Mr. Paresh Khatri
Alameda County Environmental Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: 6310 Houston Place, Dublin, California 94568
ACEHS Case No. RO0002862, GeoTracker ID T0600113164

Dear Mr. Khatri:

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

Sincerely,

Mr. Cary Grayson

STRATUS
ENVIRONMENTAL, INC.

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

March 15, 2011
Project No. 2094-6310-01

Mr. Paresh Khatri
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: **Quarterly Monitoring and Sampling Report – First Quarter 2011**
6310 Houston Place, Dublin, California 94568
ACEHD Case No. RO0002862, GeoTracker ID T0600113164

Dear Mr. Khatri:

Stratus Environmental, Inc. (Stratus) is submitting the attached report, which presents an update of work performed during the first quarter 2011 on behalf of Mr. Cary Grayson for the facility located at 6310 Houston Place, Dublin, California. Stratus representatives, whose signatures appear below, declare under penalty of perjury, that the information contained in the attached report are true and correct to the best of our knowledge.

If you have any questions regarding this project, please contact Mr. Steve Carter at (530) 676-6008.

Sincerely,

***STRATUS ENVIRONMENTAL, INC.***

Kasey Jones
Project Manager

Stephen J. Carter, P.G.
Senior Geologist

PROFESSIONAL GEOLOGIST
Stephen J. Carter
No. 5577
STATE OF CALIFORNIA

Attachment: Quarterly Monitoring and Sampling Report, First Quarter 2011

cc: Mr. Cary Grayson *(via email carybgrayson@gmail.com)*

March 15, 2011

# QUARTERLY MONITORING AND SAMPLING REPORT

| | |
|---|---|
| Facility Address: | 6310 Houston Place, Dublin, California 94568 |
| Consulting Co. / Contact Person: | Stratus Environmental, Inc. / Steve Carter |
| Consultant Project No: | 2094-6310-01 |
| Primary Agency/Regulatory ID No: | Paresh Khatri, Alameda County Environmental Health Department (ACEHD) Case No. RO0002862 |

## WORK PERFORMED THIS QUARTER (First Quarter 2011):

1. On January 13, 2011, Stratus conducted the first quarter 2011 semi-annual groundwater monitoring sampling event. Prior to sampling, all wells were gauged for depth to water, temperature, pH, conductivity, dissolved oxygen (DO) and oxygen-reduction potential (ORP). Groundwater samples were collected and forwarded to a state-certified analytical laboratory for analysis. Field data sheets, sampling procedures and laboratory analytical reports are included as Appendices A, B, and C, respectively.

2. In addition to the regular analytical suite, wells DW-1, DW-3, DW-5 and DW-7 were also analyzed for inorganics as part of the in-situ chemical oxidation pilot test.

3. Stratus prepared and submitted a *Pilot Test Report* to ACEHD on February 24, 2011 detailing the results of the chemical oxidation pilot test conducted at the site.

## WORK PROPOSED FOR NEXT QUARTER (Second Quarter 2011):

1. Based on a letter from ACEHD, dated July 27, 2009, the frequency of groundwater monitoring and sampling for all wells has been reduced to semi-annual (1st and 3rd quarters). No groundwater monitoring or sampling is planned for second quarter 2011. The next monitoring and sampling event is scheduled for third quarter 2011.

2. Based on the results of the pilot study and previous work performed at the site, Stratus has recommended the site be considered for low-risk closure. Additional investigation and remediation activities are not planned at the site pending review of the *Pilot Test Report* and comments from ACEHD.

| | |
|---|---|
| Current Phase of Project: | Groundwater Monitoring; Feasibility Testing |
| Frequency of Groundwater Monitoring and Sampling: | All Wells = Semi-annual (1st and 3rd) |
| Groundwater Sampling Date: | January 13, 2011 |
| Is Free Product (FP) Present on Site: | No (Sheen noted in DW-1, DW-2 and DW-3) |
| Approximate Depth to Groundwater: | 6.23 to 7.85 feet below top of well casing. |
| Groundwater Flow Direction / Gradient: | South-southwest / 0.004 ft/ft |

**DISCUSSION:**

On January 13, 2011, Stratus conducted the first quarter 2011 semi-annual groundwater monitoring sampling event. Prior to sampling, all wells were gauged for depth to water, temperature, pH, conductivity, DO and ORP. Sheen was noted in onsite wells DW-1, DW-2 and DW-3. Groundwater samples were analyzed at a state-certified analytical laboratory for diesel range organics (DRO), by EPA Method SW8015B/DHS LUFT Manual, and for benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tert-butyl ether (MTBE), and Naphthalene by EPA Method SW8260B. As part of the approved *Corrective Action Pilot Test Work Plan*, dated March 19, 2008, groundwater samples, from select wells, were also analyzed for copper (Cu), arsenic (As), cadmium (Cd), barium (Ba), total chromium (Cr), total Iron (Fe), Selenium (Se) and lead (Pb) by EPA Method 200.8 and for hexavalent chromium ($Cr^{6+}$) by EPA Method 7199. Tabulated historical groundwater elevation data/analytical results are summarized in Tables 1 and 2.

At the time of the January 13, 2011 groundwater monitoring event, depth to groundwater was measured at 6.23 to 7.85 feet below ground surface (bgs) in all monitoring wells. Groundwater monitoring data were converted to feet above mean sea level (MSL) and used to prepare a groundwater elevation contour map (Figure 2). Groundwater flow direction at the site is to the south-southwest with an average gradient of 0.004 ft/ft. Flow direction and gradient appear consistent with previous monitoring events.

Concentrations of BTEX or Naphthalene were not reported in any of the sampled wells during first quarter 2011. DRO was reported in onsite wells DW-1 (1,700 micrograms per liter (µg/L)), DW-2 (7,500 µg/L), DW-3 (1,800 µg/L), DW-4 (370 µg/L), and DW-5 (470 µg/L). Very low concentrations of MTBE were also reported in onsite well DW-4 (0.74 µg/L). No concentrations of any sampled analytes were reported in offsite wells (DW-6 and DW-7) during first quarter 2011. Tabulated groundwater analytical data are summarized in Table 1. Certified Analytical results are presented in Appendix C. DRO, benzene, and MTBE concentrations for groundwater samples collected during the first quarter 2011 are presented in Figure 3. Groundwater elevation and analytical data have been uploaded to the State of California's GeoTracker database. Documentation of completion of these data uploads are provided in Appendix D.

**ATTACHMENTS:**

- Table 1 Groundwater Elevation and Analytical Summary
- Table 2 Groundwater Analytical – Dissolved Metals Summary
- Table 3 Historical Groundwater Data Summary
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation Contour Map
- Figure 3 Groundwater Analytical Summary
- 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
## GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
6310 Houston Place, Dublin, CA

| Well Number | Date Collected | Depth to Water (feet) | Well Elevation (ft msl) | Groundwater Elevation (ft msl) | **DRO (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DW-1 | 04/10/07 | 7.44 | 334.23 | 326.79 | 8,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/12/07 | 7.72 | 334.23 | 326.51 | 30,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/11/07 | 7.88 | 334.23 | 326.35 | 18,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/25/08 | 6.16 | 334.23 | 328.07 | 13,000 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 04/23/08 | 6.96 | 334.23 | 327.27 | 15,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/23/08 | 7.55 | 334.23 | 326.68 | 5,200 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/30/08 | 8.02 | 334.23 | 326.21 | 11,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/11/10 | 7.58 | 334.23 | 326.65 | 5,600 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 08/03/10 | 7.43 | 334.23 | 326.80 | 540 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |
| | 01/13/11 | 6.81 | 334.23 | 327.42 | 1,700 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |
| DW-2 | 04/10/07 | 7.09 | 334.00 | 326.91 | 8,200 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/12/07 | 7.40 | 334.00 | 326.60 | 34,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/11/07 | 7.55 | 334.00 | 326.45 | 14,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/25/08 | 5.89 | 334.00 | 328.11 | 17,000 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 04/23/08 | 6.63 | 334.00 | 327.37 | 27,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/23/08 | 7.25 | 334.00 | 326.75 | 16,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/30/08 | 7.74 | 334.00 | 326.26 | 11,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/11/10 | 7.23 | 334.00 | 326.77 | 6,900 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 08/03/10 | 7.40 | 334.00 | 326.60 | 550 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | -- |
| | 01/13/11 | 6.27 | 334.00 | 327.73 | 7,500 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |
| DW-3 | 04/10/07 | 7.90 | 334.56 | 326.66 | 27,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/12/07 | 8.19 | 334.56 | 326.37 | 210,000 | <0.5 | <1.7 | <1.7 | <1.7 | <1.7 | -- |
| | 10/11/07 | 8.29 | 334.56 | 326.27 | 71,000 | <25 | <25 | <25 | <25 | <0.5 | -- |
| | 01/25/08 | 6.63 | 334.56 | 327.93 | 66,000 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 04/23/08 | 7.38 | 334.56 | 327.18 | 58,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/23/08 | 7.94 | 334.56 | 326.62 | 38,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/30/08 | 8.41 | 334.56 | 326.15 | 29,000 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/11/10 | 8.12 | 334.56 | 326.44 | 29,000 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 08/03/10 | 8.02 | 334.56 | 326.54 | 6,300 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |
| | 01/13/11 | 7.06 | 334.56 | 327.50 | 1,800 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |

# TABLE 1
## GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
6310 Houston Place, Dublin, CA

| Well Number | Date Collected | Depth to Water (feet) | Well Elevation (ft msl) | Groundwater Elevation (ft msl) | **DRO (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DW-4 | 04/10/07 | 7.99 | 334.49 | 326.50 | 65 | <0.5 | <0.5 | <0.5 | <0.5 | 0.67 | -- |
| | 07/12/07 | 8.22 | 334.49 | 326.27 | 300 | <0.5 | <0.5 | <0.5 | <0.5 | 0.87 | -- |
| | 10/11/07 | 8.33 | 334.49 | 326.16 | 640 | <0.5 | <0.5 | <0.5 | <0.5 | 0.80 | -- |
| | 01/25/08 | 6.62 | 334.49 | 327.87 | 240 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 04/23/08 | 7.39 | 334.49 | 327.10 | 340 | <0.5 | <0.5 | <0.5 | <0.5 | 0.94 | -- |
| | 07/23/08 | 7.94 | 334.49 | 326.55 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.94 | -- |
| | 10/30/08 | 8.39 | 334.49 | 326.10 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.92 | -- |
| | 01/11/10 | 8.13 | 334.49 | 326.36 | 65 | <1.0 | <1.0 | <1.0 | <1.0 | <5.0 | -- |
| | 08/03/10 | 8.00 | 334.49 | 326.49 | 370 | <0.50 | <0.50 | <0.50 | <0.50 | 0.76 | -- |
| | 01/13/11 | 7.08 | 334.49 | 327.41 | 370 | <0.50 | <0.50 | <0.50 | <0.50 | 0.74 | <4.0[3] |
| DW-5 | 04/10/07 | 7.00 | 333.91 | 326.91 | 800 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/12/07 | 7.36 | 333.91 | 326.55 | 990 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/11/07 | 7.52 | 333.91 | 326.39 | 880 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/25/08 | 5.93 | 333.91 | 327.98 | 730 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 04/23/08 | 6.52 | 333.91 | 327.39 | 780 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/23/08 | 7.24 | 333.91 | 326.67 | 340 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/30/08 | 7.68 | 333.91 | 326.23 | 1,200 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/11/10 | 7.47 | 333.91 | 326.44 | 130 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 08/03/10 | 7.32 | 333.91 | 326.59 | 490[1,2] | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |
| | 01/13/11 | 6.23 | 333.91 | 327.68 | 470 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |
| DW-6 | 04/10/07 | 8.62 | 334.99 | 326.37 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/12/07 | 8.81 | 334.99 | 326.18 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/11/07 | 8.53 | 334.99 | 326.46 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/25/08 | 7.16 | 334.99 | 327.83 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 04/23/08 | 7.53 | 334.99 | 327.46 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/23/08 | 8.24 | 334.99 | 326.75 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/30/08 | 8.62 | 334.99 | 326.37 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/11/10 | 8.18 | 334.99 | 326.81 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 08/03/10 | 8.25 | 334.99 | 326.74 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | -- |
| | 01/13/11 | 7.69 | 334.99 | 327.30 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |

# TABLE 1
## GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
6310 Houston Place, Dublin, CA

| Well Number | Date Collected | Depth to Water (feet) | Well Elevation (ft msl) | Groundwater Elevation (ft msl) | **DRO (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DW-7 | 04/10/07 | 8.11 | 335.18 | 327.07 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/12/07 | 8.34 | 335.18 | 326.84 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/11/07 | 8.96 | 335.18 | 326.22 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/25/08 | 6.75 | 335.18 | 328.43 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 04/23/08 | 7.95 | 335.18 | 327.23 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 07/23/08 | 8.55 | 335.18 | 326.63 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 10/30/08 | 8.96 | 335.18 | 326.22 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| | 01/11/10 | 8.62 | 335.18 | 326.56 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 08/03/10 | 8.58 | 335.18 | 326.60 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |
| | 01/13/11 | 7.85 | 335.18 | 327.33 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0 |

Notes:
*Data through January 11, 2010, reported by AEI Contultants.
**Prior to 8/3/10, reported as TPH-D
DRO = total petroleum hydrocarbons as diesel (C13-C-22)
MTBE = methyl-tertiary butyl ether
µg/L = micrograms per liter
[1] = reported concentration includes additional compounds uncharacteristic of common fuels and lubricants.
[2] = DRO concentration may include contributions from heavier-end hydrocarbons that elute in the DRO range.
[3] = Reporting limits were increased due to sample foaming.
-- = Not analyzed

# TABLE 2
## GROUNDWATER ANALYTICAL - DISSOLVED METALS SUMMARY
6310 Houston Place, Dublin, CA

| Well Number | Date Collected | Cu (µg/L) | As (µg/L) | Cd (µg/L) | Ba (µg/L) | $Cr^{+6}$ (µg/L) | Cr (µg/L) | Fe (µg/L) | Se (µg/L) | Pb (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| DW-1 | 08/03/10 | <10 | 9.4 | <1.0 | 28 | <1.0 | 6.8 | 7,300 | <5.0 | <5.0 |
| | 01/13/11 | 49 | 41 | <1.0 | 37 | <1.0 | 72 | 35,000 | <5.0 | 16 |
| DW-2 | 08/03/10 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 01/13/11 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DW-3 | 08/03/10 | <10 | <2.0 | <1.0 | 58 | <1.0 | <5.0 | 2,300 | <5.0 | <5.0 |
| | 01/13/11 | 14 | 5.4 | <1.0 | 69 | <1.0 | 29 | 16,000 | <5.0 | 7.4 |
| DW-4 | 08/03/10 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 01/13/11 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DW-5 | 08/03/10 | <10 | 5.8 | <1.0 | 48 | <1.0 | <5.0 | 540 | <5.0 | <5.0 |
| | 01/13/11 | 11 | 4.9 | <1.0 | 69 | <1.0 | 19 | 8,800 | <5.0 | <5.0 |
| DW-6 | 08/03/10 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 01/13/11 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DW-7 | 08/03/10 | <10 | 5.6 | <1.0 | 45 | <1.0 | 45 | 29,000 | 5.7 | 15 |
| | 01/13/11 | 32 | 6.0 | <1.0 | 48 | <1.0 | 79 | 36,000 | 7.8 | 12 |

Notes:

µg/L = micrograms per liter
Cu = Copper
As = Arsenic
Cd = Cadmium
Ba = Barium
Cr = Chromium
$Cr^{+6}$ = Hexavalent Chromium
Fe = Iron
Se = Selenium
Pb = Lead
-- = Not analyzed

# TABLE 2
## GROUNDWATER ANALYTICAL - DISSOLVED METALS SUMMARY
6310 Houston Place, Dublin, CA

| Well Number | Date Collected | Cu (µg/L) | As (µg/L) | Cd (µg/L) | Ba (µg/L) | $Cr^{+6}$ (µg/L) | Cr (µg/L) | Fe (µg/L) | Se (µg/L) | Pb (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| DW-1 | 08/03/10 | <10 | 9.4 | <1.0 | 28 | <1.0 | 6.8 | 7,300 | <5.0 | <5.0 |
| | 10/07/10 | 23 | 87 | <1.0 | 21 | 1.6 | 17 | 5,200 | <5.0 | <5.0 |
| | 10/19/10 | 28 | 79 | <1.0 | 20 | <1.0 | 22 | 13,000 | <5.0 | 6.3 |
| | 11/30/10 | 13 | 43 | <1.0 | 32 | <1.0 | 13 | 3,900 | <5.0 | <5.0 |
| | 01/13/11 | 49 | 41 | <1.0 | 37 | <1.0 | 72 | 35,000 | <5.0 | 16 |
| DW-3 | 08/03/10 | <10 | <2.0 | <1.0 | 58 | <1.0 | <5.0 | 2,300 | <5.0 | <5.0 |
| | 10/07/10 | 13 | 6.4 | <1.0 | 87 | <1.0 | 6.3 | 2,600 | <5.0 | <5.0 |
| | 10/19/10 | 14 | 6.7 | <1.0 | 96 | <1.0 | 16 | 12,000 | <5.0 | <5.0 |
| | 11/30/10 | <10 | 6.7 | <1.0 | 76 | <1.0 | 9.4 | 3,000 | <5.0 | <5.0 |
| | 01/13/11 | 14 | 5.4 | <1.0 | 69 | <1.0 | 29 | 16,000 | <5.0 | 7.4 |
| DW-5 | 08/03/10 | <10 | 5.8 | <1.0 | 48 | <1.0 | <5.0 | 540 | <5.0 | <5.0 |
| | 10/07/10 | 11 | 5.1 | <1.0 | 53 | <1.0 | <5.0 | 640 | <5.0 | <5.0 |
| | 10/19/10 | <10 | 5.1 | <1.0 | 53 | <1.0 | <5.0 | 1,700 | <5.0 | <5.0 |
| | 11/30/10 | <10 | 5.5 | <1.0 | 55 | <1.0 | 8.5 | 1,200 | <5.0 | <5.0 |
| | 01/13/11 | 11 | 4.9 | <1.0 | 69 | <1.0 | 19 | 8,800 | <5.0 | <5.0 |
| DW-7 | 08/03/10 | <10 | 5.6 | <1.0 | 45 | <1.0 | 45 | 29,000 | 5.7 | 15 |
| | 10/07/10 | 71 | 5.7 | <1.0 | 51 | <1.0 | 92 | 57,000 | 5.9 | 25 |
| | 10/19/10 | 69 | 4.2 | <1.0 | 49 | <1.0 | 110 | 69,000 | 7.4 | 26 |
| | 11/30/10 | 23 | <2.0 | <1.0 | 50 | <1.0 | 42 | 21,000 | 5.1 | 7.6 |
| | 01/13/11 | 32 | 6.0 | <1.0 | 48 | <1.0 | 79 | 36,000 | 7.8 | 12 |

