

RECEIVED

By Alameda County Environmental Health 1:20 pm, Jan 14, 2016

Neil and Mary Cotter
John and Antoinette Coyle
2847 Arguello Drive
Burlingame, CA94010

11 January 2016

Karel Detterman, PG
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Re: Third Quarter 2015 Monitoring Report
Fuel leak Case RO0000027 and GeoTracker Global ID Number T0600102106
Grove Street Wash Rack, 3884 Martin Luther King Jr. Way, Oakland, California

Dear Ms. Detterman:

Please find attached for your review a copy of the Third Quarter 2015 Monitoring Report for the Grove Street Wash Rack, 3884 Martin Luther King Jr. Way, Oakland, California. This report has been prepared by ERM West Inc. (ERM).

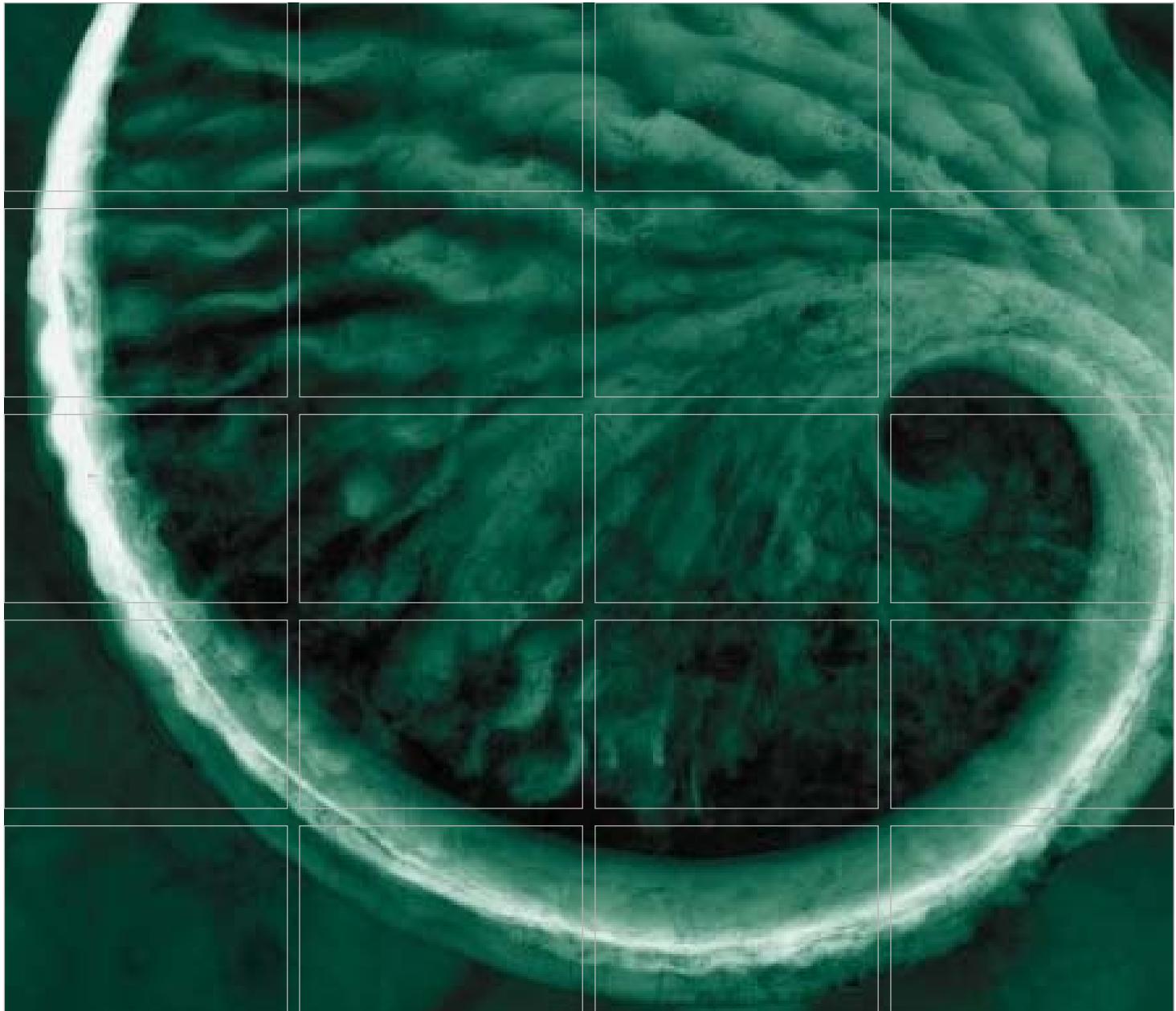
I certify under penalty of perjury that to the best of my knowledge this report is true, complete and correct.

Sincerely

Neil and Mary Cotter:

John and Antoinette Coyle ~~for a -~~ date 1-12-16

cc: Alexandra Foote, Law Offices of Alexandra Foote
Giorgio Molinario, ERM



Third Quarter 2015 Monitoring Report

Prepared for:

Neil Cotter and John Coyle

**3884 Martin Luther King Jr. Way
Oakland, California**

3 December 2015

www.erm.com



Cotter and Coyle

Third Quarter 2015 Monitoring Report

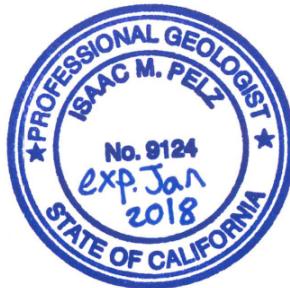
3884 Martin Luther King Jr. Way
Oakland, California

3 December 2015

Project No. 0307273



Mark Bradford
Partner in Charge



Isaac Pelz
Senior Geologist, P.G.



Kevin Almestad
Task Manager

Environmental Resources Management

1277 Treat Boulevard, Suite 500
Walnut Creek, California 94597

T: 925-946-0455
F: 925-946-9968

TABLE OF CONTENTS

LIST OF FIGURES	<i>ii</i>
LIST OF TABLES	<i>ii</i>
1.0 INTRODUCTION	1
1.1 PURPOSE	1
1.2 SITE LOCATION	1
1.3 SITE BACKGROUND	2
2.0 MONITORING PROGRAM	4
2.1 GROUNDWATER MONITORING	4
3.0 THIRD QUARTER 2015 MONITORING ACTIVITIES	5
3.1 GROUNDWATER MONITORING RESULTS	6
3.1.1 <i>Groundwater Elevations and Flow Direction</i>	6
3.1.2 <i>Groundwater Analytical Results</i>	7
4.0 CONCLUSIONS	10
APPENDIX A FIELD DATA SHEETS	
APPENDIX B ANALYTICAL RESULTS AND QA/QC REVIEW	

LIST OF FIGURES

- 1 *Site Location Map*
- 2 *Groundwater Elevation Map*
- 3 *Groundwater Analytical Results*

LIST OF TABLES

- 1 *Groundwater Elevation Data*
- 2 *Groundwater Analytical Results*
- 3 *Groundwater Physical Parameters*

ERM-West, Inc. (ERM) has prepared this *Third Quarter 2015 Monitoring Report* for Neil Cotter and John Coyle (Cotter and Coyle) for the former Grove Street Wash Rack (Global ID No. T0600102106) located at 3884 Martin Luther King Junior Way, in Oakland, Alameda County, California (Site). Groundwater monitoring activities were conducted by ERM on 14 October 2015 consistent with procedures presented in the *2013 URS Work Plan for Additional Soil and Groundwater Investigation* (Work Plan) and in accordance with Leaking Underground Storage Tank (LUST) Fund program requirements (CUF Claim No. 13712). The results of the third quarter 2015 groundwater monitoring event are presented herein.

1.1**PURPOSE**

The main purpose of the monitoring activities documented in this report is to monitor groundwater conditions and trends as requested by the Alameda County Department of Environmental Health (Case No. RO0000027) and San Francisco Bay Regional Water Quality Control Board (Case No. 01-2290).

1.2**SITE LOCATION**

The Site is located at 3884 Martin Luther King Junior Way in Oakland, Alameda County, California, and is identified by the Alameda County Assessor's Office Assessor's Parcel Number (APN) 012-0968-31. The site is located in a mixed commercial and residential zoned area. The site occupies approximately 10,250 square feet. The adjoining properties and nearby land use include the following:

- North: 39th Street, followed by a commercial property;
- East: the Highway 24 right-of-way, followed by the MacArthur BART station;
- South: a multi-story residential and commercial building; and
- West: Martin Luther King Junior Way (MLK Jr. Way), followed by residential and vacant properties.

The surface water body nearest to the site is the San Francisco Bay, located approximately 1.4 miles west of the site. Groundwater beneath the site is interpreted to flow to the west, towards the San Francisco Bay.

SITE BACKGROUND

The site is the location of the former Grove Street Wash Rack and Lucky's Auto. Historical site usage consisted of a gas station that operated in the 1950's and 1960's and an auto body shop operated on the eastern portion of the site until 2004. Three underground storage tanks (USTs) were removed from the gas station on 5 January 1995.

The immediately neighboring property south of the site was redeveloped into a multi-story residential and commercial building in 2006, as it remains today.

No operations currently take place at the site. The former site buildings have been removed, and only concrete pads, paved, and unpaved areas remain on the site. An advertising billboard is located on the southwest corner of the site. The site is surrounded by a chain-link fence.

