	<50	-	3.1	2.1	2.2	11
	02/07/96	400	<50	-	1.4	2.5	2.2	7
	09/06/96	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	06/19/97	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	01/24/02	58	<50	<5.0	4	2.7	2.3	6.7
	07/15/03	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	10/10/03	350	75	<5.0	14	16	23	60
	04/06/04	<50	<50	<5.0	<0.5	1.7	<0.5	1.7
	07/09/04	260	<50	<5.0	12	13	14	36
	10/08/04	450	76	<5.0	21	22	30	86
	04/02/07	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	07/02/07	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	10/03/07	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	01/09/08	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	04/04/08	<50	-	<5.0	<0.5	<0.5	<0.5	<0.5
	07/07/08	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	10/16/08	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	1/29/2013 [1]	63	<50	<5.0	7.8	<0.5	3.1	2.1
	12/16/13	<50	-	<5.0	<0.5	<0.5	<0.5	<0.5
	04/17/14	<50	-	<5.0	<0.5	<0.5	<0.5	<0.5
	11/04/14	<50	-	<5.0	<0.5	<0.5	<0.5	<0.5
	05/29/15	<50	-	<5.0	<0.5	<0.5	<0.5	<0.5
	11/20/15	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	05/24/16	**<50**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW - 4	10/03/07	11,000	2,000	<1,500	1,100	87	<17	1,300
	01/09/08	17,000	2,600	<900	1,300	120	580	790
	04/04/08	17,000	-	<1,500	1,600	200	500	1,300
	07/07/08	18,000	3,100	<1,200	1,400	190	930	1,200
	10/16/08	25,000	2,000	<1,500	1,200	110	490	890
	1/29/2013 [1]	18,000	3,200	<700	1,500	170	1,100	1,100
	12/16/13	4,200	-	43	370	26	130	100
	04/17/14	7,300	-	45	550	55	540	305
	11/04/14	4,800	-	33	220	21	190	66
	05/29/15	12,000	-	49	600	78	740	337
	11/20/15	740	120	17	45	<2.5	17	6.2
	05/24/16	**870**	**410**	**56**	**<5.0**	**<5.0**	**<5.0**	**47**
MW - 5	10/03/07	8,800	680	<250	2,800	74	100	190
	01/09/08	7,400	580	<350	2,000	5.6	93	29
	04/04/08	43,000	-	<500	12,000	2,800	670	2,500
	07/07/08	20,000	1,000	<500	6,800	190	280	380
	10/16/08	13,000	490	<250	3,500	10	93	30
	1/29/2013 [1]	5,300	470	<130	1,300	11	170	14
	12/16/13	1,300	-	86	240	<2.5	5.7	<2.5
	04/17/14	2,100	-	91	400	<2.5	30	<2.5
	11/04/14	470	-	59	1.1	<0.5	0.9	<0.5
	05/29/15	2,200	-	39	480	<3.1	48	<3.1
	11/20/15	200	<50	74	<1.2	<1.2	<1.2	<1.2
	05/24/16	**4,200**	**210**	**42**	**1,500**	**65**	**150**	**440**

Table 4

Summary of Groundwater Analytical Results

3635 13th Avenue, Oakland, California

Sample ID	Date Sampled	TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
MW - 6	10/03/07	11,000	1,400	<1,200	1,400	64	74	320
	01/09/08	8,400	1,300	<400	790	17	210	51
	04/04/08	6,100	-	<500	630	52	430	130
	07/07/08	6,200	1,200	<300	500	11	250	53
	10/16/08	3,700	600	180	220	4.4	93	15
	1/29/2013 [1]	2,300	440	<130	180	18	79	40
	12/16/13	1,400	-	170	100	1.9	9.0	5.0
	04/17/14	740	-	97	49	1.1	22	0.9
	11/04/14	1,300	-	140	52	1.0	3.2	1.4
	05/29/15	2,600	-	140	310	13	25	42.7
	11/20/15	690	130	92	11	<5.0	<5.0	<5.0
	05/24/16	**1,200**	**420**	**80**	**130**	**16**	**16**	**30**
MW - 7	1/29/2013 [1]	42,000	2,300	<900	14,000	140	1,100	800
	12/16/13	21,000	-	<50	7,200	<50	280	164
	04/17/14	11,000	-	23	3,900	22	290	157
	11/04/14	8,400	-	<25	4,100	<25	260	<25
	05/29/15	6,800	-	<20	2,700	<20	240	24
	11/20/15	5,600	390	<50	1,600	<50	<50	<50
	05/24/16	**3,000**	**620**	**<250**	**4,600**	**<250**	**<250**	**<250**

Notes / Abbreviations:

MTBE - Methyl tert butyl ether

TPH-d - Total petroleum hydrocarbons (TPH) as diesel

TPH-g - Total petroleum hydrocarbons (TPH) as gasoline

- = sample not analyzed by this method

< = Less than reporting limit

[1] = well additionally analyzed for TPH as motor oil and hexachrome; all below laboratory detection limits.

ug/L - micrograms per liter

Bold = Most recent sample

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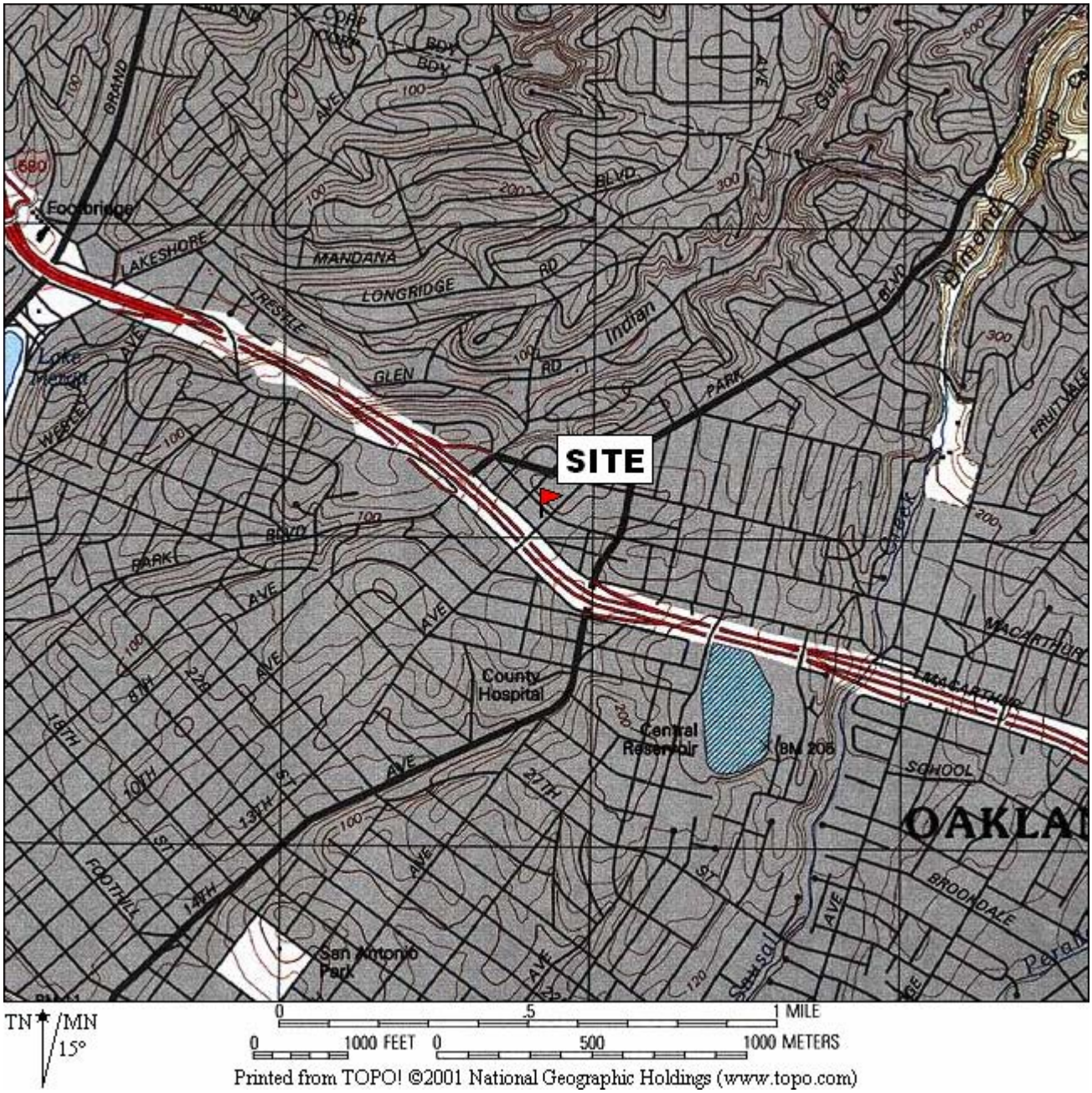
FIGURES



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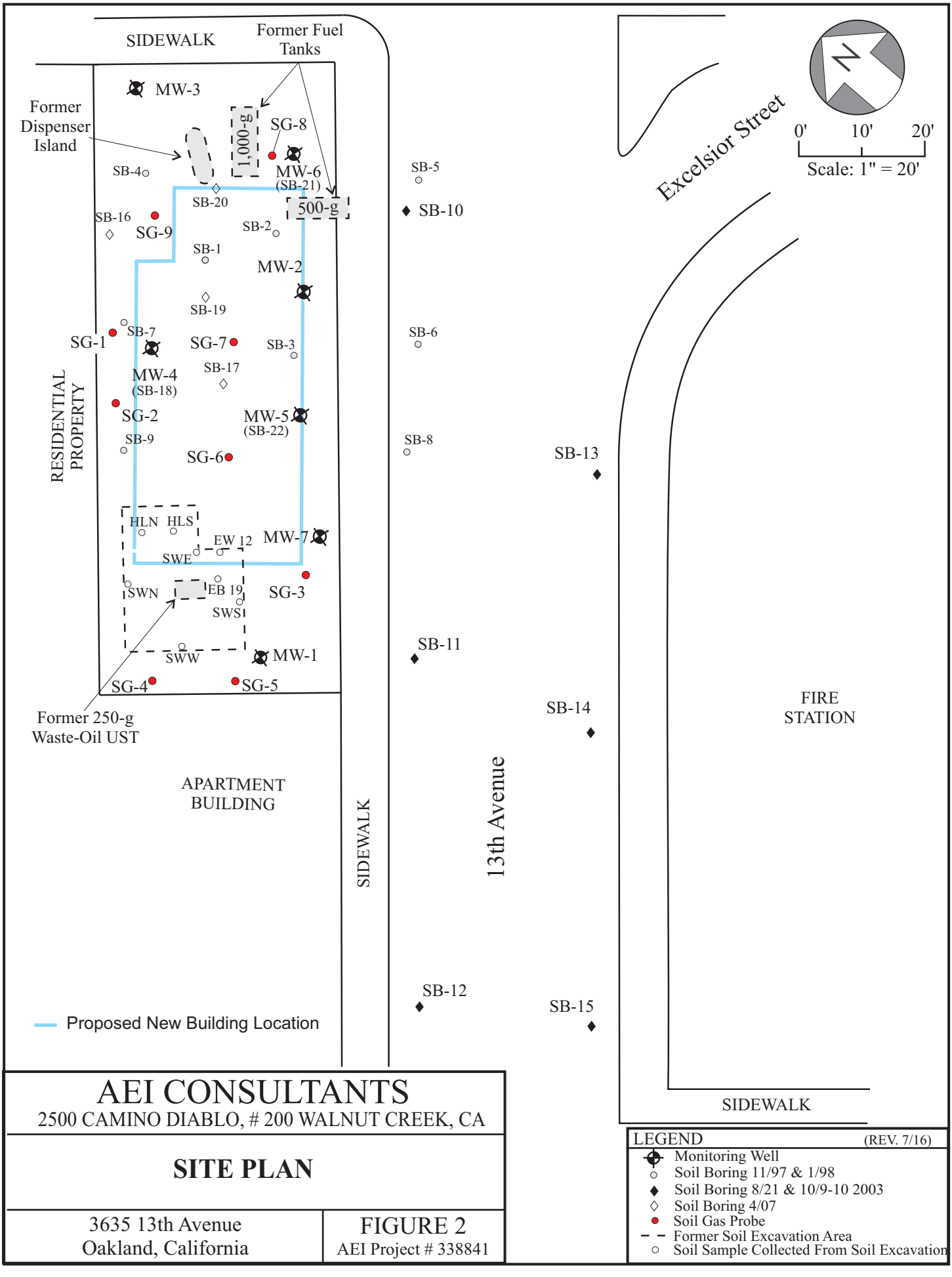
SITE LOCATION MAP

