Ms. Karel Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Alaska Gas Service Station, 6211 San Pablo Avenue, Oakland, California (Fuel Leak Case No. RO0000127)

Dear Ms. Detterman:

Stratus Environmental, Inc. (Stratus) has prepared a report entitled *Groundwater Monitoring Report First Quarter 2016* on my behalf. The report was prepared in regards to Alameda County Fuel Leak Case No. RO0000127, Alaska Gas Service Station, 6211 San Pablo Avenue, Oakland, California.

I have reviewed a copy of this report, sent to me by representatives of Stratus, and "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge."

Sincerely,

Pritpaul Sappal

STRATUS
ENVIRONMENTAL, INC.

3330 Cameron Park Drive, Ste 550
Cameron Park, California 95682
**(530) 676-6004** ~ Fax: (530) 676-6005

Prepared on April 1, 2016
Issued on June 14, 2016
Project No. 2192-6211-01

Ms. Karel Detterman
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Groundwater Monitoring and Sampling Results Report, First Quarter 2016
Alaska Gas Service Station
6211 San Pablo Avenue, Oakland, California
Fuel Leak Case No. RO0000127

Dear Ms. Detterman:

Stratus Environmental, Inc. (Stratus) is submitting the attached report, on behalf of Pritpaul Sappal, for the Alaska Gas Service Station underground storage tank fuel leak case, located at 6211 San Pablo Avenue, Oakland, California. This report presents a summary of recent groundwater monitoring and sampling activities performed at the subject property. This report has been prepared in compliance with Alameda County Environmental Health Department and California Regional Water Quality Control Board (CRWQCB) requirements for underground storage tank (UST) investigations.

If you have any questions regarding this report, please contact Scott Bittinger at (530) 676-2062 or via email at sbittinger@stratusinc.net.

Sincerely,

**STRATUS ENVIRONMENTAL, INC.**

PROFESSIONAL GEOLOGIST
Scott G. Bittinger
No. 7477
STATE OF CALIFORNIA

Scott G. Bittinger, P.G.
Project Manager

Gowri S. Kowtha, P.E.
Principal Engineer

Attachment: Groundwater Monitoring and Sampling Results Report, First Quarter 2016

cc: Mr. Pritpaul Sappal, Alaska Gas Service Station

## ALASKA GAS SERVICE STATION
## GROUNDWATER MONITORING AND SAMPLING RESULTS REPORT

| | |
|---|---|
| Facility Address: | 6211 San Pablo Avenue, Oakland, California |
| Consulting Co. / Contact Person: | Stratus Environmental, Inc. / Scott Bittinger, P.G. |
| Consultant Project No: | 2192-6211-01 |
| Primary Agency/Regulatory ID No: | Ms. Karel Detterman, Alameda County Environmental Health Department (ACEHD), Fuel Leak Case No. RO0000127 |

**WORK PERFORMED THIS PERIOD (Fourth Quarter 2015 and First Quarter 2016):**

1. Stratus conducted a groundwater monitoring and sampling event on January 18, 2016. At this time 8 wells were gauged for depth to groundwater levels. Purge groundwater samples were collected from these wells and submitted to a state-certified analytical laboratory for chemical analysis.

**WORK PROPOSED FOR NEXT PERIOD (Second and Third Quarters 2016):**

1. On February 18, 2015, Stratus prepared and submitted a report titled *Additional Information to Support Environmental Case Closure Review*. After reviewing the content of this document, ACEHD requested that an addendum to this report be prepared.

| | |
|---|---|
| Current Phase of Project: | Verification Monitoring (VM), Potential Environmental Case Closure |
| Frequency of Groundwater Monitoring: | All monitoring wells = Semi-annually (1st & 3rd quarters) |
| Frequency of Groundwater Sampling: | All monitoring wells = Semi-annually (1st & 3rd quarters) |
| Groundwater Sampling Date: | January 18, 2016 |
| Are Free Phase Petroleum Hydrocarbons Present: | Yes, 0.01 feet measured on January 18, 2016 |
| Depth to Groundwater: | 2.41 to 6.86 feet below the top of the well casing |
| Groundwater Flow Direction : | West-southwest |
| Groundwater Gradient : | 0.01 ft/ft |

Stratus conducted first quarter 2016 groundwater monitoring and sampling activities on January 18, 2016. During this event, wells MW-1R, MW-2, MW-3R, MW-4R, MW-5, MW-6, MW-7, and MW-9 were gauged for depth to groundwater and evaluated for the presence of free phase petroleum hydrocarbons (free product). After well gauging, purge groundwater samples were collected from the site's monitoring wells (including MW-7, with 0.01 feet of measureable product). Table 1 presents a summary of information pertaining to construction of the site's monitoring well network. Vehicles were parked on top of wells MW-8 and MW-10 and thus these wells were not gauged or sampled.

Groundwater samples were forwarded to a state-certified analytical laboratory to be analyzed for gasoline range organics (GRO) by EPA Method SW8015B/SW8260B, for benzene, toluene, ethylbenzene, and xylene (BTEX compounds), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA) using EPA Method SW8260B. Table 2 provides depth to water measurements and groundwater elevations. Table 3 presents a summary of groundwater analytical data collected for the site's monitoring well network.

Field data sheets documenting measurements and observations collected by Stratus personnel are provided in Appendix A. A description of sampling and analysis procedures used by Stratus/laboratory personnel are provided in Appendix B. Certified analytical results provided by the analyzing laboratory (Alpha Analytical, Inc.) are presented in Appendix C. Analytical results of sampled wells and depth to groundwater measurements have been uploaded to the State of California's GeoTracker database. Documentation of these data uploads is attached in Appendix D.

## FINDINGS:

Groundwater levels beneath the property are relatively shallow, ranging from 2.41 to 6.86 feet below the top of the well casing on January 18, 2016. Using the available data, groundwater levels were corrected to elevation mean sea level and used to prepare a groundwater elevation contour map (Figure 3). On January 18, 2016, west-southwest groundwater flow, at an average gradient of approximately 0.01 ft/ft, was observed.

Figure 4 presents a summary of GRO, benzene, MTBE, and TBA concentrations in shallow groundwater using the January 2016 well sampling results. GRO was detected in three onsite wells samples, at concentrations ranging from 52 micrograms per liter [µg/L] to 620 µg/L, and two offsite well samples (MW-7 and MW-9, at 33,000 µg/L and 51 µg/L, respectively). Benzene was detected in two onsite well samples, at a maximum level of 1.0 µg/L, and also at offsite well MW-7 (110 µg/L). MTBE was detected in 5 of the 8 well samples; offsite MTBE concentrations ranged from 10 µg/L to 28 µg/L and onsite MTBE concentrations ranged from 1.6 µg/L to 78 µg/L. TBA was detected in three of the eight well samples, at a maximum concentration of 30,000 µg/L (well MW-3R). High TBA concentrations were also observed in offsite well MW-8 during the third quarter 2015, however MW-8 could not be accessed on January 18, 2016.

## LIMITATIONS:

This document was prepared in general accordance with accepted standards of care that existed at the time this work was performed. No other warranty, expressed or implied, is made. Conclusions and recommendations are based on field observations and data obtained from this work and previous investigations. It should be recognized that definition and evaluation of geologic conditions is a difficult and somewhat inexact science. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the subsurface conditions present. More extensive studies may be performed to reduce uncertainties. This document is solely for the use and information of our client unless otherwise noted.

## ATTACHMENTS:

- Table 1 Monitoring Well Construction Detail Summary
- Table 2 Groundwater Elevation Data
- Table 3 Groundwater Analytical Data
- Figure 1 Site Location Map
- Figure 2 Site Vicinity Map
- Figure 3 Groundwater Elevation Contour Map, First Quarter 2016
- Figure 4 Groundwater Analytical Summary, First Quarter 2016
- Appendix A Field Data Sheets
- Appendix B Sampling and Analyses Procedures
- Appendix C Laboratory Analytical Reports and Chain-of-Custody Documentation
- Appendix D GeoTracker Electronic Submittal Confirmations

# TABLE 1
# MONITORING WELL CONSTRUCTION DETAIL SUMMARY

Alaska Gas Service Station
6211 San Pablo Avenue, Oakland, CA

| Well I.D. | Installation Date | Well Diameter (inches) | Well Depth (feet) | Screen Interval (feet bgs) |
|---|---|---|---|---|
| MW-1* | Oct-1999 | 2 | 23 | 3-23 |
| MW-1R | Jan-2004 | 2 | 23 | 3-23 |
| MW-2 | Oct-1999 | 2 | 21 | 6-21 |
| MW-3** | Oct-1999 | 2 | 21 | 6-21 |
| MW-3R | June-2011 | 2 | 15 | 5-15 |
| MW-4** | Nov-2001 | 2 | 20 | 5-20 |
| MW-4R | June-2011 | 2 | 15 | 5-15 |
| MW-5 | Nov-2001 | 2 | 25 | 5-25 |
| MW-6 | Nov-2001 | 2 | 25 | 5-25 |
| MW-7 | Feb-2010 | 2 | 16 | 6-16 |
| MW-8 | Feb-2010 | 2 | 15 | 5-15 |
| MW-9 | Feb-2010 | 2 | 15 | 5-15 |
| MW-10 | Feb-2010 | 2 | 15 | 5-15 |
| EX-1** | Jan-2004 | 4 | 30 | 5-30 |

**Notes:**

bgs = below ground surface

* = Monitoring well destroyed approximately 2004

** = Monitoring well was destroyed on May 17, 2011

Information from the AEI Consultants, *Remedial Action Report / Groundwater Monitoring Report - 2nd Semester 2011* , dated October 6, 2011.

# TABLE 2
# GROUNDWATER ELEVATION DATA
## Alaska Gas Service Station
## 6211 San Pablo Avenue, Oakland, CA

| Well ID | Date of Measurement | Well Casing Elevation (feet-MSL) | Depth to Groundwater (feet bgs) | Product Thickness (feet) | Groundwater Elevation* (feet-MSL) |
|---|---|---|---|---|---|
| MW-1 | 11/07/99 | 34.70 | 8.53 | | |
| | 03/08/01 | | 6.32 | | 28.38 |
| | 11/17/01 | | 8.09 | | 26.61 |
| | 03/31/02 | | 7.18 | | 27.52 |
| | 09/09/03 | | 8.54 | | 26.16 |
| | 12/09/03 | | 7.50 | | 27.20 |
| | | | *Well Destroyed May 17, 2011* | | |
| MW-1R | 02/19/04 | 36.67 | 5.45 | | 31.22 |
| | 05/24/04 | | 8.58 | | 28.09 |
| | 09/03/04 | | 9.15 | | 27.52 |
| | 02/17/05 | | 6.57 | | 30.10 |
| | 08/15/05 | | 8.55 | | 28.12 |
| | 11/17/05 | | 8.41 | | 28.26 |
| | 02/08/06 | | 6.81 | | 29.86 |
| | 05/05/06 | | 7.46 | | 29.21 |
| | 08/18/06 | | 8.58 | | 28.09 |
| | 12/01/06 | | 6.56 | | 30.11 |
| | 08/16/07 | | 9.33 | | 27.34 |
| | 11/08/07 | | 8.83 | | 27.84 |
| | 02/14/08 | | 6.89 | | 29.78 |
| | 05/15/08 | | 8.53 | | 28.14 |
| | 09/10/08 | | 9.36 | | 27.31 |
| | 11/18/08 | | 8.82 | | 27.85 |
| | 02/17/09 | | 5.67 | | 31.00 |
| | 05/15/09 | | 7.79 | | 28.88 |
| | 08/13/09 | | 9.20 | | 27.47 |
| | 02/23/10 | | 6.67 | | 30.00 |
| | 08/12/10 | | 8.74 | | 27.93 |
| | 02/17/11 | | 6.51 | | 30.16 |
| | 08/17/11 | | 8.78 | | 27.89 |
| | 03/28/14 | | 8.18 | | 28.49 |
| | 08/14/14 | | 9.70 | | 26.97 |
| | 01/28/15 | | 8.86 | | 27.81 |
| | 07/09/15 | | 9.63 | | 27.04 |
| | 01/18/16 | | 6.86 | | 29.81 |

# TABLE 2
# GROUNDWATER ELEVATION DATA
## Alaska Gas Service Station
## 6211 San Pablo Avenue, Oakland, CA

| Well ID | Date of Measurement | Well Casing Elevation (feet-MSL) | Depth to Groundwater (feet bgs) | Product Thickness (feet) | Groundwater Elevation* (feet-MSL) |
|---|---|---|---|---|---|
| MW-2 | 11/07/99 | 34.94 | 8.26 | | 26.68 |
| | 03/08/01 | | 5.89 | | 29.05 |
| | 11/17/01 | | 7.75 | | 27.19 |
| | 03/31/02 | | 6.68 | | 28.26 |
| | 09/09/03 | | 8.26 | | 26.68 |
| | 12/09/03 | | 7.20 | | 27.74 |
| | 02/19/04 | | 5.81 | | 29.13 |
| | 05/24/04 | | 7.79 | | 27.15 |
| | 09/03/04 | | 8.43 | | 26.51 |
| | 11/02/04 | | 7.65 | | 27.29 |
| | 02/17/05 | | 5.86 | | 29.08 |
| | 05/26/05 | | 6.39 | | 28.55 |
| | 08/17/05 | | 7.99 | | 26.95 |
| | 11/17/05 | | 7.88 | | 27.06 |
| | 02/08/06 | | 6.24 | | 28.70 |
| | 05/05/06 | | 6.89 | | 28.05 |
| | 08/18/06 | | 8.05 | | 26.89 |
| | 12/01/06 | | 7.58 | | 27.36 |
| | 08/16/07 | | 7.26 | | 27.68 |
| | 11/08/07 | | 7.81 | | 27.13 |
| | 02/14/08 | | 5.90 | | 29.04 |
| | 05/15/08 | 36.33 | 7.63 | | 28.70 |
| | 09/10/08 | | 8.43 | | 27.90 |
| | 11/18/08 | | 7.83 | | 28.50 |
| | 02/17/09 | | 4.92 | | 31.41 |
| | 05/15/09 | | 6.81 | | 29.52 |
| | 08/13/09 | | 8.23 | | 28.10 |
| | 02/23/10 | | 6.06 | | 30.27 |
| | 08/12/10 | | 7.70 | | 28.63 |
| | 02/17/11 | | 6.16 | | 30.17 |
| | 08/17/11 | | 7.16 | | 29.17 |
| | 03/28/14 | | 7.60 | | 28.73 |
| | 08/14/14 | | 8.72 | | 27.61 |
| | 01/28/15 | | 7.97 | | 28.36 |
| | 07/09/15 | | 8.75 | | 27.58 |
| | 01/18/16 | | 6.50 | | 29.83 |