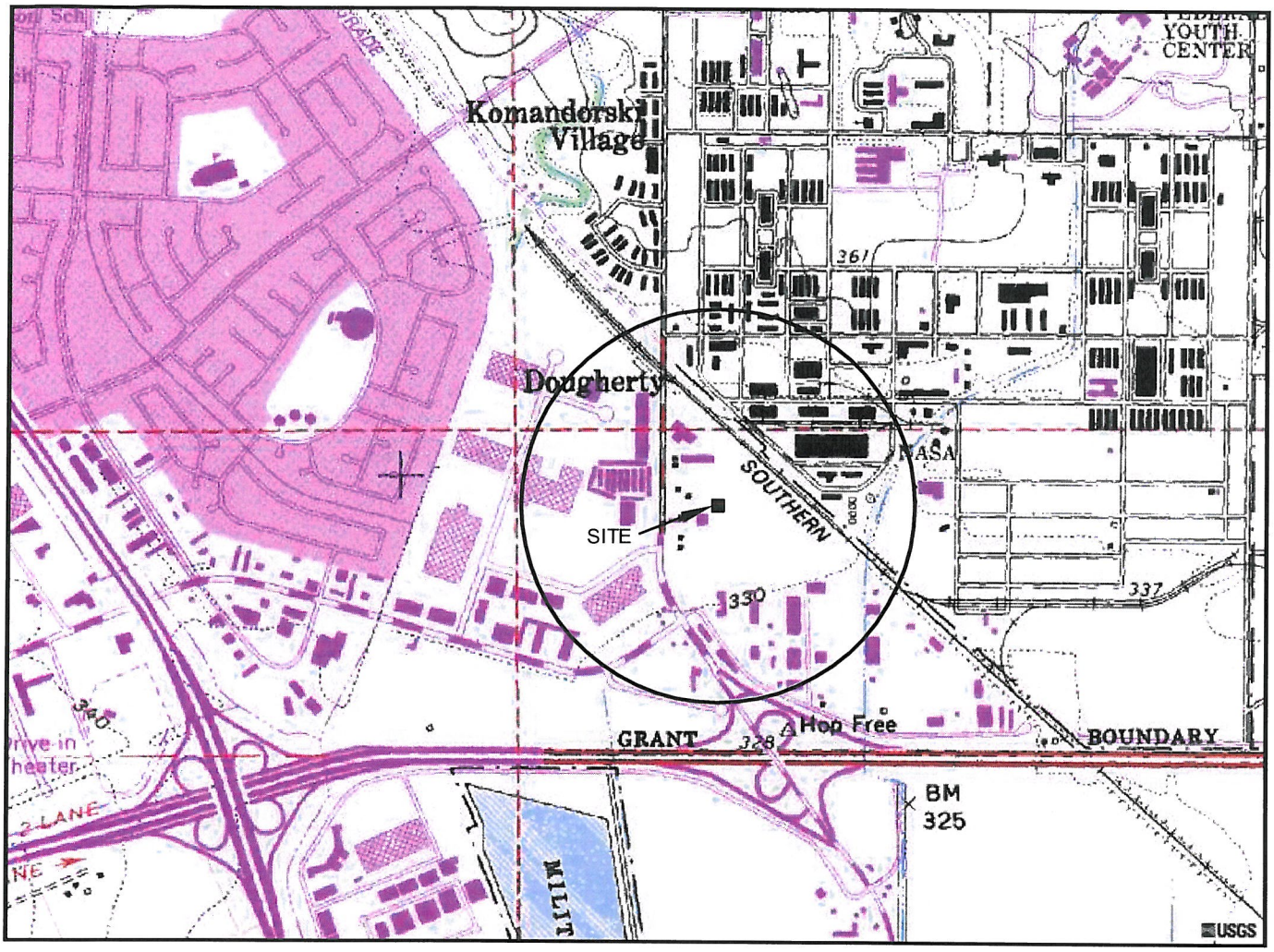
Notes:

µg/L = micrograms per liter
Cu = Copper
As = Arsenic
Cd = Cadmium
Ba = Barium
Cr = Chromium
$Cr^{+6}$ = Hexavalent Chromium
Fe = Iron
Se = Selenium
Pb = Lead
-- = Not analyzed

# TABLE 3
# HISTORICAL GROUNDWATER DATA SUMMARY
6310 Houston Place, Dublin, CA

| Well Number | Date Collected | TPH-G (µ/L) | TPH-MO (µ/L) | TAME (µg/L) | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | Ethanol (µg/L) | Methanol (µg/L) |
|---|---|---|---|---|---|---|---|---|---|
| DW-1 | 04/10/07 | 100 | 2800 | <0.5 | <5.0 | <0.5 | <0.5 | <50 | <500 |
| | 07/12/07 | 100 | -- | -- | -- | -- | -- | -- | -- |
| | 10/11/07 | <50 | -- | -- | -- | -- | -- | -- | -- |
| DW-2 | 04/10/07 | 180 | <5,000 | <0.5 | <5.0 | <0.5 | <0.5 | <50 | <500 |
| | 07/12/07 | 120 | -- | -- | -- | -- | -- | -- | -- |
| | 10/11/07 | <50 | -- | -- | -- | -- | -- | -- | -- |
| DW-3 | 04/10/07 | 220 | 9200 | <0.5 | <5.0 | <0.5 | <0.5 | <50 | <500 |
| | 07/12/07 | 2,200 | -- | -- | -- | -- | -- | -- | -- |
| | 10/11/07 | 18,000 | -- | -- | -- | -- | -- | -- | -- |
| DW-4 | 04/10/07 | <50 | <250 | <0.5 | <5.0 | <0.5 | <0.5 | <50 | <500 |
| | 07/12/07 | <50 | -- | -- | -- | -- | -- | -- | -- |
| | 10/11/07 | <50 | -- | -- | -- | -- | -- | -- | -- |
| DW-5 | 04/10/07 | <50 | 320 | <0.5 | <5.0 | <0.5 | <0.5 | <50 | <500 |
| | 07/12/07 | <50 | -- | -- | -- | -- | -- | -- | -- |
| | 10/11/07 | <50 | -- | -- | -- | -- | -- | -- | -- |
| DW-6 | 04/10/07 | <50 | <250 | <0.5 | <5.0 | <0.5 | <0.5 | <50 | <50 |
| | 07/12/07 | <50 | -- | -- | -- | -- | -- | -- | -- |
| | 10/11/07 | <50 | -- | -- | -- | -- | -- | -- | -- |
| DW-7 | 04/10/07 | <50 | <250 | <0.5 | <5.0 | <0.5 | <0.5 | <50 | <500 |
| | 07/12/07 | <50 | -- | -- | -- | -- | -- | -- | -- |
| | 10/11/07 | <50 | -- | -- | -- | -- | -- | -- | -- |

Notes:
*Data through January 11, 2010, reported by AEI Contultants.
µg/L = micrograms per liter
TPH-G = total petroleum hydrocarbons as galoine (C6-C12)
TPH-MO = total petroleum hydrocarbons as motor oil (C18)
TAME = Tertiary amyl methyl ether
TBA = Tertiary butyl alcohol
DIPE = di-isopropyl ether
ETBE = Ethyl tertiary butyl ether
-- = Not analyzed