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



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2500 CAMINO DIABLO, # 200 WALNUT CREEK, CA

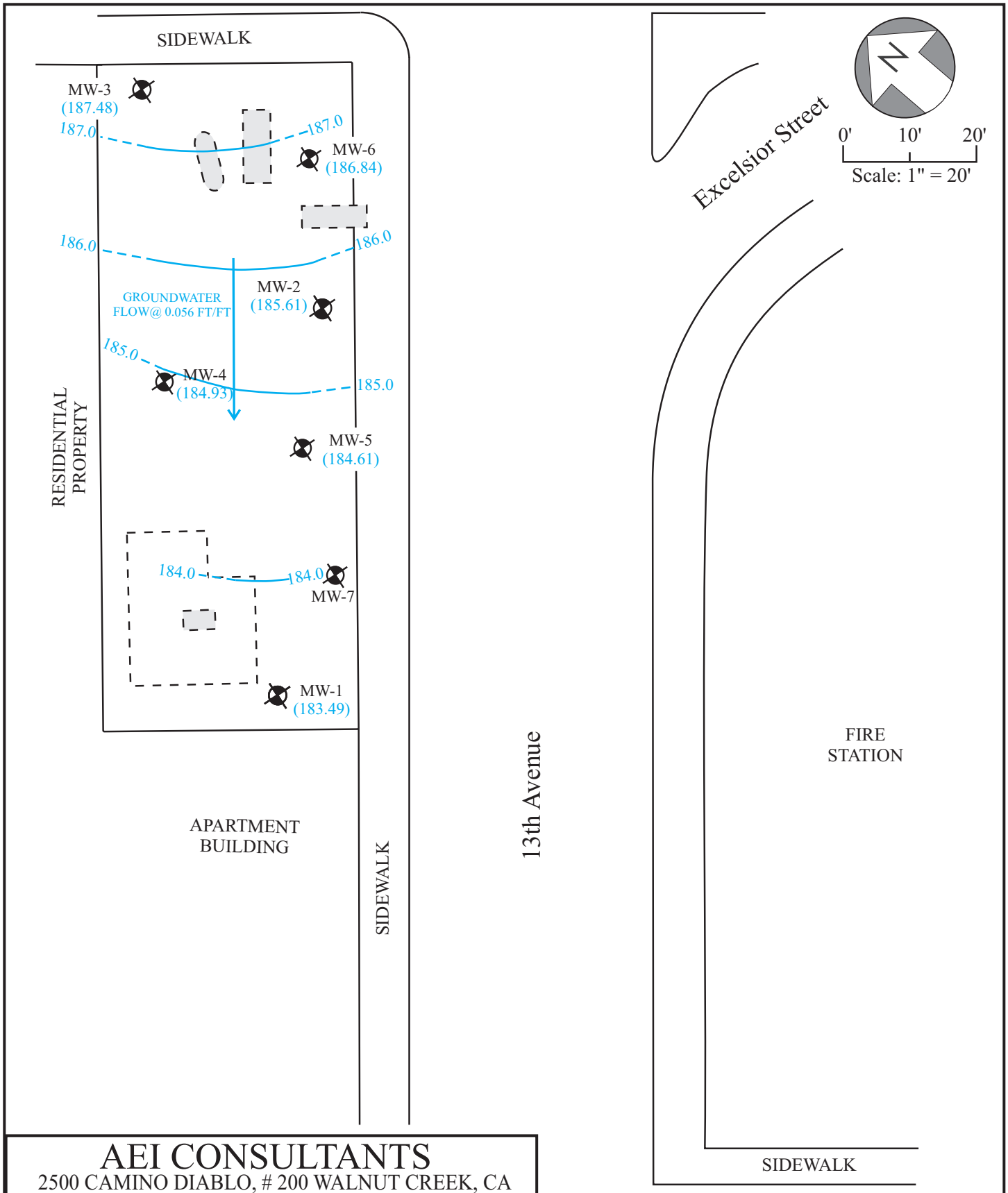
SITE PLAN

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
- Former Soil Excavation Area
- Soil Sample Collected From Soil Excavation



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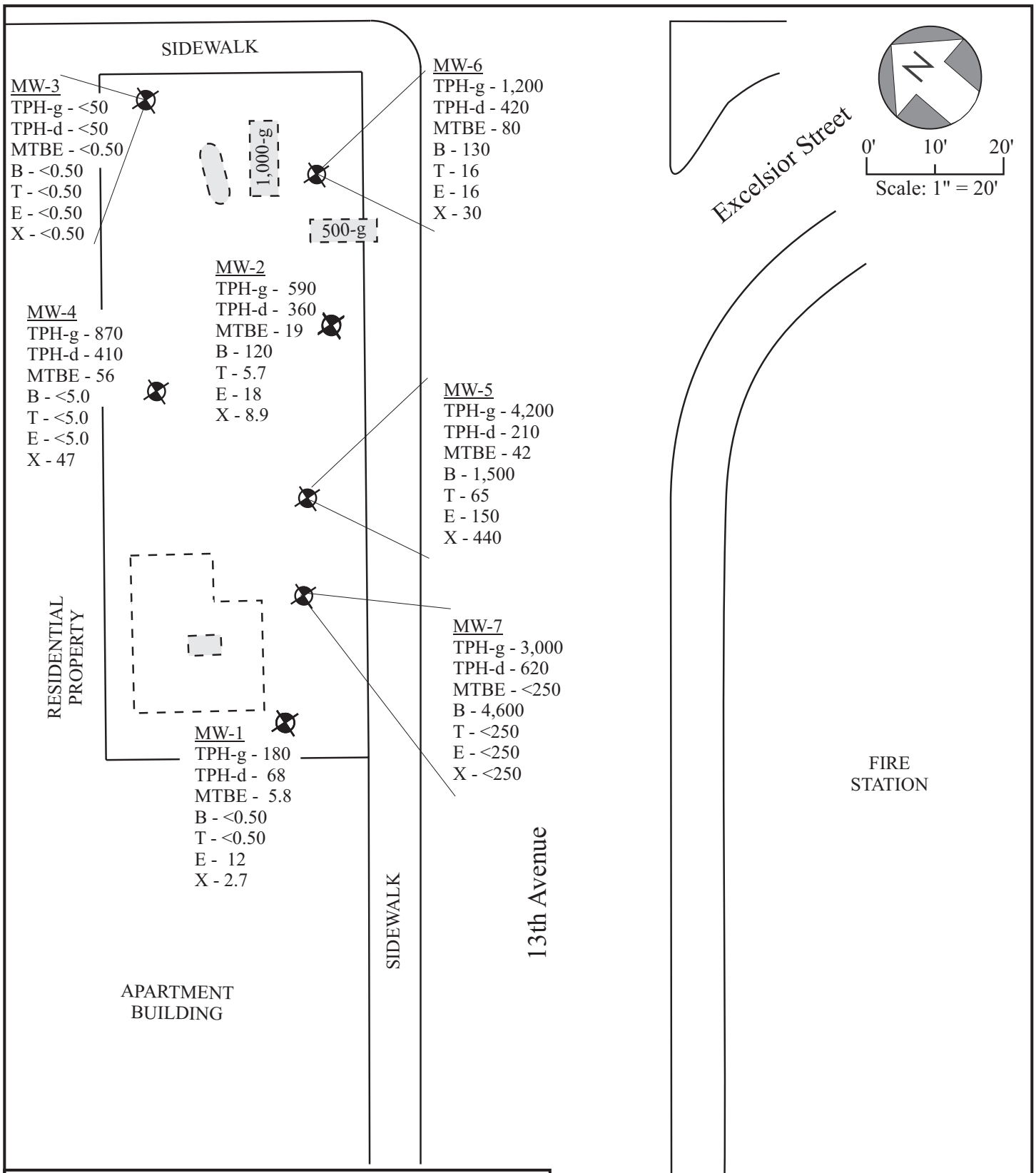
2500 CAMINO DIABLO, # 200 WALNUT CREEK, CA

Groundwater Elevation Contour (5/24/16)

3635 13th Avenue Oakland, California	FIGURE 3 AEI Project # 338841

LEGEND (REV. 7/16)

- Approximate Groundwater Monitoring Well Location
- Former soil excavation
- 186.0 Contour of Groundwater Elevation (Feet NAVD 88)
- Approximate Direction and Gradient in Feet Per Foot (FT/FT)



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2500 CAMINO DIABLO, # 200 WALNUT CREEK, CA