# TABLE 2
# GROUNDWATER ELEVATION DATA
## Alaska Gas Service Station
## 6211 San Pablo Avenue, Oakland, CA

| Well ID | Date of Measurement | Well Casing Elevation (feet-MSL) | Depth to Groundwater (feet bgs) | Product Thickness (feet) | Groundwater Elevation* (feet-MSL) |
|---|---|---|---|---|---|
| MW-3 | 11/07/99 | 33.74 | 7.55 | | 26.19 |
| | 03/08/01 | | 5.36 | | 28.38 |
| | 11/17/01 | | 7.18 | | 26.56 |
| | 03/31/02 | | 6.27 | | 27.47 |
| | 09/09/03 | | 7.52 | | 26.22 |
| | 12/09/03 | | 6.45 | | 27.29 |
| | 02/19/04 | | 5.56 | | 28.18 |
| | 05/24/04 | | 6.99 | | 26.75 |
| | 09/03/04 | | 7.53 | | 26.21 |
| | 11/02/04 | | 6.88 | | 26.86 |
| | 02/17/05 | | 5.01 | | 28.73 |
| | 08/15/05 | | 7.71 | | 26.03 |
| | 11/17/05 | | 7.56 | | 26.18 |
| | 02/08/06 | | 6.00 | | 27.74 |
| | 05/05/06 | | 6.65 | | 27.09 |
| | 08/18/06 | | 7.73 | | 26.01 |
| | 12/01/06 | | 8.51 | | 25.23 |
| | 08/16/07 | | 7.62 | | 26.12 |
| | 11/08/07 | | 7.52 | | 26.22 |
| | 02/14/08 | | 5.60 | | 28.14 |
| | 05/15/08 | 35.12 | 7.23 | | 27.89 |
| | 09/10/08 | | 8.08 | | 27.04 |
| | 11/18/08 | | 7.52 | | 27.60 |
| | 02/17/09 | | 4.36 | | 30.76 |
| | 05/15/09 | | 6.50 | | 28.62 |
| | 08/13/09 | | 7.96 | | 27.16 |
| | 02/23/10 | | 5.10 | | 30.02 |
| | 08/12/10 | | 7.40 | | 27.72 |
| | | | *Well Destroyed May 17, 2011* | | |
| MW-3R | 07/14/11 | -- | 7.01 | | -- |
| | 08/17/11 | | 7.48 | | -- |
| | 3828/14 | | 7.68 | | -- |
| | 08/14/14 | | 8.98 | | -- |
| | 01/28/15 | | 8.15 | | -- |
| | 07/09/15 | | 8.89 | | -- |
| | 01/18/16 | | 6.54 | | -- |

# TABLE 2
# GROUNDWATER ELEVATION DATA
## Alaska Gas Service Station
## 6211 San Pablo Avenue, Oakland, CA

| Well ID | Date of Measurement | Well Casing Elevation (feet-MSL) | Depth to Groundwater (feet bgs) | Product Thickness (feet) | Groundwater Elevation* (feet-MSL) |
|---|---|---|---|---|---|
| MW-4 | 11/17/01 | 32.38 | 5.75 | | 26.63 |
| | 03/31/02 | | 5.40 | | 26.98 |
| | 12/09/03 | | -- | | -- |
| | 09/09/03 | | -- | | -- |
| | 05/24/04 | | 5.70 | 0.33 | 26.91 |
| | 02/19/04 | | 3.56 | 0.25 | 29.00 |
| | 05/05/06 | | 5.60 | | 26.78 |
| | 08/18/06 | | 6.45 | | 25.93 |
| | 12/01/06 | | 5.95 | | 26.43 |
| | 11/18/07 | | 6.60 | | 25.78 |
| | 02/14/08 | | 4.28 | | 28.10 |
| | 05/15/08 | 34.11 | 5.43 | | 28.68 |
| | 09/10/08 | | 7.26 | | 26.85 |
| | 11/18/08 | | 5.84 | | 28.27 |
| | 02/17/09 | | 2.67 | | 31.44 |
| | 05/15/09 | | 4.90 | | 29.21 |
| | 08/13/09 | | 6.02 | | 28.09 |
| | 02/23/10 | | 3.84 | | 30.27 |
| | 08/12/10 | | 5.65 | | 28.46 |
| | 02/17/11 | | 3.19 | | 30.92 |
| | | | *Well Destroyed May 17, 2011* | | |
| MW-4R | 07/14/11 | -- | 5.31 | | -- |
| | 08/17/11 | | 5.78 | | -- |
| | 03/28/14 | | 5.90 | | -- |
| | 08/14/14 | | 7.28 | | -- |
| | 01/28/15 | | 6.46 | | -- |
| | 07/09/15 | | 7.20 | | -- |
| | 01/18/16 | | 4.86 | | -- |

# TABLE 2
# GROUNDWATER ELEVATION DATA
## Alaska Gas Service Station
## 6211 San Pablo Avenue, Oakland, CA

| Well ID | Date of Measurement | Well Casing Elevation (feet-MSL) | Depth to Groundwater (feet bgs) | Product Thickness (feet) | Groundwater Elevation* (feet-MSL) |
|---|---|---|---|---|---|
| MW-5 | 11/17/01 | 33.75 | 6.22 | | 27.53 |
| | 03/31/02 | | 6.35 | | 27.40 |
| | 09/09/03 | | 7.08 | | 26.67 |
| | 12/09/03 | | 6.13 | | 27.62 |
| | 02/19/04 | | 5.11 | | 28.64 |
| | 05/24/04 | | 6.57 | | 27.18 |
| | 09/03/04 | | 7.01 | | 26.74 |
| | 11/02/04 | | 6.43 | | 27.32 |
| | 05/24/05 | | 6.02 | | 27.73 |
| | 08/17/05 | | 6.75 | | 27.00 |
| | 11/17/05 | | 6.47 | | 27.28 |
| | 02/08/06 | | 5.53 | | 28.22 |
| | 05/05/06 | | 6.10 | | 27.65 |
| | 08/18/06 | | 6.77 | | 26.98 |
| | 12/01/06 | | 6.47 | | 27.28 |
| | 08/16/07 | | 6.79 | | 26.96 |
| | 11/08/07 | | 6.43 | | 27.32 |
| | 02/14/08 | | 5.31 | | 28.44 |
| | 05/15/08 | 35.17 | 6.29 | | 28.88 |
| | 09/10/08 | | 6.99 | | 28.18 |
| | 11/18/08 | | 6.41 | | 28.76 |
| | 02/17/09 | | 4.07 | | 31.10 |
| | 05/15/09 | | 5.59 | | 29.58 |
| | 08/13/09 | | 6.81 | | 28.36 |
| | 02/23/10 | | 5.05 | | 30.12 |
| | 08/12/10 | | 6.61 | | 28.56 |
| | 02/17/11 | | 5.03 | | 30.14 |
| | 08/17/11 | | 6.59 | | 28.58 |
| | 03/28/14 | | 6.97 | | 28.20 |
| | 08/14/14 | | 8.32 | | 26.85 |
| | 01/28/15 | | 7.62 | | 27.55 |
| | 07/09/15 | | 8.19 | | 26.98 |
| | 01/18/16 | | 5.62 | | 29.55 |

# TABLE 2
# GROUNDWATER ELEVATION DATA
## Alaska Gas Service Station
## 6211 San Pablo Avenue, Oakland, CA

| Well ID | Date of Measurement | Well Casing Elevation (feet-MSL) | Depth to Groundwater (feet bgs) | Product Thickness (feet) | Groundwater Elevation* (feet-MSL) |
|---|---|---|---|---|---|
| MW-6 | 11/17/01 | 34.68 | 7.19 | | 27.49 |
| | 03/31/02 | | 6.58 | | 28.10 |
| | 09/09/03 | | 8.21 | | 26.47 |
| | 12/09/03 | | 7.11 | | 27.57 |
| | 02/19/04 | | 5.61 | | 29.07 |
| | 05/24/04 | | -- | | -- |
| | 09/03/04 | | 8.25 | | 26.43 |
| | 11/02/04 | | 7.57 | | 27.11 |
| | 02/17/05 | | 5.70 | | 28.98 |
| | 08/15/05 | | 7.91 | | 26.77 |
| | 11/17/05 | | 7.80 | | 26.88 |
| | 02/08/06 | | 6.16 | | 28.52 |
| | 05/05/06 | | 6.81 | | 27.87 |
| | 08/18/06 | | 7.97 | | 26.71 |
| | 12/01/06 | | 7.60 | | 27.08 |
| | 08/16/07 | | 7.94 | | 26.74 |
| | 11/08/07 | | 7.71 | | 26.97 |
| | 02/14/08 | | 5.83 | | 28.85 |
| | 05/15/08 | 36.07 | 7.51 | | 28.56 |
| | 09/10/08 | | 8.32 | | 27.75 |
| | 11/18/08 | | 7.73 | | 28.34 |
| | 02/17/09 | | 4.64 | | 31.43 |
| | 05/15/09 | | 6.89 | | 29.18 |
| | 08/13/09 | | 8.26 | | 27.81 |
| | 02/23/10 | | 5.76 | | 30.31 |
| | 08/12/10 | | 7.71 | | 28.36 |
| | 02/17/11 | | 4.89 | | 31.18 |
| | 08/17/11 | | 7.78 | | 28.29 |
| | 03/28/14 | | 7.20 | | 28.87 |
| | 08/14/14 | | 8.67 | | 27.40 |
| | 01/28/15 | | 7.88 | | 28.19 |
| | 07/09/15 | | 8.65 | | 27.42 |
| | 01/18/16 | | 5.92 | | 30.15 |

# TABLE 2
# GROUNDWATER ELEVATION DATA
## Alaska Gas Service Station
## 6211 San Pablo Avenue, Oakland, CA

| Well ID | Date of Measurement | Well Casing Elevation (feet-MSL) | Depth to Groundwater (feet bgs) | Product Thickness (feet) | Groundwater Elevation* (feet-MSL) |
|---|---|---|---|---|---|
| MW-7 | 02/23/10 | 31.16 | 2.09 | | 29.07 |
| | 08/12/10 | | 4.14 | | 27.02 |
| | 02/17/11 | | 1.68 | | 29.48 |
| | 08/17/11 | | 4.01 | | 27.15 |
| | 03/28/14 | | 4.48 | 0.03 | 26.70 |
| | 05/28/14 | | 5.07 | 0.01 | 26.10 |
| | 08/14/14 | | 5.54 | | 25.62 |
| | 01/28/15 | | 4.95 | | 26.21 |
| | 07/09/15 | | 5.40 | | 25.76 |
| | 01/18/16 | | 2.41 | 0.01 | 28.76 |
| MW-8 | 02/23/10 | 30.92 | 2.66 | | 28.26 |
| | 08/12/10 | | 4.16 | | 26.76 |
| | 02/17/11 | | 1.01 | | 29.91 |
| | 08/17/11 | | 4.41 | | 26.51 |
| | 03/28/14 | | 3.87 | | 27.05 |
| | 08/14/14 | | 5.41 | | 25.51 |
| | 01/28/15 | | 4.70 | | 26.22 |
| | 07/09/15 | | 5.31 | | 25.61 |
| | 01/18/16 | | *RV Parked Over Well Unable to Gauge* | | |
| MW-9 | 02/23/10 | 28.90 | 2.84 | | 26.06 |
| | 08/12/10 | | 4.53 | | 24.37 |
| | 02/17/11 | | 1.93 | | 26.97 |
| | 08/17/11 | | 4.82 | | 24.08 |
| | 03/28/14 | | 4.65 | | 24.25 |
| | 08/14/14 | | 6.67 | | 22.23 |
| | 01/28/15 | | 5.96 | | 22.94 |
| | 07/09/15 | | 6.62 | | 22.28 |
| | 01/18/16 | | 3.10 | | 25.80 |
| MW-10 | 02/23/10 | 30.28 | 0.98 | | 29.30 |
| | 08/12/10 | | 3.47 | | 26.81 |
| | 02/17/11 | | 0.95 | | 29.33 |
| | 08/17/11 | | 3.39 | | 26.89 |
| | 03/28/14 | | 2.50 | | 27.78 |
| | 08/14/14 | | 4.65 | | 25.63 |
| | 01/28/15 | | 3.87 | | 26.41 |
| | 07/09/15 | | 4.41 | | 25.87 |
| | 01/18/16 | | *Car Parked Over Well Unable to Gauge* | | |

# TABLE 2
# GROUNDWATER ELEVATION DATA
## Alaska Gas Service Station
## 6211 San Pablo Avenue, Oakland, CA

| Well ID | Date of Measurement | Well Casing Elevation (feet-MSL) | Depth to Groundwater (feet bgs) | Product Thickness (feet) | Groundwater Elevation* (feet-MSL) |
|---|---|---|---|---|---|
| EX-1 | 02/19/04 | 33.28 | 3.96 | | 29.32 |
| | 05/24/04 | | 5.56 | 0.76 | 28.25 |
| | 02/08/06 | | 4.92 | | 28.36 |
| | 05/05/06 | | 5.15 | | 28.13 |
| | 08/18/06 | | 5.85 | | 27.43 |
| | 12/01/06 | | 4.96 | | 28.32 |
| | 11/08/07 | | 5.10 | | 28.18 |
| | 02/14/08 | | 3.51 | | 29.77 |
| | 05/15/08 | | 4.69 | | 28.59 |
| | 09/10/08 | | 5.46 | | 27.82 |
| | 11/18/08 | | 4.79 | | 28.49 |
| | 02/17/09 | | 1.86 | | 31.42 |
| | 05/15/09 | | 4.16 | | 29.12 |
| | 08/13/09 | | 8.36 | | 24.92 |
| | 02/23/10 | | 3.09 | | 30.19 |
| | 08/12/10 | | 4.91 | | 28.37 |
| | 02/17/11 | | 2.53 | | 30.75 |
| | | | *Well Destroyed May 17, 2011* | | |

**Notes:**

* = Groundwater Elevation is corrected for the presence of free phase petroleum hydrocarbons by the following formula: casing elevation - depth to water + (0.7 * free phase petroleum hydrocarbon thickness)

-- = Not measured or Not Available

MSL = mean sea level

bgs = below ground surface

Information prior to February 2014, taken from the AEI Consultants, *Remedial Action Report / Groundwater Monitoring Report - 2nd Semester 2011* , dated October 6, 2011.