Multiple environmental investigations and remedial activities have been performed at the site, including:

- In 1995, Scott Environmental performed an excavation of three USTs. One soil sample was taken at each UST removal location. Detectable concentrations of total petroleum hydrocarbons as gasoline (TPH-g) and volatile organic compounds (VOCs) were discovered in the soil samples collected.
- In 1996, H2O GEOL collected one soil sample from a soil stockpile on the site and detected no TPH-g or benzene, toluene, ethylbenzene, and xylenes (BTEX) in the sample.
- In 2004, URS performed a soil and groundwater investigation at the site under the Department of Toxic Substances Control Brownfield's Program. Elevated concentrations of TPH-g were found in the location of two former USTs and elevated concentrations of benzene were found in the location of all three former USTs.
- In 2006, John Carver Consulting performed a soil and groundwater investigation. Elevated concentrations of TPH-g and benzene were discovered to be present on the northwestern portion of the site adjacent to the former USTs.
- In 2013, URS performed a soil and groundwater investigation and developed a work plan. Initially, five groundwater monitoring wells were installed. Three additional wells were installed downgradient in order to address data gaps regarding the vertical and horizontal extent of contamination. Soil samples collected from the monitoring well borings were found to have elevated concentrations of TPH-g and

BTEX at selected locations. Groundwater samples collected had elevated concentrations of TPH-g and BTEX.

- In 2014, URS prepared a Remedial Design and Implementation Plan (RDIP). The RDIP presented the remedial design including excavation of contaminated soil and in-situ chemical oxidation followed by application of enhanced bioremediation augmentation materials, approved by the ACDEH.

2.0

MONITORING PROGRAM

Consistent with the Work Plan that was approved by the ACDEH, groundwater monitoring was conducted as described below.

2.1

GROUNDWATER MONITORING

As stated in the Work Plan groundwater monitoring is required on a semiannual (first and third quarter) schedule. Semiannual monitoring includes the following:

- Site water-level monitoring at all available monitoring wells;
- Collection of groundwater samples from site monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8); and
- Analysis of all groundwater samples for TPH-g, BTEX, naphthalene, 1,2-dichloroethane (1,2-DCA), and cis-1,2-dichloroethene (cis-1,2-DCE) by United States Environmental Protection Agency (USEPA) Method 8260B.

ERM performed the third quarter 2015 semiannual groundwater monitoring event on 14 October 2015.

Consistent with the Work Plan, water level measurements and groundwater samples for the third quarter 2015 semiannual monitoring event were collected from the eight site monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7 and MW-8).

Groundwater levels were collected by measuring the depth below top of surveyed well casings using an electronic sounding tape. Before measuring groundwater levels at each well, the well cap was removed and the water level in the well was allowed to equilibrate with atmospheric pressure.

Monitoring wells were purged and sampled using low-flow sampling techniques to ensure the sampling of representative formation water. Groundwater was purged from the wells using a peristaltic pump with new tubing placed at the mid-point of the well screens. During purging, groundwater physical parameters were measured using a multi-parameter meter equipped with a flow cell. The meter was calibrated in accordance with manufacturer guidelines before use. During purging, the following parameters were measured and/or assessed and recorded on the field sampling sheets:

- Purge volume removed;
- Elapsed purging time;
- Flow rate;
- pH;
- Electrical conductivity;
- Temperature;
- Liquid color;
- Oxidation-reduction potential;
- Dissolved oxygen;
- Turbidity; and
- Odor.

Groundwater field sampling sheets for all site wells sampled are included in Appendix A.

Following stabilization of groundwater parameters, samples were collected into laboratory provided, pre-preserved containers. Following groundwater sample collection, sample containers were labeled, placed in zip-top-style plastic bags, packed in an ice-filled cooler, and transported under standard chain-of-custody procedures to TestAmerica, Inc., a California-certified laboratory in Pleasanton, California.

For quality assurance/quality control purposes, duplicate groundwater samples were collected at a rate of one duplicate sample per 10 groundwater samples. Trip blanks were included in each cooler of samples sent to the laboratory. ERM reviewed the analytical results for quality assurance/quality control (QA/QC) purposes in accordance with the *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (August 2014). Copies of the laboratory data sheets are presented in Appendix B.

3.1

GROUNDWATER MONITORING RESULTS

The groundwater elevations and analytical results for the third quarter 2015 semiannual monitoring event were compared to the results of previous monitoring events and to December 2013 RWQCB Environmental Screening Levels (ESLs) for commercial/industrial properties, and the results are discussed below.

3.1.1

Groundwater Elevations and Flow Direction

Depth-to-water measurements for the third quarter 2015 semiannual monitoring event are presented in Table 1 and were used to generate the potentiometric surface map presented as Figure 2. As shown in Table 1, groundwater was encountered at depths ranging from 13.22 (MW-8) to 18.24 (MW-5) feet below top of casing. In general, groundwater elevations measured in October 2015 decreased compared to the previous monitoring event in March 2015. Groundwater elevations in site monitoring wells ranged from 57.8 (MW-3) to 57.4 (MW-7) feet above mean sea level (Figure 2). Groundwater elevations measured at wells MW-5, MW-6 and MW-7 appeared to be anomalous and therefore, these data points were excluded from the potentiometric surface evaluation. Based on the groundwater elevations measured in October 2015, the estimated groundwater gradient was approximately 0.008 foot per foot toward the west, which is consistent with results from previous groundwater monitoring events.

3.1.2

Groundwater Analytical Results

The groundwater analytical results from the third quarter 2015 semiannual monitoring event are presented below.

3.1.2.1

TPH and VOCs in Groundwater

Analytical results for TPH and VOCs detected in groundwater collected from the eight Site monitoring wells are presented in Table 3. As shown in Table 3, TPH-g, BTEX, naphthalene and 1,2-DCA were detected in site groundwater.

TPH-g was detected in groundwater from three wells, MW-2, MW-4, and MW-6, at concentrations ranging from 1,300 micrograms per liter ($\mu\text{g}/\text{L}$) (MW-6) to 14,000 $\mu\text{g}/\text{L}$ (MW-4) during the October 2015 monitoring event. The concentrations of TPH-g in groundwater were above the ESL of 100 $\mu\text{g}/\text{L}$ at MW-2, MW-4 and MW-6. The concentrations of TPH-g detected in groundwater at MW-2, MW-4 and MW-6 were generally consistent with historical results.

Benzene was detected in groundwater from three wells, MW-2, MW-4, and MW-6, at concentrations ranging from 72 $\mu\text{g}/\text{L}$ (MW-6) to 3,600 $\mu\text{g}/\text{L}$ (MW-2) during the October 2015 monitoring event. The concentrations of benzene in groundwater were above the ESL of 1 $\mu\text{g}/\text{L}$ at MW-2, MW-4 and MW-6. The concentrations of benzene in groundwater at MW-2, MW-4 and MW-6 were consistent with historical results.

Toluene was detected in groundwater from three wells, MW-2, MW-4, and MW-6, at concentrations ranging from 0.55 $\mu\text{g}/\text{L}$ to 170 $\mu\text{g}/\text{L}$ during the October monitoring event. The concentrations of toluene in groundwater were above the ESL of 40 $\mu\text{g}/\text{L}$ at MW-2 and MW-4 and below the ESL at MW-6. Concentrations of toluene generally decreased compared to prior monitoring events.

Ethylbenzene was detected in groundwater from three wells, MW-2, MW-4, and MW-6, at concentrations ranging from 1.1 $\mu\text{g}/\text{L}$ to 1,600 $\mu\text{g}/\text{L}$ during the October monitoring event. The concentrations of ethylbenzene in groundwater were above the ESL of 30 $\mu\text{g}/\text{L}$ at MW-2 and MW-4, and below the ESL at MW-6. ESL Concentrations of ethylbenzene in groundwater generally decreased compared to prior monitoring events. The concentration of ethylbenzene in MW-6 was above the ESL during the first quarter 2015 monitoring event, and is now below the ESL.

Xylene was detected in groundwater from three wells, MW-2, MW-4, and MW-6, at concentrations ranging from 2.6 $\mu\text{g}/\text{L}$ to 1,600 $\mu\text{g}/\text{L}$ during the

October monitoring event. The concentrations of xylene in groundwater were above the ESL of 20 µg/L at MW-2 and MW-4, and below the ESL at MW-6. In general, concentrations of xylene in groundwater decreased from the first quarter 2015 monitoring event as shown in Table 3.

Naphthalene was detected in groundwater from two wells, MW-2 and MW-4, at concentrations of 7.8 µg/L (MW-2) and 150 µg/L (MW-4) during the October 2015 monitoring event. The concentrations of naphthalene in groundwater were above the ESL of 6.1 µg/L at MW-2 and MW-4. As shown in Table 3, naphthalene concentrations in groundwater samples collected from MW-2 and MW-4 appear to be generally decreasing over time. However, the elevated reporting limit for the sample collected at MW-2 during the first quarter monitoring event does not allow a quantitative comparison for that well during this period.

1,2-DCA was detected in groundwater from two wells, MW-1 and MW-2, at concentrations of 2.1 µg/L (MW-1) and 0.74 µg/L (MW-2) during the October 2015 monitoring event. The groundwater concentrations of 1,2-DCA at MW-1 and MW-2 were above the ESL of 0.5 µg/L. 1,2-DCA concentrations in groundwater samples collected from MW-2 were generally in the same range; however, due to the limited number of data points and the concentrations close to or below the reporting limit, a clear trend is not discernible.