GENERAL NOTES:
BASE MAP FROM U.S.G.S.
DUBLIN, CA.
7.5 MINUTE TOPOGRAPHIC
PHOTOREVISED 1989

N

QUADRANGLE LOCATION

0 1800 FT

APPROXIMATE SCALE

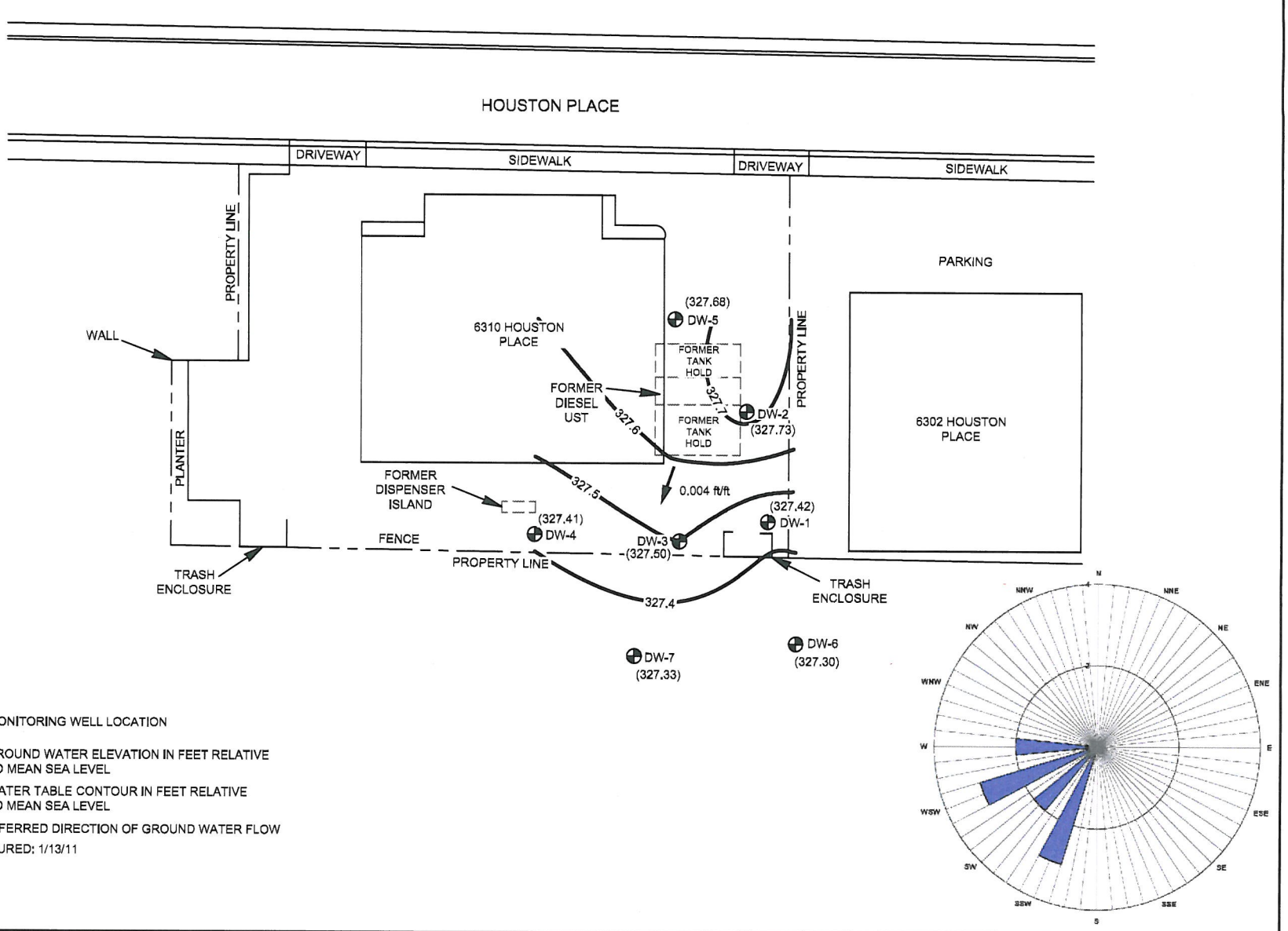
STRATUS
ENVIRONMENTAL, INC.

6310 HOUSTON PLACE
DUBLIN, CALIFORNIA

SITE LOCATION MAP

FIGURE
1

PROJECT NO.
2094-6310-01




STRATUS ENVIRONMENTAL, INC.

0 50 FT
SCALE

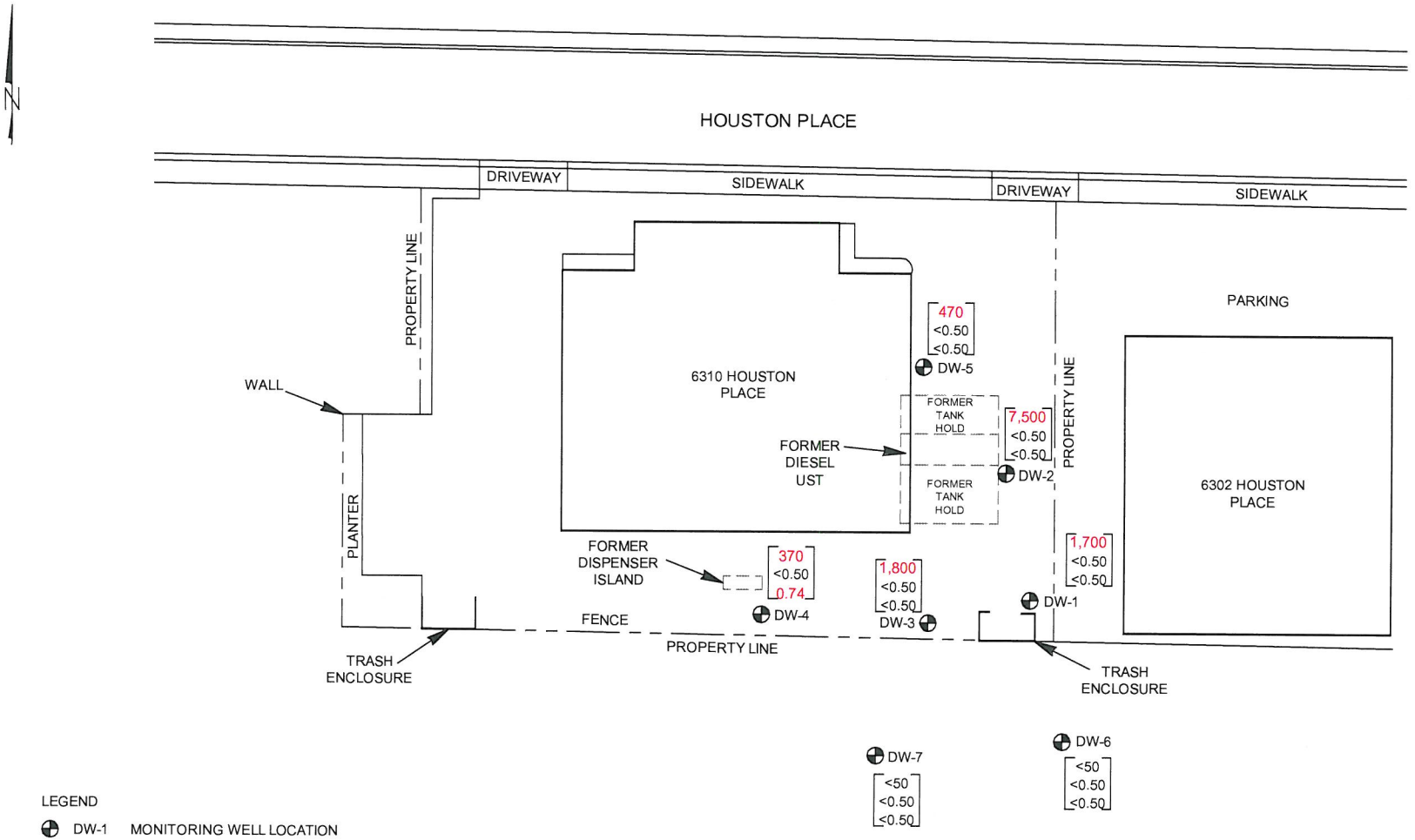
6310 HOUSTON PLACE
DUBLIN, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
1st QUARTER 2011

FIGURE
2

PROJECT NO.
2094-6310-01

Bay Counties\Quarterly JMP REV February 9, 2011 Bay Co Quarterly Figures




LEGEND

DW-1 MONITORING WELL LOCATION

[<50 / <0.50 / <0.50] DIESEL RANGE ORGANICS (DRO) IN µg/L / BENZENE CONCENTRATION IN µg/L / METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L

SAMPLES COLLECTED ON 1/13/11
DRO ANALYZED BY EPA METHOD 8015B
BENZENE & MTBE ANALYZED BY EPA METHOD 8260B

STRATUS ENVIRONMENTAL, INC.

0 50 FT
SCALE

6310 HOUSTON PLACE
DUBLIN, CALIFORNIA

GROUNDWATER ANALYTICAL SUMMARY
1st QUARTER 2011

FIGURE
3
PROJECT NO.
2094-6310-01

Bay Counties\Quarterly JMP REV February 9, 2011 Bay Co Quarterly Figures

# APPENDIX A

# FIELD DATA SHEETS

STRATUS ENVIRONMENTAL, INC.

Site Address 6310 Houston Place
City Dublin, CA
Sampled by: Levi Ford
Signature

Site Number Bay Counties
Project Number 2094-6310-01
Project PM Kasey Jones
DATE 01/13/2011

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) |
| DW-1 | 0805 | | 6.81 | 16.52 | 9.71 | 2 | 0.50 | 4.86 | 5.00 | | X | | | 7.81 | DW-1 | 1044 | 5.15 |
| -2 | 0808 | | 6.27 | 16.59 | 10.32 | | | 5.16 | 5.00 | | X | | | 8.05 | -2 | 0840 | 6.22 |
| -3 | 0812 | | 7.06 | 16.67 | 9.61 | | | 4.81 | 5.00 | | X | | | 8.58 | -3 | 1155 | 4.90 |
| -4 | 0814 | | 7.08 | 16.81 | 9.73 | | | 4.87 | 5.00 | | X | | | 7.62 | -4 | 0902 | 4.11 |
| -5 | 0810 | | 6.23 | 16.84 | 10.61 | | | 5.31 | 5.50 | | X | | | 7.78 | -5 | 1123 | 5.23 |
| -6 | 0745 | | 7.69 | 16.87 | 9.18 | | | 4.59 | 4.50 | | X | | | 8.47 | -6 | 0940 | 5.31 |
| -7 | 0743 | | 7.85 | 16.72 | 8.87 | | | 4.44 | 4.50 | | X | | | 7.98 | -7 | 1005 | 6.37 |
| | | | | | | | | | 34.5 | gallons | | | | | | | |

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)

SL

CALIBRATION DATE 12/1/2010
pH LE
Conductivity
DO

T:\Forms

ORIGINAL

STRATUS ENVIRONMENTAL, INC.