**TABLE 3**
**GROUNDWATER ANALYTICAL DATA**
**Alaska Gas Service Station**
**6211 San Pablo Avenue, Oakland, CA**

| Well ID | Date Collected | GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | DIPE | ETBE | TAME | TBA | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | µg/L | | | | | | | | | | | |
| MW-1 | 11/07/99 | 5,700 | 170 | 59 | 22 | 85 | 20,000 | -- | -- | -- | -- | -- | -- |
| | 03/08/01 | 17,000 | 480 | 150 | 52 | 170 | 38,000 | -- | -- | -- | -- | -- | -- |
| | 11/17/01 | 10,000 | 230 | 210 | 60 | 250 | 22,000 | -- | -- | -- | -- | -- | -- |
| | 03/31/02 | 12,000 | 61 | ND | ND | 29 | 35,000 | -- | -- | -- | -- | -- | -- |
| | 11/09/03 | 19,000 | ND | ND | ND | ND | 50,000 | -- | -- | -- | -- | -- | -- |
| | 12/09/03 | 22,000 | 150 | ND | ND | ND | 66,000 | -- | -- | -- | -- | -- | -- |
| | | *Well Destroyed May 17, 2011* | | | | | | | | | | | |
| MW-1R | 11/17/01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 03/31/02 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09/09/03 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 12/09/03 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 02/19/04 | 1,800 | 95 | 130 | 44 | 200 | 220 | -- | -- | -- | -- | -- | -- |
| | 05/24/04 | 210 | 12 | 10 | 5.4 | 23 | 79 | ND | ND | 2.1 | 37 | ND | ND |
| | 09/03/04 | 300 | 1.5 | 7.1 | 9.4 | 42 | 81 | ND | ND | 1.6 | ND | ND | ND |
| | 11/02/04 | 290 | 14 | 30 | 9.5 | 45 | 45 | ND | ND | 1.1 | ND | -- | -- |
| | 02/17/05 | 530 | 3.4 | ND | ND | 2.6 | 1,000 | ND | ND | 100 | ND | -- | -- |
| | 05/24/05 | -- | -- | -- | -- | -- | -- | ND | ND | 610 | ND | ND | ND |
| | 08/15/05 | 2,500 | 64 | 240 | 61 | 210 | 2,300 | ND | ND | 210 | ND | ND | ND |
| | 11/17/05 | 2,500 | 66 | 290 | 75 | 290 | 1,300 | ND | ND | 110 | 1,600 | ND | ND |
| | 02/08/06 | 3,300 | 100 | 310 | 86 | 470 | 1,400 | ND | ND | 130 | 1,400 | ND | ND |
| | 05/05/06 | 3,400 | 170 | 350 | 97 | 550 | 1,100 | ND | ND | 100 | 2,400 | ND | ND |
| | 08/18/06 | 5,800 | 190 | 1,000 | 230 | 1,000 | 490 | ND | ND | 36 | 2,900 | ND | ND |
| | 12/01/06 | 410 | 1.7 | 6.3 | 1.2 | 47 | 100 | ND | ND | 4.7 | 100 | ND | ND |
| | 02/23/07 | ND | ND | 0.51 | ND | 1.4 | 3 | ND | ND | ND | ND | ND | ND |
| | 05/10/07 | ND | ND | ND | ND | 2.0 | 5.9 | ND | ND | ND | ND | ND | ND |
| | 08/16/07 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | 11/08/07 | 1,300 | 11 | 82 | 54 | 270 | 1.4 | ND | ND | ND | ND | ND | ND |
| | 02/14/08 | 800 | 7.6 | 31 | 23 | 150 | 1.7 | ND | ND | ND | ND | ND | ND |
| | 05/15/08 | 3,200 | 20 | 200 | 110 | 550 | 4.2 | <0.50 | <0.50 | 1.0 | <20 | <0.50 | <0.50 |
| | 09/10/08 | 1,000 | 6.5 | 22 | 19 | 120 | 2.3 | <0.50 | <0.50 | <0.50 | 4.0 | <0.50 | <0.50 |
| | 11/18/08 | 430 | 4.1 | 18 | 12 | 100 | 1.8 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 02/17/09 | 220 | 3.6 | 6.1 | 2.0 | 41 | 1.3 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 05/15/09 | 890 | 6.0 | 17 | 27 | 110 | 1.8 | <0.50 | <0.50 | <0.50 | 3.9 | <0.50 | <0.50 |
| | 08/13/09 | 2,000 | 17 | 23 | 73 | 350 | 2.1 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 02/23/10 | 3,200 | 31 | 77 | 120 | 810 | 3.9 | <1.7 | <1.7 | <1.7 | <6.7 | <1.7 | <1.7 |
| | 08/12/10 | 1,300 | 13 | 16 | 40 | 280 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | <1.0 | <1.0 |
| | 02/17/11 | 210 | 4.0 | 1.7 | 13 | 21 | <0.5 | <0.5 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 08/17/11 | 670 | 6.1 | 13 | 26 | 200 | <0.5 | <0.5 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |

**TABLE 3**
**GROUNDWATER ANALYTICAL DATA**
**Alaska Gas Service Station**
**6211 San Pablo Avenue, Oakland, CA**

| Well ID | Date Collected | GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | DIPE | ETBE | TAME | TBA | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | µg/L | | | | | | | | | | | |
| MW-1R Cont. | 03/28/14 | 1,200 | 3.7 | 11 | 34 | 299 | 1.2 | -- | -- | <2.0[1] | <20 | -- | -- |
| | 08/14/14 | 560 | 1.9 | 0.83 | 3.9 | 20 | 0.79 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/28/15 | 1,900 | 6.4 | 9.3 | 36 | 285 | 1.0 | -- | -- | <2.0[1] | <20[1] | -- | -- |
| | 07/09/15 | 360 | 1.4 | 0.51 | 1.9 | 6.0 | <0.50 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/18/16 | 200 | 1.0 | 0.60 | 2.0 | 17.6 | <0.50 | -- | -- | <1.0 | <10 | -- | -- |
| MW-2 | 11/07/99 | 6,000 | 1,300 | 92 | 50 | 400 | 6,800 | -- | -- | -- | -- | -- | -- |
| | 03/08/01 | 41,000 | 8,100 | 870 | 2,000 | 4,100 | 26,000 | -- | -- | -- | -- | -- | -- |
| | 11/17/01 | 18,000 | 3,700 | 180 | 610 | 640 | 16,000 | -- | -- | -- | -- | -- | -- |
| | 03/31/02 | 32,000 | 6,500 | 270 | 1,700 | 2,700 | 19,000 | -- | -- | -- | -- | -- | -- |
| | 09/09/03 | 24,000 | 4,600 | ND | 1,200 | 440 | 19,000 | -- | -- | -- | -- | -- | -- |
| | 12/09/03 | 31,000 | 6,200 | 170 | 1,600 | 2,700 | 19,000 | -- | -- | -- | -- | -- | -- |
| | 02/19/04 | 21,000 | 4,600 | 120 | 970 | 2,000 | 15,000 | -- | -- | -- | -- | -- | -- |
| | 05/24/04 | 1,200 | 120 | 3 | 63 | 67 | 1,900 | ND | ND | ND | ND | ND | ND |
| | 09/03/04 | 2,300 | 120 | ND | 51 | 70 | 1,700 | ND | ND | 26 | ND | ND | ND |
| | 11/02/04 | 530 | 35 | ND | 17 | 30 | 520 | ND | ND | 28 | 100 | -- | -- |
| | 02/17/05 | 18,000 | 2,100 | 31 | 800 | 680 | 20,000 | ND | ND | 1,000 | ND | -- | -- |
| | 05/24/05 | 22,000 | 3,200 | 52 | 1,400 | 1,700 | 16,000 | ND | ND | -- | -- | ND | ND |
| | 08/15/05 | 2,000 | 66 | ND | 46 | 47 | 2,400 | ND | ND | 95 | 880 | ND | ND |
| | 11/17/05 | 760 | 19 | 0.64 | 15 | 13 | 1,000 | ND | ND | 26 | 810 | ND | ND |
| | 02/08/06 | 10,000 | 1,500 | 8 | 660 | 380 | 4,300 | ND | ND | 120 | 2,800 | ND | ND |
| | 05/05/06 | 15,000 | 1,800 | ND | 1,200 | 1,200 | 5,800 | ND | ND | 150 | 4,300 | ND | ND |
| | 08/18/06 | 360 | 11 | ND | 13 | 9.7 | 160 | ND | ND | 4.6 | 600 | ND | ND |
| | 12/01/06 | 11,000 | 1,000 | ND | 990 | 910 | 2,100 | ND | ND | 87 | 2,000 | ND | ND |
| | 02/23/07 | 3,200 | 210 | ND | 270 | 85 | 900 | ND | ND | 33 | 1,400 | ND | ND |
| | 05/10/07 | 590 | 31 | ND | 39 | 22 | 200 | ND | ND | 5.9 | 250 | ND | ND |
| | 08/16/07 | 650 | 49 | ND | 71 | 49 | 100 | ND | ND | 3.5 | 82 | ND | ND |
| | 11/08/07 | 110 | 1.6 | ND | 1.9 | 1.6 | 23 | ND | ND | 0.64 | 48 | ND | ND |
| | 02/14/08 | 350 | 24 | ND | 12 | 5.9 | 190 | ND | ND | 7.7 | 320 | ND | ND |
| | 05/15/08 | 81 | 0.59 | <0.50 | 0.71 | 0.66 | 38 | <0.50 | <0.50 | 1.4 | 54 | <0.50 | <0.50 |
| | 09/10/08 | 150 | 6.4 | <0.50 | 8.4 | 5.1 | 14 | <0.50 | <0.50 | 0.55 | 38 | <0.50 | <0.50 |
| | 11/18/08 | 420 | 25 | 0.70 | 46 | 47 | 29 | <0.50 | <0.50 | 1.3 | 60 | <0.50 | <0.50 |
| | 02/17/09 | 460 | 23 | 0.96 | 51 | 37 | 26 | <0.50 | <0.50 | 1.4 | 61 | <0.50 | <0.50 |
| | 05/15/09 | 220 | 13 | 0.93 | 26 | 13 | 21 | <0.50 | <0.50 | 0.87 | 60 | <0.50 | <0.50 |
| | 08/13/09 | 110 | 7.0 | <0.50 | 13 | 5.0 | 7.7 | <0.50 | <0.50 | <0.50 | 26 | <0.50 | <0.50 |
| | 02/23/10 | 170 | 9.4 | 0.65 | 27 | 5.6 | 14 | <0.50 | <0.50 | <0.50 | 36 | <0.50 | <0.50 |
| | 08/12/10 | <50 | 1.1 | <0.50 | 1.8 | 0.63 | 3.7 | <0.50 | <0.50 | <0.50 | 6.3 | <0.50 | <0.50 |
| | 02/17/11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 8.3 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 08/17/11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 150 | <2.5 | <2.5 | <2.5 | <10 | <2.5 | <2.5 |
| | 03/28/14 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.51 | -- | -- | <1.0 | <10 | -- | -- |
| | 08/14/14 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/28/15 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | -- | -- | <1.0 | <10 | -- | -- |
| | 07/09/15 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/18/16 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | -- | -- | <1.0 | <10 | -- | -- |

**TABLE 3**
**GROUNDWATER ANALYTICAL DATA**
**Alaska Gas Service Station**
**6211 San Pablo Avenue, Oakland, CA**

| Well ID | Date Collected | GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | DIPE | ETBE | TAME | TBA | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | µg/L | | | | | | | | | | | |
| MW-3 | 11/07/99 | 43,000 | 860 | 70 | ND | 65 | 120,000 | -- | -- | -- | -- | -- | -- |
| | 03/08/01 | 90,000 | 1,800 | ND | ND | ND | 210,000 | -- | -- | -- | -- | -- | -- |
| | 11/17/01 | 110,000 | 1,600 | ND | ND | ND | 300,000 | -- | -- | -- | -- | -- | -- |
| | 03/31/02 | 130,000 | 2,400 | 670 | 300 | 390 | 300,000 | -- | -- | -- | -- | -- | -- |
| | 09/09/03 | 190,000 | 1,600 | ND | ND | ND | 420,000 | -- | -- | -- | -- | -- | -- |
| | 12/09/03 | 170,000 | 2,000 | ND | ND | ND | 4,500,000 | -- | -- | -- | -- | -- | -- |
| | 02/19/04 | 86,000 | 1,800 | 630 | ND | ND | 160,000 | -- | -- | -- | -- | -- | -- |
| | 05/24/04 | 120,000 | 2,200 | ND | 180 | 220 | 400,000 | ND | ND | 15,000 | ND | ND | ND |
| | 09/03/04 | 180,000 | 2,000 | ND | ND | ND | 510,000 | ND | ND | 14,000 | ND | ND | ND |
| | 11/02/04 | 150,000 | 1,700 | ND | ND | ND | 350,000 | ND | ND | 31,000 | 140,000 | -- | -- |
| | 02/17/05 | 130,000 | 2,100 | 420 | 210 | 730 | 290,000 | ND | ND | 11,000 | ND | -- | -- |
| | 05/24/05 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 08/15/05 | 110,000 | 1,500 | ND | ND | ND | 260,000 | ND | ND | 21,000 | 25,000 | ND | ND |
| | 11/17/05 | 200,000 | 2,400 | ND | ND | ND | 580,000 | ND | ND | 24,000 | 49,000 | ND | ND |
| | 02/08/06 | 470,000 | 3,800 | 660 | ND | 790 | 490,000 | ND | ND | 26,000 | 49,000 | ND | ND |
| | 05/05/06 | 400,000 | 3,300 | ND | ND | ND | 590,000 | ND | ND | 21,000 | 86,000 | ND | ND |
| | 08/18/06 | 310,000 | 1,800 | ND | ND | ND | 440,000 | ND | ND | 23,000 | 79,000 | ND | ND |
| | 12/01/06 | 270,000 | ND | ND | ND | ND | 290,000 | ND | ND | 11,000 | 90,000 | ND | ND |
| | 02/23/07 | 220,000 | ND | ND | ND | ND | 260,000 | ND | ND | 15,000 | 33,000 | ND | ND |
| | 05/10/07 | 140,000 | ND | ND | ND | ND | 180,000 | ND | ND | 7,100 | 80,000 | ND | ND |
| | 08/16/07 | 69,000 | ND | ND | ND | ND | 85,000 | ND | ND | 3,400 | 180,000 | ND | ND |
| | 11/08/07 | 34,000 | ND | ND | ND | ND | 38,000 | ND | ND | 1,400 | 140,000 | ND | ND |
| | 02/14/08 | 41,000 | ND | ND | ND | ND | 44,000 | ND | ND | 1,900 | 110,000 | ND | ND |
| | 05/15/08 | 43,000 | <100 | <100 | <100 | <100 | 62,000 | <100 | <100 | 1,100 | 200,000 | <100 | <100 |
| | 09/10/08 | 1,600 | 14 | 8.6 | 7.7 | 23 | 21,000 | <1,000 | <1,000 | <1,000 | 290,000 | <1,000 | <1,000 |
| | 11/18/08 | 4,500 | 86 | 150 | 100 | 590 | 29,000 | <1,000 | <1,000 | <1,000 | 290,000 | <1,000 | <1,000 |
| | 02/17/09 | 2,500 | 45 | 53 | 35 | 160 | 16,000 | <1,000 | <1,000 | <1,000 | 190,000 | <1,000 | <1,000 |
| | 05/15/09 | 2,000 | 15 | 21 | 13 | 35 | 13,000 | <1,000 | <1,000 | <1,000 | 260,000 | <1,000 | <1,000 |
| | 08/13/09 | 1,300 | 10 | 11 | 4.1 | 14 | 7,900 | <1,200 | <1,200 | <1,200 | 250,000 | <1,200 | <1,200 |
| | 02/23/10 | 1,700 | 22 | 21 | 11 | 38 | 4,700 | <1,700 | <1,700 | <1,700 | 260,000 | <1,700 | <1,700 |
| | 08/12/10 | 1,600 | 5.8 | 16 | 5.8 | 16 | 4,200 | <1,200 | <1,200 | <1,200 | 250,000 | <1,200 | <1,200 |
| | 02/17/11 | 290 | 1.0 | 5.5 | 6.5 | 8.1 | 73 | <50 | <50 | <50 | 8,500 | <50 | <50 |
| | | | | | | *Well Destroyed May 17, 2011* | | | | | | | |
| MW-3R | 07/14/11 | 130 | 3.2 | 0.97 | <0.5 | 1.2 | 1,200 | <250 | <250 | <250 | 35,000 | <250 | <250 |
| | 08/17/11 | 64 | <0.5 | <0.5 | <0.5 | <0.5 | 260 | <50 | <50 | <50 | 3,800 | <50 | <50 |
| | 03/28/14 | <200[1] | <1.0[1] | <1.0[1] | <1.0[1] | <1.0[1] | 28 | -- | -- | 5.3 | 1,400 | -- | -- |
| | 08/14/14 | <800[1] | <4.0[1] | <4.0[1] | <4.0[1] | <4.0[1] | 5.2 | -- | -- | <8.0[1] | 5,200 | -- | -- |
| | 01/28/15 | 140 | <0.50 | <0.50 | <0.50 | <0.50 | 23 | -- | -- | 4.1 | 6,500 | -- | -- |
| | 07/09/15 | <200[1] | <1.0[1] | <1.0[1] | <1.0[1] | <1.0[1] | 2.5 | -- | -- | <2.0[1] | 2,100 | -- | -- |
| | 01/18/16 | <3,000[1] | <15[1] | <15[1] | <15[1] | <15[1] | 78 | -- | -- | <30[1] | 30,000 | -- | -- |