3.1.2.1 *Data Quality Review*

ERM reviewed analytical data quality including: trip and laboratory blanks, field duplicate results, laboratory control samples (LCS) and duplicates (LCSD), matrix spike samples (MS) and duplicates (MSD), surrogate recoveries, and holding times. All samples were received within temperature at the laboratory and were analyzed within method-specified holding times. No analytes were detected in the trip or method blanks analyzed. Surrogate recoveries were within acceptance criteria. LCS and MS sample recoveries were also within acceptance criteria. LCSD and MSD samples were within relative percent difference (RPD) criteria of their respective LCS and MS samples. The RPDs of TPH-g, benzene, toluene, ethylbenzene, and xylenes were above the 20 percent RPD criteria; however, only TPH-g and benzene results were above 5 times the reporting limit; therefore only those results were J-qualified. Overall, all data reviewed are considered usable for their intended purpose.

3.1.2.3 *Groundwater Physical Parameters*

Groundwater physical parameters (conductivity, temperature, pH, ORP, and DO) were measured at regular intervals during the purging process.

The final field parameter measurements prior to sampling are summarized in Table 2. The following are ranges of the final parameter measurements from all eight monitoring wells at the site prior to sampling:

- Conductivity ranged from 0.568 to 1.137 mS/cm;
- Temperature ranged from 18.38 to 23.48 °C;
- pH ranged between 6.2 and 6.87;
- ORP ranged from -87.3 to 146 millivolts (mV); and
- DO ranged from 0.14 to 0.79 mg/L.

Refer to Appendix A for the specific range of parameters in each monitoring well.

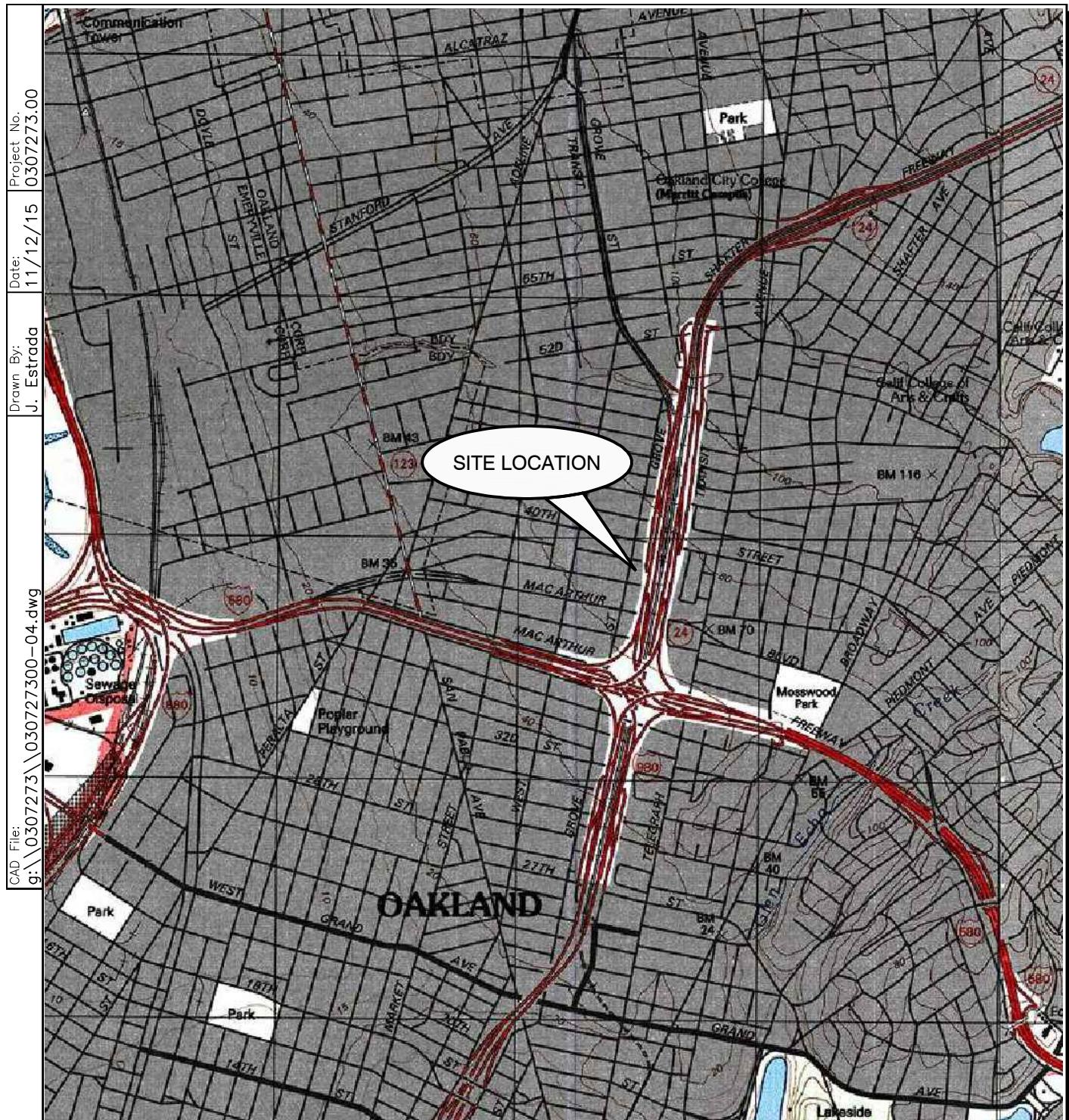
Based on a comparison of the October 2015 groundwater monitoring event to historical monitoring results, ERM has developed the following conclusions:

- Groundwater elevations and physical parameters were generally consistent with historical observations.
- Analytical results for groundwater samples collected from site monitoring wells were generally consistent with previous monitoring results. The historical trend shows generally stable TPH-g and BTEX concentrations in groundwater.
- TPH-g and benzene concentrations in groundwater exceeded the ESL in MW-2, MW-4, and MW-6.

Toluene, ethylbenzene, and xylene concentrations in groundwater exceeded their respective ESLs at MW-2 and MW-4 and were below the ESLs at MW-6.

- Naphthalene concentrations in groundwater exceeded the ESL in MW-2 and MW-4. Naphthalene concentrations decreased in groundwater at MW-4 since the first quarter 2015 monitoring event; however, no discernible trend was evident for concentrations that have been close to or below the reporting limit in groundwater from MW-2.
- 1,2-DCA concentrations in groundwater exceeded the ESL in MW-1 and MW-2. No discernible trend was evident for 1,2-DCA concentrations that have been close to or below the reporting limit in groundwater from MW-1, MW-2, and MW-4.
- Cis-1,2-DCE was not detected in any groundwater samples collected.

Figures



SCALE 1:24,000

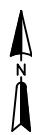
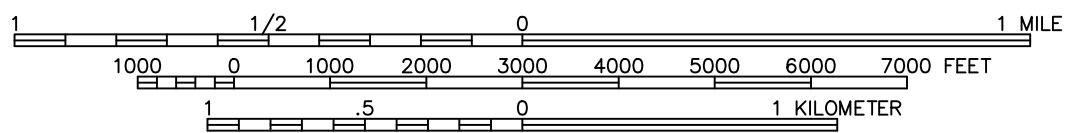


Figure 1

*Site Location Map
3884 Martin Luther King Jr. Way
Oakland, California*

References:
TOPO!® Software
U.S.G.S. 7.5 Minute Series (Topographic) Quadrangle,
Oakland West, California, 1993