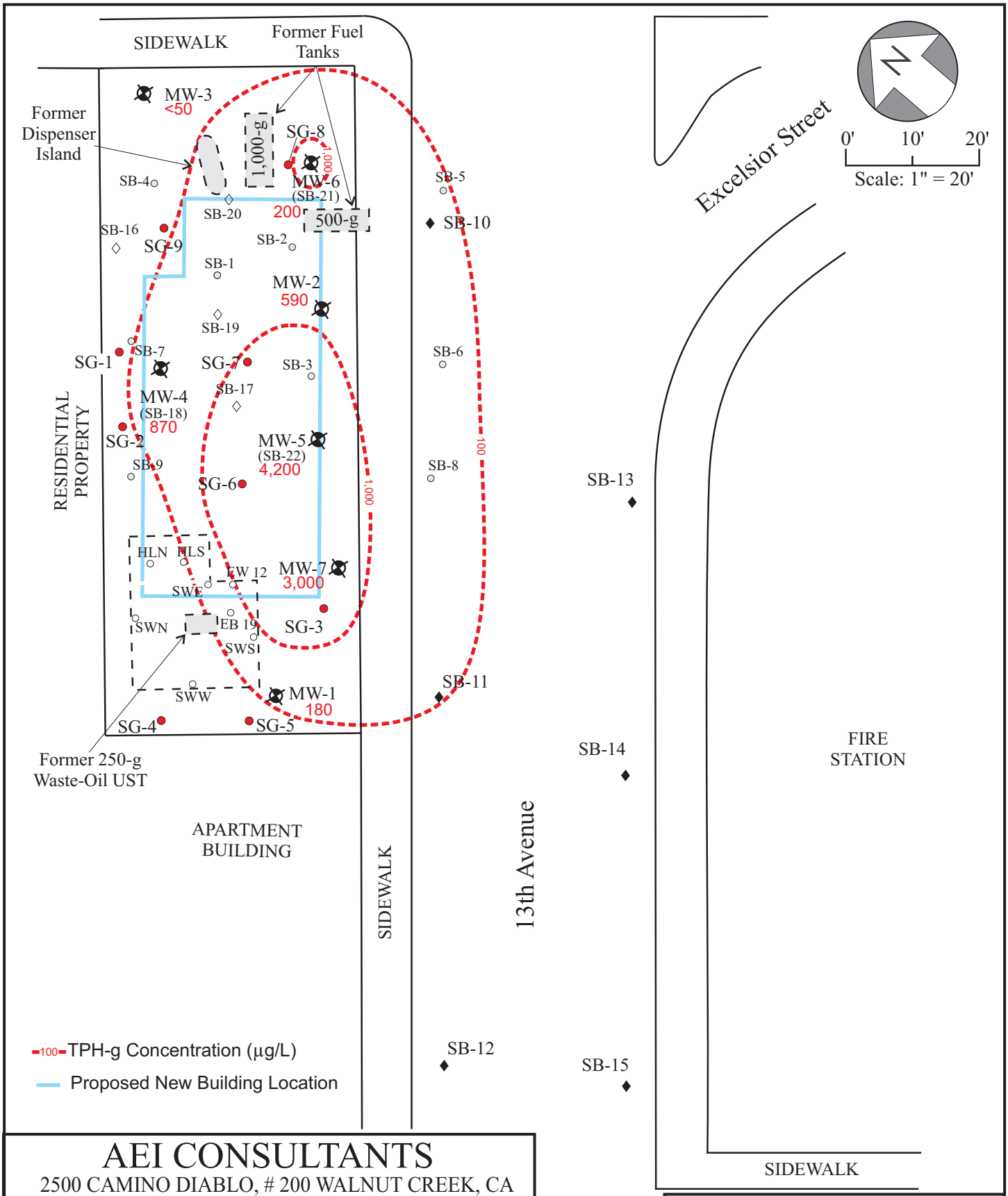
GROUNDWATER SAMPLE ANALYTICAL DATA (5/24/16)

3635 13th Avenue
Oakland, California

FIGURE 4
AEI Project # 338841

LEGEND (REV. 7/08)

TPH-g= Total Petroleum Hydrocarbon as gasoline (by EPA 8021/8015)
TPH-d = TPH as diesel (by EPA 8015C)
MTBE - Methyl tert-butyl ether (by EPA 8260)
B - Benzene (by EPA 8021/8015)
T - Toluene (by EPA 8021/8015)
E - Ethylbenzene (by EPA 8021/8015)
X - Xylenes (by EPA 8021/8015)
Monitoring well
All data in micrograms/Liter (µg/L)



AEI CONSULTANTS

2500 CAMINO DIABLO, # 200 WALNUT CREEK, CA

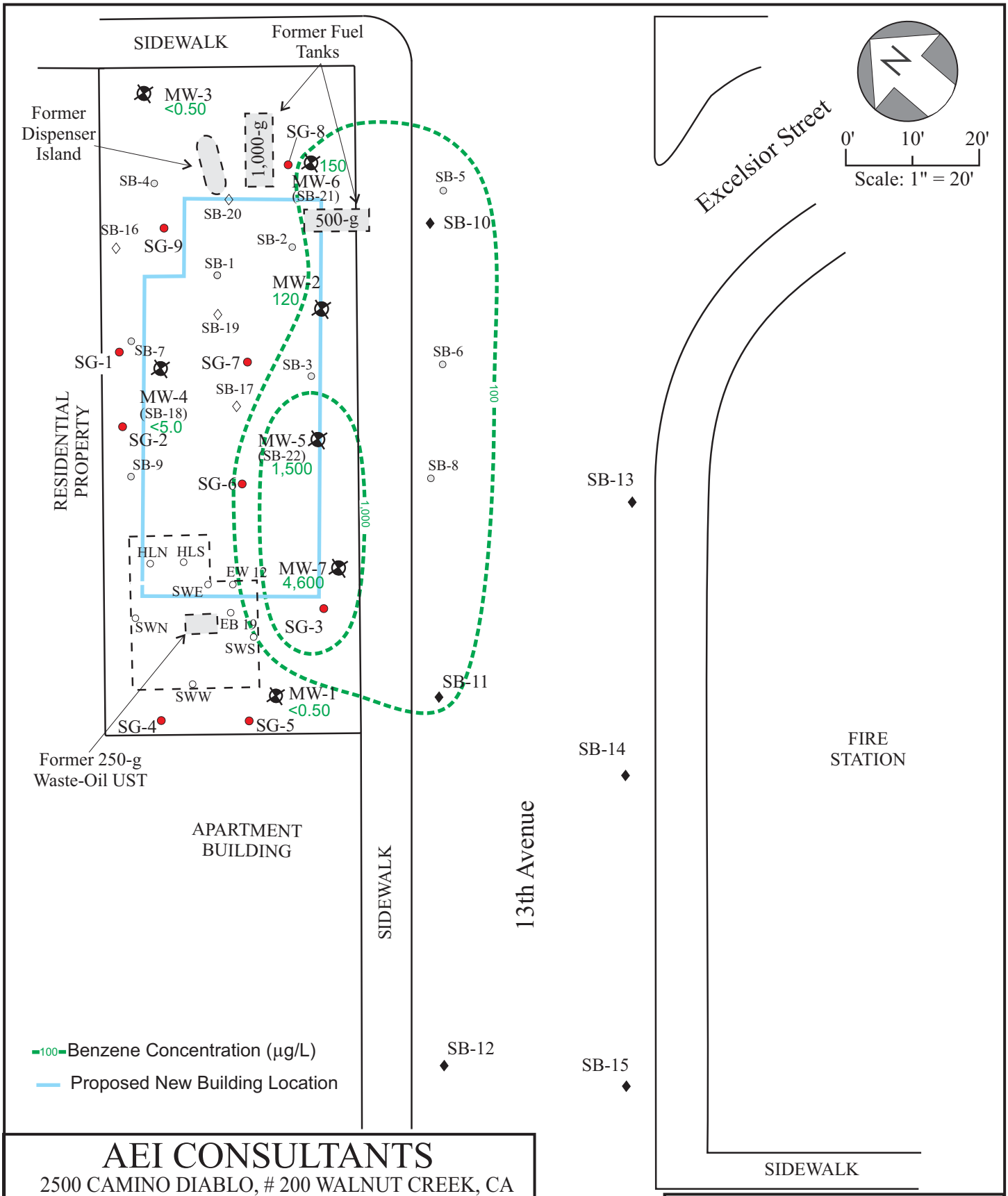
TPH-g Concentration in Groundwater (5/24/16)

3635 13th Avenue
Oakland, California

FIGURE 5
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
- Former Soil Excavation Area
- Soil Sample Collected From Soil Excavation



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2500 CAMINO DIABLO, # 200 WALNUT CREEK, CA

Benzene Concentration in Groundwater (5/24/16)

3635 13th Avenue
Oakland, California

FIGURE 6
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
- Former Soil Excavation Area
- Soil Sample Collected From Soil Excavation

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APPENDIX A

Field Data Sheets

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GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	Kia	Date of Sampling:	5/24/2016
Job Number:	338841	Name of Sampler:	J. Vida
Project Address:	3635 13th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	fair		
Elevation of Top of Casing (feet above msl)	197.28		
Depth of Well	24.50		
Depth to Water (from top of casing)	13.79		
Water Elevation (feet above msl)	10.71		
Well Volumes Purged	3		
Calculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	1.71 gal = 1 casing vol.		
Actual Volume Purged (gallons)	5.25		
Appearance of Purge Water	Cloudy		
Free Product Present?	NO	Thickness (ft):	NA

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 Amber VOAs and 4 HCl VOAs

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
10:13			started	purging			
10:19	1.75	19.03	6.86	1315	2.30	-26.3	Cloudy
10:24	3.50	18.98	6.88	1314	1.40	-29.7	Cloudy
10:27	5.25	18.98	6.86	1292	8.31	-15.0	Cloudy
10:30			started	sampling			

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

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GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	Kia	Date of Sampling:	5/24/2016
Job Number:	338841	Name of Sampler:	J. Vida
Project Address:	3635 13th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	198.93		
Depth of Well	36.00		
Depth to Water (from top of casing)	13.32		
Water Elevation (feet above msl)	22.68		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	3.63 gal = 1 casing vol.		
Actual Volume Purged (gallons)			
Appearance of Purge Water			
Free Product Present?		Thickness (ft):	NA

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 Amber VOAs and 4 HCl VOAs

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
10:53	started purging						
10:56	3.75	20.11	6.59	1161	1.47	-251.9	dark gray
11:01	7.50	20.04	6.54	1244	0.88	-218.6	Cloudy
11:05	11.25	20.17	6.53	1161	0.85	-222.7	Cloudy
11:10	started sampling						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

TPH odor

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GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	Kia	Date of Sampling:	5/24/2016
Job Number:	338841	Name of Sampler:	J. Vida
Project Address:	3635 13th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	201.46		
Depth of Well	36.00		
Depth to Water (from top of casing)	13.98		
Water Elevation (feet above msl)	22.02		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	3.52 gal = 1 casing vol		
Actual Volume Purged (gallons)	10.50		
Appearance of Purge Water	Cloudy		
Free Product Present?	NO	Thickness (ft):	NA

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 Amber VOAs and 4 HCl VOAs

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
09:22	~~3.52~~	started purging					
09:27	3.50	18.83	6.95	661	4.82	8.7	cloudy
09:30	~~7.01~~ ~~10.56~~ 5.0		dry				
11:36	7.00	19.37	7.28	672	~~4~~ 4.35	-76.6	Cloudy
11:45	10.50	21.98	6.87	679	3.18	-61.3	Cloudy
11:55			started sampling				

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

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GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name:	Kia	Date of Sampling:	5/24/2016
Job Number:	338841	Name of Sampler:	J. Vida
Project Address:	3635 13th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	200.23		
Depth of Well	22.00		
Depth to Water (from top of casing)	15.30		
Water Elevation (feet above msl)	6.7		
Well Volumes Purged	2.25		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	1.072 gal		
Actual Volume Purged (gallons)	2.25		
Appearance of Purge Water	Cloudy		
Free Product Present?	No	Thickness (ft):	NA

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 Amber VOAs and 4 HCl VOAs

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
08:12	started purging						
08:30	1.080	18.59	6.41	7359	3.11	-59.9	
08:36	2.000	18.82	6.38	1311	2.40	-50.9	
08:40	2.25 dry						
12:25	started sampling						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

TPH odor

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GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-5

Project Name:	Kia	Date of Sampling:	5/24/2016
Job Number:	338841	Name of Sampler:	J. Vida
Project Address:	3635 13th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	198.52		
Depth of Well	22.00		
Depth to Water (from top of casing)	13.91		
Water Elevation (feet above msl)	8.09		
Well Volumes Purged			
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	1.29 gal = 1 casing vol.		
Actual Volume Purged (gallons)	2.00		
Appearance of Purge Water	Cloudy		
Free Product Present?	NO	Thickness (ft):	NA

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 Amber VOAs and 4 HCl VOAs

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
09:59			started purging				
10:03	1.25	19.35	6.53	836	3.25	-23.3	Cloudy
10:07	2.00		dry				
12:35			started sampling				

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Strong petroleum hydrocarbon odors noted.