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**GROUNDWATER ANALYTICAL DATA**
**Alaska Gas Service Station**
**6211 San Pablo Avenue, Oakland, CA**

| Well ID | Date Collected | GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | DIPE | ETBE | TAME | TBA | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | µg/L | | | | | | | | | | | |
| MW-4 | 11/17/01 | 64,000 | 960 | 1,400 | 360 | 1,600 | 140,000 | -- | -- | -- | -- | -- | -- |
| | 03/31/02 | 78,000 | 4,400 | 4,700 | 690 | 2,700 | 150,000 | -- | -- | -- | -- | -- | -- |
| | 09/06/07 | 49,000 | 710 | 840 | ND | 10,000 | 3,600 | ND | ND | 510 | 32,000 | ND | ND |
| | 11/08/07 | 64,000 | 1,300 | 2,600 | 1,000 | 8,500 | 1,500 | ND | ND | 360 | 14,000 | ND | ND |
| | 02/14/08 | 60,000 | 390 | 460 | 230 | 2,000 | 52,000 | ND | ND | 2,000 | 58,000 | ND | ND |
| | 05/15/08 | 22,000 | 670 | 130 | 740 | 2,700 | 3,300 | <5.0 | <5.0 | 340 | 35,000 | <5.0 | <5.0 |
| | 09/10/08 | 16,000 | 500 | 150 | 730 | 2,500 | 2,000 | <250 | <250 | <250 | 65,000 | <250 | <250 |
| | 11/18/08 | 24,000 | 820 | 190 | 1,200 | 5,000 | 1,400 | <50 | <50 | 260 | 9,300 | <50 | <50 |
| | 02/17/09 | 17,000 | 350 | 170 | 620 | 2,600 | 360 | <10 | <10 | 82 | 2,100 | <10 | <10 |
| | 05/15/09 | 32,000 | 300 | 190 | 880 | 3,200 | 470 | <10 | <10 | 95 | 380 | <10 | <10 |
| | 08/13/09 | 29,000 | 320 | 250 | 980 | 3,400 | 350 | <50 | <50 | 61 | 10,000 | <50 | <50 |
| | 02/23/10 | 15,000 | 250 | 77 | 580 | 2,200 | 180 | <5.0 | <5.0 | 41 | 400 | <5.0 | <5.0 |
| | 08/12/10 | 17,000 | 200 | 47 | 580 | 1,400 | 150 | <10 | <10 | 28 | 1,800 | <10 | <10 |
| | 02/17/11 | 7,600 | 190 | 15 | 260 | 440 | 130 | <5.0 | <5.0 | 29 | 790 | <5.0 | <5.0 |
| | | *Well Destroyed May 17, 2011* | | | | | | | | | | | |
| MW-4R | 07/14/11 | 1,000 | 210 | 3.6 | <2.5 | 32 | 7,800 | <200 | <200 | 390 | 41,000 | <200 | <200 |
| | 08/17/11 | 840 | 9.1 | <5.0 | <5.0 | <5.0 | 4,500 | <250 | <250 | 310 | 26,000 | <250 | <250 |
| | 03/28/14 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 3.6 | -- | -- | <1.0 | 110 | -- | -- |
| | 08/14/14 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 4.7 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/28/15 | <100[2] | <0.50 | <0.50 | <0.50 | <0.50 | 8.8 | -- | -- | 1.4 | 190 | -- | -- |
| | 07/09/15 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 3.9 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/18/16 | 620 | 0.60 | 1.2 | 8.0 | 23 | 11 | -- | -- | 3.0 | 750 | -- | -- |

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**GROUNDWATER ANALYTICAL DATA**
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**6211 San Pablo Avenue, Oakland, CA**

| Well ID | Date Collected | GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | DIPE | ETBE | TAME | TBA | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | µg/L | | | | | | | | | | | |
| MW-5 | 11/17/01 | 210 | 15 | 12 | 11 | 23 | 4.8 | -- | -- | -- | -- | -- | -- |
| | 03/31/02 | 120 | 11 | 7.4 | 6.1 | 16 | 4.2 | -- | -- | -- | -- | -- | -- |
| | 09/09/03 | ND | 1.5 | ND | ND | ND | 1.7 | -- | -- | -- | -- | -- | -- |
| | 12/09/03 | 130 | 32 | ND | 2.6 | 0.57 | 5 | -- | -- | -- | -- | -- | -- |
| | 02/19/04 | ND | ND | ND | ND | ND | 1.5 | -- | -- | -- | -- | -- | -- |
| | 05/24/04 | ND | ND | ND | ND | ND | 0.55 | ND | ND | ND | ND | ND | ND |
| | 09/03/04 | 100 | 6.4 | ND | ND | 0.79 | 4.2 | ND | ND | ND | ND | ND | ND |
| | 11/02/04 | ND | 2.6 | ND | 1.7 | 0.87 | 1 | ND | ND | ND | ND | ND | ND |
| | 02/17/05 | 51 | 0.74 | ND | 0.94 | ND | 1.5 | ND | ND | ND | ND | ND | ND |
| | 05/24/05 | ND | ND | ND | ND | ND | 1 | ND | ND | ND | ND | ND | ND |
| | 08/15/05 | ND | ND | ND | ND | ND | 0.88 | ND | ND | ND | ND | ND | ND |
| | 11/17/05 | 71 | 0.81 | ND | 1.1 | ND | 1.4 | ND | ND | ND | ND | ND | ND |
| | 02/08/06 | 50 | ND | ND | ND | ND | 1 | ND | ND | ND | ND | ND | ND |
| | 05/05/06 | ND | ND | ND | ND | ND | 0.93 | ND | ND | ND | ND | ND | ND |
| | 08/18/06 | ND | ND | ND | ND | ND | 1 | ND | ND | ND | ND | ND | ND |
| | 12/01/06 | ND | 0.69 | ND | ND | 0.52 | 0.97 | ND | ND | ND | ND | ND | ND |
| | 02/23/07 | 73 | ND | ND | ND | ND | 1.7 | ND | ND | ND | ND | ND | ND |
| | 05/10/07 | ND | ND | ND | ND | ND | 1.5 | ND | ND | ND | ND | ND | ND |
| | 08/16/07 | ND | ND | ND | ND | ND | 1.3 | ND | ND | ND | ND | ND | ND |
| | 11/08/07 | ND | ND | ND | ND | ND | 1.5 | ND | ND | ND | ND | ND | ND |
| | 02/14/08 | ND | ND | ND | ND | ND | 1.3 | ND | ND | ND | ND | ND | ND |
| | 05/15/08 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 1.7 | <0.50 | <0.50 | <0.50 | <20 | <0.50 | <0.50 |
| | 09/10/08 | 480 | 17 | 1.8 | 2.7 | 0.59 | 12 | <0.50 | <0.50 | <0.50 | 4.4 | <0.50 | <0.50 |
| | 11/18/08 | 130 | 2.3 | 1.6 | <0.50 | <0.50 | 7.3 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 02/17/09 | 170 | <0.50 | 2.7 | <0.50 | <0.50 | 4.2 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 05/15/09 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 7.6 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 08/13/09 | 380 | 19 | 2.1 | 3.8 | 0.88 | 11 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 02/23/10 | <50 | <0.50 | 0.87 | <0.50 | <0.50 | 1.9 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 08/12/10 | 120 | 1.5 | 2.9 | 0.74 | 3.5 | 13 | <0.50 | <0.50 | <0.50 | 3.0 | <0.50 | <0.50 |
| | 02/17/11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 3.7 | <0.5 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 08/17/11 | 160 | 2.3 | 1.1 | <0.5 | <0.5 | 5.4 | <0.5 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 03/28/14 | 77 | 0.52 | <0.50 | <0.50 | <0.50 | 5.2 | -- | -- | <1.0 | <10 | -- | -- |
| | 08/14/14 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 3.7 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/28/15 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 16 | -- | -- | 2.8 | 57 | -- | -- |
| | 07/09/15 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 3.0 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/18/16 | 52 | <0.50 | <0.50 | <0.50 | <0.50 | 1.6 | -- | -- | <1.0 | <10 | -- | -- |

**TABLE 3**
**GROUNDWATER ANALYTICAL DATA**
**Alaska Gas Service Station**
**6211 San Pablo Avenue, Oakland, CA**

| Well ID | Date Collected | GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | DIPE | ETBE | TAME | TBA | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | µg/L | | | | | | | | | | | |
| MW-6 | 11/17/01 | 3,500 | 160 | 260 | 95 | 420 | 1,500 | -- | -- | -- | -- | -- | -- |
| | 03/31/02 | 3,200 | 410 | 170 | 82 | 280 | 3,000 | -- | -- | -- | -- | -- | -- |
| | 09/09/03 | 800 | 49 | ND | 7.4 | ND | 1,700 | -- | -- | -- | -- | -- | -- |
| | 12/09/03 | 970 | 150 | 9.9 | 31 | 83 | 1,200 | -- | -- | -- | -- | -- | -- |
| | 02/19/04 | 1,900 | 280 | 58 | 17 | 160 | 2,700 | -- | -- | -- | -- | -- | -- |
| | 09/03/04 | 1,100 | 27 | ND | 14 | 27 | 2,200 | ND | ND | 85 | ND | ND | ND |
| | 11/02/04 | 1,800 | 32 | ND | 5 | 11 | 4,100 | ND | ND | 170 | 270 | ND | ND |
| | 02/17/05 | 5,600 | 190 | 34 | 41 | 110 | 10,000 | ND | ND | 780 | 2,000 | ND | ND |
| | 08/15/05 | 1,800 | 27 | ND | 6 | 23 | 3,800 | ND | ND | 300 | 3,500 | ND | ND |
| | 11/17/05 | 1,100 | 30 | ND | 4 | 9 | 2,400 | ND | ND | 190 | 9,500 | ND | ND |
| | 02/08/06 | 3,600 | 220 | 43 | 66 | 160 | 2,700 | ND | ND | 180 | 7,800 | ND | ND |
| | 05/05/06 | 1,600 | 130 | 21 | 37 | 65 | 1,400 | ND | ND | 53 | 3,100 | ND | ND |
| | 08/18/06 | 270 | 27 | ND | 3 | 4 | 240 | ND | ND | 11 | 2,400 | ND | ND |
| | 12/01/06 | 1,700 | ND | ND | ND | ND | 1,700 | ND | ND | 92 | 800 | ND | ND |
| | 02/23/07 | ND | ND | ND | ND | ND | 15 | ND | ND | ND | ND | ND | ND |
| | 05/10/07 | ND | 3.0 | ND | ND | 1.9 | 26 | ND | ND | 2 | 48 | ND | ND |
| | 08/16/07 | ND | ND | ND | ND | ND | 1.4 | ND | ND | ND | ND | ND | ND |
| | 11/08/07 | ND | ND | ND | ND | ND | 5.3 | ND | ND | ND | ND | ND | ND |
| | 02/14/08 | ND | ND | ND | ND | ND | 11 | ND | ND | 0.94 | 220 | ND | ND |
| | 05/15/08 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 13 | <0.50 | <0.50 | 1.0 | 130 | <0.50 | <0.50 |
| | 09/10/08 | 78 | 1.4 | 0.60 | 0.94 | 1.3 | 71 | <1.0 | <1.0 | 6.2 | 160 | <1.0 | <1.0 |
| | 11/18/08 | <50 | 2.4 | <0.50 | <0.50 | 0.70 | 72 | <1.2 | <1.2 | 7.2 | 180 | <1.2 | <1.2 |
| | 02/17/09 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 05/15/09 | 53 | 3.2 | <0.50 | <0.50 | 1.7 | 44 | <1.0 | <1.0 | 4.3 | 89 | <1.0 | <1.0 |
| | 08/13/09 | 74 | 5.9 | 0.57 | 0.97 | 5.0 | 27 | <0.50 | <0.50 | 2.2 | 140 | <0.50 | <0.50 |
| | 02/23/10 | <50 | 0.66 | <0.50 | <0.50 | 0.57 | 5.7 | <0.50 | <0.50 | <0.50 | 15 | <0.50 | <0.50 |
| | 08/12/10 | 92 | 7.5 | 0.94 | <0.50 | 1.0 | 32 | <1.0 | <1.0 | 2.7 | 180 | <1.0 | <1.0 |
| | 02/17/11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 08/17/11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 73 | <1.2 | <1.2 | 7.7 | 130 | <1.2 | <1.2 |
| | 03/28/14 | 110 | 6.0 | <0.50 | 2.2 | 1.1 | 14 | -- | -- | 2.0 | 36 | -- | -- |
| | 08/14/14 | <50 | 0.56 | <0.50 | <0.50 | <0.50 | 1.5 | -- | -- | <1.0 | 14 | -- | -- |
| | 01/28/15 | 90 | 4.6 | <0.50 | 3.0 | 0.88 | 5.5 | -- | -- | 1.0 | 12 | -- | -- |
| | 07/09/15 | <50 | 0.52 | <0.50 | <0.50 | <0.50 | 1.5 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/18/16 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | -- | -- | <1.0 | <10 | -- | -- |