Site Address: 6310 Houston Place
City: Dublin
Sampled By: Levi Ford
Signature: LF

Site Number: Bay Counties
Project Number: 2094-6310-01
Project PM: Kasey Jones
DATE: 01/13/2011

Well ID D.W-2 Bail Sheen
Purge start time 0830 Odor (Y) N

| | Temp C | pH | cond | gallons |
|---|---|---|---|---|
| time 0830 | 19.7 | 6.86 | 1269 | Ø |
| time 0833 | 19.9 | 7.10 | 1219 | 2.5 |
| time 0837 | 19.9 | 7.23 | 1118 | 5 |
| time | | | | |

purge stop time 0837 ORP 14

Well ID D.W-4 Bail
Purge start time 0848 Odor Y (N)

| | Temp C | pH | cond | gallons |
|---|---|---|---|---|
| time 0848 | 18.5 | 6.70 | 4.01ms | Ø |
| time 0852 | 18.1 | 6.94 | 3.65ms | 2.5 |
| time 0858 | 18.1 | 6.85 | 3.79ms | 5 |
| time | | | | |

purge stop time 0858 ORP 38

Well ID D.W-6 Bail
Purge start time 0931 Odor Y (N)

| | Temp C | pH | cond | gallons |
|---|---|---|---|---|
| time 0931 | 18.9 | 6.89 | 4.33ms | Ø |
| time 0934 | 18.7 | 6.88 | 4.32ms | 2.5 |
| time 0937 | 18.6 | 6.90 | | 4.5 |
| time | | | | |

purge stop time ORP 27

Well ID D.W-7 Bail
Purge start time 0954 Odor Y (N)

| | Temp C | pH | cond | gallons |
|---|---|---|---|---|
| time 0954 | 18.9 | 6.83 | 4.45ms | Ø |
| time 0958 | 18.8 | 6.79 | 4.63ms | 2.5 |
| time 1001 | 18.9 | 6.81 | 4.54ms | 4.5 |
| time | | | | |

purge stop time 1001 ORP 30

Well ID DW-1 Bail Sheen
Purge start time 1033 Odor (Y) N

| | Temp C | pH | cond | gallons |
|---|---|---|---|---|
| time 1033 | 17.9 | 8.33 | 6.32ms | Ø |
| time 1036 | 17.7 | 8.29 | 572ms | 2.5 |
| time 1039 | 17.8 | 8.01 | 5.54ms | 5 |
| time | | | | |

purge stop time 1039 ORP 20

Well ID DW-5 Bail
Purge start time 1111 Odor Y (N)

| | Temp C | pH | cond | gallons |
|---|---|---|---|---|
| time 1111 | 19.4 | 7.03 | 3.05ms | Ø |
| time 1115 | 19.3 | 7.08 | 2.66ms | 3 |
| time 1119 | 19.3 | 7.05 | 2.77ms | 5.5 |
| time | | | | |

purge stop time 1119 ORP Ø

Well ID DW-3 Bail Sheen
Purge start time 1143 Odor (Y) N

| | Temp C | pH | cond | gallons |
|---|---|---|---|---|
| time 1143 | 18.0 | 7.13 | 2.23ms | Ø |
| time 1147 | 18.1 | 7.10 | 2.35ms | 2.5 |
| time 1151 | 18.2 | 7.15 | 2.25ms | 5 |
| time | | | | |

purge stop time 1151 ORP -10

Well ID
Purge start time Odor Y N

| | Temp C | pH | cond | gallons |
|---|---|---|---|---|
| time | | | | |
| time | | | | |
| time | | | | |
| time | | | | |

purge stop time ORP

GV

# APPENDIX B

# SAMPLING AND ANALYSES PROCEDURES

# 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: Kasey Jones
Phone: (530) 676-6000
Fax: (530) 676-6005
Date Received : 01/13/11

Job: 2094-6310-01/ Bay Counties Petroleum

Metals by ICPMS
EPA Method SW6020 / SW6020A

| Parameter | | Concentration | Reporting Limit | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|
| Client ID: **DW-1** | | | | | |
| Lab ID : STR11011307-01A | Chromium (Cr) | 72 | 5.0 µg/L | 01/14/11 | 01/14/11 |
| Date Sampled 01/13/11 10:44 | Iron (Fe) | 35,000 | 300 µg/L | 01/14/11 | 01/14/11 |
| | Copper (Cu) | 49 | 10 µg/L | 01/14/11 | 01/14/11 |
| | Selenium (Se) | ND | 5.0 µg/L | 01/14/11 | 01/14/11 |
| | Lead (Pb) | 16 | 5.0 µg/L | 01/14/11 | 01/14/11 |
| Client ID: **DW-3** | | | | | |
| Lab ID : STR11011307-03A | Chromium (Cr) | 29 | 5.0 µg/L | 01/14/11 | 01/14/11 |
| Date Sampled 01/13/11 11:55 | Iron (Fe) | 16,000 | 300 µg/L | 01/14/11 | 01/14/11 |
| | Copper (Cu) | 14 | 10 µg/L | 01/14/11 | 01/14/11 |
| | Selenium (Se) | ND | 5.0 µg/L | 01/14/11 | 01/14/11 |
| | Lead (Pb) | 7.4 | 5.0 µg/L | 01/14/11 | 01/14/11 |
| Client ID: **DW-5** | | | | | |
| Lab ID : STR11011307-05A | Chromium (Cr) | 19 | 5.0 µg/L | 01/14/11 | 01/14/11 |
| Date Sampled 01/13/11 11:23 | Iron (Fe) | 8,800 | 300 µg/L | 01/14/11 | 01/14/11 |
| | Copper (Cu) | 11 | 10 µg/L | 01/14/11 | 01/14/11 |
| | Selenium (Se) | ND | 5.0 µg/L | 01/14/11 | 01/14/11 |
| | Lead (Pb) | ND | 5.0 µg/L | 01/14/11 | 01/14/11 |
| Client ID: **DW-7** | | | | | |
| Lab ID : STR11011307-07A | Chromium (Cr) | 79 | 5.0 µg/L | 01/14/11 | 01/14/11 |
| Date Sampled 01/13/11 10:05 | Iron (Fe) | 36,000 | 300 µg/L | 01/14/11 | 01/14/11 |
| | Copper (Cu) | 32 | 10 µg/L | 01/14/11 | 01/14/11 |
| | Selenium (Se) | 7.8 | 5.0 µg/L | 01/14/11 | 01/14/11 |
| | Lead (Pb) | 12 | 5.0 µg/L | 01/14/11 | 01/14/11 |

ND = Not Detected
Reported in micrograms per Liter, per client request.

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer


Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com


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

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.

1/20/11
**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


## ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Kasey Jones
Phone: (530) 676-6000
Fax: (530) 676-6005
Date Received : 01/13/11

Job: 2094-6310-01/ Bay Counties Petroleum

Dissolved Metals by ICPMS
EPA Method SW6020 / SW6020A

| | Parameter | Concentration | Reporting Limit | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|
| Client ID: **DW-1** | | | | | |
| Lab ID : STR11011307-01A | Arsenic (As), Dissolved | 41 | 2.0 µg/L | 01/14/11 | 01/14/11 |
| Date Sampled 01/13/11 10:44 | Cadmium (Cd), Dissolved | ND | 1.0 µg/L | 01/14/11 | 01/14/11 |
| | Barium (Ba), Dissolved | 37 | 5.0 µg/L | 01/14/11 | 01/14/11 |
| Client ID: **DW-3** | | | | | |
| Lab ID : STR11011307-03A | Arsenic (As), Dissolved | 5.4 | 2.0 µg/L | 01/14/11 | 01/14/11 |
| Date Sampled 01/13/11 11:55 | Cadmium (Cd), Dissolved | ND | 1.0 µg/L | 01/14/11 | 01/14/11 |
| | Barium (Ba), Dissolved | 69 | 5.0 µg/L | 01/14/11 | 01/14/11 |
| Client ID: **DW-5** | | | | | |
| Lab ID : STR11011307-05A | Arsenic (As), Dissolved | 4.9 | 2.0 µg/L | 01/14/11 | 01/17/11 |
| Date Sampled 01/13/11 11:23 | Cadmium (Cd), Dissolved | ND | 1.0 µg/L | 01/14/11 | 01/17/11 |
| | Barium (Ba), Dissolved | 69 | 5.0 µg/L | 01/14/11 | 01/17/11 |
| Client ID: **DW-7** | | | | | |
| Lab ID : STR11011307-07A | Arsenic (As), Dissolved | 6.0 | 2.0 µg/L | 01/14/11 | 01/14/11 |
| Date Sampled 01/13/11 10:05 | Cadmium (Cd), Dissolved | ND | 1.0 µg/L | 01/14/11 | 01/14/11 |
| | Barium (Ba), Dissolved | 48 | 5.0 µg/L | 01/14/11 | 01/14/11 |

ND = Not Detected
Reported in micrograms per Liter, per client request.

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

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.