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GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-6

Project Name:	Kia	Date of Sampling:	5/24/2016
Job Number:	338841	Name of Sampler:	J. Vida
Project Address:	3635 13th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	200.20		
Depth of Well	22.00		
Depth to Water (from top of casing)	13.36		
Water Elevation (feet above msl)	8.64		
Well Volumes Purged			
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	1.38 gal = 1 casing vol		
Actual Volume Purged (gallons)			
Appearance of Purge Water			
Free Product Present?		Thickness (ft):	NA

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 Amber VOAs and 4 HCl VOAs

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
09:30			started purging				
09:38	~~1.38~~ 1.50	19.36	6.51	1239	2.91	-22.7	Cloudy
09:45	2.25	—	dry				
12:00			started sampling				

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Strong petroleum hydrocarbon odors noted.

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GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-7

Project Name:	Kia	Date of Sampling:	5/24/2016
Job Number:	338841	Name of Sampler:	J. Vida
Project Address:	3635 13th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	200.20		
Depth of Well	22.00		
Depth to Water (from top of casing)	18.09		
Water Elevation (feet above msl)	3.91		
Well Volumes Purged			
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	0.63 gal = 1 casing vol.		
Actual Volume Purged (gallons)	1.75		
Appearance of Purge Water	Cloudy		
Free Product Present?	NO	Thickness (ft):	NA

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 Amber VOAs and 4 HCl VOAs

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
08:48	started purging						Clear
08:51	0.75	19.25	5.98	2431	4.66	-46.6	Cloudy
09:02	1.50	19.10	5.96	2304	4.31	-34.4	Cloudy
09:05	1.75	dry					
12:45	started sampling						

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Strong petroleum hydrocarbon odors noted.

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APPENDIX B

Laboratory Analytical Reports and Chain-of-Custody Documentation

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1605A34 **Amended:** 07/19/2016

Report Created for: AEI Consultants

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

Project Contact: Wayne Hung
Project P.O.: 109477
Project Name: 338841; Kia

Project Received: 05/24/2016

Analytical Report reviewed & approved for release on 06/02/2016 by:

Angela Rydelius,
Laboratory Manager

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
CDPH ELAP 1644 ♦ NELAP 4033ORELAP

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
WorkOrder: 1605A34

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
E	Spike reference value above calibration level
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
WorkOrder: 1605A34

Analytical Qualifiers

E	value above quantitation range
e2	diesel range compounds are significant; no recognizable pattern
e4/e11	gasoline range compounds are significant.; and/or stoddard solvent/mineral spirit (?)
e4	gasoline range compounds are significant.
e11	stoddard solvent/mineral spirit (?)

McCampbell Analytical, Inc.
"When Quality Counts"

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

Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1605A34-001B	Water	05/24/2016 10:30	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	05/27/2016 04:40
tert-Amyl methyl ether (TAME)	ND	0.50	1	05/27/2016 04:40
Benzene	ND	0.50	1	05/27/2016 04:40
Bromobenzene	ND	0.50	1	05/27/2016 04:40
Bromochloromethane	ND	0.50	1	05/27/2016 04:40
Bromodichloromethane	ND	0.50	1	05/27/2016 04:40
Bromoform	ND	0.50	1	05/27/2016 04:40
Bromomethane	ND	0.50	1	05/27/2016 04:40
2-Butanone (MEK)	ND	2.0	1	05/27/2016 04:40
t-Butyl alcohol (TBA)	ND	2.0	1	05/27/2016 04:40
n-Butyl benzene	ND	0.50	1	05/27/2016 04:40
sec-Butyl benzene	ND	0.50	1	05/27/2016 04:40
tert-Butyl benzene	ND	0.50	1	05/27/2016 04:40
Carbon Disulfide	ND	0.50	1	05/27/2016 04:40
Carbon Tetrachloride	ND	0.50	1	05/27/2016 04:40
Chlorobenzene	ND	0.50	1	05/27/2016 04:40
Chloroethane	ND	0.50	1	05/27/2016 04:40
Chloroform	ND	0.50	1	05/27/2016 04:40
Chloromethane	ND	0.50	1	05/27/2016 04:40
2-Chlorotoluene	ND	0.50	1	05/27/2016 04:40
4-Chlorotoluene	ND	0.50	1	05/27/2016 04:40
Dibromochloromethane	ND	0.50	1	05/27/2016 04:40
1,2-Dibromo-3-chloropropane	ND	0.20	1	05/27/2016 04:40
1,2-Dibromoethane (EDB)	ND	0.50	1	05/27/2016 04:40
Dibromomethane	ND	0.50	1	05/27/2016 04:40
1,2-Dichlorobenzene	ND	0.50	1	05/27/2016 04:40
1,3-Dichlorobenzene	ND	0.50	1	05/27/2016 04:40
1,4-Dichlorobenzene	ND	0.50	1	05/27/2016 04:40
Dichlorodifluoromethane	ND	0.50	1	05/27/2016 04:40
1,1-Dichloroethane	ND	0.50	1	05/27/2016 04:40
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	05/27/2016 04:40
1,1-Dichloroethene	ND	0.50	1	05/27/2016 04:40
cis-1,2-Dichloroethene	ND	0.50	1	05/27/2016 04:40
trans-1,2-Dichloroethene	ND	0.50	1	05/27/2016 04:40
1,2-Dichloropropane	ND	0.50	1	05/27/2016 04:40
1,3-Dichloropropane	ND	0.50	1	05/27/2016 04:40
2,2-Dichloropropane	ND	0.50	1	05/27/2016 04:40

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1605A34-001B	Water	05/24/2016 10:30	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	05/27/2016 04:40
cis-1,3-Dichloropropene	ND	0.50	1	05/27/2016 04:40
trans-1,3-Dichloropropene	ND	0.50	1	05/27/2016 04:40
Diisopropyl ether (DIPE)	ND	0.50	1	05/27/2016 04:40
Ethylbenzene	**12**	0.50	1	05/27/2016 04:40
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	05/27/2016 04:40
Freon 113	ND	0.50	1	05/27/2016 04:40
Hexachlorobutadiene	ND	0.50	1	05/27/2016 04:40
Hexachloroethane	ND	0.50	1	05/27/2016 04:40
2-Hexanone	ND	0.50	1	05/27/2016 04:40
Isopropylbenzene	**6.9**	0.50	1	05/27/2016 04:40
4-Isopropyl toluene	ND	0.50	1	05/27/2016 04:40
Methyl-t-butyl ether (MTBE)	**5.8**	0.50	1	05/27/2016 04:40
Methylene chloride	ND	0.50	1	05/27/2016 04:40
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	05/27/2016 04:40
Naphthalene	ND	0.50	1	05/27/2016 04:40
n-Propyl benzene	**7.3**	0.50	1	05/27/2016 04:40
Styrene	ND	0.50	1	05/27/2016 04:40
1,1,1,2-Tetrachloroethane	ND	0.50	1	05/27/2016 04:40
1,1,2,2-Tetrachloroethane	ND	0.50	1	05/27/2016 04:40
Tetrachloroethene	ND	0.50	1	05/27/2016 04:40
Toluene	ND	0.50	1	05/27/2016 04:40
1,2,3-Trichlorobenzene	ND	0.50	1	05/27/2016 04:40
1,2,4-Trichlorobenzene	ND	0.50	1	05/27/2016 04:40
1,1,1-Trichloroethane	ND	0.50	1	05/27/2016 04:40
1,1,2-Trichloroethane	ND	0.50	1	05/27/2016 04:40
Trichloroethene	ND	0.50	1	05/27/2016 04:40
Trichlorofluoromethane	ND	0.50	1	05/27/2016 04:40
1,2,3-Trichloropropane	ND	0.50	1	05/27/2016 04:40
1,2,4-Trimethylbenzene	**1.9**	0.50	1	05/27/2016 04:40
1,3,5-Trimethylbenzene	ND	0.50	1	05/27/2016 04:40
Vinyl Chloride	ND	0.50	1	05/27/2016 04:40
Xylenes, Total	**2.7**	0.50	1	05/27/2016 04:40

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1605A34-001B**	**Water**	**05/24/2016 10:30**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	93	70-130		05/27/2016 04:40
Toluene-d8	87	70-130		05/27/2016 04:40
4-BFB	91	70-130		05/27/2016 04:40

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1605A34-002B	Water	05/24/2016 11:10	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	50	5	05/31/2016 13:18
tert-Amyl methyl ether (TAME)	ND	2.5	5	05/31/2016 13:18
Benzene	**120**	2.5	5	05/31/2016 13:18
Bromobenzene	ND	2.5	5	05/31/2016 13:18
Bromochloromethane	ND	2.5	5	05/31/2016 13:18
Bromodichloromethane	ND	2.5	5	05/31/2016 13:18
Bromoform	ND	2.5	5	05/31/2016 13:18
Bromomethane	ND	2.5	5	05/31/2016 13:18
2-Butanone (MEK)	ND	10	5	05/31/2016 13:18
t-Butyl alcohol (TBA)	**34**	10	5	05/31/2016 13:18
n-Butyl benzene	ND	2.5	5	05/31/2016 13:18
sec-Butyl benzene	ND	2.5	5	05/31/2016 13:18
tert-Butyl benzene	ND	2.5	5	05/31/2016 13:18
Carbon Disulfide	ND	2.5	5	05/31/2016 13:18
Carbon Tetrachloride	ND	2.5	5	05/31/2016 13:18
Chlorobenzene	ND	2.5	5	05/31/2016 13:18
Chloroethane	ND	2.5	5	05/31/2016 13:18
Chloroform	ND	2.5	5	05/31/2016 13:18
Chloromethane	ND	2.5	5	05/31/2016 13:18
2-Chlorotoluene	ND	2.5	5	05/31/2016 13:18
4-Chlorotoluene	ND	2.5	5	05/31/2016 13:18
Dibromochloromethane	ND	2.5	5	05/31/2016 13:18
1,2-Dibromo-3-chloropropane	ND	1.0	5	05/31/2016 13:18
1,2-Dibromoethane (EDB)	ND	2.5	5	05/31/2016 13:18
Dibromomethane	ND	2.5	5	05/31/2016 13:18
1,2-Dichlorobenzene	ND	2.5	5	05/31/2016 13:18
1,3-Dichlorobenzene	ND	2.5	5	05/31/2016 13:18
1,4-Dichlorobenzene	ND	2.5	5	05/31/2016 13:18
Dichlorodifluoromethane	ND	2.5	5	05/31/2016 13:18
1,1-Dichloroethane	ND	2.5	5	05/31/2016 13:18
1,2-Dichloroethane (1,2-DCA)	ND	2.5	5	05/31/2016 13:18
1,1-Dichloroethene	ND	2.5	5	05/31/2016 13:18
cis-1,2-Dichloroethene	ND	2.5	5	05/31/2016 13:18
trans-1,2-Dichloroethene	ND	2.5	5	05/31/2016 13:18
1,2-Dichloropropane	ND	2.5	5	05/31/2016 13:18
1,3-Dichloropropane	ND	2.5	5	05/31/2016 13:18
2,2-Dichloropropane	ND	2.5	5	05/31/2016 13:18