**TABLE 3**
**GROUNDWATER ANALYTICAL DATA**
**Alaska Gas Service Station**
**6211 San Pablo Avenue, Oakland, CA**

| Well ID | Date Collected | GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | DIPE | ETBE | TAME | TBA | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | µg/L | | | | | | | | | | | |
| MW-7 | 02/23/10 | 29,000 | 410 | 380 | 2,100 | 6,100 | 410 | <10 | <10 | 19 | 1,500 | <10 | <10 |
| | 08/12/10 | 2,000 | 26 | 17 | 140 | 250 | 2,400 | <50 | <50 | 75 | 9,600 | <50 | <50 |
| | 02/17/11 | 2,400 | 35 | 17 | 160 | 190 | 670 | <10 | <10 | 24 | 1,300 | <10 | <10 |
| | 08/17/11 | 320 | 4.3 | 4.0 | 5.7 | 11 | 3.0 | <0.5 | <0.5 | <0.5 | 110 | <0.5 | <0.5 |
| | 03/28/14 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 05/28/14 | 8,300 | 43 | 8.5 | 520 | 490 | 340 | -- | -- | 9.7 | 420 | -- | -- |
| | 08/14/14 | 8,800 | 25 | <5.0[1] | 400 | 460 | 99 | -- | -- | <10[1] | 1,200 | -- | -- |
| | 01/28/15 | 28,000 | 140 | <40[1] | 1,600 | 1,542 | <40[1] | -- | -- | <80[1] | <800[1] | -- | -- |
| | 07/09/15 | 10,000 | 47 | 6.4 | 410 | 225.5 | 130 | -- | -- | 7.3 | 830 | -- | -- |
| | 01/18/16 | 33,000 | 110 | <10[1] | 1,200 | 570 | 10 | -- | -- | <20[1] | 930 | -- | -- |
| MW-8 | 02/23/10 | 690 | 3.5 | 2.8 | 29 | 40 | 1,600 | <100 | <100 | <100 | 24,000 | <100 | <100 |
| | 08/12/10 | 260 | 4.1 | 1.4 | 6.9 | 7.2 | 2,100 | <170 | <170 | <170 | 25,000 | <170 | <170 |
| | 02/17/11 | 500 | 3.6 | 5.1 | 7.8 | 2.1 | 1,300 | <100 | <100 | <100 | 25,000 | <100 | <100 |
| | 08/17/11 | 3,000 | 30 | 23 | 96 | 85 | 320 | <100 | <100 | <100 | 19,000 | <100 | <100 |
| | 03/28/14 | <4,000[1] | <20[1] | <20[1] | <20[1] | <20[1] | 200 | -- | -- | <40[1] | 33,000 | -- | -- |
| | 08/14/14 | <3,000[1] | <15[1] | <15[1] | <15[1] | <15[1] | 160 | -- | -- | <30[1] | 20,000 | -- | -- |
| | 01/28/15 | <2,000[1] | <10[1] | <10[1] | <10[1] | <10[1] | 93 | -- | -- | <20[1] | 15,000 | -- | -- |
| | 07/09/15 | <1,000[1] | <5.0[1] | <5.0[1] | <5.0[1] | <5.0[1] | 44 | -- | -- | <10[1] | 10,000 | -- | -- |
| | 01/18/16 | *Unable to Sample - RV Parked Over Well* | | | | | | | | | | | |
| MW-9 | 02/23/10 | <50 | <0.50 | 0.70 | <0.50 | <0.50 | 260 | <10 | <10 | <10 | 1,600 | <10 | <10 |
| | 08/12/10 | <50 | <0.50 | 1.6 | <0.50 | <0.50 | 85 | <10 | <10 | <10 | 880 | <10 | <10 |
| | 02/17/11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 160 | <5.0 | <5.0 | <5.0 | 1,300 | <5.0 | <5.0 |
| | 08/17/11 | 170 | <0.5 | 7.0 | <0.5 | <0.5 | 10 | <5.0 | <5.0 | <5.0 | 650 | <5.0 | <5.0 |
| | 03/28/14 | 55 | <0.50 | <0.50 | <0.50 | <0.50 | 74 | -- | -- | <1.0 | 15 | -- | -- |
| | 08/14/14 | 64 | <0.50 | <0.50 | <0.50 | <0.50 | 130 | -- | -- | 3.5 | <10 | -- | -- |
| | 01/28/15 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 62 | -- | -- | 1.0 | <10 | -- | -- |
| | 07/09/15 | 68 | <0.50 | <0.50 | <0.50 | <0.50 | 86 | -- | -- | 1.8 | <10 | -- | -- |
| | 01/18/16 | 51 | <0.50 | <0.50 | <0.50 | <0.50 | 28 | -- | -- | <1.0 | <10 | -- | -- |
| MW-10 | 02/23/10 | 1,300 | <0.50 | 11 | 3.1 | 2.6 | 2.8 | <0.50 | <0.50 | <0.50 | <2.0 | <0.50 | <0.50 |
| | 08/12/10 | 61 | <0.50 | 0.72 | <0.50 | <0.50 | 39 | <0.50 | <0.50 | 1.8 | <2.0 | <0.50 | <0.50 |
| | 02/17/11 | 150 | <0.5 | 1.6 | <0.5 | <0.5 | 6.9 | <0.5 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 08/17/11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6.9 | <0.5 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 03/28/14 | 95 | <0.50 | <0.50 | <0.50 | <0.50 | 24 | -- | -- | <1.0 | <10 | -- | -- |
| | 08/14/14 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 21 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/28/15 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 23 | -- | -- | <1.0 | <10 | -- | -- |
| | 07/09/15 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 17 | -- | -- | <1.0 | <10 | -- | -- |
| | 01/18/16 | *Unable to Sample - Car Parked Over Well* | | | | | | | | | | | |

**TABLE 3**
**GROUNDWATER ANALYTICAL DATA**
**Alaska Gas Service Station**
**6211 San Pablo Avenue, Oakland, CA**

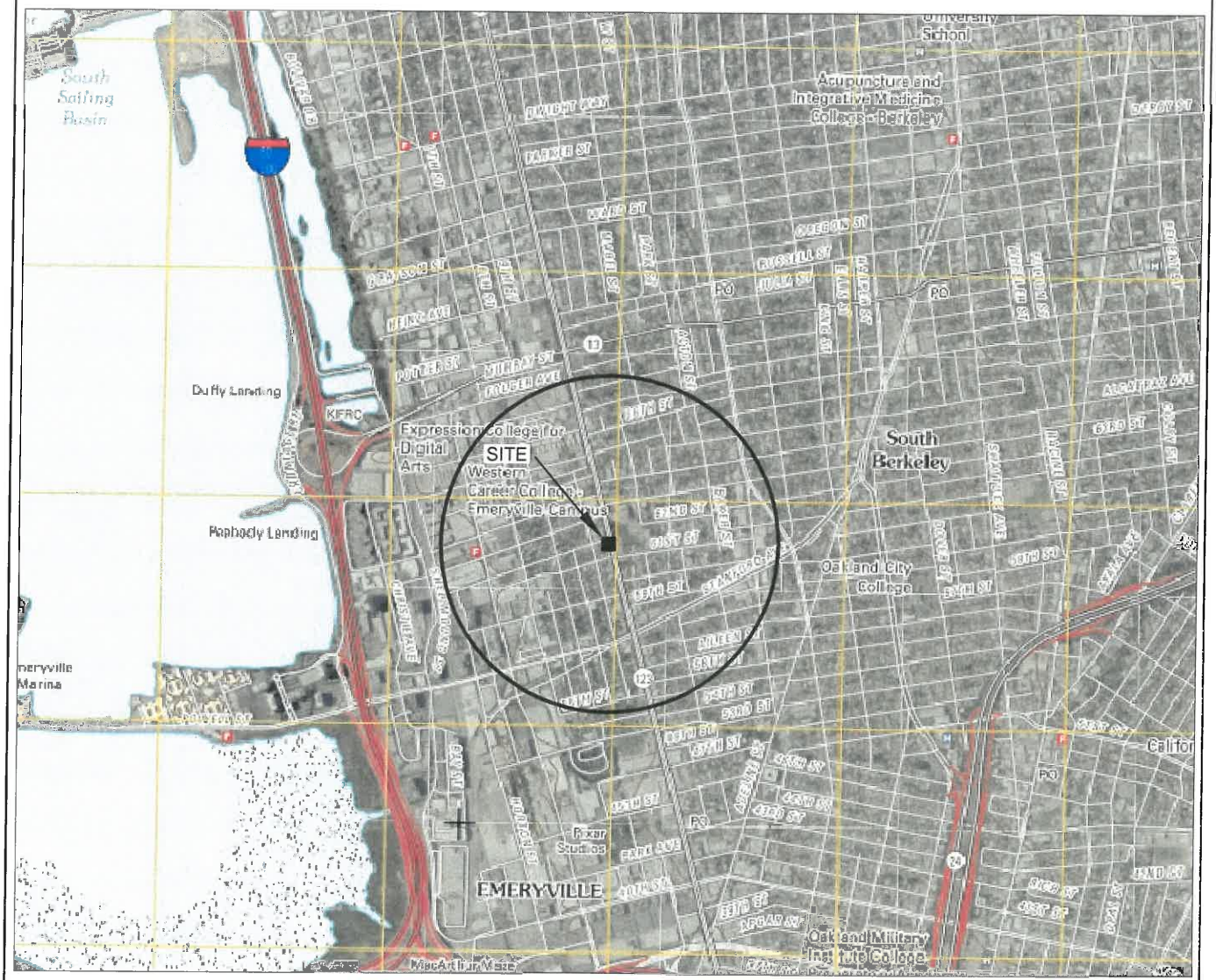
| Well ID | Date Collected | GRO | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | DIPE | ETBE | TAME | TBA | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | µg/L | | | | | | | | | | | |
| EX-1 | 02/19/04 | 120,000 | 9,500 | 4,300 | 840 | 3,900 | 150,000 | -- | -- | -- | -- | -- | -- |
| | 02/14/08 | 84,000 | 2,300 | 4,900 | 1,800 | 14,000 | 3,900 | ND | ND | ND | ND | ND | ND |
| | 05/15/08 | 24,000 | 2,100 | 750 | 640 | 2,100 | 1,800 | <0.50 | <0.50 | 610 | 10,000 | <0.50 | <0.50 |
| | 09/10/08 | 9,200 | 1,000 | 160 | 300 | 1,000 | 780 | <100 | <100 | 380 | 11,000 | <100 | <100 |
| | 11/18/08 | 8,900 | 1,400 | 290 | 360 | 1,300 | 840 | <100 | <100 | 180 | 22,000 | <100 | <100 |
| | 02/17/09 | 70,000 | 2,700 | 3,600 | 1,900 | 13,000 | 1,400 | <25 | <25 | 230 | 20,000 | <25 | <25 |
| | 05/15/09 | 18,000 | 1,400 | 250 | 530 | 1,700 | 640 | <25 | <25 | 480 | 1,500 | <25 | <25 |
| | 08/13/09 | 10,000 | 1,100 | 150 | 410 | 940 | 520 | <25 | <25 | 200 | 5,500 | <25 | <25 |
| | 02/23/10 | 39,000 | 1,300 | 1,100 | 1,100 | 7,700 | 880 | <25 | <25 | 120 | 5,200 | <25 | <25 |
| | 08/12/10 | 12,000 | 1,000 | 160 | 470 | 1,200 | 660 | <17 | <17 | 250 | 670 | <17 | <17 |
| | 02/17/11 | 33,000 | 1,700 | 600 | 1,100 | 6,500 | 720 | <12 | <12 | 160 | 1,000 | <12 | <12 |
| | | *Well Destroyed May 17, 2011* | | | | | | | | | | | |

**Notes:**
µg/L = Micrograms per liter
GRO = Gasoline Range Organics (C4-C13)
MTBE = Methyl Tertiary Butyl Ether
TAME= Tertiary Amyl Methyl Ether
ETBE= Ethyl Tertiary Butyl Ether
DIPE= Di-Isopropyl Ether
TBA = Tertiary Butyl Alcohol
1,2-DCA= 1,2-Dichloroethane
EDB = Ethylene dibromide

1 = Reporting limits were increased due to high concentrations of target analytes.
2 = Reporting limits were increased due to sample foaming.

**Analytical Methods:**
GRO by EPA Method SW8015B/SW8260B
All other analytes by EPA Method SW8260B.

Information prior to February 2014, taken from the AEI Consultants, *Remedial Action Report / Groundwater Monitoring Report - 2nd Semester 2011* , dated October 6, 2011.




GENERAL NOTES:
BASE MAP FROM U.S.G.S.
OAKLAND WEST, CA.
7.5 MINUTE TOPOGRAPHIC
PHOTOREVISED 2012

N

QUADRANGLE LOCATION

0 2000 FT

SCALE 1:24,000

STRATUS ENVIRONMENTAL, INC.

ALASKA GAS SERVICE STATION
6211 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

SITE LOCATION MAP

FIGURE
1
PROJECT NO.
2192-6211-01

N

LEGEND

- MW-1 MONITORING WELL LOCATION
- SG-2 NESTED VAPOR PROBE LOCATIONS
- B-1 SOIL BORING LOCATION
- MW-1 ABANDONED WELL LOCATION

MARSHALL STREET

SAN PABLO AVENUE

62nd STREET

SIDEWALK

PLANTER

DRIVEWAY

SIDEWALK LANDSCAPING

APARTMENT COMPLEX
(1130 & 1126 62nd STREET)

STATION BUILDING

USTs

PUMPS

CANOPY

APPROXIMATE EXTENT OF OVER-EXCAVATION

PARKING LOT

1156 62nd STREET

1152 62nd STREET

APARTMENTS 6117, 6121, & 6125
SAN PABLO AVENUE

1153 62nd STREET

6125 MARSHALL STREET

6105 SAN PABLO AVENUE
(NORTH OAKLAND MEDICAL CENTERS)

MW-1R MW-1 MW-2 MW-3 MW-3R MW-4 MW-4R MW-5 MW-6 MW-7 MW-8 MW-9 MW-10

SB-1 SB-2 SB-3 SB-4 SB-5 SB-6 SB-7 SB-8 SB-9 SB-10 SB-11 SB-12 SB-13 SB-14

B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8 B-9 B-10 B-11 B-12 B-13 B-14

DDP-1 DDP-2 DDP-3 DDP-4

DP-1 DP-2 DP-3 DP-4

SG-1 SG-2 SG-3 SG-4 SG-5 SG-6 SG-7 SG-8

VE-1 VE-2 VE-3 VE-4 VE-5 VE-6 VE-7 VE-8 VE-9 VE-10 VE-11 VE-12 VE-13

AS-1 AS-2 AS-3 AS-4 AS-5

EX-1

0 50 FT

APPROXIMATE SCALE

STRATUS ENVIRONMENTAL, INC.