**1/20/11**
**Report Date**

# *Alpha Analytical, Inc.*

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## ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Kasey Jones
Phone: (530) 676-6000
Fax: (530) 676-6005
Date Received : 01/13/11

Job: 2094-6310-01/ Bay Counties Petroleum

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

| | | Parameter | Concentration | | Reporting Limit | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Client ID : | **DW-1** | | | | | | |
| Lab ID : | STR11011307-01A | TPH-E (DRO) | 1,700 | | 50 µg/L | 01/14/11 | 01/15/11 |
| Date Sampled | 01/13/11 10:44 | Methyl tert-butyl ether (MTBE) | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Benzene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Toluene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | o-Xylene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Naphthalene | ND | | 2.0 µg/L | 01/18/11 | 01/18/11 |
| Client ID : | **DW-2** | | | | | | |
| Lab ID : | STR11011307-02A | TPH-E (DRO) | 7,500 | | 50 µg/L | 01/14/11 | 01/15/11 |
| Date Sampled | 01/13/11 08:40 | Methyl tert-butyl ether (MTBE) | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Benzene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Toluene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | o-Xylene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Naphthalene | ND | | 2.0 µg/L | 01/18/11 | 01/18/11 |
| Client ID : | **DW-3** | | | | | | |
| Lab ID : | STR11011307-03A | TPH-E (DRO) | 1,800 | | 50 µg/L | 01/14/11 | 01/15/11 |
| Date Sampled | 01/13/11 11:55 | Methyl tert-butyl ether (MTBE) | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Benzene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Toluene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | o-Xylene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Naphthalene | ND | | 2.0 µg/L | 01/18/11 | 01/18/11 |
| Client ID : | **DW-4** | | | | | | |
| Lab ID : | STR11011307-04A | TPH-E (DRO) | 370 | | 50 µg/L | 01/14/11 | 01/15/11 |
| Date Sampled | 01/13/11 09:02 | Methyl tert-butyl ether (MTBE) | 0.74 | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Benzene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Toluene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | o-Xylene | ND | | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Naphthalene | ND | O | 4.0 µg/L | 01/18/11 | 01/18/11 |

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| | | | | | | |
|---|---|---|---|---|---|---|
| Client ID : | **DW-5** | | | | | |
| Lab ID : | STR11011307-05A | TPH-E (DRO) | 470 | 50 µg/L | 01/14/11 | 01/15/11 |
| Date Sampled | 01/13/11 11:23 | Methyl tert-butyl ether (MTBE) | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Benzene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Toluene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Ethylbenzene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | m,p-Xylene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | o-Xylene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Naphthalene | ND | 2.0 µg/L | 01/18/11 | 01/18/11 |
| Client ID : | **DW-6** | | | | | |
| Lab ID : | STR11011307-06A | TPH-E (DRO) | ND | 50 µg/L | 01/14/11 | 01/15/11 |
| Date Sampled | 01/13/11 09:40 | Methyl tert-butyl ether (MTBE) | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Benzene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Toluene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Ethylbenzene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | m,p-Xylene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | o-Xylene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Naphthalene | ND | 2.0 µg/L | 01/18/11 | 01/18/11 |
| Client ID : | **DW-7** | | | | | |
| Lab ID : | STR11011307-07A | TPH-E (DRO) | ND | 50 µg/L | 01/14/11 | 01/15/11 |
| Date Sampled | 01/13/11 10:05 | Methyl tert-butyl ether (MTBE) | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Benzene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Toluene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Ethylbenzene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | m,p-Xylene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | o-Xylene | ND | 0.50 µg/L | 01/18/11 | 01/18/11 |
| | | Naphthalene | ND | 2.0 µg/L | 01/18/11 | 01/18/11 |

Diesel Range Organics (DRO) C13-C22

O = Reporting Limits were increased due to sample foaming.

ND = Not Detected

Reported in micrograms per Liter, per client request.

Roger Scholl  Randy Gardner  Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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**1/20/11**

**Report Date**

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# VOC Sample Preservation Report

**Work Order:** STR11011307 **Job:** 2094-6310-01/ Bay Counties Petroleum

| Alpha's Sample ID | Client's Sample ID | Matrix | pH |
|---|---|---|---|
| 11011307-01A | DW-1 | Aqueous | 2 |
| 11011307-02A | DW-2 | Aqueous | 2 |
| 11011307-03A | DW-3 | Aqueous | 2 |
| 11011307-04A | DW-4 | Aqueous | 6 |
| 11011307-05A | DW-5 | Aqueous | 2 |
| 11011307-06A | DW-6 | Aqueous | 2 |
| 11011307-07A | DW-7 | Aqueous | 2 |

**1/20/11**
**Report Date**

# *Alpha Analytical, Inc.*

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**Date:** *18-Jan-11*

## QC Summary Report

**Work Order:** 11011307

### Method Blank

Type **MBLK** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **011411.B\038_M.D** Batch ID: **25805** Analysis Date: **01/14/2011 15:23**

Sample ID: **MB-25805** Units : **µg/L** Run ID: **ICP/MS_110114C** Prep Date: **01/14/2011 09:55**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium (Cr) | ND | 5 | | | | | | | | |
| Iron (Fe) | ND | 300 | | | | | | | | |
| Copper (Cu) | ND | 10 | | | | | | | | |
| Selenium (Se) | ND | 5 | | | | | | | | |
| Lead (Pb) | ND | 5 | | | | | | | | |

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **011411.B\039_M.D** Batch ID: **25805** Analysis Date: **01/14/2011 15:29**

Sample ID: **LCS-25805** Units : **µg/L** Run ID: **ICP/MS_110114C** Prep Date: **01/14/2011 09:55**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium (Cr) | 254 | 5 | 250 | | 102 | 80 | 120 | | | |
| Iron (Fe) | 51200 | 300 | 50000 | | 102 | 80 | 120 | | | |
| Copper (Cu) | 256 | 10 | 250 | | 102 | 80 | 120 | | | |
| Selenium (Se) | 247 | 5 | 250 | | 99 | 80 | 120 | | | |
| Lead (Pb) | 250 | 5 | 250 | | 100 | 80 | 120 | | | |

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **011411.B\044_M.D** Batch ID: **25805** Analysis Date: **01/14/2011 15:57**

Sample ID: **11011341-01AMS** Units : **µg/L** Run ID: **ICP/MS_110114C** Prep Date: **01/14/2011 09:55**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium (Cr) | 258 | 5 | 250 | 0 | 103 | 75 | 125 | | | |
| Iron (Fe) | 76800 | 300 | 50000 | 516800 | -880 | 75 | 125 | | | M3 |
| Copper (Cu) | 257 | 10 | 250 | 0 | 103 | 75 | 125 | | | |
| Selenium (Se) | 255 | 5 | 250 | 0 | 102 | 75 | 125 | | | |
| Lead (Pb) | 254 | 5 | 250 | 0 | 101 | 75 | 125 | | | |

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW6020 / SW6020A**

File ID: **011411.B\045_M.D** Batch ID: **25805** Analysis Date: **01/14/2011 16:02**

Sample ID: **11011341-01AMSD** Units : **µg/L** Run ID: **ICP/MS_110114C** Prep Date: **01/14/2011 09:55**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium (Cr) | 256 | 5 | 250 | 0 | 102 | 75 | 125 | 258.3 | 0.9(20) | |
| Iron (Fe) | 76500 | 300 | 50000 | 516800 | -880 | 75 | 125 | 76810 | 0.5(20) | M3 |
| Copper (Cu) | 254 | 10 | 250 | 0 | 102 | 75 | 125 | 256.6 | 1.0(20) | |
| Selenium (Se) | 253 | 5 | 250 | 0 | 101 | 75 | 125 | 254.6 | 0.8(20) | |
| Lead (Pb) | 249 | 5 | 250 | 0 | 99 | 75 | 125 | 253.5 | 1.9(20) | |

**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.

M3 = The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to the spike level. The method control sample recovery was acceptable.

Reported in micrograms per Liter, per client request.