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Analytical Report

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Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1605A34-002B	Water	05/24/2016 11:10	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	2.5	5	05/31/2016 13:18
cis-1,3-Dichloropropene	ND	2.5	5	05/31/2016 13:18
trans-1,3-Dichloropropene	ND	2.5	5	05/31/2016 13:18
Diisopropyl ether (DIPE)	ND	2.5	5	05/31/2016 13:18
Ethylbenzene	**18**	2.5	5	05/31/2016 13:18
Ethyl tert-butyl ether (ETBE)	ND	2.5	5	05/31/2016 13:18
Freon 113	ND	2.5	5	05/31/2016 13:18
Hexachlorobutadiene	ND	2.5	5	05/31/2016 13:18
Hexachloroethane	ND	2.5	5	05/31/2016 13:18
2-Hexanone	ND	2.5	5	05/31/2016 13:18
Isopropylbenzene	**5.1**	2.5	5	05/31/2016 13:18
4-Isopropyl toluene	ND	2.5	5	05/31/2016 13:18
Methyl-t-butyl ether (MTBE)	**19**	2.5	5	05/31/2016 13:18
Methylene chloride	**3.0**	2.5	5	05/31/2016 13:18
4-Methyl-2-pentanone (MIBK)	ND	2.5	5	05/31/2016 13:18
Naphthalene	**3.5**	2.5	5	05/31/2016 13:18
n-Propyl benzene	**7.2**	2.5	5	05/31/2016 13:18
Styrene	ND	2.5	5	05/31/2016 13:18
1,1,1,2-Tetrachloroethane	ND	2.5	5	05/31/2016 13:18
1,1,2,2-Tetrachloroethane	ND	2.5	5	05/31/2016 13:18
Tetrachloroethene	ND	2.5	5	05/31/2016 13:18
Toluene	**5.7**	2.5	5	05/31/2016 13:18
1,2,3-Trichlorobenzene	ND	2.5	5	05/31/2016 13:18
1,2,4-Trichlorobenzene	ND	2.5	5	05/31/2016 13:18
1,1,1-Trichloroethane	ND	2.5	5	05/31/2016 13:18
1,1,2-Trichloroethane	ND	2.5	5	05/31/2016 13:18
Trichloroethene	ND	2.5	5	05/31/2016 13:18
Trichlorofluoromethane	ND	2.5	5	05/31/2016 13:18
1,2,3-Trichloropropane	ND	2.5	5	05/31/2016 13:18
1,2,4-Trimethylbenzene	**4.8**	2.5	5	05/31/2016 13:18
1,3,5-Trimethylbenzene	ND	2.5	5	05/31/2016 13:18
Vinyl Chloride	ND	2.5	5	05/31/2016 13:18
Xylenes, Total	**8.9**	2.5	5	05/31/2016 13:18

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1605A34-002B**	**Water**	**05/24/2016 11:10**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	98	70-130		05/31/2016 13:18
Toluene-d8	87	70-130		05/31/2016 13:18
4-BFB	88	70-130		05/31/2016 13:18

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	1605A34-003B	Water	05/24/2016 11:55	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	05/31/2016 12:38
tert-Amyl methyl ether (TAME)	ND	0.50	1	05/31/2016 12:38
Benzene	ND	0.50	1	05/31/2016 12:38
Bromobenzene	ND	0.50	1	05/31/2016 12:38
Bromochloromethane	ND	0.50	1	05/31/2016 12:38
Bromodichloromethane	ND	0.50	1	05/31/2016 12:38
Bromoform	ND	0.50	1	05/31/2016 12:38
Bromomethane	ND	0.50	1	05/31/2016 12:38
2-Butanone (MEK)	ND	2.0	1	05/31/2016 12:38
t-Butyl alcohol (TBA)	ND	2.0	1	05/31/2016 12:38
n-Butyl benzene	ND	0.50	1	05/31/2016 12:38
sec-Butyl benzene	ND	0.50	1	05/31/2016 12:38
tert-Butyl benzene	ND	0.50	1	05/31/2016 12:38
Carbon Disulfide	ND	0.50	1	05/31/2016 12:38
Carbon Tetrachloride	ND	0.50	1	05/31/2016 12:38
Chlorobenzene	ND	0.50	1	05/31/2016 12:38
Chloroethane	ND	0.50	1	05/31/2016 12:38
Chloroform	ND	0.50	1	05/31/2016 12:38
Chloromethane	ND	0.50	1	05/31/2016 12:38
2-Chlorotoluene	ND	0.50	1	05/31/2016 12:38
4-Chlorotoluene	ND	0.50	1	05/31/2016 12:38
Dibromochloromethane	ND	0.50	1	05/31/2016 12:38
1,2-Dibromo-3-chloropropane	ND	0.20	1	05/31/2016 12:38
1,2-Dibromoethane (EDB)	ND	0.50	1	05/31/2016 12:38
Dibromomethane	ND	0.50	1	05/31/2016 12:38
1,2-Dichlorobenzene	ND	0.50	1	05/31/2016 12:38
1,3-Dichlorobenzene	ND	0.50	1	05/31/2016 12:38
1,4-Dichlorobenzene	ND	0.50	1	05/31/2016 12:38
Dichlorodifluoromethane	ND	0.50	1	05/31/2016 12:38
1,1-Dichloroethane	ND	0.50	1	05/31/2016 12:38
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	05/31/2016 12:38
1,1-Dichloroethene	ND	0.50	1	05/31/2016 12:38
cis-1,2-Dichloroethene	ND	0.50	1	05/31/2016 12:38
trans-1,2-Dichloroethene	ND	0.50	1	05/31/2016 12:38
1,2-Dichloropropane	ND	0.50	1	05/31/2016 12:38
1,3-Dichloropropane	ND	0.50	1	05/31/2016 12:38
2,2-Dichloropropane	ND	0.50	1	05/31/2016 12:38

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	1605A34-003B	Water	05/24/2016 11:55	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	05/31/2016 12:38
cis-1,3-Dichloropropene	ND	0.50	1	05/31/2016 12:38
trans-1,3-Dichloropropene	ND	0.50	1	05/31/2016 12:38
Diisopropyl ether (DIPE)	ND	0.50	1	05/31/2016 12:38
Ethylbenzene	ND	0.50	1	05/31/2016 12:38
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	05/31/2016 12:38
Freon 113	ND	0.50	1	05/31/2016 12:38
Hexachlorobutadiene	ND	0.50	1	05/31/2016 12:38
Hexachloroethane	ND	0.50	1	05/31/2016 12:38
2-Hexanone	ND	0.50	1	05/31/2016 12:38
Isopropylbenzene	ND	0.50	1	05/31/2016 12:38
4-Isopropyl toluene	ND	0.50	1	05/31/2016 12:38
Methyl-t-butyl ether (MTBE)	ND	0.50	1	05/31/2016 12:38
Methylene chloride	**0.82**	0.50	1	05/31/2016 12:38
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	05/31/2016 12:38
Naphthalene	ND	0.50	1	05/31/2016 12:38
n-Propyl benzene	ND	0.50	1	05/31/2016 12:38
Styrene	ND	0.50	1	05/31/2016 12:38
1,1,1,2-Tetrachloroethane	ND	0.50	1	05/31/2016 12:38
1,1,2,2-Tetrachloroethane	ND	0.50	1	05/31/2016 12:38
Tetrachloroethene	ND	0.50	1	05/31/2016 12:38
Toluene	ND	0.50	1	05/31/2016 12:38
1,2,3-Trichlorobenzene	ND	0.50	1	05/31/2016 12:38
1,2,4-Trichlorobenzene	ND	0.50	1	05/31/2016 12:38
1,1,1-Trichloroethane	ND	0.50	1	05/31/2016 12:38
1,1,2-Trichloroethane	ND	0.50	1	05/31/2016 12:38
Trichloroethene	ND	0.50	1	05/31/2016 12:38
Trichlorofluoromethane	ND	0.50	1	05/31/2016 12:38
1,2,3-Trichloropropane	ND	0.50	1	05/31/2016 12:38
1,2,4-Trimethylbenzene	ND	0.50	1	05/31/2016 12:38
1,3,5-Trimethylbenzene	ND	0.50	1	05/31/2016 12:38
Vinyl Chloride	ND	0.50	1	05/31/2016 12:38
Xylenes, Total	ND	0.50	1	05/31/2016 12:38

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Analytical Report

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Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	**1605A34-003B**	**Water**	**05/24/2016 11:55**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	96	70-130		05/31/2016 12:38
Toluene-d8	89	70-130		05/31/2016 12:38
4-BFB	88	70-130		05/31/2016 12:38

Analyst(s): AK

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Angela Rydelius, Lab Manager

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	1605A34-004B	Water	05/24/2016 12:25	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	100	10	05/31/2016 15:59
tert-Amyl methyl ether (TAME)	ND	5.0	10	05/31/2016 15:59
Benzene	ND	5.0	10	05/31/2016 15:59
Bromobenzene	ND	5.0	10	05/31/2016 15:59
Bromochloromethane	ND	5.0	10	05/31/2016 15:59
Bromodichloromethane	ND	5.0	10	05/31/2016 15:59
Bromoform	ND	5.0	10	05/31/2016 15:59
Bromomethane	ND	5.0	10	05/31/2016 15:59
2-Butanone (MEK)	ND	20	10	05/31/2016 15:59
t-Butyl alcohol (TBA)	ND	20	10	05/31/2016 15:59
n-Butyl benzene	ND	5.0	10	05/31/2016 15:59
sec-Butyl benzene	ND	5.0	10	05/31/2016 15:59
tert-Butyl benzene	ND	5.0	10	05/31/2016 15:59
Carbon Disulfide	ND	5.0	10	05/31/2016 15:59
Carbon Tetrachloride	ND	5.0	10	05/31/2016 15:59
Chlorobenzene	ND	5.0	10	05/31/2016 15:59
Chloroethane	ND	5.0	10	05/31/2016 15:59
Chloroform	ND	5.0	10	05/31/2016 15:59
Chloromethane	ND	5.0	10	05/31/2016 15:59
2-Chlorotoluene	ND	5.0	10	05/31/2016 15:59
4-Chlorotoluene	ND	5.0	10	05/31/2016 15:59
Dibromochloromethane	ND	5.0	10	05/31/2016 15:59
1,2-Dibromo-3-chloropropane	ND	2.0	10	05/31/2016 15:59
1,2-Dibromoethane (EDB)	ND	5.0	10	05/31/2016 15:59
Dibromomethane	ND	5.0	10	05/31/2016 15:59
1,2-Dichlorobenzene	ND	5.0	10	05/31/2016 15:59
1,3-Dichlorobenzene	ND	5.0	10	05/31/2016 15:59
1,4-Dichlorobenzene	ND	5.0	10	05/31/2016 15:59
Dichlorodifluoromethane	ND	5.0	10	05/31/2016 15:59
1,1-Dichloroethane	ND	5.0	10	05/31/2016 15:59
1,2-Dichloroethane (1,2-DCA)	ND	5.0	10	05/31/2016 15:59
1,1-Dichloroethene	ND	5.0	10	05/31/2016 15:59
cis-1,2-Dichloroethene	ND	5.0	10	05/31/2016 15:59
trans-1,2-Dichloroethene	ND	5.0	10	05/31/2016 15:59
1,2-Dichloropropane	ND	5.0	10	05/31/2016 15:59
1,3-Dichloropropane	ND	5.0	10	05/31/2016 15:59
2,2-Dichloropropane	ND	5.0	10	05/31/2016 15:59