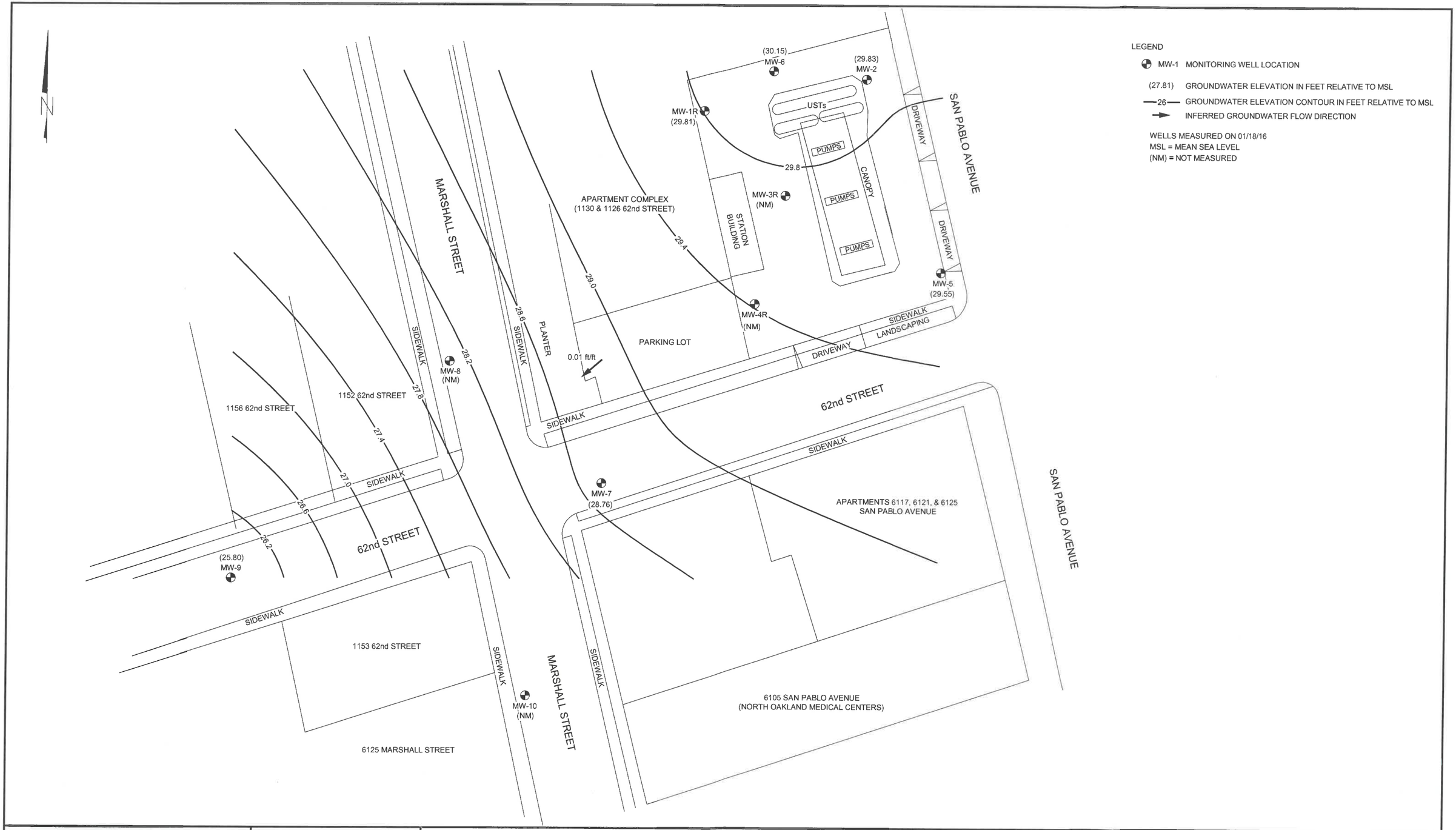
PATH NAME: Alaska Gas
DRAFTER INITIALS: JMP
DATE LAST REVISED: February 10, 2015
FILENAME: Alaska Site Vicinity Map

ALASKA GAS SERVICE STATION
6211 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

SITE VICINITY MAP

FIGURE
2

PROJECT NO.
2192-6211-01




STRATUS ENVIRONMENTAL, INC.

PATH NAME: Alaska Gas\Quarterly Figures
DRAFTER INITIALS: DMG
DATE LAST REVISED: February 24,2016
FILENAME: Alaska Quarterly Figures

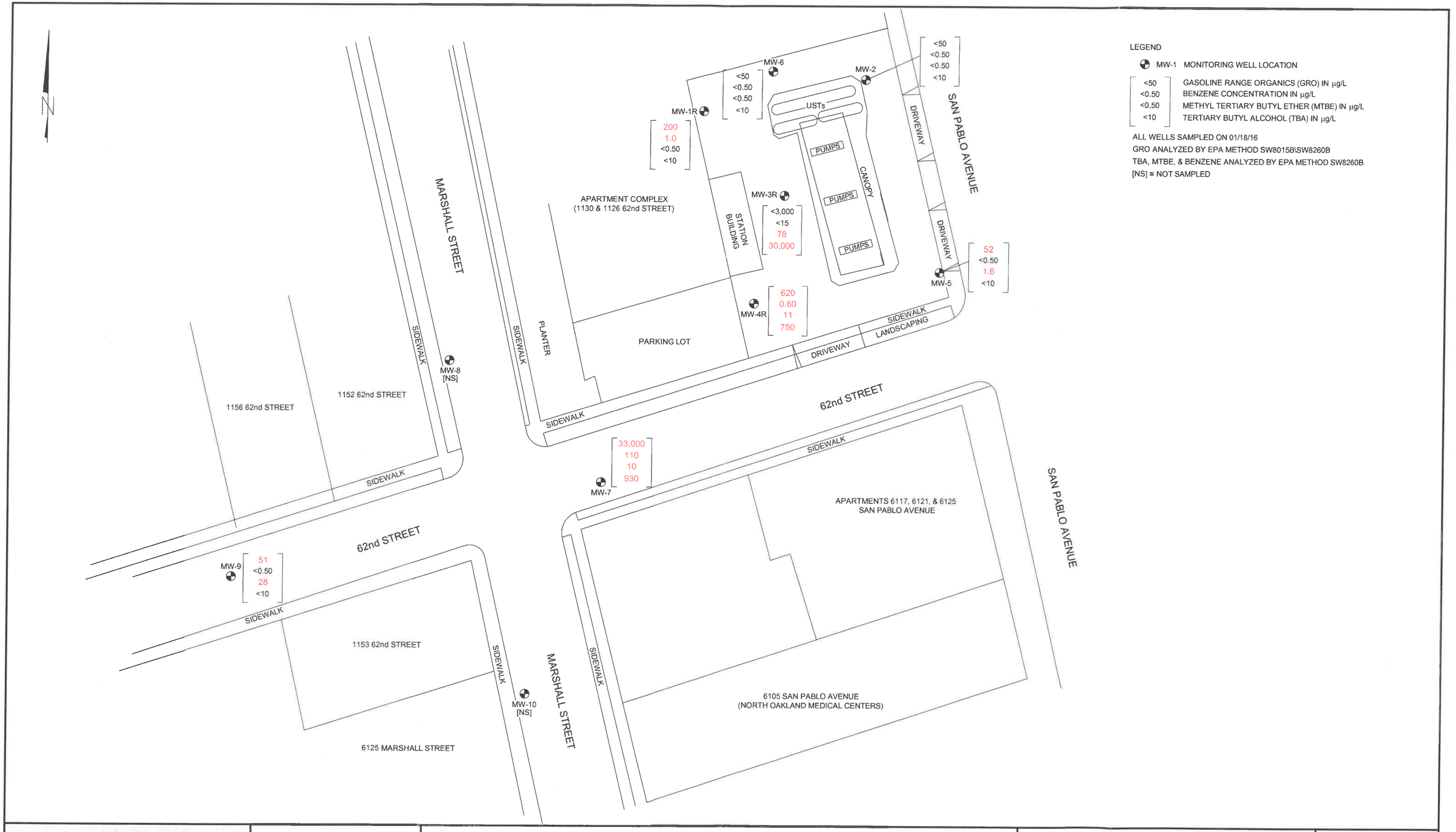
0 50 FT
APPROXIMATE SCALE

ALASKA GAS SERVICE STATION
6211 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
1st QUARTER 2016

FIGURE
3

PROJECT NO.
2192-6211-01




LEGEND

MW-1 MONITORING WELL LOCATION

| | |
|---|---|
| <50 | GASOLINE RANGE ORGANICS (GRO) IN µg/L |
| <0.50 | BENZENE CONCENTRATION IN µg/L |
| <0.50 | METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L |
| <10 | TERTIARY BUTYL ALCOHOL (TBA) IN µg/L |

ALL WELLS SAMPLED ON 01/18/16
GRO ANALYZED BY EPA METHOD SW8015B\SW8260B
TBA, MTBE, & BENZENE ANALYZED BY EPA METHOD SW8260B
[NS] = NOT SAMPLED

STRATUS ENVIRONMENTAL, INC.

PATH NAME: Alaska Gas\Quarterly Figures
DRAFTER INITIALS: DMG
DATE LAST REVISED: February 24,2016
FILENAME: Alaska Quarterly Figures

0 50 FT
APPROXIMATE SCALE

ALASKA GAS SERVICE STATION
6211 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

GROUNDWATER ANALYTICAL SUMMARY
1st QUARTER 2016

FIGURE
4

PROJECT NO.
2192-6211-01

# APPENDIX A

# FIELD DATA SHEETS

STRATUS ENVIRONMENTAL, INC.

Site Address 6211 San Pablo Ave
City Oakland
Sampled by:
Signature CMcL

Site Number Alaska 6045
Project Number
Project PM Scott
DATE 1-18-16

ORIGINAL

| Water Level Data | | | | | Purge Volume Calculations | | | | | Purge Method | | | | Sample Record | | | Field Data |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well ID | Time | Depth to Product (feet) | Depth to Water (feet) | Total Depth (feet) | Water column (feet) | Diameter (inches) | Multiplier | 3 casing volumes (gallons) | Actual water purged (gallons) | No Purge | Bailer | Pump | other | DTW at sample time (feet) | Sample I.D | Sample Time | DO (mg/L) |
| MW1R | 0434 | | 6.86 | 22.71 | 15.85 | 2 | .5 | 8 | 8 | | X | | | 6.98 | 1R | 0453 | 1.18 |
| MW2 | 0525 | | 6.50 | 20.52 | 14.02 | 2 | .5 | 7 | 7 | | X | | | 7.93 | 2 | 0540 | 1.57 |
| MW3R | 0418 | | 6.54 | 14.55 | 8.31 | 2 | .5 | 4 | 4 | | X | | | 6.75 | 3R | 0430 | 2.14 |
| MW4R | 0413 | | 4.86 | 14.63 | 9.77 | 2 | .5 | 5 | 5 | | X | | | 4.93 | 4R | 0416 | 1.49 |
| MW5 | 0341 | | 0.62 | 24.11 | 18.49 | 2 | .5 | 9 | 9 | | X | | | 5.71 | 5 | 0400 | 1.35 |
| MW6 | 0435 | | 7.92 | 23.09 | 17.17 | 2 | .5 | 8 | 8 | | X | | | 6.03 | 6 | 0513 | 6.71 |
| MW7 | 0610 | 2.40 | 2.41 | 15.74 | 13.33 | 2 | .5 | 6 | 6 | | X | | | 3.61 | 7 | 0620 | — |
| MW8 | RV | | | 14.75 | | 2 | .5 | | | | | | | | 8 | | — |
| MW9 | 0547 | | 3.10 | 14.87 | 11.77 | 2 | .5 | 6 | 6 | | X | | | | 9 | 0603 | 1.96 |
| MW10 | Cav | | | 14.40 | | 2 | .5 | | | | | | | | 10 | | — |

Multiplier
2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

Please refer to groundwater sampling field procedures
pH/Conductivity/temperature Meter - Oakton Model PC-10
DO Meter - Oakton 300 Series (DO is always measured before purge)

CALIBRATION DATE
pH 1-1-16
Conductivity
DO

T:\Forms

ORIGINA

STRATUS ENVIRONMENTAL, INC.

Site Address 6211 San Pablo Ave
City Dublin
Sampled By:
Signature

Site Number Alaska Cvas
Project Number
Project PM Scott
DATE 1-18-16

| Well ID MW5 | | | | 9 |
|---|---|---|---|---|
| Purge start time | | | Odor | (Y) N |
| | Temp C | pH | cond | gallons |
| time 0345 | 19.1 | 6.40 | 175.2 | 8 |
| time 0349 | 18.9 | 6.57 | 178.1 | 5 |
| time 0353 | 19.8 | 6.52 | 176.3 | 9 |
| time | | | | |
| purge stop time 1.39 | | | ORP 4.9 | |

| Well ID MW4R | | | | 32 |
|---|---|---|---|---|
| Purge start time | | | Odor | (Y) N |
| | Temp C | pH | cond | gallons |
| time 0405 | 18.4 | 6.66 | 158.6 | 0 |
| time 0408 | 18.9 | 6.77 | 166.9 | 3 |
| time 0410 | 18.9 | 6.78 | 155.8 | 5 |
| time | | | | |
| purge stop time 1.49 | | | ORP -9.6 | |

| Well ID MW3R | | | | 4 |
|---|---|---|---|---|
| Purge start time | | | Odor | Y (N) |
| | Temp C | pH | cond | gallons |
| time 0420 | 18.2 | 6.64 | 172.0 | 0 |
| time 0422 | 18.4 | 6.70 | 171.7 | 2 |
| time 0427 | 18.3 | 6.74 | 176.7 | 4 |
| time | | | | |
| purge stop time 2.14 | | | ORP 7.0 | |

| Well ID MW1R | | | | 8 |
|---|---|---|---|---|
| Purge start time | | | Odor | (Y) N |
| | Temp C | pH | cond | gallons |
| time 0439 | 18.5 | 6.67 | 163.3 | 0 |
| time 0443 | 18.0 | 6.62 | 162.0 | 4 |
| time 0447 | 18.9 | 6.61 | 162.0 | 8 |
| time | | | | |
| purge stop time 1.18 | | | ORP -9.1 | |

| Well ID MW6 | | | | 8 |
|---|---|---|---|---|
| Purge start time | | | Odor | (Y) N |
| | Temp C | pH | cond | gallons |
| time 0457 | 15.6 | 6.88 | 78.80 | 0 |
| time 0502 | 17.1 | 6.83 | 114.9 | 4 |
| time 0508 | 17.3 | 6.74 | 127.5 | 8 |
| time | | | | |
| purge stop time 6.71 | | | ORP -27.1 | |

| Well ID MW2 | | | | 7 |
|---|---|---|---|---|
| Purge start time | | | Odor | (Y) N |
| | Temp C | pH | cond | gallons |
| time 0527 | 18.8 | 6.48 | 162.9 | 0 |
| time 0531 | 19.1 | 6.53 | 169.3 | 3.5 |
| time 0535 | 19.9 | 6.55 | 171.0 | 7 |
| time | | | | |
| purge stop time 1.53 | | | ORP 0.5 | |

| Well ID MW9 | | | | 6 |
|---|---|---|---|---|
| Purge start time | | | Odor | Y (N) |
| | Temp C | pH | cond | gallons |
| time 0550 | 17.9 | 6.65 | 170.1 | 0 |
| time 0553 | 18.5 | 6.73 | 170.7 | 3 |
| time 0559 | 18.8 | 6.78 | 171.8 | 6 |
| time | | | | |
| purge stop time 1.91 | | | ORP -10.2 | |

| Well ID | | | | |
|---|---|---|---|---|
| Purge start time | | | Odor | Y N |
| | Temp C | pH | cond | gallons |
| time | | | | |
| time | | | | |
| time | | | | |
| time | | | | |
| purge stop time | | | ORP | |

55969

**Billing Information:**
Company Name Stantec
Attn:
Address
City, State, Zip
Phone Number Fax

**Alpha Analytical, Inc.**
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

**Samples Collected From Which State?**
AZ ____ CA X NV ____ WA ____ DOD Site ____
ID ____ OR ____ OTHER ____ Page # 1 of 1

Consultant / Client Name Alaska GWS
Address
City, State, Zip Oakland
Job #
Job Name
Report Attention / Project Manager
Name: Scott
Email:
Phone: Mobile:

Data Validation Level: III or IV
EDD / EDF? YES ____ NO ____
Global ID # T0600101604

| Time Sampled | Date Sampled | Matrix* See Key Below | P.O. # / Lab ID Number (Office Use Only) | Sample Description | TAT | Field Filtered | # Containers** | GRO | BTEX | MTBE | TAME | TBA | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0453 | 11/8 | AQ | | MW-1R | STD | N | 3V | X | X | X | X | X | | | |
| 0540 | " | " | | MW-2 | " | " | 3V | " | " | " | " | " | | | |
| 0430 | " | " | | MW-3R | " | " | 3V | " | " | " | " | " | | | |
| 0416 | " | " | | MW-4R | " | " | 3V | " | " | " | " | " | | | |
| 0400 | " | " | | MW-5 | " | " | 3V | " | " | " | " | " | | | |
| 0513 | " | " | | MW-6 | " | " | 3V | " | " | " | " | " | | | |
| 0620 | " | " | | MW-7 | " | " | 3V | " | " | " | " | " | | | |
| 0605 | 11/8 | AQ | | MW-9 | STD | N | 3V | X | X | X | X | X | | | |

FOR LAB USE ONLY

**ADDITIONAL INSTRUCTIONS:**

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled By: Scott

| | | | |
|---|---|---|---|
| Relinquished by: (Signature/Affiliation) Scott Stantec | Received by: (Signature/Affiliation) | Date: | Time: |
| Relinquished by: (Signature/Affiliation) | Received by: (Signature/Affiliation) | Date: | Time: |
| Relinquished by: (Signature/Affiliation) | Received by: (Signature/Affiliation) | Date: | Time: |

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

**NOTE:** Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

# APPENDIX B

# SAMPLING AND ANALYSES PROCEDURES

# APPENDIX B

# SAMPLING AND ANALYSIS PROCEDURES

The sampling and analysis procedures as well as the quality assurance plan are contained in this appendix. The procedures and adherence to the quality assurance plan will provide for consistent and reproducible sampling methods; proper application of analytical methods; accurate and precise analytical results; and finally, these procedures will provide guidelines so that the overall objectives of the monitoring program are achieved.