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**Date:** *18-Jan-11*

## QC Summary Report

**Work Order:** 11011307

### Method Blank

Type **MBLK** Test Code: **EPA Method 200.8**

File ID: **011411.B\068_M.D** Batch ID: **25813** Analysis Date: **01/14/2011 18:41**

Sample ID: **MB-25813** Units : **µg/L** Run ID: **ICP/MS_110114B** Prep Date: **01/14/2011 14:48**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As), Dissolved | ND | 2 | | | | | | | | |
| Cadmium (Cd), Dissolved | ND | 1 | | | | | | | | |
| Barium (Ba), Dissolved | ND | 5 | | | | | | | | |

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 200.8**

File ID: **011411.B\069_M.D** Batch ID: **25813** Analysis Date: **01/14/2011 18:47**

Sample ID: **LCS-25813** Units : **µg/L** Run ID: **ICP/MS_110114B** Prep Date: **01/14/2011 14:48**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As), Dissolved | 49.5 | 2 | 50 | | 99 | 80 | 120 | | | |
| Cadmium (Cd), Dissolved | 49.3 | 1 | 50 | | 99 | 80 | 120 | | | |
| Barium (Ba), Dissolved | 49 | 5 | 50 | | 98 | 80 | 120 | | | |

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method 200.8**

File ID: **011411.B\073_M.D** Batch ID: **25813** Analysis Date: **01/14/2011 19:15**

Sample ID: **11011307-03AMS** Units : **µg/L** Run ID: **ICP/MS_110114B** Prep Date: **01/14/2011 14:48**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As), Dissolved | 61.8 | 2 | 50 | 5.395 | 113 | 75 | 125 | | | |
| Cadmium (Cd), Dissolved | 53.5 | 2 | 50 | 0 | 107 | 75 | 125 | | | |
| Barium (Ba), Dissolved | 122 | 5 | 50 | 68.81 | 107 | 75 | 125 | | | |

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 200.8**

File ID: **011411.B\074_M.D** Batch ID: **25813** Analysis Date: **01/14/2011 19:21**

Sample ID: **11011307-03AMSD** Units : **µg/L** Run ID: **ICP/MS_110114B** Prep Date: **01/14/2011 14:48**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As), Dissolved | 59 | 2 | 50 | 5.395 | 107 | 75 | 125 | 61.78 | 4.6(20) | |
| Cadmium (Cd), Dissolved | 51.2 | 2 | 50 | 0 | 102 | 75 | 125 | 53.48 | 4.4(20) | |
| Barium (Ba), Dissolved | 119 | 5 | 50 | 68.81 | 101 | 75 | 125 | 122.2 | 2.5(20) | |

**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.

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**Date:** *19-Jan-11*

## QC Summary Report

**Work Order:** 11011307

### Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B / E**

File ID: **2A01141106.D** Batch ID: **25812** Analysis Date: **01/14/2011 16:00**

Sample ID: **MBLK-25812** Units : **µg/L** Run ID: **FID_1_110114A** Prep Date: **01/14/2011 13:47**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH-E (DRO) | ND | 50 | | | | | | | | |
| Surr: Nonane | 148 | | 150 | | 99 | 57 | 147 | | | |

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B / E**

File ID: **2A01141107.D** Batch ID: **25812** Analysis Date: **01/14/2011 16:25**

Sample ID: **LCS-25812** Units : **µg/L** Run ID: **FID_1_110114A** Prep Date: **01/14/2011 13:47**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH-E (DRO) | 2550 | 50 | 2500 | | 102 | 67 | 130 | | | |
| Surr: Nonane | 157 | | 150 | | 105 | 57 | 147 | | | |

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B / E**

File ID: **2A01141110.D** Batch ID: **25812** Analysis Date: **01/14/2011 17:42**

Sample ID: **11011305-02AMSD** Units : **µg/L** Run ID: **FID_1_110114A** Prep Date: **01/14/2011 13:47**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH-E (DRO) | 2900 | 50 | 2500 | 0 | 116 | 49 | 150 | | | |
| Surr: Nonane | 163 | | 150 | | 109 | 57 | 147 | | | |

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B / E**

File ID: **2A01141111.D** Batch ID: **25812** Analysis Date: **01/14/2011 18:08**

Sample ID: **11011305-02AMSD** Units : **µg/L** Run ID: **FID_1_110114A** Prep Date: **01/14/2011 13:47**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH-E (DRO) | 3080 | 50 | 2500 | 0 | 123 | 49 | 150 | 2902 | 5.9(38) | |
| Surr: Nonane | 164 | | 150 | | 109 | 57 | 147 | | | |

**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.

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**Date:** 19-Jan-11

## QC Summary Report

**Work Order:** 11011307

### Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **11011804.D** Batch ID: **MS12W0118A** Analysis Date: **01/18/2011 09:42**

Sample ID: **MBLK MS12W0118A** Units : **µg/L** Run ID: **MSD_12_110118A** Prep Date: **01/18/2011 09:42**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether (MTBE) | ND | 0.5 | | | | | | | | |
| Benzene | ND | 0.5 | | | | | | | | |
| Toluene | ND | 0.5 | | | | | | | | |
| Ethylbenzene | ND | 0.5 | | | | | | | | |
| m,p-Xylene | ND | 0.5 | | | | | | | | |
| o-Xylene | ND | 0.5 | | | | | | | | |
| Naphthalene | ND | 2 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 8.63 | | 10 | | 86 | 70 | 130 | | | |
| Surr: Toluene-d8 | 10.4 | | 10 | | 104 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 8.81 | | 10 | | 88 | 70 | 130 | | | |

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **11011803.D** Batch ID: **MS12W0118A** Analysis Date: **01/18/2011 09:19**

Sample ID: **LCS MS12W0118A** Units : **µg/L** Run ID: **MSD_12_110118A** Prep Date: **01/18/2011 09:19**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether (MTBE) | 8.59 | 0.5 | 10 | | 86 | 62 | 136 | | | |
| Benzene | 9.4 | 0.5 | 10 | | 94 | 70 | 130 | | | |
| Toluene | 9.49 | 0.5 | 10 | | 95 | 80 | 120 | | | |
| Ethylbenzene | 9.94 | 0.5 | 10 | | 99 | 80 | 120 | | | |
| m,p-Xylene | 10 | 0.5 | 10 | | 100 | 70 | 130 | | | |
| o-Xylene | 10.3 | 0.5 | 10 | | 103 | 70 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 8.38 | | 10 | | 84 | 70 | 130 | | | |
| Surr: Toluene-d8 | 10.4 | | 10 | | 104 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 9.57 | | 10 | | 96 | 70 | 130 | | | |

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **11011814.D** Batch ID: **MS12W0118A** Analysis Date: **01/18/2011 13:43**

Sample ID: **11011402-01AMS** Units : **µg/L** Run ID: **MSD_12_110118A** Prep Date: **01/18/2011 13:43**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether (MTBE) | 40.9 | 1.3 | 50 | 0 | 82 | 56 | 141 | | | |
| Benzene | 40.6 | 1.3 | 50 | 0 | 81 | 67 | 130 | | | |
| Toluene | 40.1 | 1.3 | 50 | 0 | 80 | 66 | 130 | | | |
| Ethylbenzene | 41.9 | 1.3 | 50 | 0 | 84 | 68 | 130 | | | |
| m,p-Xylene | 41.9 | 1.3 | 50 | 0 | 84 | 64 | 130 | | | |
| o-Xylene | 43.8 | 1.3 | 50 | 0 | 88 | 70 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 43.4 | | 50 | | 87 | 70 | 130 | | | |
| Surr: Toluene-d8 | 51.4 | | 50 | | 103 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 48.5 | | 50 | | 97 | 70 | 130 | | | |

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **11011815.D** Batch ID: **MS12W0118A** Analysis Date: **01/18/2011 14:06**

Sample ID: **11011402-01AMSD** Units : **µg/L** Run ID: **MSD_12_110118A** Prep Date: **01/18/2011 14:06**

| Analyte | Result | PQL | SpkVal | SpkRefVal | %REC | LCL(ME) | UCL(ME) | RPDRefVal | %RPD(Limit) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether (MTBE) | 42.1 | 1.3 | 50 | 0 | 84 | 56 | 141 | 40.87 | 2.9(20) | |
| Benzene | 42.1 | 1.3 | 50 | 0 | 84 | 67 | 130 | 40.61 | 3.7(20) | |
| Toluene | 41.6 | 1.3 | 50 | 0 | 83 | 66 | 130 | 40.09 | 3.6(20) | |
| Ethylbenzene | 43.7 | 1.3 | 50 | 0 | 87 | 68 | 130 | 41.87 | 4.3(20) | |
| m,p-Xylene | 43.7 | 1.3 | 50 | 0 | 87 | 64 | 130 | 41.93 | 4.0(20) | |
| o-Xylene | 45.7 | 1.3 | 50 | 0 | 91 | 70 | 130 | 43.84 | 4.2(20) | |
| Surr: 1,2-Dichloroethane-d4 | 41.7 | | 50 | | 83 | 70 | 130 | | | |
| Surr: Toluene-d8 | 51.2 | | 50 | | 102 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 48.4 | | 50 | | 97 | 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:** *19-Jan-11*

## QC Summary Report

**Work Order:** 11011307

**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.

# CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

January 19, 2011

**CLS Work Order #: CUA0506**
**COC #:**

Reyna Vallejo
Alpha Analytical, Inc.-Sparks
255 Glendale Ave.; Suite 21
Sparks, NV 89431

**Project Name: STR11011307**

Enclosed are the results of analyses for samples received by the laboratory on 01/13/11 16:35. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

# CALIFORNIA LABORATORY SERVICES



01/19/11 09:24

| | | |
|---|---|---|
| Alpha Analytical, Inc.-Sparks | Project: STR11011307 | |
| 255 Glendale Ave.; Suite 21 | Project Number: STR11011307 | **CLS Work Order #: CUA0506** |
| Sparks, NV 89431 | Project Manager: Reyna Vallejo | COC #: |

## Conventional Chemistry Parameters by APHA/EPA Methods

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **STR11011307-01A (DW-1) (CUA0506-01) Aqueous** | **Sampled: 01/13/11 10:44** | | **Received: 01/13/11 16:35** | | | | | | |
| Hexavalent Chromium | ND | 1.0 | µg/L | 1 | CU00298 | 01/14/11 | 01/14/11 | EPA 7199 | |
| **STR11011307-03A (DW-3) (CUA0506-02) Aqueous** | **Sampled: 01/13/11 11:55** | | **Received: 01/13/11 16:35** | | | | | | |
| Hexavalent Chromium | ND | 1.0 | µg/L | 1 | CU00298 | 01/14/11 | 01/14/11 | EPA 7199 | |
| **STR11011307-05A (DW-5) (CUA0506-03) Aqueous** | **Sampled: 01/13/11 11:23** | | **Received: 01/13/11 16:35** | | | | | | |
| Hexavalent Chromium | ND | 1.0 | µg/L | 1 | CU00298 | 01/14/11 | 01/14/11 | EPA 7199 | |
| **STR11011307-07A (DW-7) (CUA0506-04) Aqueous** | **Sampled: 01/13/11 10:05** | | **Received: 01/13/11 16:35** | | | | | | |
| Hexavalent Chromium | ND | 1.0 | µg/L | 1 | CU00298 | 01/14/11 | 01/14/11 | EPA 7199 | |

# CALIFORNIA LABORATORY SERVICES



01/19/11 09:24

| | | |
|---|---|---|
| Alpha Analytical, Inc.-Sparks | Project: STR11011307 | |
| 255 Glendale Ave.; Suite 21 | Project Number: STR11011307 | **CLS Work Order #: CUA0506** |
| Sparks, NV 89431 | Project Manager: Reyna Vallejo | COC #: |

## Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch CU00298 - General Prep** | | | | | | | | | | |
| **Blank (CU00298-BLK1)** | | | | Prepared & Analyzed: 01/14/11 | | | | | | |
| Hexavalent Chromium | ND | 1.0 | µg/L | | | | | | | |
| **LCS (CU00298-BS1)** | | | | Prepared & Analyzed: 01/14/11 | | | | | | |
| Hexavalent Chromium | 4.62 | 1.0 | µg/L | 5.00 | | 92 | 80-120 | | | |
| **LCS Dup (CU00298-BSD1)** | | | | Prepared & Analyzed: 01/14/11 | | | | | | |
| Hexavalent Chromium | 4.96 | 1.0 | µg/L | 5.00 | | 99 | 80-120 | 7 | 20 | |
| **Matrix Spike (CU00298-MS1)** | | **Source: CUA0506-01** | | Prepared & Analyzed: 01/14/11 | | | | | | |
| Hexavalent Chromium | 5.20 | 1.0 | µg/L | 5.00 | ND | 104 | 75-125 | | | |
| **Matrix Spike Dup (CU00298-MSD1)** | | **Source: CUA0506-01** | | Prepared & Analyzed: 01/14/11 | | | | | | |
| Hexavalent Chromium | 5.10 | 1.0 | µg/L | 5.00 | ND | 102 | 75-125 | 2 | 25 | |

# CALIFORNIA LABORATORY SERVICES



01/19/11 09:24

| | | |
|---|---|---|
| Alpha Analytical, Inc.-Sparks | Project: STR11011307 | |
| 255 Glendale Ave.; Suite 21 | Project Number: STR11011307 | **CLS Work Order #: CUA0506** |
| Sparks, NV 89431 | Project Manager: Reyna Vallejo | COC #: |

## Notes and Definitions

| | |
|---|---|
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |

Billing Information :

# CHAIN-OF-CUSTODY RECORD

CA



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

**WorkOrder : STR11011307**

**Report Due By : 5:00 PM On : 20-Jan-2011**

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

| Report Attention | Phone Number | EMail Address |
|---|---|---|
| Kasey Jones | (530) 676-6000 x | kaseyjones@statusinc.net |

EDD Required : **Yes**

Sampled by : Levi

PO :

Client's COC # : 27237 Job : 2094-6310-01/ Bay Counties Petroleum

| Cooler Temp | Samples Received | Date Printed |
|---|---|---|
| 3 °C | 13-Jan-2011 | **14-Jan-2011** |

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: METALS_AQ | METALS_CR6_SUB_W | METALS_DS | TPH/E_W | VOC_W | | | | Sample Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STR11011307-01A | DW-1 | AQ | 01/13/11 10:44 | 10 | 1 | 5 | Cr, Fe, Cu, Se, Pb | Cr6+ by 7199 | As, Cd, Ba | TPH/E_C | BTEX/MTBE /Naphthalene_C | | | | |
| STR11011307-02A | DW-2 | AQ | 01/13/11 08:40 | 8 | 0 | 5 | | | | TPH/E_C | BTEX/MTBE /Naphthalene_C | | | | |
| STR11011307-03A | DW-3 | AQ | 01/13/11 11:55 | 10 | 1 | 5 | Cr, Fe, Cu, Se, Pb | Cr6+ by 7199 | As, Cd, Ba | TPH/E_C | BTEX/MTBE /Naphthalene_C | | | | |
| STR11011307-04A | DW-4 | AQ | 01/13/11 09:02 | 8 | 0 | 5 | | | | TPH/E_C | BTEX/MTBE /Naphthalene_C | | | | |
| STR11011307-05A | DW-5 | AQ | 01/13/11 11:23 | 10 | 1 | 5 | Cr, Fe, Cu, Se, Pb | Cr6+ by 7199 | As, Cd, Ba | TPH/E_C | BTEX/MTBE /Naphthalene_C | | | | |
| STR11011307-06A | DW-6 | AQ | 01/13/11 09:40 | 8 | 0 | 5 | | | | TPH/E_C | BTEX/MTBE /Naphthalene_C | | | | |
| STR11011307-07A | DW-7 | AQ | 01/13/11 10:05 | 10 | 1 | 5 | Cr, Fe, Cu, Se, Pb | Cr6+ by 7199 | As, Cd, Ba | TPH/E_C | BTEX/MTBE /Naphthalene_C | | | | |

**Comments:** Samples prelogged in order for Sac office to sub Cr+6 to CLS. Security seals intact. Frozen ice. :

| | Signature | Print Name | Company | Date/Time |
|---|---|---|---|---|
| **Logged in by:** | Elizabeth Adcox | Elizabeth Adcox | **Alpha Analytical, Inc.** | 1-14-11 1035 |

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

**Billing Information:**

Name Stratus Environmental
Address 3330 Cameron Park Dr. #550
City, State, Zip Cameron Park, CA.
Phone Number 676 6004 Fax 676 6005

**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 ___ ID ___ OR ___ OTHER ___

27237

Page # 1 of 1

Client Name Bay Counties Petroleum
Address 6310 Houston Place
City, State, Zip Dublin, CA

P.O. #
Job # 2094-6310-01
EMail Address
Phone #
Fax #
Report Attention Kjones@Stratusinc.net

| Time Sampled | Date Sampled 2011 | Matrix* See Key Below | Sampled by Levi / Lab ID Number (Office Use Only) | Sample Description | TAT | Field Filtered | Total and type of containers ** See below | Diesel - 8015M | BTEX | Naphthalene | MTBE | Dissolved Metals | Hex Chrome | Total Metals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1044 | 1/13 | AQ | STR1101307-01 | DW-1 | 5 DAY | N/A | 8V, 3P | X | X | X | X | X* | X* | X* |
| 0840 | | | -02 | -2 | | | | | | | | | | |
| 1155 | | | -03 | -3 | | | | | | | | X | X | X |
| 0902 | | | -04 | -4 | | | | | | | | | | |
| 1123 | | | -05 | -5 | | | | | | | | X | X | X |
| 0940 | | | -06 | -6 | | | | | | | | | | |
| 1005 | | | -07 | -7 | | | | | | | | X | X | X |

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID # T0600113164

REMARKS

DW-1, DW-3, DW-5, and DW-7 are samples for Hex. Chrome and Total Metals

* Hex Chrome Sub to CLS

**ADDITIONAL INSTRUCTIONS:**

| | Signature | Print Name | Company | Date | Time |
|---|---|---|---|---|---|
| Relinquished by | | Levi Ford | Stratus Env | 1/13/2011 | 1540 |
| Received by | | Lisa deSilva | ALPHA | 1-13-11 | 1540 |
| Relinquished by | | Lisa deSilva | ALPHA | 1-13-11 | 1600 |
| Received by | Elizabeth Adcox | Elizabeth Adcox | Alpha | 1-14-11 | 1035 |
| Relinquished by | | | | | |
| Received by | | | | | |

*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** |
| **Submittal Title:** | **GeoWell 1-13-11** |
| **Facility Global ID:** | **T0600113164** |
| **Facility Name:** | **BAY COUNTIES PETROLEUM** |
| **File Name:** | **GEO_WELL.zip** |
| **Organization Name:** | **Stratus Environmental, Inc.** |
| **Username:** | **STRATUS NOCAL** |
| **IP Address:** | **12.186.106.98** |
| **Submittal Date/Time:** | **1/24/2011 12:06:47 PM** |
| **Confirmation Number:** | **8583734095** |

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 - Monitoring Report - Quarterly** |
| **Submittal Title:** | **Analytical 1-13-11** |
| **Facility Global ID:** | **T0600113164** |
| **Facility Name:** | **BAY COUNTIES PETROLEUM** |
| **File Name:** | **11011307_EDF.zip** |
| **Organization Name:** | **Stratus Environmental, Inc.** |
| **Username:** | **STRATUS NOCAL** |
| **IP Address:** | **12.186.106.98** |
| **Submittal Date/Time:** | **2/7/2011 2:36:47 PM** |
| **Confirmation Number:** | 3683694422 |

VIEW QC REPORT

VIEW DETECTIONS REPORT