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	1605A34-004B	Water	05/24/2016 12:25	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	5.0	10	05/31/2016 15:59
cis-1,3-Dichloropropene	ND	5.0	10	05/31/2016 15:59
trans-1,3-Dichloropropene	ND	5.0	10	05/31/2016 15:59
Diisopropyl ether (DIPE)	ND	5.0	10	05/31/2016 15:59
Ethylbenzene	ND	5.0	10	05/31/2016 15:59
Ethyl tert-butyl ether (ETBE)	ND	5.0	10	05/31/2016 15:59
Freon 113	ND	5.0	10	05/31/2016 15:59
Hexachlorobutadiene	ND	5.0	10	05/31/2016 15:59
Hexachloroethane	ND	5.0	10	05/31/2016 15:59
2-Hexanone	ND	5.0	10	05/31/2016 15:59
Isopropylbenzene	ND	5.0	10	05/31/2016 15:59
4-Isopropyl toluene	ND	5.0	10	05/31/2016 15:59
Methyl-t-butyl ether (MTBE)	**56**	5.0	10	05/31/2016 15:59
Methylene chloride	**6.3**	5.0	10	05/31/2016 15:59
4-Methyl-2-pentanone (MIBK)	ND	5.0	10	05/31/2016 15:59
Naphthalene	**47**	5.0	10	05/31/2016 15:59
n-Propyl benzene	ND	5.0	10	05/31/2016 15:59
Styrene	ND	5.0	10	05/31/2016 15:59
1,1,1,2-Tetrachloroethane	ND	5.0	10	05/31/2016 15:59
1,1,2,2-Tetrachloroethane	ND	5.0	10	05/31/2016 15:59
Tetrachloroethene	ND	5.0	10	05/31/2016 15:59
Toluene	ND	5.0	10	05/31/2016 15:59
1,2,3-Trichlorobenzene	ND	5.0	10	05/31/2016 15:59
1,2,4-Trichlorobenzene	ND	5.0	10	05/31/2016 15:59
1,1,1-Trichloroethane	ND	5.0	10	05/31/2016 15:59
1,1,2-Trichloroethane	ND	5.0	10	05/31/2016 15:59
Trichloroethene	ND	5.0	10	05/31/2016 15:59
Trichlorofluoromethane	ND	5.0	10	05/31/2016 15:59
1,2,3-Trichloropropane	ND	5.0	10	05/31/2016 15:59
1,2,4-Trimethylbenzene	ND	5.0	10	05/31/2016 15:59
1,3,5-Trimethylbenzene	ND	5.0	10	05/31/2016 15:59
Vinyl Chloride	ND	5.0	10	05/31/2016 15:59
Xylenes, Total	**47**	5.0	10	05/31/2016 15:59

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1605A34-004B**	**Water**	**05/24/2016 12:25**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	98	70-130		05/31/2016 15:59
Toluene-d8	88	70-130		05/31/2016 15:59
4-BFB	93	70-130		05/31/2016 15:59

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1605A34-005B	Water	05/24/2016 12:35	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	500	50	05/31/2016 21:29
tert-Amyl methyl ether (TAME)	ND	25	50	05/31/2016 21:29
Benzene	**1500**	25	50	05/31/2016 21:29
Bromobenzene	ND	25	50	05/31/2016 21:29
Bromochloromethane	ND	25	50	05/31/2016 21:29
Bromodichloromethane	ND	25	50	05/31/2016 21:29
Bromoform	ND	25	50	05/31/2016 21:29
Bromomethane	ND	25	50	05/31/2016 21:29
2-Butanone (MEK)	ND	100	50	05/31/2016 21:29
t-Butyl alcohol (TBA)	**200**	100	50	05/31/2016 21:29
n-Butyl benzene	ND	25	50	05/31/2016 21:29
sec-Butyl benzene	ND	25	50	05/31/2016 21:29
tert-Butyl benzene	ND	25	50	05/31/2016 21:29
Carbon Disulfide	ND	25	50	05/31/2016 21:29
Carbon Tetrachloride	ND	25	50	05/31/2016 21:29
Chlorobenzene	ND	25	50	05/31/2016 21:29
Chloroethane	ND	25	50	05/31/2016 21:29
Chloroform	ND	25	50	05/31/2016 21:29
Chloromethane	ND	25	50	05/31/2016 21:29
2-Chlorotoluene	ND	25	50	05/31/2016 21:29
4-Chlorotoluene	ND	25	50	05/31/2016 21:29
Dibromochloromethane	ND	25	50	05/31/2016 21:29
1,2-Dibromo-3-chloropropane	ND	10	50	05/31/2016 21:29
1,2-Dibromoethane (EDB)	ND	25	50	05/31/2016 21:29
Dibromomethane	ND	25	50	05/31/2016 21:29
1,2-Dichlorobenzene	ND	25	50	05/31/2016 21:29
1,3-Dichlorobenzene	ND	25	50	05/31/2016 21:29
1,4-Dichlorobenzene	ND	25	50	05/31/2016 21:29
Dichlorodifluoromethane	ND	25	50	05/31/2016 21:29
1,1-Dichloroethane	ND	25	50	05/31/2016 21:29
1,2-Dichloroethane (1,2-DCA)	ND	25	50	05/31/2016 21:29
1,1-Dichloroethene	ND	25	50	05/31/2016 21:29
cis-1,2-Dichloroethene	ND	25	50	05/31/2016 21:29
trans-1,2-Dichloroethene	ND	25	50	05/31/2016 21:29
1,2-Dichloropropane	ND	25	50	05/31/2016 21:29
1,3-Dichloropropane	ND	25	50	05/31/2016 21:29
2,2-Dichloropropane	ND	25	50	05/31/2016 21:29

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1605A34-005B	Water	05/24/2016 12:35	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	25	50	05/31/2016 21:29
cis-1,3-Dichloropropene	ND	25	50	05/31/2016 21:29
trans-1,3-Dichloropropene	ND	25	50	05/31/2016 21:29
Diisopropyl ether (DIPE)	ND	25	50	05/31/2016 21:29
Ethylbenzene	**150**	25	50	05/31/2016 21:29
Ethyl tert-butyl ether (ETBE)	ND	25	50	05/31/2016 21:29
Freon 113	ND	25	50	05/31/2016 21:29
Hexachlorobutadiene	ND	25	50	05/31/2016 21:29
Hexachloroethane	ND	25	50	05/31/2016 21:29
2-Hexanone	ND	25	50	05/31/2016 21:29
Isopropylbenzene	ND	25	50	05/31/2016 21:29
4-Isopropyl toluene	ND	25	50	05/31/2016 21:29
Methyl-t-butyl ether (MTBE)	**42**	25	50	05/31/2016 21:29
Methylene chloride	**44**	25	50	05/31/2016 21:29
4-Methyl-2-pentanone (MIBK)	ND	25	50	05/31/2016 21:29
Naphthalene	**31**	25	50	05/31/2016 21:29
n-Propyl benzene	ND	25	50	05/31/2016 21:29
Styrene	ND	25	50	05/31/2016 21:29
1,1,1,2-Tetrachloroethane	ND	25	50	05/31/2016 21:29
1,1,2,2-Tetrachloroethane	ND	25	50	05/31/2016 21:29
Tetrachloroethene	ND	25	50	05/31/2016 21:29
Toluene	**65**	25	50	05/31/2016 21:29
1,2,3-Trichlorobenzene	ND	25	50	05/31/2016 21:29
1,2,4-Trichlorobenzene	ND	25	50	05/31/2016 21:29
1,1,1-Trichloroethane	ND	25	50	05/31/2016 21:29
1,1,2-Trichloroethane	ND	25	50	05/31/2016 21:29
Trichloroethene	ND	25	50	05/31/2016 21:29
Trichlorofluoromethane	ND	25	50	05/31/2016 21:29
1,2,3-Trichloropropane	ND	25	50	05/31/2016 21:29
1,2,4-Trimethylbenzene	**54**	25	50	05/31/2016 21:29
1,3,5-Trimethylbenzene	ND	25	50	05/31/2016 21:29
Vinyl Chloride	ND	25	50	05/31/2016 21:29
Xylenes, Total	**440**	25	50	05/31/2016 21:29

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1605A34-005B**	**Water**	**05/24/2016 12:35**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	99	70-130		05/31/2016 21:29
Toluene-d8	88	70-130		05/31/2016 21:29
4-BFB	91	70-130		05/31/2016 21:29

Analyst(s): AK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	1605A34-006B	Water	05/24/2016 12:10	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	50	5	05/31/2016 13:58
tert-Amyl methyl ether (TAME)	ND	2.5	5	05/31/2016 13:58
Benzene	**130**	2.5	5	05/31/2016 13:58
Bromobenzene	ND	2.5	5	05/31/2016 13:58
Bromochloromethane	ND	2.5	5	05/31/2016 13:58
Bromodichloromethane	ND	2.5	5	05/31/2016 13:58
Bromoform	ND	2.5	5	05/31/2016 13:58
Bromomethane	ND	2.5	5	05/31/2016 13:58
2-Butanone (MEK)	ND	10	5	05/31/2016 13:58
t-Butyl alcohol (TBA)	**52**	10	5	05/31/2016 13:58
n-Butyl benzene	ND	2.5	5	05/31/2016 13:58
sec-Butyl benzene	ND	2.5	5	05/31/2016 13:58
tert-Butyl benzene	ND	2.5	5	05/31/2016 13:58
Carbon Disulfide	ND	2.5	5	05/31/2016 13:58
Carbon Tetrachloride	ND	2.5	5	05/31/2016 13:58
Chlorobenzene	ND	2.5	5	05/31/2016 13:58
Chloroethane	ND	2.5	5	05/31/2016 13:58
Chloroform	ND	2.5	5	05/31/2016 13:58
Chloromethane	ND	2.5	5	05/31/2016 13:58
2-Chlorotoluene	ND	2.5	5	05/31/2016 13:58
4-Chlorotoluene	ND	2.5	5	05/31/2016 13:58
Dibromochloromethane	ND	2.5	5	05/31/2016 13:58
1,2-Dibromo-3-chloropropane	ND	1.0	5	05/31/2016 13:58
1,2-Dibromoethane (EDB)	ND	2.5	5	05/31/2016 13:58
Dibromomethane	ND	2.5	5	05/31/2016 13:58
1,2-Dichlorobenzene	ND	2.5	5	05/31/2016 13:58
1,3-Dichlorobenzene	ND	2.5	5	05/31/2016 13:58
1,4-Dichlorobenzene	ND	2.5	5	05/31/2016 13:58
Dichlorodifluoromethane	ND	2.5	5	05/31/2016 13:58
1,1-Dichloroethane	ND	2.5	5	05/31/2016 13:58
1,2-Dichloroethane (1,2-DCA)	ND	2.5	5	05/31/2016 13:58
1,1-Dichloroethene	ND	2.5	5	05/31/2016 13:58
cis-1,2-Dichloroethene	ND	2.5	5	05/31/2016 13:58
trans-1,2-Dichloroethene	ND	2.5	5	05/31/2016 13:58
1,2-Dichloropropane	ND	2.5	5	05/31/2016 13:58
1,3-Dichloropropane	ND	2.5	5	05/31/2016 13:58
2,2-Dichloropropane	ND	2.5	5	05/31/2016 13:58