## Ground Water and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

A water/hydrocarbon interface probe is used to assess the liquid-phase petroleum hydrocarbon (LPH) thickness, if present, and a water level indicator is used to measure the ground water depth in monitoring wells that do not contain LPH. Depth to ground water or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typical a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for hydrocarbon sheen.

## Subjective Analysis of Ground Water

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

## Monitoring Well Purging and Sampling

Monitoring wells are purged using a pump or bailer until pH, temperature, and conductivity of the purge water has stabilized and a minimum of three well volumes of water have been removed. If three well volumes can not be removed in one half hour's time the well is allowed to recharge to 80% of original level. After recharging, a ground water sample is then removed from each of the wells using a disposable bailer.

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These bottles will be filled completely to prevent air from remaining in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped.

The water sample is collected, labeled, and handled according to the Quality Assurance Plan. Water generated during the monitoring event is disposed of accruing to regulatory accepted method pertaining to the site.

## QUALITY ASSURANCE PLAN

Procedures to provide data quality should be established and documented so that conditions adverse to quality, such as deficiencies, deviations, nonconforments, defective material, services, and/or equipment, can be promptly identified and corrected.

### General Sample Collection and Handling Procedures

Proper collection and handling are essential to ensure the quality of a sample. Each sample is collected in a suitable container, preserved correctly for the intended analysis, and stored prior to analysis for no longer than the maximum allowable holding time. Details on the procedures for collection and handling of samples used on this project can be found in this section.

### Soil and Water Sample Labeling and Preservation

Label information includes a unique sample identification number, job identification number, date, and time. After labeling all soil and water samples are placed in a Ziploc® type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Upon recovery, the sample container is sealed to minimize the potential of volatilization and cross-contamination prior to chemical analysis. Soil sampling tubes are typically closed at each end with Teflon® sheeting and plastic caps. The sample is then placed in a Ziploc® type bag and sealed. The sample is labeled and refrigerated at approximately 4° Celsius for delivery, under strict chain-of-custody, to the analytical laboratory.

### Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded on the borehole log or in the field records. The samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and

noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

## Equipment Cleaning

Sample bottles, caps, and septa used in sampling for volatile and semivolatile organics will be triple rinsed with high-purity deionized water. After being rinsed, sample bottles will be dried overnight at a temperature of 200°C. Sample caps and septa will be dried overnight at a temperature of 60°C. Sample bottles, caps, and septa will be protected from solvent contact between drying and actual use at the sampling site. Sampling containers will be used only once and discarded after analysis is complete.

Plastic bottles and caps used in sampling for metals will be soaked overnight in a 1-percent nitric acid solution. Next, the bottles and caps will be triple rinsed with deionized water. Finally, the bottles and caps will be air dried before being used at the site. Plastic bottles and caps will be constructed of linear polyethylene or polypropylene. Sampling containers will be used only once and discarded after analysis is complete. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

Before the sampling event is started, equipment that will be placed in the well or will come in contact with groundwater will be disassembled and cleaned thoroughly with detergent water, and then steam cleaned with deionized water. Any parts that may absorb contaminants, such as plastic pump valves, etc. will be cleaned as described above or replaced.

During field sampling, equipment surfaces that are placed in the well or contact groundwater will be steam cleaned with deionized water before the next well is purged or sampled. Equipment blanks will be collected and analyzed from non-disposable sampling equipment that is used for collecting groundwater samples at the rate of one blank per twenty samples collected.

## Internal Quality Assurance Checks

Internal quality assurance procedures are designed to provide reliability of monitoring and measurement of data. Both field and laboratory quality assurance checks are necessary to evaluate the reliability of sampling and analysis results. Internal quality assurance procedures generally include:

- Laboratory Quality Assurance

- Documentation of instrument performance checks
- Documentation of instrument calibration
- Documentation of the traceability of instrument standards, samples, and data
- Documentation of analytical and QC methodology (QC methodology includes use of spiked samples, duplicate samples, split samples, use of reference blanks, and check standards to check method accuracy and precision)

- Field Quality Assurance

- Documentation of sample preservation and transportation
- Documentation of field instrument calibration and irregularities in performance

Internal laboratory quality assurance checks will be the responsibility of the contract laboratories. Data and reports submitted by field personnel and the contract laboratory will be reviewed and maintained in the project files.

**Types of Quality Control Checks**

Samples are analyzed using analytical methods outlined in EPA Manual SW 846 and approved by the California Regional Water Quality Control Board-Central Valley Region in the Leaking Underground Fuel Tanks (LUFT) manual and appendices. Standard contract laboratory quality control may include analysis or use of the following:

- Method blanks – reagent water used to prepare calibration standards, spike solutions, etc. is analyzed in the same manner as the sample to demonstrate that analytical interferences are under control.
- Matrix spiked samples – a known amount of spike solution containing selected constituents is added to the sample at concentrations at which the accuracy of the analytical method is to satisfactorily monitor and evaluate laboratory data quality.
- Split samples – a sample is split into two separate aliquots before analysis to assess the reproducibility of the analysis.
- Surrogate samples – samples are spiked with surrogate constituents at known concentrations to monitor both the performance of the analytical system and the effectiveness of the method in dealing with the sample matrix.
- Control charts – graphical presentation of spike or split sample results used to track the accuracy or precision of the analysis.
- Quality control check samples – when spiked sample analysis indicates atypical instrument performance, a quality check sample, which is prepared independently of the calibration standards and contains the constituents of interest, is analyzed to confirm that measurements were performed accurately.

- Calibration standards and devices – traceable standards or devices to set instrument response so that sample analysis results represent the absolute concentration of the constituent.

Field QA samples will be collected to assess sample handling procedures and conditions. Standard field quality control may include the use of the following, and will be collected and analyzed as outlined in EPA Manual SW 846.

- Field blanks – reagent water samples are prepared at the sampling location by the same procedure used to collect field groundwater samples and analyzed with the groundwater samples to assess the impact of sampling techniques on data quality. Typically, one field blank per twenty groundwater samples collected will be analyzed per sampling event.
- Field replicates – duplicate or triplicate samples are collected and analyzed to assess the reproducibility of the analytical data. One replicate groundwater sample per twenty samples collected will be analyzed per sampling event, unless otherwise specified. Triplicate samples will be collected only when specific conditions warrant and generally are sent to an alternate laboratory to confirm the accuracy of the routinely used laboratory.
- Trip blanks – reagent water samples are prepared before field work, transported and stored with the samples and analyzed to assess the impact of sample transport and storage for data quality. In the event that any analyte is detected in the field blank, a trip blank will be included in the subsequent groundwater sampling event.

Data reliability will be evaluated by the certified laboratory and reported on a cover sheet attached to the laboratory data report. Analytical data resulting from the testing of field or trip blanks will be included in the laboratory's report. Results from matrix spike, surrogate, and method blank testing will be reported, along with a statement of whether the samples were analyzed within the appropriate holding time.

Stratus will evaluate the laboratory's report on data reliability and note significant QC results that may make the data biased or unacceptable. Data viability will be performed as outlined in EPA Manual SW 846. If biased or unacceptable data is noted, corrective actions (including re-sample/re-analyze, etc.) will be evaluated on a site-specific basis.

# APPENDIX C

# LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

# *Alpha Analytical, Inc.*

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183


## ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005
Date Received : 01/19/16

Job: Alaska Gas

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B / SW8260B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

| | | Parameter | Concentration | | Reporting Limit | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Client ID : | **MW-1R** | | | | | | |
| Lab ID : | STR16011902-01A | TPH-P (GRO) | 200 | | 50 µg/L | 01/20/16 | 01/20/16 |
| Date Sampled | 01/18/16 04:53 | Tertiary Butyl Alcohol (TBA) | ND | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | Methyl tert-butyl ether (MTBE) | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Benzene | 1.0 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Tertiary Amyl Methyl Ether (TAME) | ND | | 1.0 µg/L | 01/20/16 | 01/20/16 |
| | | Toluene | 0.60 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Ethylbenzene | 2.0 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | m,p-Xylene | 9.3 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | o-Xylene | 8.3 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| Client ID : | **MW-2** | | | | | | |
| Lab ID : | STR16011902-02A | TPH-P (GRO) | ND | | 50 µg/L | 01/20/16 | 01/20/16 |
| Date Sampled | 01/18/16 05:40 | Tertiary Butyl Alcohol (TBA) | ND | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | Methyl tert-butyl ether (MTBE) | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Benzene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Tertiary Amyl Methyl Ether (TAME) | ND | | 1.0 µg/L | 01/20/16 | 01/20/16 |
| | | Toluene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | o-Xylene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| Client ID : | **MW-3R** | | | | | | |
| Lab ID : | STR16011902-03A | TPH-P (GRO) | ND | V | 3,000 µg/L | 01/20/16 | 01/20/16 |
| Date Sampled | 01/18/16 04:30 | Tertiary Butyl Alcohol (TBA) | 30,000 | | 300 µg/L | 01/20/16 | 01/20/16 |
| | | Methyl tert-butyl ether (MTBE) | 78 | | 15 µg/L | 01/20/16 | 01/20/16 |
| | | Benzene | ND | V | 15 µg/L | 01/20/16 | 01/20/16 |
| | | Tertiary Amyl Methyl Ether (TAME) | ND | V | 30 µg/L | 01/20/16 | 01/20/16 |
| | | Toluene | ND | V | 15 µg/L | 01/20/16 | 01/20/16 |
| | | Ethylbenzene | ND | V | 15 µg/L | 01/20/16 | 01/20/16 |
| | | m,p-Xylene | ND | V | 15 µg/L | 01/20/16 | 01/20/16 |
| | | o-Xylene | ND | V | 15 µg/L | 01/20/16 | 01/20/16 |
| Client ID : | **MW-4R** | | | | | | |
| Lab ID : | STR16011902-04A | TPH-P (GRO) | 620 | | 50 µg/L | 01/20/16 | 01/20/16 |
| Date Sampled | 01/18/16 04:16 | Tertiary Butyl Alcohol (TBA) | 750 | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | Methyl tert-butyl ether (MTBE) | 11 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Benzene | 0.60 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Tertiary Amyl Methyl Ether (TAME) | 3.0 | | 1.0 µg/L | 01/20/16 | 01/20/16 |
| | | Toluene | 1.2 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Ethylbenzene | 8.0 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | m,p-Xylene | 9.0 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | o-Xylene | 14 | | 0.50 µg/L | 01/20/16 | 01/20/16 |

# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183


| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Client ID : | **MW-5** | | | | | | |
| Lab ID : | STR16011902-05A | TPH-P (GRO) | 52 | | 50 µg/L | 01/20/16 | 01/20/16 |
| Date Sampled | 01/18/16 04:00 | Tertiary Butyl Alcohol (TBA) | ND | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | Methyl tert-butyl ether (MTBE) | 1.6 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Benzene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Tertiary Amyl Methyl Ether (TAME) | ND | | 1.0 µg/L | 01/20/16 | 01/20/16 |
| | | Toluene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | o-Xylene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| Client ID : | **MW-6** | | | | | | |
| Lab ID : | STR16011902-06A | TPH-P (GRO) | ND | | 50 µg/L | 01/20/16 | 01/20/16 |
| Date Sampled | 01/18/16 05:13 | Tertiary Butyl Alcohol (TBA) | ND | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | Methyl tert-butyl ether (MTBE) | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Benzene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Tertiary Amyl Methyl Ether (TAME) | ND | | 1.0 µg/L | 01/20/16 | 01/20/16 |
| | | Toluene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | o-Xylene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| Client ID : | **MW-7** | | | | | | |
| Lab ID : | STR16011902-07A | TPH-P (GRO) | 33,000 | | 2,000 µg/L | 01/20/16 | 01/20/16 |
| Date Sampled | 01/18/16 06:20 | Tertiary Butyl Alcohol (TBA) | 930 | | 200 µg/L | 01/20/16 | 01/20/16 |
| | | Methyl tert-butyl ether (MTBE) | 10 | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | Benzene | 110 | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | Tertiary Amyl Methyl Ether (TAME) | ND | V | 20 µg/L | 01/20/16 | 01/20/16 |
| | | Toluene | ND | V | 10 µg/L | 01/20/16 | 01/20/16 |
| | | Ethylbenzene | 1,200 | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | m,p-Xylene | 570 | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | o-Xylene | ND | V | 10 µg/L | 01/20/16 | 01/20/16 |
| Client ID : | **MW-9** | | | | | | |
| Lab ID : | STR16011902-08A | TPH-P (GRO) | 51 | | 50 µg/L | 01/20/16 | 01/20/16 |
| Date Sampled | 01/18/16 06:03 | Tertiary Butyl Alcohol (TBA) | ND | | 10 µg/L | 01/20/16 | 01/20/16 |
| | | Methyl tert-butyl ether (MTBE) | 28 | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Benzene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Tertiary Amyl Methyl Ether (TAME) | ND | | 1.0 µg/L | 01/20/16 | 01/20/16 |
| | | Toluene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |
| | | o-Xylene | ND | | 0.50 µg/L | 01/20/16 | 01/20/16 |

Gasoline Range Organics (GRO) C4-C13

V = Reporting Limits were increased due to high concentrations of target analytes.

ND = Not Detected

Reported in micrograms per Liter, per client request.

Roger Scholl  Randy Gardner

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered in any way.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

ACCLASS ACCREDITED DoD ELAP

1/26/16

**Report Date**

# *Alpha Analytical, Inc.*

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183


## VOC Sample Preservation Report

**Work Order:** STR16011902 **Job:** Alaska Gas

| Alpha's Sample ID | Client's Sample ID | Matrix | pH |
|---|---|---|---|
| 16011902-01A | MW-1R | Aqueous | 2 |
| 16011902-02A | MW-2 | Aqueous | 2 |
| 16011902-03A | MW-3R | Aqueous | 2 |
| 16011902-04A | MW-4R | Aqueous | 2 |
| 16011902-05A | MW-5 | Aqueous | 2 |
| 16011902-06A | MW-6 | Aqueous | 2 |
| 16011902-07A | MW-7 | Aqueous | 2 |
| 16011902-08A | MW-9 | Aqueous | 2 |

**1/26/16**

**Report Date**

# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183


**Date:** 21-Jan-16

## QC Summary Report

**Work Order:** 16011902

### Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\160120\16012004.D** Batch ID: **MS10W0120B** Analysis Date: **01/20/2016 14:42**

Sample ID: **MBLK MS10W0120B** Units : µg/L Run ID: **MSD_10_160120A** Prep Date: **01/20/2016 14:42**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH-P (GRO) | ND | 50 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 9.02 | | 10 | | 90 | 70 | 130 | | | |
| Surr: Toluene-d8 | 10.2 | | 10 | | 102 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 8.37 | | 10 | | 84 | 70 | 130 | | | |

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\160120\16012003.D** Batch ID: **MS10W0120B** Analysis Date: **01/20/2016 13:45**

Sample ID: **GLCS MS10W0120B** Units : µg/L Run ID: **MSD_10_160120A** Prep Date: **01/20/2016 13:45**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH-P (GRO) | 424 | 50 | 400 | | 106 | 70 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 9.22 | | 10 | | 92 | 70 | 130 | | | |
| Surr: Toluene-d8 | 10.1 | | 10 | | 101 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 8.06 | | 10 | | 81 | 70 | 130 | | | |

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\160120\16012014.D** Batch ID: **MS10W0120B** Analysis Date: **01/20/2016 18:19**

Sample ID: **16011920-01AGS** Units : µg/L Run ID: **MSD_10_160120A** Prep Date: **01/20/2016 18:19**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH-P (GRO) | 2180 | 250 | 2000 | 0 | 109 | 54 | 143 | | | |
| Surr: 1,2-Dichloroethane-d4 | 46.7 | | 50 | | 93 | 70 | 130 | | | |
| Surr: Toluene-d8 | 49.5 | | 50 | | 99 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 39.7 | | 50 | | 79 | 70 | 130 | | | |

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/C / SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\160120\16012015.D** Batch ID: **MS10W0120B** Analysis Date: **01/20/2016 18:40**

Sample ID: **16011920-01AGSD** Units : µg/L Run ID: **MSD_10_160120A** Prep Date: **01/20/2016 18:40**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH-P (GRO) | 2480 | 250 | 2000 | 0 | 124 | 54 | 143 | 2184 | 12.8(23) | |
| Surr: 1,2-Dichloroethane-d4 | 47.2 | | 50 | | 94 | 70 | 130 | | | |
| Surr: Toluene-d8 | 49.2 | | 50 | | 98 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 40.3 | | 50 | | 81 | 70 | 130 | | | |

**Comments:**

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Reported in micrograms per Liter, per client request.

# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183


**Date:** *21-Jan-16*

## QC Summary Report

**Work Order:** 16011902

### Method Blank

Type **MBLK** Test Code: **EPA Method 624/8260**

File ID: **C:\HPCHEM\MS10\DATA\160120\16012004.D** Batch ID: **MS10W0120A** Analysis Date: **01/20/2016 14:42**

Sample ID: **MBLK MS10W0120A** Units : µg/L Run ID: **MSD_10_160120A** Prep Date: **01/20/2016 14:42**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Tertiary Butyl Alcohol (TBA) | ND | 10 | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | ND | 0.5 | | | | | | | | |
| Benzene | ND | 0.5 | | | | | | | | |
| Tertiary Amyl Methyl Ether (TAME) | ND | 1 | | | | | | | | |
| Toluene | ND | 0.5 | | | | | | | | |
| Ethylbenzene | ND | 0.5 | | | | | | | | |
| m,p-Xylene | ND | 0.5 | | | | | | | | |
| o-Xylene | ND | 0.5 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 9.02 | | 10 | | 90 | 70 | 130 | | | |
| Surr: Toluene-d8 | 10.2 | | 10 | | 102 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 8.37 | | 10 | | 84 | 70 | 130 | | | |

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/8260**

File ID: **C:\HPCHEM\MS10\DATA\160120\16012002.D** Batch ID: **MS10W0120A** Analysis Date: **01/20/2016 13:24**

Sample ID: **LCS MS10W0120A** Units : µg/L Run ID: **MSD_10_160120A** Prep Date: **01/20/2016 13:24**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether (MTBE) | 9.86 | 0.5 | 10 | | 99 | 63 | 137 | | | |
| Benzene | 10.5 | 0.5 | 10 | | 105 | 70 | 130 | | | |
| Toluene | 8.73 | 0.5 | 10 | | 87 | 70 | 130 | | | |
| Ethylbenzene | 9.38 | 0.5 | 10 | | 94 | 70 | 130 | | | |
| m,p-Xylene | 9.13 | 0.5 | 10 | | 91 | 65 | 139 | | | |
| o-Xylene | 9.58 | 0.5 | 10 | | 96 | 70 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 9.8 | | 10 | | 98 | 70 | 130 | | | |
| Surr: Toluene-d8 | 10.2 | | 10 | | 102 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 8 | | 10 | | 80 | 70 | 130 | | | |

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/8260**

File ID: **C:\HPCHEM\MS10\DATA\160120\16012012.D** Batch ID: **MS10W0120A** Analysis Date: **01/20/2016 17:35**

Sample ID: **16011920-01AMS** Units : µg/L Run ID: **MSD_10_160120A** Prep Date: **01/20/2016 17:35**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether (MTBE) | 49.4 | 1.3 | 50 | 0 | 99 | 56 | 140 | | | |
| Benzene | 50.1 | 1.3 | 50 | 0 | 100 | 67 | 134 | | | |
| Toluene | 40.6 | 1.3 | 50 | 0 | 81 | 38 | 130 | | | |
| Ethylbenzene | 44.4 | 1.3 | 50 | 0 | 89 | 70 | 130 | | | |
| m,p-Xylene | 42.9 | 1.3 | 50 | 0 | 86 | 65 | 139 | | | |
| o-Xylene | 45.1 | 1.3 | 50 | 0 | 90 | 69 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 50.6 | | 50 | | 101 | 70 | 130 | | | |
| Surr: Toluene-d8 | 49.4 | | 50 | | 99 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 38.9 | | 50 | | 78 | 70 | 130 | | | |

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/8260**

File ID: **C:\HPCHEM\MS10\DATA\160120\16012013.D** Batch ID: **MS10W0120A** Analysis Date: **01/20/2016 17:57**

Sample ID: **16011920-01AMSD** Units : µg/L Run ID: **MSD_10_160120A** Prep Date: **01/20/2016 17:57**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether (MTBE) | 50 | 1.3 | 50 | 0 | 100 | 56 | 140 | 49.36 | 1.3(40) | |
| Benzene | 51.6 | 1.3 | 50 | 0 | 103 | 67 | 134 | 50.07 | 2.9(21) | |
| Toluene | 43 | 1.3 | 50 | 0 | 86 | 38 | 130 | 40.62 | 5.6(20) | |
| Ethylbenzene | 45.5 | 1.3 | 50 | 0 | 91 | 70 | 130 | 44.37 | 2.6(20) | |
| m,p-Xylene | 44.7 | 1.3 | 50 | 0 | 89 | 65 | 139 | 42.91 | 4.0(20) | |
| o-Xylene | 46.9 | 1.3 | 50 | 0 | 94 | 69 | 130 | 45.1 | 4.0(20) | |
| Surr: 1,2-Dichloroethane-d4 | 49.3 | | 50 | | 99 | 70 | 130 | | | |
| Surr: Toluene-d8 | 50.8 | | 50 | | 102 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 38.9 | | 50 | | 78 | 70 | 130 | | | |

# *Alpha Analytical, Inc.*

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183


**Date:** *21-Jan-16*

## QC Summary Report

**Work Order:** 16011902

**Comments:**

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Billing Information :

# CHAIN-OF-CUSTODY RECORD


**Alpha Analytical, Inc.**
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406


CA



**WorkOrder : STR16011902**

**Report Due By : 5:00 PM On : 26-Jan-16**

| Report Attention | Phone Number | EMail Address |
|---|---|---|
| Scott Bittinger | (530) 676-2062 x | sbittinger@stratusinc.net |

Client:
Stratus Environmental
3330 Cameron Park Drive
Suite 550
Cameron Park, CA 95682-8861

EDD Required : Yes

Sampled by : C. Hill

PO :

Client's COC # : 53969 Job : Alaska Gas

| Cooler Temp | Samples Received | Date Printed |
|---|---|---|
| 1 °C | 19-Jan-16 | 19-Jan-16 |

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

| Alpha Sample ID | Client Sample ID | Matrix | Collection Date | No. of Bottles Alpha | Sub | TAT | Requested Tests TPH/P_W | VOC_W | | | | | | | Sample Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STR16011902-01A | MW-1R | AQ | 01/18/16 04:53 | 3 | 0 | 5 | GAS-C | BTEX/M_C/ TAME/TBA | | | | | | | |
| STR16011902-02A | MW-2 | AQ | 01/18/16 05:40 | 3 | 0 | 5 | GAS-C | BTEX/M_C/ TAME/TBA | | | | | | | |
| STR16011902-03A | MW-3R | AQ | 01/18/16 04:30 | 3 | 0 | 5 | GAS-C | BTEX/M_C/ TAME/TBA | | | | | | | |
| STR16011902-04A | MW-4R | AQ | 01/18/16 04:16 | 3 | 0 | 5 | GAS-C | BTEX/M_C/ TAME/TBA | | | | | | | |
| STR16011902-05A | MW-5 | AQ | 01/18/16 04:00 | 3 | 0 | 5 | GAS-C | BTEX/M_C/ TAME/TBA | | | | | | | |
| STR16011902-06A | MW-6 | AQ | 01/18/16 05:13 | 3 | 0 | 5 | GAS-C | BTEX/M_C/ TAME/TBA | | | | | | | |
| STR16011902-07A | MW-7 | AQ | 01/18/16 06:20 | 3 | 0 | 5 | GAS-C | BTEX/M_C/ TAME/TBA | | | | | | | |
| STR16011902-08A | MW-9 | AQ | 01/18/16 06:03 | 3 | 0 | 5 | GAS-C | BTEX/M_C/ TAME/TBA | | | | | | | |

**Comments:** Security Seals Intact. Frozen Ice. :

| | Signature | Print Name | Company | Date/Time |
|---|---|---|---|---|
| Logged in by: | N.R. | Nathalia Ramirez | Alpha Analytical, Inc. | 1/19/16 1142 |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

53969

**Billing Information:**
Company Name Stantec
Attn:
Address
City, State, Zip
Phone Number Fax

**Alpha Analytical, Inc.**
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

**Samples Collected From Which State?**
AZ ___ CA X NV ___ WA ___ DOD Site ___
ID ___ OR ___ OTHER ___
Page # 1 of 1

Consultant / Client Name Alaska GMS
Address
City, State, Zip Oakland
Job # Job Name
Report Attention / Project Manager
Name: Scott
Email:
Phone: Mobile:

Data Validation Level: III or IV
EDD / EDF? YES ___ NO ___
Global ID # T0600101804

| Time Sampled | Date Sampled | Matrix* See Key Below | P.O. # / Lab ID Number (Office Use Only) | Sample Description | TAT | Field Filtered | # Containers** | GRO | BTEX | MTBE | TAME | TBA | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0453 | 1/8/16 | AQ | STR16011902-01A | MW-1R | STD | N | 3V | X | X | X | X | X | | | |
| 0540 | | | 02A | MW-2 | | | 3V | | | | | | | | |
| 0430 | | | 03A | MW-3R | | | 3V | | | | | | | | |
| 0416 | | | 04A | MW-4R | | | 3V | | | | | | | | |
| 0400 | | | 05A | MW-5 | | | 3V | | | | | | | | |
| 0513 | | | 06A | MW-6 | | | 3V | | | | | | | | |
| 0620 | | | 07A | MW-7 | | | 3V | | | | | | | | |
| 0603 | 1/8/16 | AQ | 08A | MW-9 | STD | N | 3V | X | X | X | X | X | | | |

FOR LAB USE ONLY

**ADDITIONAL INSTRUCTIONS:**

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled By: Chris Stratton

| Relinquished by: (Signature/Affiliation) | Received by: (Signature/Affiliation) | Date: | Time: |
|---|---|---|---|
| Chris Stratton | Elmciano | 011816 | 1142 |
| Relinquished by: (Signature/Affiliation) | Received by: (Signature/Affiliation) | Date: | Time: |
| | MR. | 011916 | 1122 |
| Relinquished by: (Signature/Affiliation) | Received by: (Signature/Affiliation) | Date: | Time: |
| | | | |

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

**NOTE:** Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

# APPENDIX D

# GEOTRACKER ELECTRONIC SUBMITTAL CONFIRMATIONS

STATE WATER RESOURCES CONTROL BOARD

# GEOTRACKER ESI

UPLOADING A GEO_WELL FILE

## SUCCESS

**Processing is complete. No errors were found!**
**Your file has been successfully submitted!**

| | |
|---|---|
| **Submittal Type:** | **GEO_WELL** |
| **Report Title:** | **1st Quarter 2016 Geo Well** |
| **Facility Global ID:** | **T0600101804** |
| **Facility Name:** | **ALASKA GASOLINE** |
| **File Name:** | **GEO_WELL.zip** |
| **Organization Name:** | **Stratus Environmental, Inc.** |
| **Username:** | **STRATUS NOCAL** |
| **IP Address:** | **50.192.223.97** |
| **Submittal Date/Time:** | **2/23/2016 3:13:42 PM** |
| **Confirmation Number:** | **1320105016** |

STATE WATER RESOURCES CONTROL BOARD

# GEOTRACKER ESI

UPLOADING A EDF FILE

## SUCCESS

**Processing is complete. No errors were found!**
**Your file has been successfully submitted!**

| | |
|---|---|
| **Submittal Type:** | EDF |
| **Report Title:** | 1st Quarter 2016 GW Monitoring Lab Results |
| **Report Type:** | Monitoring Report - Semi-Annually |
| **Facility Global ID:** | T0600101804 |
| **Facility Name:** | ALASKA GASOLINE |
| **File Name:** | 16011902_EDF.zip |
| **Organization Name:** | Stratus Environmental, Inc. |
| **Username:** | STRATUS NOCAL |
| **IP Address:** | 50.192.223.97 |
| **Submittal Date/Time:** | 3/4/2016 12:03:18 PM |
| **Confirmation Number:** | 9346720099 |

VIEW QC REPORT

VIEW DETECTIONS REPORT