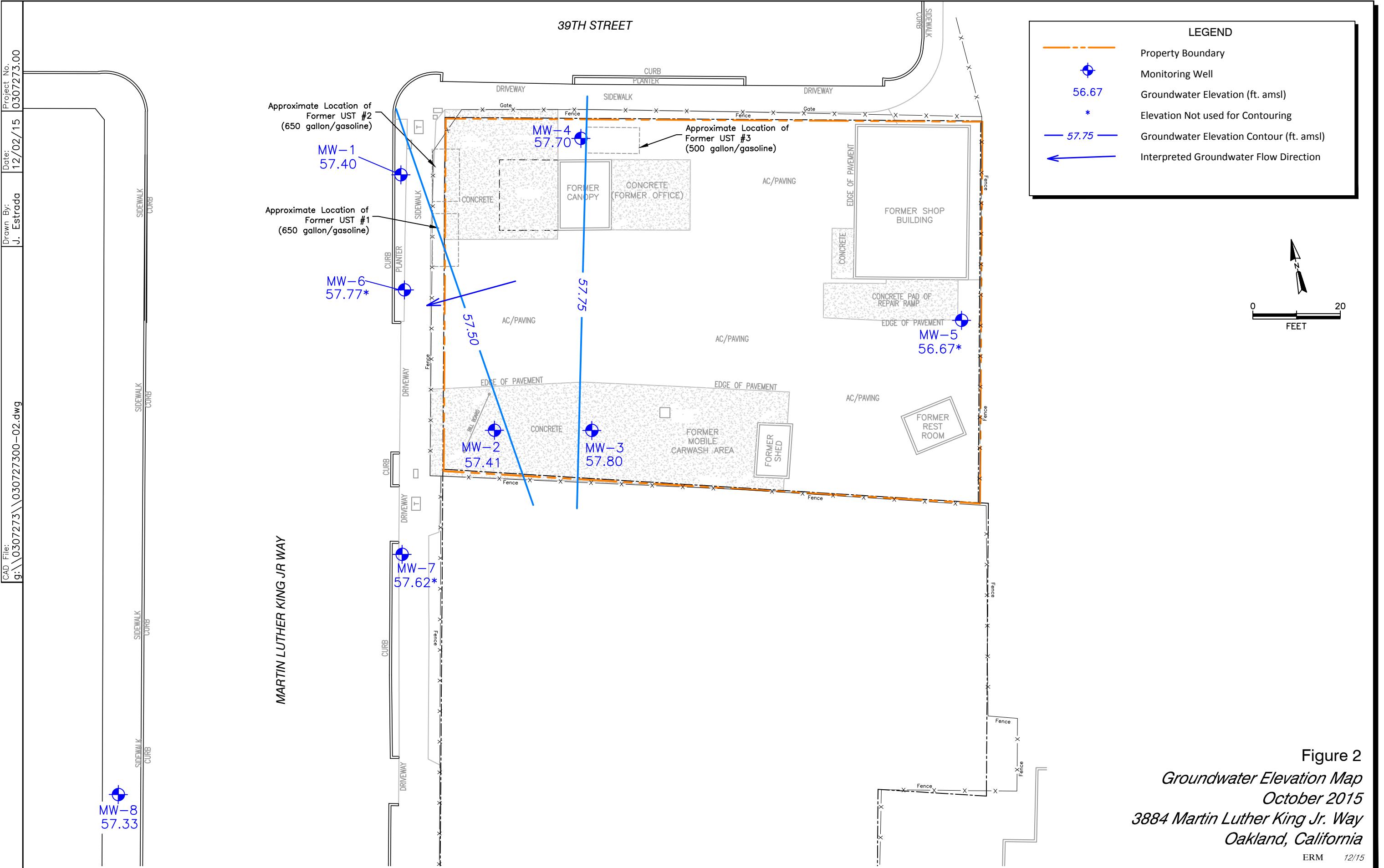


Figure 2
Groundwater Elevation Map
October 2015
3884 Martin Luther King Jr. Way
Oakland, California

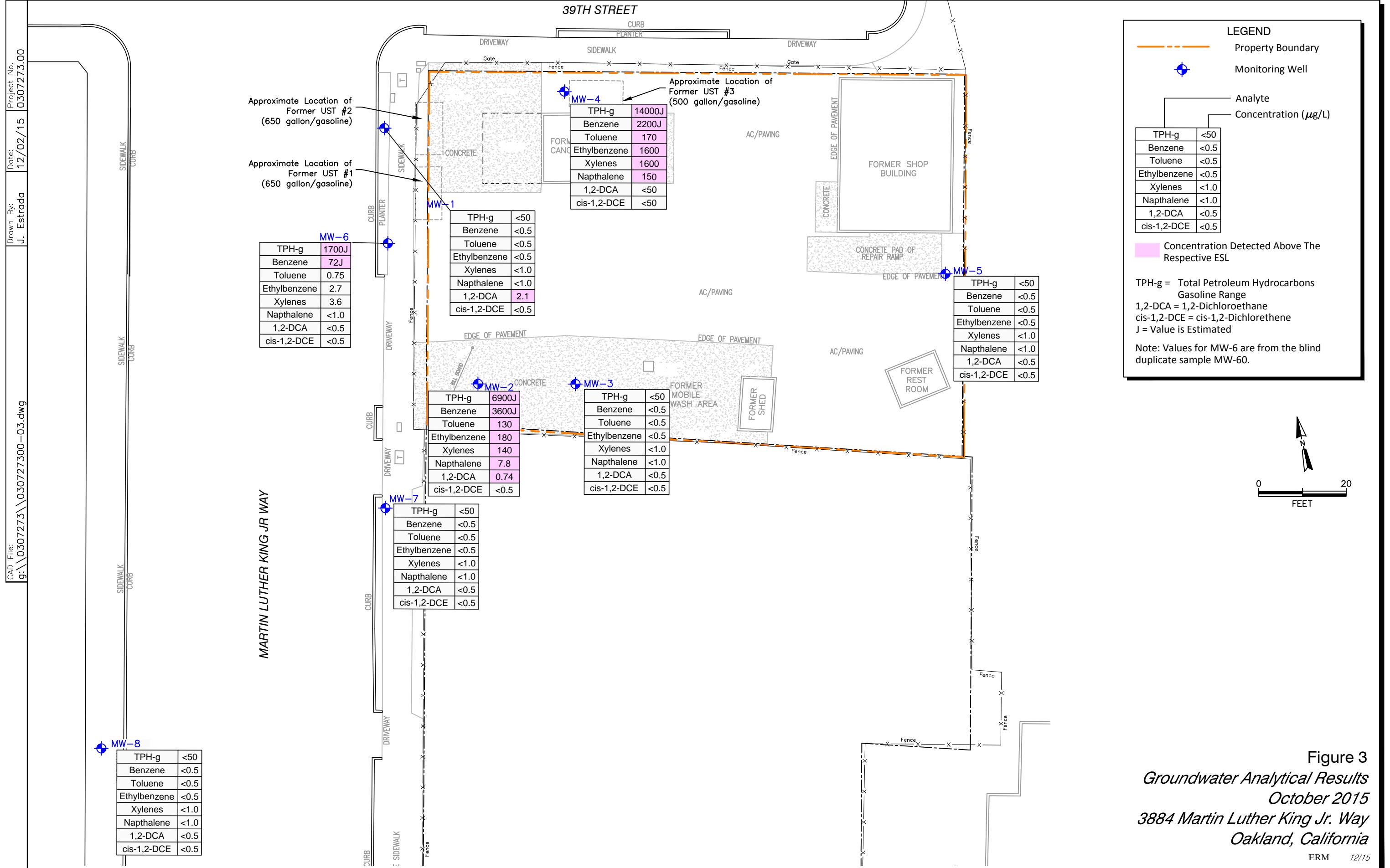


Figure 3
Groundwater Analytical Results
October 2015
3884 Martin Luther King Jr. Way
Oakland, California

Tables

Table 1
Groundwater Elevation Data
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Well Screen (ft-bmp)	Depth to Groundwater (ft-bmp)	Measuring Point Elevation (ft-msl)	Water Elevation (ft-amsl)
MW-1	7/18/2013	12-19	14.43	72.83	58.40
MW-1	10/23/2013	12-19	14.99	72.83	57.84
MW-1	7/10/2014	12-19	14.41	72.83	58.42
MW-1	9/15/2014	12-19	15.16	72.83	57.67
MW-1	1/9/2015	12-19	12.14	72.83	60.69
MW-1	3/31/2015	12-19	13.57	72.83	59.26
MW-1	10/14/15	12-19	15.43	72.83	57.40
MW-2	7/18/2013	13-20	14.90	73.16	58.26
MW-2	10/23/2013	13-20	15.07	73.16	58.09
MW-2	7/10/2014	13-20	14.69	73.16	58.47
MW-2	9/15/2014	13-20	15.45	73.16	57.71
MW-2	1/9/2015	13-20	13.82	73.16	59.34
MW-2	3/31/2015	13-20	14.08	73.16	59.08
MW-2	10/14/15	13-20	15.75	73.16	57.41
MW-3	7/18/2013	13-20	15.08	73.54	58.46
MW-3	10/23/2013	13-20	15.45	73.54	58.09
MW-3	7/10/2014	13-20	14.68	73.54	58.86
MW-3	9/15/2014	13-20	15.56	73.54	57.98
MW-3	1/9/2015	13-20	13.32	73.54	60.22
MW-3	3/31/2015	13-20	14.25	73.54	59.29
MW-3	10/14/2015	13-20	15.74	73.54	57.8
MW-4	7/18/2013	11-18	14.42	73.18	58.76
MW-4	10/23/2013	11-18	15.15	73.18	58.03
MW-4	7/10/2014	11-18	14.43	73.18	58.75
MW-4	9/15/2014	11-18	15.25	73.18	57.93
MW-4	1/9/2015	11-18	12.91	73.18	60.27
MW-4	3/31/2015	11-18	13.68	73.18	59.50
MW-4	10/14/2015	11-18	15.48	73.18	57.70
MW-5	7/18/2013	15-21	16.89	74.92	58.03
MW-5	10/23/2013	15-21	17.65	74.92	57.27
MW-5	7/10/2014	15-21	16.79	74.92	58.13
MW-5	9/15/2014	15-21	17.82	74.92	57.10
MW-5	1/9/2015	15-21	14.78	74.91	60.13
MW-5	3/31/2015	15-21	15.48	74.91	59.43
MW-5	10/14/2015	15-21	18.24	74.91	56.67
MW-6	9/15/2014	11-19	14.86	72.43	57.57
MW-6	1/9/2015	11-19	11.39	72.43	61.04
MW-6	3/31/2015	11-19	13.26	72.43	59.17
MW-6	10/14/2015	11-19	14.66	72.43	57.77
MW-7	9/15/2014	11-19	13.61	71.46	57.85
MW-7	1/9/2015	11-19	11.27	71.46	60.19
MW-7	3/31/2015	11-19	11.93	71.46	59.53
MW-7	10/14/2015	11-19	13.84	71.46	57.62
MW-8	9/15/2014	11-18	14.23	70.75	56.52
MW-8	1/9/2015	11-18	10.3	70.75	60.45
MW-8	3/31/2015	11-18	12.31	70.75	58.44
MW-8	10/14/2015	11-18	13.22	70.75	57.53

Abbreviations:

ft-msl - Feet relative to mean sea level

ft-amsl - Feet above mean sea level

ft-bmp - Feet below measuring point

Table 2
Groundwater Physical Parameters
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Temperature (°Celsius)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
MW-1	7/18/2013	20.0	1.129	5.74	6.35	63.4
MW-1	10/23/2013	19.2	1.189	1.45	6.42	-55.4
MW-1	7/10/2014	20.0	1.100	0.81	6.42	33.2
MW-1	9/15/2014	20.5	1.100	0.13	6.15	74.9
MW-1	1/9/2015	20.3	1.077	0.27	6.55	-24.9
MW-1	3/31/2015	19.5	1.021	0.91	6.12	61.9
MW-1	10/14/15	21.5	0.765	0.30	6.20	82.6
MW-2	7/18/2013	18.7	0.901	3.63	6.62	51.2
MW-2	10/23/2013	18.3	0.852	0.57	6.59	-93.4
MW-2	7/10/2014	19.3	0.878	0.51	6.72	-160.3
MW-2	9/15/2014	19.0	0.936	0.07	6.35	-49.3
MW-2	1/9/2015	19.1	0.959	0.47	6.79	-59.5
MW-2	3/31/2015	18.2	0.934	0.13	6.38	-113.4
MW-2	10/14/15	19.85	0.673	0.40	6.64	-87.3
MW-3	7/18/2013	18.7	0.799	5.36	6.52	71.9
MW-3	10/23/2013	18.3	1.133	1.84	6.94	213.6
MW-3	7/10/2014	19.6	1.121	1.99	7.10	54.3
MW-3	9/15/2014	18.9	1.162	0.28	6.73	97.4
MW-3	1/9/2015	18.9	1.147	5.30	7.11	334.8
MW-3	3/31/2015	18.2	1.113	3.48	6.71	435.5
MW-3	10/14/2015	19.76	0.773	0.79	6.80	136.0
MW-4	7/18/2013	20.5	1.438	4.21	6.44	25.1
MW-4	10/23/2013	20.6	1.271	0.92	6.34	-85.3
MW-4	7/10/2014	21.5	1.379	0.65	6.50	-47.9
MW-4	9/15/2014	21.2	1.463	0.05	6.25	-20.0
MW-4	1/9/2015	20.1	1.424	0.17	6.74	-59.3
MW-4	3/31/2015	19.6	1.386	0.14	6.29	-48.5
MW-4	10/14/2015	23.48	1.137	0.31	6.44	-31.1
MW-5	7/18/2013	17.1	0.845	6.17	6.63	78.2
MW-5	10/23/2013	17.0	0.841	0.81	6.56	205.2
MW-5	7/10/2014	17.5	0.795	0.53	6.48	73.8
MW-5	9/15/2014	17.4	0.861	0.08	6.20	103.5
MW-5	1/9/2015	17.6	0.864	0.30	6.49	256.4
MW-5	3/31/2015	17.3	0.842	0.12	6.12	460.5
MW-5	10/14/2015	18.38	0.611	0.30	6.20	123.1
MW-6	9/15/2014	21.3	1.757	2.56	6.51	98.4
MW-6	1/9/2015	20.1	1.716	0.77	7.01	-7.9
MW-6	3/31/2015	19.8	1.569	0.07	6.47	-72.6
MW-6	10/14/2015	22.94	0.977	0.14	6.56	-18.1
MW-7	9/15/2014	20.5	1.508	4.95	6.66	104.3
MW-7	1/9/2015	19.5	1.377	3.14	7.26	115.5
MW-7	3/31/2015	19.2	1.277	0.85	6.74	118.6
MW-7	10/14/2015	22.04	0.899	0.19	6.74	146.0
MW-8	9/15/2014	20.4	1.055	5.87	6.81	106.1
MW-8	1/9/2015	19.9	0.813	2.39	9.20	92.9
MW-8	3/31/2015	19.4	0.723	1.03	6.89	155.7
MW-8	10/14/2015	21.75	0.568	0.18	6.87	136.3

Abbreviations:

DO = Dissolved Oxygen

mV = millivolt

mg/L = milligrams per liter

ORP = Oxidation-Reduction Potential

mS/cm = millisiemens per centimeter

Table 3
Petroleum Hydrocarbons and Volatile Organic Compounds
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Analyte							
		TPH as Gas (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	cis-1,2-DCE (µg/L)
<i>Groundwater ESL (µg/L)</i>		100	1	40	30	20	6.1	0.5	6
MW-1	7/18/2013	<50	<0.5	<0.5	<0.5	<1.0	<1.0	4.5	<0.5
MW-1	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-10 ²	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-1	7/10/2014	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-1	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	4.0	<0.5
MW-1	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	3.1	<0.5
MW-1	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	1.8	<0.5
MW-1	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	2.1	<0.5
MW-2	7/18/2013	560	220	2.9	4.6	35	<1.0	4.3	<0.5
MW-2	10/23/2013	9400	8200	200	120	380	NA	NA	NA
MW-2	7/10/2014	8800 J	4800	130	140	<200	NA	NA	NA
MW-2	9/15/2014	11000	5600	180	190	<200	<200	<100	<100
MW-2	1/9/2015	7600	4200	110	130	98	17	2.2	<0.5
FD-1 ⁴	1/9/2015	6600	3600	99	110	90	15	2.3	<0.5
MW-2	3/31/2015	10000	5900	160	230	150	<100	<50	<0.5
MW-2	10/14/15	6900 J	3600 J	130	180	140	7.8	0.74	<0.5
MW-3	7/18/2013	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-3	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-3	7/10/2014	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-3	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
FD-1 ³	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-3	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-3	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-3	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-4	7/18/2013	9500	980	510	270	2600	180	0.7	<0.5
MW-40 ¹	7/18/2013	13000	1100	930	800	3500	180	0.6	<0.5
MW-4	10/23/2013	15000	1800	480	1500	3100	NA	NA	NA
MW-4	7/10/2014	25000 J	2500 J	950	1800 J	6400	NA	NA	NA
MW-40 ¹	7/10/2014	32000 J	3100 J	1100	2400 J	6100	NA	NA	NA
MW-4	9/15/2014	22000	2800	470	2200	3000	370	<25	<25
MW-4	1/9/2015	21000	1900	180	1800	3600	290	0.67	<0.5
MW-4	3/31/2015	32000	3100	730	2900	8100	530	<50	<50
MW-4	10/14/15	14000 J	2200 J	170	1600	1600	150	<50	<50
MW-5	7/18/2013	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-5	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-5	7/10/2014	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-5	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-5	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-5	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-5	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-6	9/15/2014	300	5.6	<0.5	0.6	4.7	<1.0	<0.5	<0.5
MW-6	1/9/2015	160	10	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-6	3/31/2015	2000	150	1.4	48	2.9	<1.0	<0.5	<0.5
MW-60 ⁴	3/31/2015	2100	160	1.5	53	3.5	<1.0	<0.5	<0.5
MW-6	10/14/15	1300 J	40 J	0.55	1.1	2.6	<1.0	<0.5	<0.5
MW-60 ⁴	10/14/15	1700 J	72 J	0.75	2.7	3.6	<1.0	<0.5	<0.5

Table 3
Petroleum Hydrocarbons and Volatile Organic Compounds
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Analyte							
		TPH as Gas (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	cis-1,2-DCE (µg/L)
<i>Groundwater ESL (µg/L)</i>		100	1	40	30	20	6.1	0.5	6
MW-7	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-7	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-7	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-7	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-8	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-8	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-8	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-8	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	7/18/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
Trip Blank	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
Trip Blank	7/10/2014	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
Trip Blank	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	10/14/15	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5

Notes:

Sample concentrations reported in micrograms per liter (µg/L)

Groundwater ESL = Environmental Screening Level in groundwater for commercial/industrial properties (RWQCB ESL Workbook, and updated December 2013)

Bold values indicate concentrations detected above the laboratory reporting limit

#	Indicates a concentration detected above the respective ESL
<0.5	Compound not detected at or above the laboratory reporting limit
NA	Not analyzed
J	Value is Estimated
UJ	Non-detected, Estimated

¹ Field duplicate of MW-4

² Field duplicate of MW-1

³ Field duplicate of MW-3

⁴ Field duplicate of MW-6

Abbreviations:

TPH = Total Petroleum Hydrocarbons

1,2-DCA = 1,2-Dichloroethane

cis-1,2-DCE = cis-1,2-Dichloroethene

VOCs = Volatile organic compounds

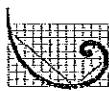
Appendix A
Field Data Sheets



LOW-FLOW GROUNDWATER SAMPLING FORM



LOW-FLOW GROUNDWATER SAMPLING FORM



LOW-FLOW GROUNDWATER SAMPLING FORM

ERM



LOW-FLOW GROUNDWATER SAMPLING FORM



LOW-FLOW GROUNDWATER SAMPLING FORM



LOW-FLOW GROUNDWATER SAMPLING FORM



LOW-FLOW GROUNDWATER SAMPLING FORM



LOW-FLOW GROUNDWATER SAMPLING FORM

Appendix B
Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-68025-1

Client Project/Site: MLK Jr. Way GW Sampling

For:

ERM-West

1277 Treat Blvd., Suite 500

Walnut Creek, California 94597

Attn: Giorgio Molinario



Authorized for release by:

10/29/2015 11:55:41 AM

Micah Smith, Project Manager II

(925)484-1919

micah.smith@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	7
QC Sample Results	17
QC Association Summary	22
Lab Chronicle	23
Certification Summary	25
Method Summary	26
Sample Summary	27
Chain of Custody	28
Receipt Checklists	29

Definitions/Glossary

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ERM-West
Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Job ID: 720-68025-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-68025-1

Comments

No additional comments.

Receipt

The samples were received on 10/15/2015 11:16 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ERM-West
Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-5

Lab Sample ID: 720-68025-1

No Detections.

Client Sample ID: MW-3

Lab Sample ID: 720-68025-2

No Detections.

Client Sample ID: MW-2

Lab Sample ID: 720-68025-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3600		50		ug/L	100		8260B/CA_LUFT	Total/NA
1,2-Dichloroethane	0.74		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Ethylbenzene	180		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Naphthalene	7.8		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Toluene	130		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Xylenes, Total	140		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	6900		5000		ug/L	100		8260B/CA_LUFT	Total/NA
									MS

Client Sample ID: MW-4

Lab Sample ID: 720-68025-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2200		50		ug/L	100		8260B/CA_LUFT	Total/NA
Ethylbenzene	1600		50		ug/L	100		8260B/CA_LUFT	Total/NA
Naphthalene	150		100		ug/L	100		8260B/CA_LUFT	Total/NA
Toluene	170		50		ug/L	100		8260B/CA_LUFT	Total/NA
Xylenes, Total	1600		100		ug/L	100		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	14000		5000		ug/L	100		8260B/CA_LUFT	Total/NA
									MS

Client Sample ID: MW-1

Lab Sample ID: 720-68025-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	2.1		0.50		ug/L	1		8260B/CA_LUFT	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 720-68025-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	40		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Ethylbenzene	1.1		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Toluene	0.55		0.50		ug/L	1		8260B/CA_LUFT	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Detection Summary

Client: ERM-West
Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-6 (Continued)

Lab Sample ID: 720-68025-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	2.6		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	1300		50		ug/L	1		8260B/CA_LUFT MS	Total/NA

Client Sample ID: MW-60

Lab Sample ID: 720-68025-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	72		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	2.7		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Toluene	0.75		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	3.6		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	1700		50		ug/L	1		8260B/CA_LUFT MS	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 720-68025-8

No Detections.

Client Sample ID: MW-8

Lab Sample ID: 720-68025-9

No Detections.

Client Sample ID: TB

Lab Sample ID: 720-68025-10

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-5

Date Collected: 10/14/15 09:17

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-1

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/27/15 12:41	1
1,2-Dichloroethane	ND		0.50		ug/L			10/27/15 12:41	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/27/15 12:41	1
Ethylbenzene	ND		0.50		ug/L			10/27/15 12:41	1
Naphthalene	ND		1.0		ug/L			10/27/15 12:41	1
Toluene	ND		0.50		ug/L			10/27/15 12:41	1
Xylenes, Total	ND		1.0		ug/L			10/27/15 12:41	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			10/27/15 12:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		67 - 130					10/27/15 12:41	1
1,2-Dichloroethane-d4 (Surr)	86		72 - 130					10/27/15 12:41	1
Toluene-d8 (Surr)	100		70 - 130					10/27/15 12:41	1

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-3

Date Collected: 10/14/15 10:10

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-2

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/27/15 13:09	1
1,2-Dichloroethane	ND		0.50		ug/L			10/27/15 13:09	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/27/15 13:09	1
Ethylbenzene	ND		0.50		ug/L			10/27/15 13:09	1
Naphthalene	ND		1.0		ug/L			10/27/15 13:09	1
Toluene	ND		0.50		ug/L			10/27/15 13:09	1
Xylenes, Total	ND		1.0		ug/L			10/27/15 13:09	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			10/27/15 13:09	1
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96			67 - 130				10/27/15 13:09	1
1,2-Dichloroethane-d4 (Surr)	90			72 - 130				10/27/15 13:09	1
Toluene-d8 (Surr)	101			70 - 130				10/27/15 13:09	1

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-2

Date Collected: 10/14/15 10:52

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-3

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3600		50		ug/L			10/28/15 14:38	100
1,2-Dichloroethane	0.74		0.50		ug/L			10/27/15 13:37	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/27/15 13:37	1
Ethylbenzene	180		0.50		ug/L			10/27/15 13:37	1
Naphthalene	7.8		1.0		ug/L			10/27/15 13:37	1
Toluene	130		0.50		ug/L			10/27/15 13:37	1
Xylenes, Total	140		1.0		ug/L			10/27/15 13:37	1
Gasoline Range Organics (GRO) -C5-C12	6900		5000		ug/L			10/28/15 14:38	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	106		67 - 130					10/27/15 13:37	1
4-Bromofluorobenzene	95		67 - 130					10/28/15 14:38	100
1,2-Dichloroethane-d4 (Surr)	93		72 - 130					10/27/15 13:37	1
1,2-Dichloroethane-d4 (Surr)	114		72 - 130					10/28/15 14:38	100
Toluene-d8 (Surr)	105		70 - 130					10/27/15 13:37	1
Toluene-d8 (Surr)	95		70 - 130					10/28/15 14:38	100

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-4

Date Collected: 10/14/15 11:32

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-4

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2200		50		ug/L			10/28/15 15:08	100
1,2-Dichloroethane	ND		50		ug/L			10/28/15 15:08	100
cis-1,2-Dichloroethene	ND		50		ug/L			10/28/15 15:08	100
Ethylbenzene	1600		50		ug/L			10/28/15 15:08	100
Naphthalene	150		100		ug/L			10/28/15 15:08	100
Toluene	170		50		ug/L			10/28/15 15:08	100
Xylenes, Total	1600		100		ug/L			10/28/15 15:08	100
Gasoline Range Organics (GRO) -C5-C12	14000		5000		ug/L			10/28/15 15:08	100
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99			67 - 130				10/28/15 15:08	100
1,2-Dichloroethane-d4 (Surr)	117			72 - 130				10/28/15 15:08	100
Toluene-d8 (Surr)	97			70 - 130				10/28/15 15:08	100

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-1

Date Collected: 10/14/15 13:34

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-5

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/28/15 15:37	1
1,2-Dichloroethane	2.1		0.50		ug/L			10/28/15 15:37	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/28/15 15:37	1
Ethylbenzene	ND		0.50		ug/L			10/28/15 15:37	1
Naphthalene	ND		1.0		ug/L			10/28/15 15:37	1
Toluene	ND		0.50		ug/L			10/28/15 15:37	1
Xylenes, Total	ND		1.0		ug/L			10/28/15 15:37	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			10/28/15 15:37	1
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95			67 - 130				10/28/15 15:37	1
1,2-Dichloroethane-d4 (Surr)	118			72 - 130				10/28/15 15:37	1
Toluene-d8 (Surr)	97			70 - 130				10/28/15 15:37	1

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-6

Date Collected: 10/14/15 14:08

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-6

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	40		0.50		ug/L			10/28/15 17:04	1
1,2-Dichloroethane	ND		0.50		ug/L			10/28/15 17:04	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/28/15 17:04	1
Ethylbenzene	1.1		0.50		ug/L			10/28/15 17:04	1
Naphthalene	ND		1.0		ug/L			10/28/15 17:04	1
Toluene	0.55		0.50		ug/L			10/28/15 17:04	1
Xylenes, Total	2.6		1.0		ug/L			10/28/15 17:04	1
Gasoline Range Organics (GRO) -C5-C12	1300		50		ug/L			10/28/15 17:04	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	113			67 - 130				10/28/15 17:04	1
1,2-Dichloroethane-d4 (Surr)	118			72 - 130				10/28/15 17:04	1
Toluene-d8 (Surr)	99			70 - 130				10/28/15 17:04	1

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-60

Date Collected: 10/14/15 14:20

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-7

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	72		0.50		ug/L			10/27/15 15:29	1
1,2-Dichloroethane	ND		0.50		ug/L			10/27/15 15:29	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/27/15 15:29	1
Ethylbenzene	2.7		0.50		ug/L			10/27/15 15:29	1
Naphthalene	ND		1.0		ug/L			10/27/15 15:29	1
Toluene	0.75		0.50		ug/L			10/27/15 15:29	1
Xylenes, Total	3.6		1.0		ug/L			10/27/15 15:29	1
Gasoline Range Organics (GRO) -C5-C12	1700		50		ug/L			10/27/15 15:29	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	113			67 - 130				10/27/15 15:29	1
1,2-Dichloroethane-d4 (Surr)	87			72 - 130				10/27/15 15:29	1
Toluene-d8 (Surr)	100			70 - 130				10/27/15 15:29	1

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-7

Date Collected: 10/14/15 14:53

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-8

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/27/15 15:57	1
1,2-Dichloroethane	ND		0.50		ug/L			10/27/15 15:57	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/27/15 15:57	1
Ethylbenzene	ND		0.50		ug/L			10/27/15 15:57	1
Naphthalene	ND		1.0		ug/L			10/27/15 15:57	1
Toluene	ND		0.50		ug/L			10/27/15 15:57	1
Xylenes, Total	ND		1.0		ug/L			10/27/15 15:57	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			10/27/15 15:57	1
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95			67 - 130				10/27/15 15:57	1
1,2-Dichloroethane-d4 (Surr)	85			72 - 130				10/27/15 15:57	1
Toluene-d8 (Surr)	100			70 - 130				10/27/15 15:57	1

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-8

Date Collected: 10/14/15 15:46

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-9

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/27/15 16:25	1
1,2-Dichloroethane	ND		0.50		ug/L			10/27/15 16:25	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/27/15 16:25	1
Ethylbenzene	ND		0.50		ug/L			10/27/15 16:25	1
Naphthalene	ND		1.0		ug/L			10/27/15 16:25	1
Toluene	ND		0.50		ug/L			10/27/15 16:25	1
Xylenes, Total	ND		1.0		ug/L			10/27/15 16:25	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			10/27/15 16:25	1
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97			67 - 130				10/27/15 16:25	1
1,2-Dichloroethane-d4 (Surr)	88			72 - 130				10/27/15 16:25	1
Toluene-d8 (Surr)	100			70 - 130				10/27/15 16:25	1

TestAmerica Pleasanton

Client Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: TB

Date Collected: 10/14/15 00:00

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-10

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/27/15 11:15	1
1,2-Dichloroethane	ND		0.50		ug/L			10/27/15 11:15	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/27/15 11:15	1
Ethylbenzene	ND		0.50		ug/L			10/27/15 11:15	1
Naphthalene	ND		1.0		ug/L			10/27/15 11:15	1
Toluene	ND		0.50		ug/L			10/27/15 11:15	1
Xylenes, Total	ND		1.0		ug/L			10/27/15 11:15	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			10/27/15 11:15	1
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96			67 - 130				10/27/15 11:15	1
1,2-Dichloroethane-d4 (Surr)	86			72 - 130				10/27/15 11:15	1
Toluene-d8 (Surr)	100			70 - 130				10/27/15 11:15	1

TestAmerica Pleasanton

QC Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-191472/4

Matrix: Water

Analysis Batch: 191472

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/27/15 08:54	1
1,2-Dichloroethane	ND		0.50		ug/L			10/27/15 08:54	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/27/15 08:54	1
Ethylbenzene	ND		0.50		ug/L			10/27/15 08:54	1
Naphthalene	ND		1.0		ug/L			10/27/15 08:54	1
Toluene	ND		0.50		ug/L			10/27/15 08:54	1
Xylenes, Total	ND		1.0		ug/L			10/27/15 08:54	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			10/27/15 08:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		67 - 130		10/27/15 08:54	1
1,2-Dichloroethane-d4 (Surr)	84		72 - 130		10/27/15 08:54	1
Toluene-d8 (Surr)	98		70 - 130		10/27/15 08:54	1

Lab Sample ID: LCS 720-191472/5

Matrix: Water

Analysis Batch: 191472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Benzene	25.0	27.0		ug/L		108	79 - 130
1,2-Dichloroethane	25.0	23.8		ug/L		95	61 - 132
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	70 - 130
Ethylbenzene	25.0	26.4		ug/L		106	80 - 120
Naphthalene	25.0	26.1		ug/L		105	70 - 130
Toluene	25.0	26.1		ug/L		104	78 - 120
m-Xylene & p-Xylene	25.0	25.8		ug/L		103	70 - 142
o-Xylene	25.0	25.4		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	92		67 - 130
1,2-Dichloroethane-d4 (Surr)	85		72 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCS 720-191472/7

Matrix: Water

Analysis Batch: 191472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Gasoline Range Organics (GRO) -C5-C12	500	437		ug/L		87	62 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	86		72 - 130
Toluene-d8 (Surr)	99		70 - 130

TestAmerica Pleasanton

QC Sample Results

Client: ERM-West
Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-191472/6

Matrix: Water

Analysis Batch: 191472

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	27.4		ug/L		110	79 - 130	2	20
1,2-Dichloroethane	25.0	23.5		ug/L		94	61 - 132	1	20
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	70 - 130	1	20
Ethylbenzene	25.0	27.0		ug/L		108	80 - 120	2	20
Naphthalene	25.0	26.5		ug/L		106	70 - 130	2	20
Toluene	25.0	26.7		ug/L		107	78 - 120	2	20
m-Xylene & p-Xylene	25.0	26.5		ug/L		106	70 - 142	3	20
o-Xylene	25.0	25.9		ug/L		104	70 - 130	2	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	82		72 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 720-191472/8

Matrix: Water

Analysis Batch: 191472

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	500	457		ug/L		91	62 - 120	4	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	86		72 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: 720-68025-1 MS

Matrix: Water

Analysis Batch: 191472

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	28.6		ug/L		115	60 - 140
1,2-Dichloroethane	ND		25.0	24.7		ug/L		99	60 - 140
cis-1,2-Dichloroethene	ND		25.0	27.4		ug/L		109	60 - 140
Ethylbenzene	ND		25.0	27.0		ug/L		108	60 - 140
Naphthalene	ND		25.0	23.8		ug/L		93	56 - 140
Toluene	ND		25.0	26.8		ug/L		107	60 - 140
m-Xylene & p-Xylene	ND		25.0	26.5		ug/L		106	60 - 140
o-Xylene	ND		25.0	26.1		ug/L		104	60 - 140

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	83		72 - 130
Toluene-d8 (Surr)	102		70 - 130

TestAmerica Pleasanton

QC Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-68025-1 MSD

Matrix: Water

Analysis Batch: 191472

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Benzene	ND		25.0	28.4		ug/L		114	60 - 140	1 20
1,2-Dichloroethane	ND		25.0	25.2		ug/L		101	60 - 140	2 20
cis-1,2-Dichloroethene	ND		25.0	27.4		ug/L		110	60 - 140	0 20
Ethylbenzene	ND		25.0	26.7		ug/L		107	60 - 140	1 20
Naphthalene	ND		25.0	24.5		ug/L		96	56 - 140	3 20
Toluene	ND		25.0	26.2		ug/L		105	60 - 140	2 20
m-Xylene & p-Xylene	ND		25.0	26.1		ug/L		104	60 - 140	1 20
o-Xylene	ND		25.0	25.8		ug/L		103	60 - 140	1 20
Surrogate		MSD %Recovery	MSD Qualifier	Limits						
4-Bromofluorobenzene	96			67 - 130						
1,2-Dichloroethane-d4 (Surr)	84			72 - 130						
Toluene-d8 (Surr)	102			70 - 130						

Lab Sample ID: MB 720-191566/4

Matrix: Water

Analysis Batch: 191566

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/28/15 09:18	1
1,2-Dichloroethane	ND		0.50		ug/L			10/28/15 09:18	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/28/15 09:18	1
Ethylbenzene	ND		0.50		ug/L			10/28/15 09:18	1
Naphthalene	ND		1.0		ug/L			10/28/15 09:18	1
Toluene	ND		0.50		ug/L			10/28/15 09:18	1
Xylenes, Total	ND		1.0		ug/L			10/28/15 09:18	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			10/28/15 09:18	1
Surrogate		MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98			67 - 130				10/28/15 09:18	1
1,2-Dichloroethane-d4 (Surr)	100			72 - 130				10/28/15 09:18	1
Toluene-d8 (Surr)	97			70 - 130				10/28/15 09:18	1

Lab Sample ID: LCS 720-191566/5

Matrix: Water

Analysis Batch: 191566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	RPD
Benzene	25.0	24.0		ug/L		96	79 - 130
1,2-Dichloroethane	25.0	25.3		ug/L		101	61 - 132
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	70 - 130
Ethylbenzene	25.0	23.6		ug/L		94	80 - 120
Naphthalene	25.0	19.2		ug/L		77	70 - 130
Toluene	25.0	22.7		ug/L		91	78 - 120
m-Xylene & p-Xylene	25.0	23.9		ug/L		96	70 - 142
o-Xylene	25.0	23.4		ug/L		94	70 - 130

TestAmerica Pleasanton

QC Sample Results

Client: ERM-West
Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-191566/5

Matrix: Water

Analysis Batch: 191566

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	99		72 - 130
Toluene-d8 (Surr)	99		70 - 130

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Lab Sample ID: LCS 720-191566/7

Matrix: Water

Analysis Batch: 191566

Analyte		Spike	LCS	LCS		%Rec.
		Added	Result	Qualifier	Unit	D
Gasoline Range Organics (GRO)		500	529		ug/L	106
-C5-C12						62 - 120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Lab Sample ID: LCSD 720-191566/6

Matrix: Water

Analysis Batch: 191566

Analyte		Spike	LCSD	LCSD		%Rec.		RPD	
		Added	Result	Qualifier	Unit	D	%Rec	Limits	Limit
Benzene		25.0	24.3		ug/L		97	79 - 130	1
1,2-Dichloroethane		25.0	26.0		ug/L		104	61 - 132	20
cis-1,2-Dichloroethene		25.0	25.0		ug/L		100	70 - 130	1
Ethylbenzene		25.0	23.8		ug/L		95	80 - 120	20
Naphthalene		25.0	20.1		ug/L		80	70 - 130	5
Toluene		25.0	22.9		ug/L		92	78 - 120	1
m-Xylene & p-Xylene		25.0	24.2		ug/L		97	70 - 142	1
o-Xylene		25.0	24.0		ug/L		96	70 - 130	2

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Lab Sample ID: LCSD 720-191566/8

Matrix: Water

Analysis Batch: 191566

Analyte		Spike	LCSD	LCSD		%Rec.		RPD	
		Added	Result	Qualifier	Unit	D	%Rec	Limits	Limit
Gasoline Range Organics (GRO)		500	527		ug/L		105	62 - 120	0
-C5-C12									20

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		72 - 130

TestAmerica Pleasanton

QC Sample Results

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-191566/8

Matrix: Water

Analysis Batch: 191566

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: 720-68025-5 MS

Matrix: Water

Analysis Batch: 191566

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	21.3		ug/L		85	60 - 140
1,2-Dichloroethane	2.1		25.0	28.8		ug/L		107	60 - 140
cis-1,2-Dichloroethene	ND		25.0	23.3		ug/L		93	60 - 140
Ethylbenzene	ND		25.0	22.5		ug/L		90	60 - 140
Naphthalene	ND		25.0	20.1		ug/L		80	56 - 140
Toluene	ND		25.0	20.9		ug/L		84	60 - 140
m-Xylene & p-Xylene	ND		25.0	23.1		ug/L		92	60 - 140
o-Xylene	ND		25.0	23.2		ug/L		93	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	112		72 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: 720-68025-5 MSD

Matrix: Water

Analysis Batch: 191566

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	21.0		ug/L		84	60 - 140	2	20
1,2-Dichloroethane	2.1		25.0	28.7		ug/L		106	60 - 140	0	20
cis-1,2-Dichloroethene	ND		25.0	22.9		ug/L		92	60 - 140	2	20
Ethylbenzene	ND		25.0	21.8		ug/L		87	60 - 140	3	20
Naphthalene	ND		25.0	20.8		ug/L		83	56 - 140	3	20
Toluene	ND		25.0	20.5		ug/L		82	60 - 140	2	20
m-Xylene & p-Xylene	ND		25.0	22.3		ug/L		89	60 - 140	3	20
o-Xylene	ND		25.0	22.5		ug/L		90	60 - 140	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	114		72 - 130
Toluene-d8 (Surr)	100		70 - 130

TestAmerica Pleasanton

QC Association Summary

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

GC/MS VOA

Analysis Batch: 191472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-68025-1	MW-5	Total/NA	Water	8260B/CA_LUFT MS	5
720-68025-1 MS	MW-5	Total/NA	Water	8260B/CA_LUFT MS	6
720-68025-1 MSD	MW-5	Total/NA	Water	8260B/CA_LUFT MS	7
720-68025-2	MW-3	Total/NA	Water	8260B/CA_LUFT MS	8
720-68025-3	MW-2	Total/NA	Water	8260B/CA_LUFT MS	9
720-68025-7	MW-60	Total/NA	Water	8260B/CA_LUFT MS	10
720-68025-8	MW-7	Total/NA	Water	8260B/CA_LUFT MS	11
720-68025-9	MW-8	Total/NA	Water	8260B/CA_LUFT MS	12
720-68025-10	TB	Total/NA	Water	8260B/CA_LUFT MS	13
LCS 720-191472/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	14
LCS 720-191472/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-191472/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-191472/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-191472/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 191566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-68025-3	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
720-68025-4	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
720-68025-5	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
720-68025-5 MS	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
720-68025-5 MSD	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
720-68025-6	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-191566/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-191566/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-191566/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-191566/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-191566/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Lab Chronicle

Client: ERM-West
Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-5

Date Collected: 10/14/15 09:17

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	191472	10/27/15 12:41	PRD	TAL PLS

Client Sample ID: MW-3

Date Collected: 10/14/15 10:10

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	191472	10/27/15 13:09	PRD	TAL PLS

Client Sample ID: MW-2

Date Collected: 10/14/15 10:52

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	191472	10/27/15 13:37	PRD	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		100	191566	10/28/15 14:38	PRD	TAL PLS

Client Sample ID: MW-4

Date Collected: 10/14/15 11:32

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		100	191566	10/28/15 15:08	PRD	TAL PLS

Client Sample ID: MW-1

Date Collected: 10/14/15 13:34

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	191566	10/28/15 15:37	PRD	TAL PLS

Client Sample ID: MW-6

Date Collected: 10/14/15 14:08

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	191566	10/28/15 17:04	PRD	TAL PLS

TestAmerica Pleasanton

Lab Chronicle

Client: ERM-West
Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Client Sample ID: MW-60

Date Collected: 10/14/15 14:20

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	191472	10/27/15 15:29	PRD	TAL PLS

Client Sample ID: MW-7

Date Collected: 10/14/15 14:53

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	191472	10/27/15 15:57	PRD	TAL PLS

Client Sample ID: MW-8

Date Collected: 10/14/15 15:46

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	191472	10/27/15 16:25	PRD	TAL PLS

Client Sample ID: TB

Date Collected: 10/14/15 00:00

Date Received: 10/15/15 11:16

Lab Sample ID: 720-68025-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	191472	10/27/15 11:15	PRD	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

TestAmerica Pleasanton

Certification Summary

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-16
Analysis Method	Prep Method	Matrix	Analyte	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

TestAmerica Pleasanton

Method Summary

Client: ERM-West
Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Sample Summary

Client: ERM-West

Project/Site: MLK Jr. Way GW Sampling

TestAmerica Job ID: 720-68025-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-68025-1	MW-5	Water	10/14/15 09:17	10/15/15 11:16
720-68025-2	MW-3	Water	10/14/15 10:10	10/15/15 11:16
720-68025-3	MW-2	Water	10/14/15 10:52	10/15/15 11:16
720-68025-4	MW-4	Water	10/14/15 11:32	10/15/15 11:16
720-68025-5	MW-1	Water	10/14/15 13:34	10/15/15 11:16
720-68025-6	MW-6	Water	10/14/15 14:08	10/15/15 11:16
720-68025-7	MW-60	Water	10/14/15 14:20	10/15/15 11:16
720-68025-8	MW-7	Water	10/14/15 14:53	10/15/15 11:16
720-68025-9	MW-8	Water	10/14/15 15:46	10/15/15 11:16
720-68025-10	TB	Water	10/14/15 00:00	10/15/15 11:16

1

2

3

4

5

6

7

8

9

10

11

12

13

14

TestAmerica Pleasanton

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-68025

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 164705
Date 10/14/15 Page 1 of 1

10/29/2015

Report To

Attn: Giorgio Molinario
Company: ERM
Address: 1277 West Blvd Walnut Creek
Email: Global.Molinario@erm.com
Bill To: ERM
Attn:

Sample ID Phone 925 484-0605
Date Time Mat Presrv

MW-5	10/15/15 9:17 AM	ML	Volatile Organics GC/MS (VOCs) <input type="checkbox"/> EPA 8260B
MW-3	10/15/15 10:02 AM	ML	HVOCS by <input type="checkbox"/> EPA 8260B
MW-2	10/15/15 10:52 AM	ML	EPA 8260B, Gas <input checked="" type="checkbox"/> BTEX <input type="checkbox"/> 5 Oxygenates <input type="checkbox"/> DCA, EDB <input type="checkbox"/> Ethanol
MW-4	10/15/15 11:34 AM	ML	TEPH EPA 8015B <input type="checkbox"/> Silica Gel <input type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other
MW-1	10/15/15 1:40 PM	ML	SemiVolatile Organics GC/MS <input type="checkbox"/> EPA 8270C
MW-6	10/15/15 4:20 PM	ML	PNA/PAH's by <input type="checkbox"/> 8270C <input type="checkbox"/> 8270C SIM
MW-7	10/15/15 4:53 PM	ML	Oil and Grease <input type="checkbox"/> Petroleum (EPA 1664/9071) <input type="checkbox"/> Total
MW-8	10/15/15 5:46 PM	ML	Pesticides <input type="checkbox"/> EPA 8081 PCBs <input type="checkbox"/> EPA 8082
TB			CAM17 Metals (EPA 6010/7470/7471)
			Metals: <input type="checkbox"/> 6010B <input type="checkbox"/> 200.7 <input type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other.
			Metals: <input type="checkbox"/> 6020 <input type="checkbox"/> 200.8 (ICP-MS):
			<input type="checkbox"/> W.E.T (STLC) <input type="checkbox"/> W.E.T (DI) <input type="checkbox"/> TCLP
			Hex. Chrom by <input type="checkbox"/> EPA 7196 <input type="checkbox"/> or EPA 7199
			pH <input type="checkbox"/> 8040 <input type="checkbox"/> SM4500
			<input type="checkbox"/> Spec. Cond. <input type="checkbox"/> Alkalinity <input type="checkbox"/> TSS <input type="checkbox"/> SS <input type="checkbox"/> TDS
			Anions : <input type="checkbox"/> Cl <input type="checkbox"/> SO ₄ <input type="checkbox"/> NO ₃ <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO ₂ <input type="checkbox"/> PO ₄
			<input type="checkbox"/> Perchlorate by EPA 314.0
			COD <input type="checkbox"/> EPA 410.4 <input type="checkbox"/> SM5220D <input type="checkbox"/> Turbidity
			Naphthalene, 1,2-dca 1,2-dca (8260)

Number of Containers

Project Info. Sample Receipt

Project Name#: WLRK
0307273
PO#:
Temp: 28°
Credit Card Y/N:
If yes, please call with payment information ASAP

of Containers:
Head Space:
Printed Name
Company
Signature
10/15/15
Time
Date

1) Received by:
Victor Rama 10/15
Signature
Victor Rama 10/15/15
Time
Date
Printed Name
Company

2) Relinquished by:
Victor Rama 11/16
Signature
Victor Rama 10/15/15
Time
Date
Printed Name
Company

3) Relinquished by:
John Muller 11/16
Signature
John Muller 10/15/15
Time
Date
Printed Name
Company

720-68025 Chain of Custody



See Terms and Conditions on reverse

Report: Routine Level 3 Level 4
Special Instructions / Comments: REDD EDD
Global ID: 6600106

Printed Name TA
Company

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 720-68025-1

Login Number: 68025

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Arauz, Dennis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	