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	1605A34-006B	Water	05/24/2016 12:10	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	2.5	5	05/31/2016 13:58
cis-1,3-Dichloropropene	ND	2.5	5	05/31/2016 13:58
trans-1,3-Dichloropropene	ND	2.5	5	05/31/2016 13:58
Diisopropyl ether (DIPE)	ND	2.5	5	05/31/2016 13:58
Ethylbenzene	**16**	2.5	5	05/31/2016 13:58
Ethyl tert-butyl ether (ETBE)	ND	2.5	5	05/31/2016 13:58
Freon 113	ND	2.5	5	05/31/2016 13:58
Hexachlorobutadiene	ND	2.5	5	05/31/2016 13:58
Hexachloroethane	ND	2.5	5	05/31/2016 13:58
2-Hexanone	ND	2.5	5	05/31/2016 13:58
Isopropylbenzene	**12**	2.5	5	05/31/2016 13:58
4-Isopropyl toluene	ND	2.5	5	05/31/2016 13:58
Methyl-t-butyl ether (MTBE)	**80**	2.5	5	05/31/2016 13:58
Methylene chloride	**2.7**	2.5	5	05/31/2016 13:58
4-Methyl-2-pentanone (MIBK)	ND	2.5	5	05/31/2016 13:58
Naphthalene	**33**	2.5	5	05/31/2016 13:58
n-Propyl benzene	**16**	2.5	5	05/31/2016 13:58
Styrene	ND	2.5	5	05/31/2016 13:58
1,1,1,2-Tetrachloroethane	ND	2.5	5	05/31/2016 13:58
1,1,2,2-Tetrachloroethane	ND	2.5	5	05/31/2016 13:58
Tetrachloroethene	ND	2.5	5	05/31/2016 13:58
Toluene	**16**	2.5	5	05/31/2016 13:58
1,2,3-Trichlorobenzene	ND	2.5	5	05/31/2016 13:58
1,2,4-Trichlorobenzene	ND	2.5	5	05/31/2016 13:58
1,1,1-Trichloroethane	ND	2.5	5	05/31/2016 13:58
1,1,2-Trichloroethane	**6.2**	2.5	5	05/31/2016 13:58
Trichloroethene	ND	2.5	5	05/31/2016 13:58
Trichlorofluoromethane	ND	2.5	5	05/31/2016 13:58
1,2,3-Trichloropropane	ND	2.5	5	05/31/2016 13:58
1,2,4-Trimethylbenzene	**4.2**	2.5	5	05/31/2016 13:58
1,3,5-Trimethylbenzene	**3.6**	2.5	5	05/31/2016 13:58
Vinyl Chloride	ND	2.5	5	05/31/2016 13:58
Xylenes, Total	**30**	2.5	5	05/31/2016 13:58

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1605A34-006B**	**Water**	**05/24/2016 12:10**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	98	70-130		05/31/2016 13:58
Toluene-d8	88	70-130		05/31/2016 13:58
4-BFB	88	70-130		05/31/2016 13:58

Analyst(s): MW

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1605A34-007B	Water	05/24/2016 12:45	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	5000	500	05/31/2016 22:08
tert-Amyl methyl ether (TAME)	ND	250	500	05/31/2016 22:08
Benzene	**4600**	250	500	05/31/2016 22:08
Bromobenzene	ND	250	500	05/31/2016 22:08
Bromochloromethane	ND	250	500	05/31/2016 22:08
Bromodichloromethane	ND	250	500	05/31/2016 22:08
Bromoform	ND	250	500	05/31/2016 22:08
Bromomethane	ND	250	500	05/31/2016 22:08
2-Butanone (MEK)	ND	1000	500	05/31/2016 22:08
t-Butyl alcohol (TBA)	**1500**	1000	500	05/31/2016 22:08
n-Butyl benzene	ND	250	500	05/31/2016 22:08
sec-Butyl benzene	ND	250	500	05/31/2016 22:08
tert-Butyl benzene	ND	250	500	05/31/2016 22:08
Carbon Disulfide	ND	250	500	05/31/2016 22:08
Carbon Tetrachloride	ND	250	500	05/31/2016 22:08
Chlorobenzene	ND	250	500	05/31/2016 22:08
Chloroethane	ND	250	500	05/31/2016 22:08
Chloroform	ND	250	500	05/31/2016 22:08
Chloromethane	ND	250	500	05/31/2016 22:08
2-Chlorotoluene	ND	250	500	05/31/2016 22:08
4-Chlorotoluene	ND	250	500	05/31/2016 22:08
Dibromochloromethane	ND	250	500	05/31/2016 22:08
1,2-Dibromo-3-chloropropane	ND	100	500	05/31/2016 22:08
1,2-Dibromoethane (EDB)	ND	250	500	05/31/2016 22:08
Dibromomethane	ND	250	500	05/31/2016 22:08
1,2-Dichlorobenzene	ND	250	500	05/31/2016 22:08
1,3-Dichlorobenzene	ND	250	500	05/31/2016 22:08
1,4-Dichlorobenzene	ND	250	500	05/31/2016 22:08
Dichlorodifluoromethane	ND	250	500	05/31/2016 22:08
1,1-Dichloroethane	ND	250	500	05/31/2016 22:08
1,2-Dichloroethane (1,2-DCA)	ND	250	500	05/31/2016 22:08
1,1-Dichloroethene	ND	250	500	05/31/2016 22:08
cis-1,2-Dichloroethene	ND	250	500	05/31/2016 22:08
trans-1,2-Dichloroethene	ND	250	500	05/31/2016 22:08
1,2-Dichloropropane	ND	250	500	05/31/2016 22:08
1,3-Dichloropropane	ND	250	500	05/31/2016 22:08
2,2-Dichloropropane	ND	250	500	05/31/2016 22:08

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1605A34-007B	Water	05/24/2016 12:45	GC18	121562

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	250	500	05/31/2016 22:08
cis-1,3-Dichloropropene	ND	250	500	05/31/2016 22:08
trans-1,3-Dichloropropene	ND	250	500	05/31/2016 22:08
Diisopropyl ether (DIPE)	ND	250	500	05/31/2016 22:08
Ethylbenzene	ND	250	500	05/31/2016 22:08
Ethyl tert-butyl ether (ETBE)	ND	250	500	05/31/2016 22:08
Freon 113	ND	250	500	05/31/2016 22:08
Hexachlorobutadiene	ND	250	500	05/31/2016 22:08
Hexachloroethane	ND	250	500	05/31/2016 22:08
2-Hexanone	ND	250	500	05/31/2016 22:08
Isopropylbenzene	ND	250	500	05/31/2016 22:08
4-Isopropyl toluene	ND	250	500	05/31/2016 22:08
Methyl-t-butyl ether (MTBE)	ND	250	500	05/31/2016 22:08
Methylene chloride	**410**	250	500	05/31/2016 22:08
4-Methyl-2-pentanone (MIBK)	ND	250	500	05/31/2016 22:08
Naphthalene	ND	250	500	05/31/2016 22:08
n-Propyl benzene	ND	250	500	05/31/2016 22:08
Styrene	ND	250	500	05/31/2016 22:08
1,1,1,2-Tetrachloroethane	ND	250	500	05/31/2016 22:08
1,1,2,2-Tetrachloroethane	ND	250	500	05/31/2016 22:08
Tetrachloroethene	ND	250	500	05/31/2016 22:08
Toluene	ND	250	500	05/31/2016 22:08
1,2,3-Trichlorobenzene	ND	250	500	05/31/2016 22:08
1,2,4-Trichlorobenzene	ND	250	500	05/31/2016 22:08
1,1,1-Trichloroethane	ND	250	500	05/31/2016 22:08
1,1,2-Trichloroethane	ND	250	500	05/31/2016 22:08
Trichloroethene	ND	250	500	05/31/2016 22:08
Trichlorofluoromethane	ND	250	500	05/31/2016 22:08
1,2,3-Trichloropropane	ND	250	500	05/31/2016 22:08
1,2,4-Trimethylbenzene	ND	250	500	05/31/2016 22:08
1,3,5-Trimethylbenzene	ND	250	500	05/31/2016 22:08
Vinyl Chloride	ND	250	500	05/31/2016 22:08
Xylenes, Total	ND	250	500	05/31/2016 22:08

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-5/31/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1605A34-007B**	**Water**	**05/24/2016 12:45**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	98	70-130		05/31/2016 22:08
Toluene-d8	89	70-130		05/31/2016 22:08
4-BFB	90	70-130		05/31/2016 22:08

Analyst(s): AK

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-6/2/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1605A34-001B**	**Water**	**05/24/2016 10:30**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**180**	50	1	05/27/2016 04:40

Surrogates	REC (%)	Limits	
Dibromofluoromethane	86	70-130	05/27/2016 04:40

Analyst(s): MW

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1605A34-002B**	**Water**	**05/24/2016 11:10**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**590**	250	5	05/31/2016 13:18

Surrogates	REC (%)	Limits	
Dibromofluoromethane	90	70-130	05/31/2016 13:18

Analyst(s): MW

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	**1605A34-003B**	**Water**	**05/24/2016 11:55**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/31/2016 12:38

Surrogates	REC (%)	Limits	
Dibromofluoromethane	88	70-130	05/31/2016 12:38

Analyst(s): MW

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1605A34-004B**	**Water**	**05/24/2016 12:25**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**870**	500	10	05/31/2016 15:59

Surrogates	REC (%)	Limits	
Dibromofluoromethane	90	70-130	05/31/2016 15:59

Analyst(s): MW

(Cont.)

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW5030B
Date Prepared:	5/27/16-6/2/16	**Analytical Method:**	SW8260B
Project:	338841; Kia	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1605A34-005B**	**Water**	**05/24/2016 12:35**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**4200**	2500	50	06/02/2016 12:34

Surrogates	REC (%)	Limits	
Dibromofluoromethane	89	70-130	06/02/2016 12:34

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1605A34-006B**	**Water**	**05/24/2016 12:10**	**GC18**	**121562**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**1200**	250	5	05/31/2016 13:58

Surrogates	REC (%)	Limits	
Dibromofluoromethane	90	70-130	05/31/2016 13:58

Analyst(s): MW

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1605A34-007B**	**Water**	**05/24/2016 12:45**	**GC18**	**121562**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
TPH(g)	**3000**	E	50	1	05/27/2016 06:36

Surrogates	REC (%)	Limits	
Dibromofluoromethane	78	70-130	05/27/2016 06:36

Analyst(s): MW

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW3510C/3630C
Date Prepared:	5/24/16	**Analytical Method:**	SW8015B
Project:	338841; Kia	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1605A34-001A**	**Water**	**05/24/2016 10:30**	**GC6A**	**121411**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**68**	50	1	05/25/2016 06:07
TPH-Motor Oil (C18-C36)	ND	250	1	05/25/2016 06:07

Surrogates	REC (%)	Limits	
C9	90	70-130	05/25/2016 06:07

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1605A34-002A**	**Water**	**05/24/2016 11:10**	**GC2B**	**121411**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**360**	50	1	05/25/2016 19:45
TPH-Motor Oil (C18-C36)	ND	250	1	05/25/2016 19:45

Surrogates	REC (%)	Limits	
C9	107	70-130	05/25/2016 19:45

Analyst(s): TD Analytical Comments: e11

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	**1605A34-003A**	**Water**	**05/24/2016 11:55**	**GC2B**	**121411**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	05/25/2016 21:01
TPH-Motor Oil (C18-C36)	ND	250	1	05/25/2016 21:01

Surrogates	REC (%)	Limits	
C9	104	70-130	05/25/2016 21:01

Analyst(s): TD

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW3510C/3630C
Date Prepared:	5/24/16	**Analytical Method:**	SW8015B
Project:	338841; Kia	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4	**1605A34-004A**	**Water**	**05/24/2016 12:25**	**GC2B**	**121411**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**410**	50	1	05/25/2016 22:18
TPH-Motor Oil (C18-C36)	ND	250	1	05/25/2016 22:18

Surrogates	REC (%)	Limits	
C9	107	70-130	05/25/2016 22:18

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1605A34-005A**	**Water**	**05/24/2016 12:35**	**GC2A**	**121411**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**210**	50	1	05/25/2016 22:18
TPH-Motor Oil (C18-C36)	ND	250	1	05/25/2016 22:18

Surrogates	REC (%)	Limits	
C9	93	70-130	05/25/2016 22:18

Analyst(s): TD Analytical Comments: e4,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1605A34-006A**	**Water**	**05/24/2016 12:10**	**GC2A**	**121411**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**420**	50	1	05/25/2016 23:34
TPH-Motor Oil (C18-C36)	ND	250	1	05/25/2016 23:34

Surrogates	REC (%)	Limits	
C9	98	70-130	05/25/2016 23:34

Analyst(s): TD Analytical Comments: e4,e2

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Analytical Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Received:	5/24/16 14:26	**Extraction Method:**	SW3510C/3630C
Date Prepared:	5/24/16	**Analytical Method:**	SW8015B
Project:	338841; Kia	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	**1605A34-007A**	**Water**	**05/24/2016 12:45**	**GC2A**	**121411**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**620**	50	1	05/26/2016 03:22
TPH-Motor Oil (C18-C36)	ND	250	1	05/26/2016 03:22

Surrogates	REC (%)	Limits	
C9	100	70-130	05/26/2016 03:22

Analyst(s): TD Analytical Comments: e4,e2

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Prepared:	5/26/16	**BatchID:**	121562
Date Analyzed:	5/26/16	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	338841; Kia	**Sample ID:**	MB/LCS-121562 1605943-002BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	9.97	0.50	10	-	100	54-140
Benzene	ND	9.97	0.50	10	-	100	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	34.0	2.0	40	-	85	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	9.87	0.50	10	-	99	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	9.20	0.50	10	-	92	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	10.1	0.50	10	-	101	66-125
1,1-Dichloroethene	ND	9.43	0.50	10	-	94	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

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QA/QC Officer

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Prepared:	5/26/16	**BatchID:**	121562
Date Analyzed:	5/26/16	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	338841; Kia	**Sample ID:**	MB/LCS-121562 1605943-002BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	10.3	0.50	10	-	103	57-136
Ethanol	ND	-	50	-	-	-	-
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.2	0.50	10	-	102	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	9.81	0.50	10	-	98	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.93	0.50	10	-	99	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	10.2	0.50	10	-	102	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Prepared:	5/26/16	**BatchID:**	121562
Date Analyzed:	5/26/16	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	338841; Kia	**Sample ID:**	MB/LCS-121562 1605943-002BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	23.8	23.8		25	95	95	70-130
Toluene-d8	22.6	22.6		25	90	91	70-130
4-BFB	2.14	2.25		2.5	86	90	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.0	10.1	10	ND	101	101	69-139	0	20
Benzene	8.15	8.57	10	ND	80	85	69-141	4.98	20
t-Butyl alcohol (TBA)	42.8	38.0	40	ND	107	95	41-152	11.7	20
Chlorobenzene	8.45	8.83	10	ND	85	88	77-120	4.38	20
1,2-Dibromoethane (EDB)	8.90	8.95	10	ND	89	90	76-135	0.555	20
1,2-Dichloroethane (1,2-DCA)	9.10	9.25	10	ND	91	93	73-139	1.65	20
1,1-Dichloroethene	7.45	7.92	10	ND	75	79	59-140	6.12	20
Diisopropyl ether (DIPE)	8.38	8.63	10	ND	84	86	72-140	2.87	20
Ethyl tert-butyl ether (ETBE)	9.20	9.32	10	ND	92	93	71-140	1.24	20
Methyl-t-butyl ether (MTBE)	9.51	9.41	10	ND	95	94	73-139	1.09	20
Toluene	8.18	8.65	10	ND	80	85	71-128	5.54	20
Trichloroethene	8.67	9.17	10	ND	87	92	64-132	5.61	20
Surrogate Recovery									
Dibromofluoromethane	23.6	23.6	25		94	95	73-131	0.349	20
Toluene-d8	22.1	22.1	25		88	89	72-117	0.301	20
4-BFB	2.20	2.23	2.5		88	89	74-116	1.33	20

CLIENT: AEI Consultants
Work Order: 1605A34
Project: 338841; Kia

ANALYTICAL QC SUMMARY REPORT

BatchID: 121562

SampleID **MB-121562**	TestCode: **8260GAS_W**	Units: **µg/L**	Prep Date: **5/26/2016**
Batch ID: **121562**	TestNo: **SW8260B**	Run ID: **GC18_160601B**	Analysis Date: **5/26/2016**

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
TPH(g)	ND	50				-				
Surrogate Recovery										
Dibromofluoromethane	22.0		25		88	70 - 130				

Qualifiers:

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

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

Angela Rydelius, Lab Manager

CLIENT: AEI Consultants
Work Order: 1605A34
Project: 338841; Kia

ANALYTICAL QC SUMMARY REPORT

BatchID: 121562

SampleID **LCS-121562**	TestCode: **8260GAS_W**	Units: **µg/L**	Prep Date: **5/26/2016**
Batch ID: **121562**	TestNo: **SW8260B**	Run ID: **GC18_160601B**	Analysis Date: **5/26/2016**

Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual
VOC (C6-C12)	568	50	644	0	88	70 - 130				
Surrogate Recovery										
Dibromofluoromethane	21.9		25		87	70 - 130				

Qualifiers:

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

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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Quality Control Report

Client:	AEI Consultants	**WorkOrder:**	1605A34
Date Prepared:	5/24/16	**BatchID:**	121411
Date Analyzed:	5/25/16	**Extraction Method:**	SW3510C/3630C
Instrument:	GC6B	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	338841; Kia	**Sample ID:**	MB/LCS/LCSD-121411

QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-
Surrogate Recovery					
C9	528		625	84	65-122

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1060	1130	1000	106	113	59-151	5.96	30
Surrogate Recovery								
C9	537	552	625	86	88	65-122	2.91	30

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1605A34 **ClientCode: AEL**

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

Report to:
Wayne Hung
AEI Consultants
2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597
(925) 478-9698 FAX: (925) 944-2895

Email: whung@aeiconsultants.com
cc/3rd Party:
PO: 109477
ProjectNo: 338841;Kia

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

Requested TAT: 5 days;

Date Received: 05/24/2016
Date Logged: 05/24/2016

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
1605A34-001	MW-1	Water	5/24/2016 10:30	☐	B	B	A									
1605A34-002	MW-2	Water	5/24/2016 11:10	☐	B	B	A									
1605A34-003	MW-3	Water	5/24/2016 11:55	☐	B	B	A									
1605A34-004	MW-4	Water	5/24/2016 12:25	☐	B	B	A									
1605A34-005	MW-5	Water	5/24/2016 12:35	☐	B	B	A									
1605A34-006	MW-6	Water	5/24/2016 12:10	☐	B	B	A									
1605A34-007	MW-7	Water	5/24/2016 12:45	☐	B	B	A									

Test Legend:

1	8260B_W	2	8260GAS_W	3	TPH(DMO)WSG_W	4	
5		6		7		8	
9		10		11		12	

Prepared by: Valerie Riva

The following SampIDs: 001B, 002B, 003B, 004B, 005B, 006B, 007B 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
Comments:

QC Level: LEVEL 2
Client Contact: Wayne Hung
Contact's Email: whung@aeiconsultants.com

Work Order: 1605A34
Date Logged: 5/24/2016

☐ 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
1605A34-001A	MW-1	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	aVOA	☐	5/24/2016 10:30	5 days	Present	☐	
1605A34-001B	MW-1	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	4	VOA w/ HCl	☐	5/24/2016 10:30	5 days	Present	☐	
1605A34-002A	MW-2	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	aVOA	☐	5/24/2016 11:10	5 days	Present	☐	
1605A34-002B	MW-2	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	4	VOA w/ HCl	☐	5/24/2016 11:10	5 days	Present	☐	
1605A34-003A	MW-3	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	aVOA	☐	5/24/2016 11:55	5 days	Present	☐	
1605A34-003B	MW-3	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	4	VOA w/ HCl	☐	5/24/2016 11:55	5 days	Present	☐	
1605A34-004A	MW-4	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	aVOA	☐	5/24/2016 12:25	5 days	Present	☐	
1605A34-004B	MW-4	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	4	VOA w/ HCl	☐	5/24/2016 12:25	5 days	Present	☐	
1605A34-005A	MW-5	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	aVOA	☐	5/24/2016 12:35	5 days	Present	☐	
1605A34-005B	MW-5	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	4	VOA w/ HCl	☐	5/24/2016 12:35	5 days	Present	☐	
1605A34-006A	MW-6	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	aVOA	☐	5/24/2016 12:10	5 days	Present	☐	
1605A34-006B	MW-6	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	4	VOA w/ HCl	☐	5/24/2016 12:10	5 days	Present	☐	
1605A34-007A	MW-7	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	2	aVOA	☐	5/24/2016 12:45	5 days	Present	☐	
1605A34-007B	MW-7	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	4	VOA w/ HCl	☐	5/24/2016 12:45	5 days	Present	☐	

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

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

1605A34

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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: Wayne Hung **Bill To:** AEI

Company: AEI Consultants

E-Mail: whung@aeiconsultants.com

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

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

Project Location: 3635 13th Avenue, Oakland, CA **Purchase Order#:** 109477

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	Analysis Request: TPH Diesel and motor oil by EPA 8015, with silica gel clean-up	VOCs, TPH-gas by 8260B	HOLD
MW-1		5/24	1030	6	x								x		x	x	x	
MW-2		5/24	1110	6	x								x		x	x	x	
MW-3		5/24	1155	6	x								x		x	x	x	
MW-4		5/24	1225	6	x								x		x	x	x	
MW-5		5/24	1235	6	x								x		x	x	x	
MW-6		5/24	1210	6	x								x		x	x	x	
MW-7		5/24	1245	6	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:
	5/24/16	1426	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 3.1 WET ICE

GOOD CONDITION_____

HEAD SPACE ABSENT_____

DECHLORINATED IN LAB_____

APPROPRIATE CONTAINERS_____

PRESERVED IN LAB_____

COMMENTS:

VOAS O&G METALS OTHER HAZARDOUS:

PRESERVATION_____ pH<2_____

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Sample Receipt Checklist

Client Name:	**AEI Consultants**	Date and Time Received:	**5/24/2016 14:26**
Project Name:	**338841;Kia**	Date Logged:	**5/24/2016**
WorkOrder №:	**1605A34** Matrix: Water	Received by:	Valerie Riva
Carrier:	Client Drop-In	Logged by:	Valerie Riva

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Sample/Temp Blank temperature	Temp: 3.1°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 ☑	

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: