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By Alameda County Environmental Health at 4:17 pm, Apr 10, 2014

Mr. Jerry Wickham
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. Wickham:

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

April 7, 2014
Project No. 2094-6310-01

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

Re: **Semi-Annual Monitoring and Sampling Report – First Quarter 2014**
6310 Houston Place, Dublin, California 94568
ACEHD Case No. RO0002862, GeoTracker ID T0600113164

Dear Mr. Wickham:

Stratus Environmental, Inc. (Stratus) is submitting the attached report, which presents an update of work performed during the first quarter 2014 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. Trevor Hartwell at (530) 313-9966.

Sincerely,

STRATUS ENVIRONMENTAL, INC.

PROFESSIONAL GEOLOGIST
TREVOR M. HARTWELL
No. 8774
STATE OF CALIFORNIA

Trevor M. Hartwell, P.G
Project Manager

Jay R. Johnson, P.G.
Principal Geologist

Attachment: Semi-Annual Monitoring and Sampling Report, First Quarter 2014

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

April 7, 2014

6310 HOUSTON PLACE
SEMI-ANNUAL MONITORING AND SAMPLING REPORT

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

WORK PERFORMED THIS QUARTER (First Quarter 2014):

1. The State Water Resources Control Board (SWRCB) conducted a Low Threat Closure Plan (LTCP) review of the site in January 2014 and determined that the site is eligible for closure under the LTCP guidelines.

2. Per ACEHD correspondence dated January 6, 2014, Stratus will cease any work associated with the December 2013 Work Plan while site closure is evaluated.

3. ACEHD, on January 28, 2014, began the landowner and public notification process, as required for all sites being considered for closure. The public comment period ended on March 31, 2014.

4. On March 4, 2014, Stratus conducted the first quarter 2014 groundwater monitoring and sampling event. During this event, all wells (DW-1 through DW-7) were gauged for depth to water, temperature, pH, conductivity, dissolved oxygen (DO) and oxygen-reduction potential (ORP), purged, and groundwater samples were collected. All samples were 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. 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.

WORK TO BE PERFORMED NEXT QUARTER (Second Quarter 2014):

1. In accordance with ACEHD correspondence dated January 28, 2014, Stratus will proceed with destroying all wells at the site, as the public comment period has ended.

Current Phase of Project:	Soil and Groundwater Investigation (SWI)
Frequency of Groundwater Monitoring and Sampling:	Wells DW-1 through DW-7 = Semi-annual 1st & 3rd
Groundwater Sampling Date:	March 4, 2014
Is Free Product (FP) Present on Site:	No
Approximate Depth to Groundwater:	7.65 to 9.10 feet below top of well casing
Groundwater Flow Direction / Gradient:	West-northwest / 0.01 to 0.02 ft/ft

DISCUSSION:

Stratus conducted groundwater monitoring and sampling activities on March 4, 2014. During this event, wells DW-1 through DW-7 were gauged for depth to water, evaluated for the presence of free product,

purged, and sampled. Groundwater samples were collected and forwarded to a state-certified analytical laboratory. All samples were analyzed for diesel range organics (DRO), with silica gel cleanup, by EPA Method SW8015B, and benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds), methyl tert-butyl ether (MTBE), and naphthalene by EPA Method SW8260B. At the direction of ACEHD, Stratus also collected samples for metals analysis of chromium (Cr), Iron (Fe), copper (Cu), arsenic (As), selenium (Se), cadmium (Cd), barium (Ba), and lead (Pb) all by EPA Method 200.8 and for Cr^{6+} by EPA Method 218.6.

At the time of the March 2014 groundwater monitoring event, depth to groundwater was measured between 7.65 and 9.10 feet below ground surface (bgs) in all gauged wells. Groundwater elevations increased between 0.06 and 0.92 feet in all wells since the last monitoring event (November 4, 2013). 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 was generally to the west-northwest with a calculated gradient between 0.01 and 0.02 ft/ft.

Concentrations of DRO were reported in five of the seven sampled wells during the first quarter 2014. Onsite cross-gradient well DW-3 increased two orders of magnitude since the previous sampling event, with a reported concentration of 11,000 micrograms per liter (µg/L) during the first quarter 2014 (440 µg/L reported during the November 2013 sampling). DRO concentrations also increased in wells DW-1 (140 µg/L), DW-4 (99 µg/L), and DW-5 (120 µg/L) and decreased in well DW-2 (74 µg/L). Only one low concentration of MTBE was reported (DW-4 [0.97 µg/L]), and no concentrations of BTEX compounds or naphthalene were reported in any of the sampled wells during the first quarter 2014 sampling event. Additionally, no concentrations of DRO, BTEX compounds, MTBE or naphthalene were reported in offsite wells DW-6 or DW-7 during first quarter 2014, which is consistent with historical information. Tabulated groundwater analytical data are summarized in Table 2. DRO, benzene, and MTBE concentrations for groundwater samples collected during the first quarter 2014 are presented in Figure 3.

Concentrations of Cu increased in all wells during the first quarter 2014, with five of the seven wells reporting concentrations above the San Francisco Bay Regional Water Quality Control Board (SF Bay RWQCB) Tier 1 environmental screening level (ESL) of 3.1 µg/L[1]. Arsenic levels above the current ESL of 10 µg/L[1] were reported in wells DW-1, DW-2, DW-3, DW-4, and DW-5 with a maximum concentration of 40.8 µg/L (DW-5). Concentrations of both Cr and Cr^{6+} were reported in well DW-6 (2.82 µg/L and 2.7 µg/L, respectively) and DW-3 reported Cr at 1.07 µg/L on March 4, 2014. While concentrations of barium and Fe increased in all reporting wells, the concentrations were either below the current ESL or there is currently no screening level available. Dissolved metal concentrations (including historical data) are included in Table 3.

ATTACHMENTS:

- Table 1 Well Construction and Soil Boring Details
- Table 2 Groundwater Elevation and Analytical Summary
- Table 3 Groundwater Analytical – Dissolved Metals Summary
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation Contour Map, First Quarter 2014
- Figure 3 Groundwater Analytical Summary, First Quarter 2014
- 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

[1](SF Bay RWQCB, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, Table F-1a. Groundwater

Screening Levels [groundwater is a current or potential drinking water resource], updated May 2013).

TABLE 1
WELL CONSTRUCTION AND SOIL BORING DETAILS
6310 Houston Place, Dublin, CA

Well I.D.	Date Installed	Boring Depth (feet)	Well Diameter (inches)	Screen Interval (feet bgs)	Slot Size (inches)	Consultant
Monitoring Well						
DW-1	03/14/07	17	2	7-17	0.010	AEI
DW-2	03/14/07	17	2	7-17	0.010	AEI
DW-3	03/14/07	17	2	7-17	0.010	AEI
DW-4	03/14/07	17	2	7-17	0.010	AEI
DW-5	03/15/07	17	2	7-17	0.010	AEI
DW-6	03/15/07	17	2	7-17	0.010	AEI
DW-7	03/15/07	17	2	7-17	0.010	AEI
Soil Borings						
SB-1	03/14/06	16	--	--	--	AEI
SB-2	03/14/06	16	--	--	--	AEI
SB-3	03/14/06	16	--	--	--	AEI
SB-4	03/14/06	20	--	--	--	AEI
SB-5	03/14/06	16	--	--	--	AEI

Notes

feet bgs = Feet below ground surface

AEI = AEI Consultants

-- = Not applicable

Well and boring information taken from a review of boring logs provided on the State Water Resources Control Board GeoTracker database.

TABLE 2
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
	07/05/11	6.47	334.23	327.76	380	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	01/04/12	8.05	334.23	326.18	390	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	05/02/12	6.40	334.23	327.83	89,000	<500[3]	<500[3]	<500[3]	<500[3]	<500[3]	<4,000[3]
	05/14/12*	6.69	334.23	327.54	71	<25[3]	<25[3]	<25[3]	<25[3]	<25[3]	<200[3]
	05/14/12**	6.69	334.23	327.54	100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	09/27/12	8.10	334.23	326.13	230	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/13/12	6.61	334.23	327.62	310	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11/04/13	8.77	334.23	325.46	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	03/04/14	7.85	334.23	326.38	140	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
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
	07/05/11	6.12	334.00	327.88	210	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	01/04/12	7.77	334.00	326.23	1,600	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	05/02/12	6.06	334.00	327.94	23,000	<250[3]	<250[3]	<250[3]	<250[3]	<250[3]	<2,000[3]
	05/14/12*	6.39	334.00	327.61	450	<10[3]	<10[3]	<10[3]	<10[3]	<10[3]	<80[3]
	05/14/12**	6.39	334.00	327.61	260	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	09/27/12	8.25	334.00	325.75	340	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/13/12	6.29	334.00	327.71	580	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11/04/13	8.54	334.00	325.46	340	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	03/04/14	7.65	334.00	326.35	74	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 2
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-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
	07/05/11	6.88	334.56	327.68	780	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	01/04/12	8.43	334.56	326.13	9,000	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	05/02/12	6.92	334.56	327.64	53,000	<250[3]	<250[3]	<250[3]	<250[3]	<250[3]	<2,000[3]
	05/14/12*	7.13	334.56	327.43	1,300	<25[3]	<25[3]	<25[3]	<25[3]	<25[3]	<200[3]
	05/14/12**	7.13	334.56	327.43	740	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	09/27/12	8.54	334.56	326.02	740	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/13/12	7.02	334.56	327.54	3,200	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11/04/13	9.13	334.56	325.43	440	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	03/04/14	8.35	334.56	326.21	11,000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
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]
	07/05/11	6.91	334.49	327.58	300	<0.50	<0.50	<0.50	<0.50	0.96	<2.0
	01/04/12	8.38	334.49	326.11	88	<0.50	<0.50	<0.50	<0.50	0.80	<2.0
	05/02/12	6.85	334.49	327.64	33,000	<100[3]	<100[3]	<100[3]	<100[3]	<100[3]	<800[3]
	05/14/12*	7.20	334.49	327.29	140	<10[3]	<10[3]	<10[3]	<10[3]	<10[3]	<80[3]
Duplicate	05/14/12*	7.20	334.49	327.29	<50	<25[3]	<25[3]	<25[3]	<25[3]	<25[3]	<200[3]
	05/14/12**	7.20	334.49	327.29	110[4]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	05/14/12**	7.20	334.49	327.29	4,000[5]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	09/27/12	8.59	334.49	325.90	63	<0.50	<0.50	<0.50	<0.50	1.2	<0.50
	12/13/12	7.06	334.49	327.43	<50	<0.50	<0.50	<0.50	<0.50	1.4	<0.50
	11/04/13	9.16	334.49	325.33	72	<0.50	<0.50	<0.50	<0.50	1.3	<0.50
	03/04/14	9.10	334.49	325.39	99	<0.50	<0.50	<0.50	<0.50	0.97	<0.50

TABLE 2
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-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
	07/05/11	6.12	333.91	327.79	220	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	01/04/12	7.72	333.91	326.19	380	<0.50	<0.50	<0.50	<0.50	<0.50	<4.0[3]
	05/02/12	6.04	333.91	327.87	38,000	<250[3]	<250[3]	<250[3]	<250[3]	<250[3]	<2,000[3]
	05/14/12*	6.36	333.91	327.55	190	<50[3]	<50[3]	<50[3]	<50[3]	<50[3]	<400[3]
	05/14/12**	6.36	333.91	327.55	250[6]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	09/27/12	7.84	333.91	326.07	660	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/13/12	6.31	333.91	327.60	140	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11/04/13	8.43	333.91	325.48	110	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	03/04/14	7.75	333.91	326.16	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
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
	07/05/11	7.06	334.99	327.93	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	01/04/12	8.52	334.99	326.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	05/02/12	7.65	334.99	327.34	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	05/14/12	NM	334.99	NM	Not scheduled for sampling						
	09/27/12	8.54	334.99	326.45	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/13/12	7.26	334.99	327.73	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11/04/13	9.40	334.99	325.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	03/04/14	8.68	334.99	326.31	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 2
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
	07/05/11	7.49	335.18	327.69	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	01/04/12	9.17	335.18	326.01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<4.0[3]
	05/02/12	7.46	335.18	327.72	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0
	05/14/12	NM	335.18	NM	Not scheduled for sampling						
	09/27/12	9.20	335.18	325.98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/13/12	7.65	335.18	327.53	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11/04/13	9.77	335.18	325.41	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	03/04/14	8.91	335.18	326.27	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes:
Data through January 11, 2010, reported by AEI Contultants.
Prior to 8/3/10, reported as TPH-D
* = Sample was collected as a split grab sample. Sample was forwarded to Alpha Analytical.
** = Sample was collected as a split grab sample. Sample was forwarded to Kiff Analytical.
-- = Not analyzed
NM = Not measured
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.
[4] = Discrete peaks in diesel range, atypical for diesel fuel.
[5] = Hydrocarbons are higher-boiling than typical diesel fuel.
[6] = Lower boiling hydrocarbons present, atypical for diesel fuel.

Analytical Laboratory / Method:
Alpha Analytical Laboratory
DRO by EPA Method 8015B
All others by EPA Method 8260B

TABLE 3
GROUNDWATER ANALYTICAL - DISSOLVED METALS SUMMARY
6310 Houston Place, Dublin, California

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	43.0	<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
	05/09/12	<40	37	<4.0	<20	--	<20	1,200	<20	<20
	09/27/12	2.13	28.3	<1.0	11.6	<1.0	<1.0	94.6	<1.0	<1.0
	12/13/12	3.78	15.5	<1.0	20.8	<1.0	1.25	1,570	<1.0	<1.0
	11/04/13	2.47	9.92	<1.0	12.7	<1.0	<1.0	70	1.02	<1.0
	03/04/14	3.11	11.1	<1.0	38.8	<1.0	<1.0	1,900	<1.0	<1.0
DW-2	08/03/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/07/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/19/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/30/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/11	NS	NS	NS	NS	NS	NS	NS	NS	NS
	05/09/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/27/12	<1.0	43	<1.0	50.5	<1.0	<1.0	<50	<1.0	<1.0
	12/13/12	1.75	44.4	<1.0	35.6	<1.0	<1.0	1,910	<1.0	<1.0
	11/04/13	<1.0	38.3	<1.0	16	<1.0	<1.0	123	<1.0	<1.0
	03/04/14	1.69	34.8	<1.0	38.5	<1.0	<1.0	1,740	<1.0	<1.0
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
	05/09/12	<40	26	<4.0	62	--	<20	1,800	<20	<20
	09/27/12	<1.0	9.01	<1.0	62.9	<1.0	<1.0	410	<1.0	<1.0
	12/13/12	5.17	8.33	<1.0	77	<1.0	3.68	6,260	<1.0	1.37
	11/04/13	<1.0	10.7	<1.0	58	<1.0	<1.0	391	<1.0	<1.0
	03/04/14	2.17	13.0	<1.0	139	<1.0	1.07	2,840	<1.0	<1.0
DW-4	08/03/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/07/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/19/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/30/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/11	NS	NS	NS	NS	NS	NS	NS	NS	NS
	05/09/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/27/12	2.07	11.7	<1.0	19.1	<1.0	<1.0	139	<1.0	<1.0
	12/13/12	3.74	11.7	<1.0	32.3	<1.0	2.02	3,420	1.14	<1.0
	11/04/13	1.57	31.5	<1.0	23.3	<1.0	<1.0	1,550	<1.0	<1.0
	03/04/14	5.33	34.9	<1.0	80.0	<1.0	<1.0	2,530	<1.0	<1.0

TABLE 3
GROUNDWATER ANALYTICAL - DISSOLVED METALS SUMMARY
6310 Houston Place, Dublin, California

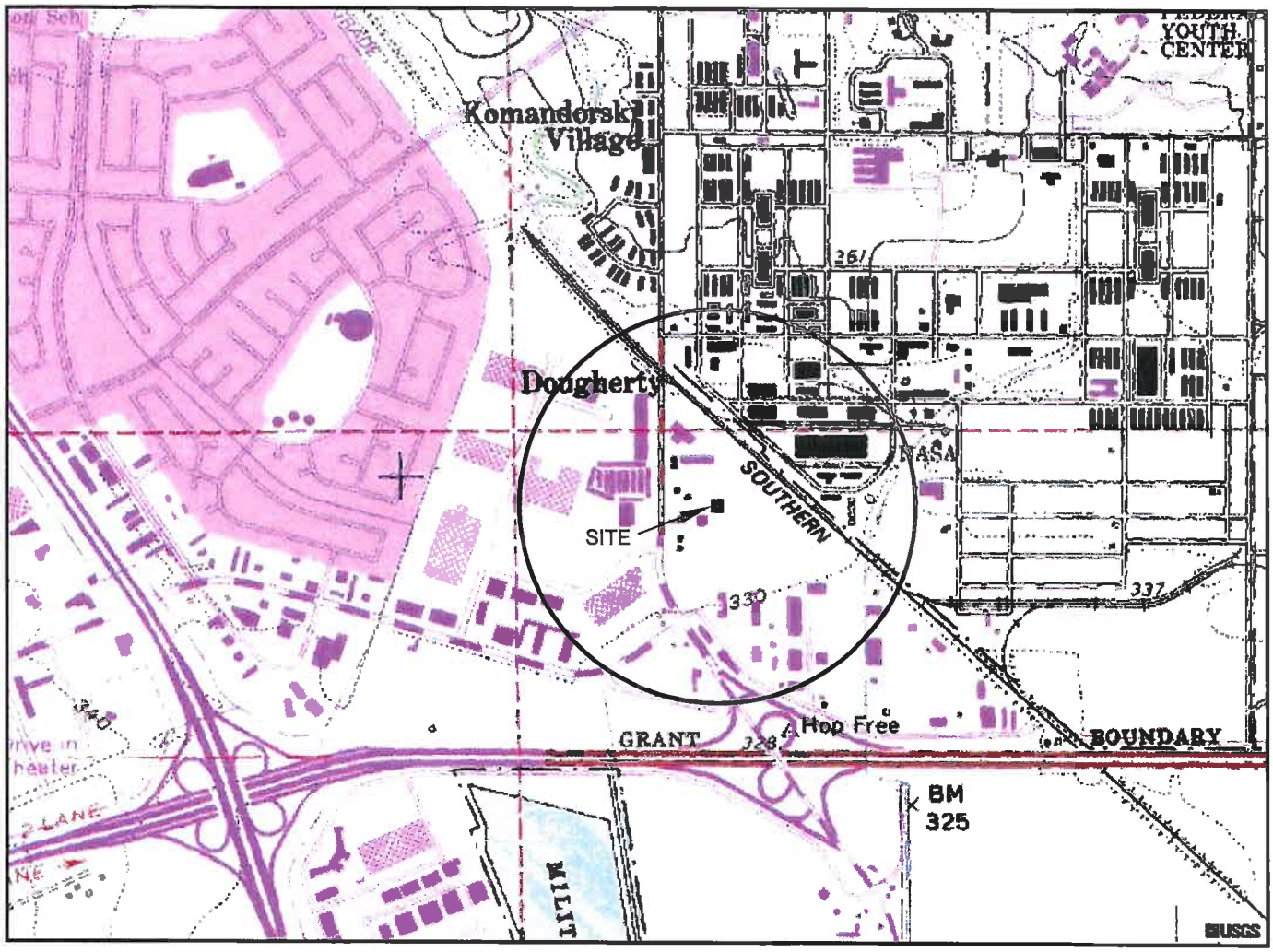
Well Number	Date Collected	Cu (µg/L)	As (µg/L)	Cd (µg/L)	Ba (µg/L)	Cr^{+6} (µg/L)	Cr (µg/L)	Fe (µg/L)	Se (µg/L)	Pb (µg/L)
DW-5	08/03/10	<10	5.8	<1.0	48	<1.0	<5.0	540	<5.0	<5.0
	10/07/10	11	5.1	<1.0	53	<1.0	<5.0	640	<5.0	<5.0
	10/19/10	69	5.1	<1.0	53	<1.0	<5.0	1,700	<5.0	<5.0
	11/30/10	<10	5.5	<1.0	55	<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
	05/09/12	<40	17	<4.0	45	--	<20	3,600	<20	<20
	09/27/12	2.12	31.7	<1.0	29.4	<1.0	<1.0	72	<1.0	<1.0
	12/13/12	3.41	22.9	<1.0	40.2	<1.0	1.59	2,620	1.29	<1.0
	11/04/13	1.88	26	<1.0	40.8	<1.0	<1.0	1,200	<1.0	<1.0
	03/04/14	5.38	40.8	<1.0	98.1	<1.0	<1.0	2,710	<1.0	<1.0
DW-6	08/03/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/07/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/19/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/30/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01/13/11	NS	NS	NS	NS	NS	NS	NS	NS	NS
	05/09/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/27/12	1.73	3.12	<1.0	70.7	2.4	2.47	<50	<1.0	<1.0
	12/13/12	6.02	4.16	<1.0	87.3	3.1	10.4	3,710	1.09	1.50
	11/04/13	2.27	4.43	<1.0	66.5	2.0	2.46	<50	1.54	<1.0
	03/04/14	6.89	3.56	<1.0	99.6	2.7	2.82	<50	<1.0	<1.0
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	<5.0	<5.0
	10/19/10	69	4.2	<1.0	49	<1.0	110	69,000	<5.0	<5.0
	11/30/10	23	<2.0	<1.0	50	<1.0	42	21,000	<5.0	<5.0
	01/13/11	32	6.0	<1.0	48	<1.0	79	36,000	7.8	12
	05/09/12	<40	34	<4.0	71	--	30	3,400	<20	<20
	09/27/12	1.95	3.1	<1.0	66.8	<1.0	<1.0	<50	<1.0	<1.0
	12/13/12	18.1	6.83	<1.0	189	<1.0	24.7	13,300	<1.0	6.42
	11/04/13	2.54	4.07	<1.0	51.8	<1.0	<1.0	<50	1.69	<1.0
	03/04/14	7.42	3.44	<1.0	114	<1.0	<1.0	<50	<1.0	<1.0

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
NS = Not Sampled
--- = Not Analyzed

Analytical Laboratory / Method:

Cr6+ = Kiff Analytical by EPA Method 218.6
Remaining Metals = Calscience Enviornmental Laboratories by EPA method 200.8



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

N

HOUSTON PLACE

DRIVEWAY

SIDEWALK

DRIVEWAY

SIDEWALK

PROPERTY LINE

PROPERTY LINE

PARKING

WALL

6310 HOUSTON PLACE

(326.16) DW-5

FORMER TANK HOLD

FORMER DIESEL UST

(326.35) DW-2

FORMER TANK HOLD

6302 HOUSTON PLACE

PLANTER

0.01 ft/ft

FORMER DISPENSER ISLAND

(326.36) DW-1

DW-4 (325.39)

FENCE

325.8

325.8

326.0

DW-3 (326.21)

326.2

PROPERTY LINE

0.02 ft/ft

TRASH ENCLOSURE

TRASH ENCLOSURE

DW-6 (326.31)

DW-7 (326.27)

EGEND

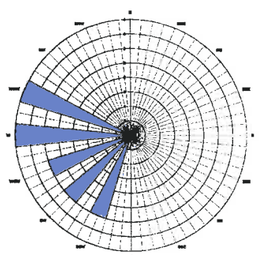
DW-1 MONITORING WELL LOCATION

(326.36) GROUND WATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL

326.0 WATER TABLE CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL

INFERRED DIRECTION OF GROUND WATER FLOW

WELLS MEASURED: 3/04/14



STRATUS ENVIRONMENTAL, INC.

PATH NAME: Bay Counties\Quarterly Figures

DRAFTER INITIALS: JMP

DATE LAST REVISED: March 13, 2014

FILENAME: Bay Co QF 11X17

0 30 FT

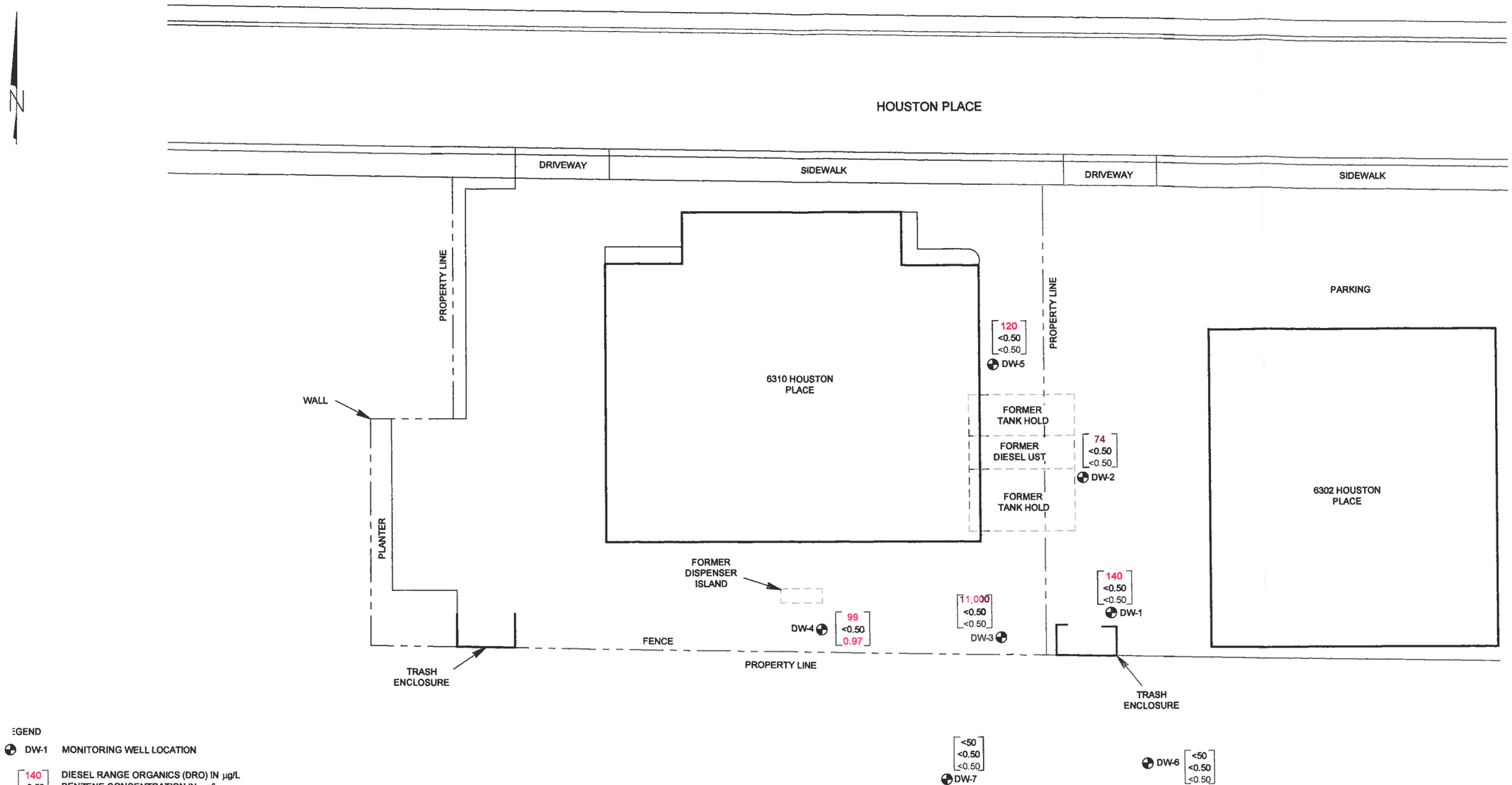
SCALE

6310 HOUSTON PLACE
DUBLIN, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
1st QUARTER 2014

FIGURE
2

PROJECT NO.
2094-6310-01



LEGEND

DW-1 MONITORING WELL LOCATION

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

WELLS SAMPLED 3/04/14
DRO ANALYZED BY EPA METHOD 8015B
BENZENE & MTBE ANALYZED BY EPA METHOD 8260B

STRATUS ENVIRONMENTAL, INC.

PATH NAME: Bay Counties\Quarterly Figures
DRAFTER INITIALS: JMP
DATE LAST REVISED: March 13, 2014
FILENAME: Bay Co QF 11X17

0 30 FT
SCALE

6310 HOUSTON PLACE
DUBLIN, CALIFORNIA

GROUNDWATER ANALYTICAL SUMMARY
1st QUARTER 2014

FIGURE
3
PROJECT NO.
2094-6310-01

APPENDIX A

FIELD DATA SHEETS

STRATUS ENVIRONMENTAL, INC.

Site Address: 6310 Houston Place
City: Dublin, CA
Sampled by: Jerry Gonzales
Signature:

Site Number: Bay Counties
Project Number: 2094-6310-01
Project PM: Trevor Hartwell
DATE: 3-4-14

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		1.55
DW-1	715		7.85	16.50	8.65	2"	0.5	4.3	5.0			X		9.45	DW-1	1015	0.97
DW-2	718		7.65	16.58	8.93	2"	0.5	4.4	5.0					8.85	DW-2	950	1.24
DW-3	722		8.35	16.65	8.3	2"	0.5	4.15	4.5					9.42	DW-3	1040	1.27
DW-4	708		9.10	16.78	7.6	2"	0.5	3.84	4.5					9.40	DW-4	850	1.54
DW-5	712		7.75	16.80	9.05	2"	0.5	4.5	5.0					8.09	DW-5	925	1.17
DW-6	703		8.68	16.80	8.12	2"	0.5	4.0	4.5					9.03	DW-8	810	1.72
DW-7	700		8.91	16.68	7.77	2"	0.5	3.8	4.5					8.91	DW-7	945	

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 3/3/14
Conductivity
DO

T:\Forms

STRATUS ENVIRONMENTAL INC.

Site Address 6310 Houston Place
City Dublin
Sampled By: Jerry Gonzales
Signature

Site Number Bay Counties
Project Number 2094-6310-01
Project PM Trevor Hartwell
DATE 3-4-14

Well ID DW-7				
Purge start time 730			Odor	Y (N)
	Temp F	pH	cond	gallons
time 731	61.0	6.89	2749	1.5
time 732	64.3	6.83	3037	3.0
time 733	64.4	6.87	3191	4.5
time 734				
purge stop time 739			ORP 130	

Well ID DW-6				
Purge start time 8:00			Odor	Y (N)
	Temp C	pH	cond	gallons
time 801	65.4	6.85	3524	1.5
time 802	65.6	6.84	3736	3.0
time 8:03	65.8	6.86	3725	4.5
time				
purge stop time 809			ORP 237	

Well ID DW-4				
Purge start time 840			Odor	Y (N)
	Temp C	pH	cond	gallons
time 841	63.8	6.84	3281	
time 842	63.9	6.81	3215	
time 843	64.0	6.78	3253	
time				
purge stop time			ORP -93	

Well ID DW-5				
Purge start time 9:11			Odor	Y (N)
	Temp F	pH	cond	gallons
time 9:12	65.5	6.92	3589	1.6
time 913	65.5	6.93	3983	3.2
time 9:14	65.5	6.91	3999	5.0
time				
purge stop time 915			ORP -31	

Well ID DW-2				
Purge start time 935			Odor	Y N
	Temp C	pH	cond	gallons
time 936	62.4	7.06	2106	1.6
time 937	68.1	7.09	1767	3.2
time 938	68.6	7.11	1708	5.0
time				
purge stop time 939			ORP -45	

Well ID DW-1				
Purge start time 1002			Odor	Y N
	Temp F	pH	cond	gallons
time 1003	67.2	7.23	3418	1.6
time 1004	650	7.24	3638	3.2
time 1005	64.5	7.27	3723	5.0
time				
purge stop time 1006			ORP -44	

Well ID DW-3				
Purge start time 1023			Odor	Y N
	Temp C	pH	cond	gallons
time 1026	65.4	7.11	2675	1.5
time 1027	64.3	7.19	2475	3.0
time 1028	64.4	7.05	2463	4.5
time				
purge stop time 1029			ORP -42	

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

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

KIFF Analytical LLC

Report Number : 87592
Date : 03/07/2014

Laboratory Results

Trevor Hartwell
Stratus Environmental, Inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682

Subject : 7 Water Samples
Project Name : Bay Counties Petroleum
Project Number : 2094-6310-01

Dear Mr. Hartwell,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC.
Kiff Analytical, LLC is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab number 08263CA.
If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy G. Turpen

Troy Turpen

KIFF Analytical LLC

Report Number : 87592
Date : 03/07/2014

Project Name : **Bay Counties Petroleum**
Project Number : **2094-6310-01**

Sample : **DW-1** Matrix : Water Lab Number : 87592-01
Sample Date :03/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	< 1.0	1.0	ug/L	EPA 218.6	03/04/14 17:20
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:31
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:31
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:31
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:31
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:31
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:31
1,2-Dichloroethane-d4 (Surr)	94.9		% Recovery	EPA 8260B	03/05/14 18:31
Toluene - d8 (Surr)	97.5		% Recovery	EPA 8260B	03/05/14 18:31
4-Bromofluorobenzene (Surr)	86.7		% Recovery	EPA 8260B	03/05/14 18:31
TPH as Diesel (Silica Gel)	**140**	50	ug/L	M EPA 8015	03/06/14 16:10
Octacosane (Silica Gel Surr)	113		% Recovery	M EPA 8015	03/06/14 16:10

KIFF Analytical LLC

Report Number : 87592
Date : 03/07/2014

Project Name : **Bay Counties Petroleum**
Project Number : **2094-6310-01**

Sample : **DW-2** Matrix : Water Lab Number : 87592-02
Sample Date :03/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	< 1.0	1.0	ug/L	EPA 218.6	03/04/14 17:26
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:19
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:19
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:19
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:19
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:19
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/05/14 18:19
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	03/05/14 18:19
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	03/05/14 18:19
4-Bromofluorobenzene (Surr)	115		% Recovery	EPA 8260B	03/05/14 18:19
TPH as Diesel (Silica Gel)	**74**	50	ug/L	M EPA 8015	03/06/14 16:45
Octacosane (Silica Gel Surr)	110		% Recovery	M EPA 8015	03/06/14 16:45

KIFF Analytical LLC

Report Number : 87592
Date : 03/07/2014

Project Name : **Bay Counties Petroleum**
Project Number : **2094-6310-01**

Sample : **DW-3** Matrix : Water Lab Number : 87592-03
Sample Date :03/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	< 1.0	1.0	ug/L	EPA 218.6	03/04/14 17:33
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 02:41
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 02:41
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 02:41
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 02:41
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 02:41
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 02:41
1,2-Dichloroethane-d4 (Surr)	93.5		% Recovery	EPA 8260B	03/06/14 02:41
Toluene - d8 (Surr)	97.2		% Recovery	EPA 8260B	03/06/14 02:41
4-Bromofluorobenzene (Surr)	86.8		% Recovery	EPA 8260B	03/06/14 02:41
TPH as Diesel (Silica Gel)	**11000**	50	ug/L	M EPA 8015	03/06/14 17:20
Octacosane (Silica Gel Surr)	110		% Recovery	M EPA 8015	03/06/14 17:20

KIFF Analytical LLC

Report Number : 87592
Date : 03/07/2014

Project Name : **Bay Counties Petroleum**
Project Number : **2094-6310-01**

Sample : **DW-4** Matrix : Water Lab Number : 87592-04
Sample Date :03/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	< 1.0	1.0	ug/L	EPA 218.6	03/04/14 17:40
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:14
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:14
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:14
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:14
Methyl-t-butyl ether (MTBE)	**0.97**	0.50	ug/L	EPA 8260B	03/06/14 03:14
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:14
1,2-Dichloroethane-d4 (Surr)	97.9		% Recovery	EPA 8260B	03/06/14 03:14
Toluene - d8 (Surr)	97.0		% Recovery	EPA 8260B	03/06/14 03:14
4-Bromofluorobenzene (Surr)	88.8		% Recovery	EPA 8260B	03/06/14 03:14
TPH as Diesel (Silica Gel)	**99**	50	ug/L	M EPA 8015	03/06/14 17:55
Octacosane (Silica Gel Surr)	108		% Recovery	M EPA 8015	03/06/14 17:55

KIFF Analytical LLC

Report Number : 87592
Date : 03/07/2014

Project Name : **Bay Counties Petroleum**
Project Number : **2094-6310-01**

Sample : **DW-5** Matrix : Water Lab Number : 87592-05
Sample Date :03/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	< 1.0	1.0	ug/L	EPA 218.6	03/04/14 17:47
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:47
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:47
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:47
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:47
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:47
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 03:47
1,2-Dichloroethane-d4 (Surr)	94.2		% Recovery	EPA 8260B	03/06/14 03:47
Toluene - d8 (Surr)	97.6		% Recovery	EPA 8260B	03/06/14 03:47
4-Bromofluorobenzene (Surr)	88.9		% Recovery	EPA 8260B	03/06/14 03:47
TPH as Diesel (Silica Gel)	**120**	50	ug/L	M EPA 8015	03/06/14 18:30
Octacosane (Silica Gel Surr)	107		% Recovery	M EPA 8015	03/06/14 18:30

KIFF Analytical LLC

Report Number : 87592
Date : 03/07/2014

Project Name : **Bay Counties Petroleum**
Project Number : **2094-6310-01**

Sample : **DW-6** Matrix : Water Lab Number : 87592-06
Sample Date :03/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	**2.7**	1.0	ug/L	EPA 218.6	03/04/14 17:53
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 10:04
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 10:04
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 10:04
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 10:04
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 10:04
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 10:04
1,2-Dichloroethane-d4 (Surr)	99.1		% Recovery	EPA 8260B	03/06/14 10:04
Toluene - d8 (Surr)	99.0		% Recovery	EPA 8260B	03/06/14 10:04
4-Bromofluorobenzene (Surr)	116		% Recovery	EPA 8260B	03/06/14 10:04
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/06/14 19:05
Octacosane (Silica Gel Surr)	111		% Recovery	M EPA 8015	03/06/14 19:05

KIFF Analytical LLC

Report Number : 87592
Date : 03/07/2014

Project Name : **Bay Counties Petroleum**
Project Number : **2094-6310-01**

Sample : **DW-7** Matrix : Water Lab Number : 87592-07

Sample Date :03/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Hexavalent Chromium	< 1.0	1.0	ug/L	EPA 218.6	03/04/14 18:00
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 13:19
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 13:19
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 13:19
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 13:19
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 13:19
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/06/14 13:19
1,2-Dichloroethane-d4 (Surr)	99.2		% Recovery	EPA 8260B	03/06/14 13:19
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	03/06/14 13:19
4-Bromofluorobenzene (Surr)	118		% Recovery	EPA 8260B	03/06/14 13:19
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/06/14 19:40
Octacosane (Silica Gel Surr)	102		% Recovery	M EPA 8015	03/06/14 19:40

Report Number : 87592

Date : 03/07/2014

QC Report : Method Blank Data

Project Name : **Bay Counties Petroleum**

Project Number : **2094-6310-01**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/06/2014
Octacosane (Silica Gel Surr)	100		%	M EPA 8015	03/06/2014
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
1,2-Dichloroethane-d4 (Surr)	98.4		%	EPA 8260B	03/06/2014
4-Bromofluorobenzene (Surr)	118		%	EPA 8260B	03/06/2014
Toluene - d8 (Surr)	99.3		%	EPA 8260B	03/06/2014
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	03/05/2014
4-Bromofluorobenzene (Surr)	114		%	EPA 8260B	03/05/2014
Toluene - d8 (Surr)	99.1		%	EPA 8260B	03/05/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/06/2014
1,2-Dichloroethane-d4 (Surr)	99.5		%	EPA 8260B	03/06/2014
4-Bromofluorobenzene (Surr)	114		%	EPA 8260B	03/06/2014
Toluene - d8 (Surr)	99.2		%	EPA 8260B	03/06/2014
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	03/05/2014
1,2-Dichloroethane-d4 (Surr)	93.3		%	EPA 8260B	03/05/2014
4-Bromofluorobenzene (Surr)	86.3		%	EPA 8260B	03/05/2014
Toluene - d8 (Surr)	97.9		%	EPA 8260B	03/05/2014
Hexavalent Chromium	<1.0	1.0	ug/L	EPA 218.6	03/04/2014

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 87592

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 03/07/2014

Project Name : **Bay Counties Petroleum**

Project Number : **2094-6310-01**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Hexavalent Chromium														
	87583-01	22	5.00	5.00	27.0	26.9	ug/L	EPA 218.6	3/4/14	102	100	0.205	90.0-110	10
TPH-D (Si Gel)														
	BLANK	<50	1000	1000	933	929	ug/L	M EPA 8015	3/6/14	93.3	92.9	0.462	70-130	25
Benzene														
	87551-03	<0.50	40.0	40.0	40.4	38.1	ug/L	EPA 8260B	3/6/14	101	95.2	6.01	70.0-130	25
Ethylbenzene														
	87551-03	<0.50	40.0	40.0	44.3	41.0	ug/L	EPA 8260B	3/6/14	111	102	7.73	70.0-130	25
Methyl-t-butyl ether														
	87551-03	<0.50	39.9	39.9	39.1	38.5	ug/L	EPA 8260B	3/6/14	98.0	96.6	1.44	70.0-130	25
Naphthalene														
	87551-03	<0.50	40.0	40.0	40.4	38.2	ug/L	EPA 8260B	3/6/14	101	95.6	5.57	70.0-130	25
P + M Xylene														
	87551-03	<0.50	40.0	40.0	42.6	38.7	ug/L	EPA 8260B	3/6/14	106	96.7	9.74	70.0-130	25
Toluene														
	87551-03	<0.50	40.0	40.0	40.4	37.6	ug/L	EPA 8260B	3/6/14	101	94.0	7.26	70.0-130	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 87592

Date : 03/07/2014

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Bay Counties Petroleum**

Project Number : **2094-6310-01**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene														
	87592-02	<0.50	40.0	40.0	40.9	39.5	ug/L	EPA 8260B	3/5/14	102	98.7	3.64	70.0-130	25
Ethylbenzene														
	87592-02	<0.50	40.0	40.0	43.9	42.8	ug/L	EPA 8260B	3/5/14	110	107	2.57	70.0-130	25
Methyl-t-butyl ether														
	87592-02	<0.50	39.9	39.9	41.8	42.2	ug/L	EPA 8260B	3/5/14	105	106	1.16	70.0-130	25
Naphthalene														
	87592-02	<0.50	40.0	40.0	41.0	40.2	ug/L	EPA 8260B	3/5/14	102	100	2.08	70.0-130	25
P + M Xylene														
	87592-02	<0.50	40.0	40.0	45.3	43.3	ug/L	EPA 8260B	3/5/14	113	108	4.43	70.0-130	25
Toluene														
	87592-02	<0.50	40.0	40.0	42.1	40.6	ug/L	EPA 8260B	3/5/14	105	102	3.66	70.0-130	25
Benzene														
	87592-06	<0.50	40.0	40.0	38.3	37.7	ug/L	EPA 8260B	3/6/14	95.8	94.3	1.54	70.0-130	25
Ethylbenzene														
	87592-06	<0.50	40.0	40.0	41.6	40.5	ug/L	EPA 8260B	3/6/14	104	101	2.62	70.0-130	25
Methyl-t-butyl ether														
	87592-06	<0.50	39.9	39.9	39.9	40.8	ug/L	EPA 8260B	3/6/14	100	102	2.29	70.0-130	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 87592

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 03/07/2014

Project Name : **Bay Counties Petroleum**

Project Number : **2094-6310-01**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Naphthalene														
	87592-06	<0.50	40.0	40.0	38.0	38.1	ug/L	EPA 8260B	3/6/14	95.1	95.2	0.108	70.0-130	25
P + M Xylene														
	87592-06	<0.50	40.0	40.0	42.7	41.8	ug/L	EPA 8260B	3/6/14	107	104	2.09	70.0-130	25
Toluene														
	87592-06	<0.50	40.0	40.0	39.6	38.8	ug/L	EPA 8260B	3/6/14	99.0	97.0	2.06	70.0-130	25
Benzene														
	87592-01	<0.50	40.0	40.0	38.0	37.5	ug/L	EPA 8260B	3/5/14	95.0	93.8	1.26	70.0-130	25
Ethylbenzene														
	87592-01	<0.50	40.0	40.0	39.7	39.7	ug/L	EPA 8260B	3/5/14	99.2	99.2	0.0498	70.0-130	25
Methyl-t-butyl ether														
	87592-01	<0.50	39.9	39.9	33.5	33.1	ug/L	EPA 8260B	3/5/14	84.0	83.0	1.18	70.0-130	25
Naphthalene														
	87592-01	<0.50	40.0	40.0	41.0	40.7	ug/L	EPA 8260B	3/5/14	102	102	0.565	70.0-130	25
P + M Xylene														
	87592-01	<0.50	40.0	40.0	38.3	38.2	ug/L	EPA 8260B	3/5/14	95.8	95.6	0.223	70.0-130	25
Toluene														
	87592-01	<0.50	40.0	40.0	38.1	37.4	ug/L	EPA 8260B	3/5/14	95.2	93.6	1.72	70.0-130	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Project Name : **Bay Counties Petroleum**
Project Number : **2094-6310-01**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.1	ug/L	EPA 8260B	3/6/14	90.0	70.0-130
Ethylbenzene	40.1	ug/L	EPA 8260B	3/6/14	97.8	70.0-130
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	3/6/14	88.6	70.0-130
Naphthalene	40.1	ug/L	EPA 8260B	3/6/14	90.8	70.0-130
P + M Xylene	40.1	ug/L	EPA 8260B	3/6/14	96.2	70.0-130
Toluene	40.1	ug/L	EPA 8260B	3/6/14	91.0	70.0-130
Benzene	39.7	ug/L	EPA 8260B	3/5/14	96.0	70.0-130
Ethylbenzene	39.7	ug/L	EPA 8260B	3/5/14	104	70.0-130
Methyl-t-butyl ether	39.6	ug/L	EPA 8260B	3/5/14	98.1	70.0-130
Naphthalene	39.7	ug/L	EPA 8260B	3/5/14	97.4	70.0-130
P + M Xylene	39.7	ug/L	EPA 8260B	3/5/14	106	70.0-130
Toluene	39.7	ug/L	EPA 8260B	3/5/14	99.4	70.0-130
Benzene	40.1	ug/L	EPA 8260B	3/6/14	94.7	70.0-130
Ethylbenzene	40.1	ug/L	EPA 8260B	3/6/14	102	70.0-130
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	3/6/14	99.4	70.0-130
Naphthalene	40.1	ug/L	EPA 8260B	3/6/14	94.8	70.0-130
P + M Xylene	40.1	ug/L	EPA 8260B	3/6/14	104	70.0-130
Toluene	40.1	ug/L	EPA 8260B	3/6/14	97.4	70.0-130
Benzene	40.1	ug/L	EPA 8260B	3/5/14	96.3	70.0-130

Report Number : 87592

Date : 03/07/2014

QC Report : Laboratory Control Sample (LCS)

Project Name : **Bay Counties Petroleum**

Project Number : **2094-6310-01**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Ethylbenzene	40.1	ug/L	EPA 8260B	3/5/14	101	70.0-130
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	3/5/14	87.0	70.0-130
Naphthalene	40.1	ug/L	EPA 8260B	3/5/14	100	70.0-130
P + M Xylene	40.1	ug/L	EPA 8260B	3/5/14	96.9	70.0-130
Toluene	40.1	ug/L	EPA 8260B	3/5/14	97.9	70.0-130
Hexavalent Chromium	5.00	ug/L	EPA 218.6	3/4/14	102	90.0-110

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

2795 2nd Street Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 87592

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Trevor Hartwell; cc Renee Scherr
Company / Address: Stratus Environmental, Inc.
Phone #: 530-676-6004
Fax #:
Project #: 2094-6310-01
P.O. #:
Project Name: Bay Counties Petroleum
Project Address: 6310 Houston Place, Dublin, CA

California EDF Report? ☑ Yes ☐ No
Sampling Company Log Code:
Global ID: T0600113164
PDF/EDF Deliverable To (Email Address): rscherr@stratusinc.net
Sampler Signature:

TAT: ☐ 12 hr ☐ 24 hr ☐ 48hr ☐ 72 hr ☐ 1 wk

Sample Designation	Date	Time	Sampling	Container: 40 ml VOA	Container: Sleeve	Container: Poly	Container: Glass	Container: Tedlar	Preservative: HCl	Preservative: H_2SO_4	Preservative: None	Preservative: HNO_3	Matrix: Water	Matrix: Soil	Matrix: Air	DRO (8015M) w/ Si Gel Cleanup-"Column Method	MTBE (EPA 8260B)	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (EPA 8260B)	Naphthalene (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB-EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	Dissolved (Cu, As, Cd, Ba, Cr, Fe, Se, Pb) 200.8	W.E.T. Lead (STLC)	Chlorinated Solvents (EPA 8260B)	Cr6+		TAT	For Lab Use Only
DW-1	3-4-14	1015		6	5	3			6		1	1	X			X	X	X										X			X		STAT	01
DW-2		950		6	5	3			6		1	1	X			X	X	X										X			X		STAT	02
DW-3		1040		6	5	3			6		1	1	X			X	X	X										X			X		STAT	03
DW-4		850		6	5	3			6		1	1	X			X	X	X										X			X		STAT	04
DW-5		925		6	5	3			6		1	1	X			X	X	X										X			X		STAT	05
DW-6		810		6	5	3			6		1	1	X			X	X	X										X			X		STAT	06
DW-7		745		6	5	3			6		1	1	X			X	X	X										X			X		STAT	07

Analysis Request

Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory:
	030414	1320	

Remarks: CR6+ - FIELD FILTERED
1st Qtr 2014 Groundwater Monitoring

Bill to: Stratus Environmental, Inc.

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present Yes / No

KIFF Analytical LLC

SAMPLE RECEIPT CHECKLIST

SRG #: 87592

Sample Receipt	Initials/Date: Eyg 030414	Storage Time: 1320	Sample Login	Initials/Date: Eyg 030414

TAT: ☒ Standard ☐ Rush ☐ Split ☐ None

Method of Receipt: ☐ Courier ☒ Over-the-counter ☐ Shipped

Temp °C 4.2 ☐ N/A | Therm ID IR3 | Time 1315 | Coolant present ☒ Yes ☐ No ☐ Water ☐ Temp Excursion

For Shipments Only: Cooler Receipt Initials/Date/Time:

Custody Seals ☐ N/A ☐ Intact ☐ Broken

Chain-of-Custody:	Yes	No
Is COC present?	✓	
Is COC signed by relinquisher?	✓	
Is COC dated by relinquisher?		✓
Is the sampler's name on the COC?	✓	
Are there analyses or hold for all samples?	✓	

Documented on	COC	Labels	Discrepancies:
Sample ID	✓	✓	
Project ID	✓	✓	
Sample Date	✓	✓	
Sample Time	✓	✓	
Does COC match project history?	☐ N/A	☒ ~~Yes~~ 030414	☒ No

Samples:	N/A	Yes	No
Are sample custody seals intact?	✓		
Are sample containers intact?		✓	
Is preservation documented?		✓	
In-house Analysis:	**N/A**	**Yes**	**No**
Are preservatives acceptable?		✓	
Are samples within holding time?		✓	
Are sample container types correct?		✓	
Is there adequate sample volume?		✓	

Comments: CR6+ logged in per the project history. SR only received 2 polys per sample. Eyg 030414 1500

Receipt Details:

Matrix	Container Type	# of Containers
WA	Voa	35
WA	Poly-250ml	14

CS Required: ☐

Proceed With Analysis: ☐ YES ☐ NO Init/Date:

Client Communication:

Leaders in Analytical Science and Service

KIFF Analytical LLC

Subcontract Laboratory Report Attachments

2795 Second Street, Suite 300 Davis, CA 95618
tel 530.297.4800 fax 530.297.4808
www.kiffanalytical.com

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-0264

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Kiff Analytical

Client Project Name: Bay Counties Petroleum

Attention: Joel Kiff
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Amanda Porter

Approved for release on 03/11/2014 by:
Amanda Porter
Project Manager

ResultLink ▸

Email your PM ▸

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Bay Counties Petroleum
Work Order Number: 14-03-0264

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-0264

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/05/14. They were assigned to Work Order 14-03-0264.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Return to Contents

Calscience Environmental Laboratories, Inc.

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 03/05/14
Work Order: 14-03-0264
Preparation: Filtered
Method: EPA 200.8
Units: mg/L

Project: Bay Counties Petroleum

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DW-1	**14-03-0264-1-A**	**03/04/14 10:15**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 22:33**	**140305L01F**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.0111	0.00100	1.00	
Barium	0.0388	0.00100	1.00	
Cadmium	ND	0.00100	1.00	
Chromium	ND	0.00100	1.00	
Copper	0.00311	0.00100	1.00	
Lead	ND	0.00100	1.00	
Selenium	ND	0.00100	1.00	
Iron	1.90	0.0500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DW-2	**14-03-0264-2-A**	**03/04/14 09:50**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 22:36**	**140305L01F**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.0348	0.00100	1.00	
Barium	0.0385	0.00100	1.00	
Cadmium	ND	0.00100	1.00	
Chromium	ND	0.00100	1.00	
Copper	0.00169	0.00100	1.00	
Lead	ND	0.00100	1.00	
Selenium	ND	0.00100	1.00	
Iron	1.74	0.0500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DW-3	**14-03-0264-3-A**	**03/04/14 10:40**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 22:40**	**140305L01F**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.0130	0.00100	1.00	
Barium	0.139	0.00100	1.00	
Cadmium	ND	0.00100	1.00	
Chromium	0.00107	0.00100	1.00	
Copper	0.00217	0.00100	1.00	
Lead	ND	0.00100	1.00	
Selenium	ND	0.00100	1.00	
Iron	2.84	0.0500	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 03/05/14
Work Order: 14-03-0264
Preparation: Filtered
Method: EPA 200.8
Units: mg/L

Project: Bay Counties Petroleum

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DW-4	**14-03-0264-4-A**	**03/04/14 08:50**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 07:23**	**140305L01F**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.0349	0.00100	1.00	
Barium	0.0800	0.00100	1.00	
Cadmium	ND	0.00100	1.00	
Chromium	ND	0.00100	1.00	
Copper	0.00533	0.00100	1.00	
Lead	ND	0.00100	1.00	
Selenium	ND	0.00100	1.00	
Iron	2.53	0.0500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DW-5	**14-03-0264-5-A**	**03/04/14 09:25**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 07:36**	**140305L01F**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.0408	0.00100	1.00	
Barium	0.0981	0.00100	1.00	
Cadmium	ND	0.00100	1.00	
Chromium	ND	0.00100	1.00	
Copper	0.00538	0.00100	1.00	
Lead	ND	0.00100	1.00	
Selenium	ND	0.00100	1.00	
Iron	2.71	0.0500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DW-6	**14-03-0264-6-A**	**03/04/14 08:10**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 07:39**	**140305L01F**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.00356	0.00100	1.00	
Barium	0.0996	0.00100	1.00	
Cadmium	ND	0.00100	1.00	
Chromium	0.00282	0.00100	1.00	
Copper	0.00689	0.00100	1.00	
Lead	ND	0.00100	1.00	
Selenium	ND	0.00100	1.00	
Iron	ND	0.0500	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 03/05/14
Work Order: 14-03-0264
Preparation: Filtered
Method: EPA 200.8
Units: mg/L

Project: Bay Counties Petroleum

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
DW-7	**14-03-0264-7-A**	**03/04/14 07:45**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 07:43**	**140305L01F**

Parameter	Result	RL	DF	Qualifiers
Arsenic	0.00344	0.00100	1.00	
Barium	0.114	0.00100	1.00	
Cadmium	ND	0.00100	1.00	
Chromium	ND	0.00100	1.00	
Copper	0.00742	0.00100	1.00	
Lead	ND	0.00100	1.00	
Selenium	ND	0.00100	1.00	
Iron	ND	0.0500	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-094-243**	**N/A**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/05/14 15:18**	**140305L01F**

Parameter	Result	RL	DF	Qualifiers
Arsenic	ND	0.00100	1.00	
Barium	ND	0.00100	1.00	
Cadmium	ND	0.00100	1.00	
Chromium	ND	0.00100	1.00	
Copper	ND	0.00100	1.00	
Lead	ND	0.00100	1.00	
Selenium	ND	0.00100	1.00	
Iron	ND	0.0500	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received: 03/05/14
Work Order: 14-03-0264
Preparation: Filtered
Method: EPA 200.8

Project: Bay Counties Petroleum

Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
DW-1	**Sample**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 22:33**	**140305S01A**
DW-1	**Matrix Spike**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 22:24**	**140305S01A**
DW-1	**Matrix Spike Duplicate**	**Aqueous**	**ICP/MS 03**	**03/05/14**	**03/06/14 22:27**	**140305S01A**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.01113	0.1000	0.1164	105	0.1105	99	80-120	5	0-20	
Barium	0.03882	0.1000	0.1411	102	0.1400	101	80-120	1	0-10	
Cadmium	ND	0.1000	0.09871	99	0.09716	97	80-120	2	0-20	
Chromium	ND	0.1000	0.1069	107	0.1040	104	80-120	3	0-20	
Copper	0.003114	0.1000	0.1045	101	0.1011	98	80-120	3	0-20	
Lead	ND	0.1000	0.1098	110	0.1086	109	80-120	1	0-20	
Selenium	ND	0.1000	0.09676	97	0.09367	94	80-120	3	0-20	
Iron	1.905	5.100	7.489	109	7.167	103	80-120	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

Kiff Analytical	Date Received:	03/05/14
2795 2nd Street, Suite 300	Work Order:	14-03-0264
Davis, CA 95618-6505	Preparation:	Filtered
	Method:	EPA 200.8
Project: Bay Counties Petroleum		Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-094-243	LCS	Aqueous	ICP/MS 03	03/05/14	03/05/14 16:52	140305L01F

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic	0.1000	0.1018	102	80-120	
Barium	0.1000	0.09887	99	80-120	
Cadmium	0.1000	0.1075	108	80-120	
Chromium	0.1000	0.1103	110	80-120	
Copper	0.1000	0.1066	107	80-120	
Lead	0.1000	0.1052	105	80-120	
Selenium	0.1000	0.1031	103	80-120	
Iron	5.100	5.696	112	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-0264

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 200.8	Filtered	598	ICP/MS 03	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 14-03-0264

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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KIFF Analytical LLC

2795 Second Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4808

Calscience
7440 Lincoln Way
Garden Grove, CA 92841-1427
714-895-5494

14-03-0264

COC No. 87592 Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF to): Scott Forbes	EDF Report? YES
Company/Address: Kiff Analytical	Recommended but not mandatory to complete this section:
Phone No.: 530-297-4800 / FAX No.: 530-297-4808	Sampling Company Log Code:
Project Number: 2094-6310-01 / P.O. No.: 87592	Global ID: T0600113164
Project Name: Bay Counties Petroleum	Deliverables to (Email Address): inbox@kiffanalytical.com
Project Address:	

Sample Designation	Sampling Date	Sampling Time	Container / Preservative: 250ml Poly Filt+HNO	Matrix: Water	Analysis Request: ICP-MS 200.8 Dissolved (1)	TAT: 4-Days	For Lab Use Only
DW-1	03/04/14	10:15	1	X	X	X	1
DW-2	03/04/14	09:50	1	X	X	X	2
DW-3	03/04/14	10:40	1	X	X	X	3
DW-4	03/04/14	08:50	1	X	X	X	4
DW-5	03/04/14	09:25	1	X	X	X	5
DW-6	03/04/14	08:10	1	X	X	X	6
DW-7	03/04/14	07:45	1	X	X	X	7

	Date	Time		
Relinquished by: [signature]	030414	1700	Received by:	
Relinquished by:			Received by:	
Relinquished by: (Outrac)	3/5/14	0930	Received by Laboratory:	

Remarks: Please refer to attached Test Detail.

Bill to: Accounts Payable

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Test Detail for Kiff Work Order: 87592

(0264)

ICP-MS 200.8 Dissolved (1)
Arsenic, Dissolved
Barium, Dissolved
Cadmium, Dissolved
Chromium, Dissolved
Copper, Dissolved
Iron, Dissolved
Lead, Dissolved
Selenium, Dissolved

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ontrac.com

D10010663140831

0264

Date Printed 3/4/2014

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Shipped From:
KIFF ANALYTICAL
2795 2ND STREET 300
DAVIS, CA 95618

Sent By: SAMPLE RECEIVINGX125
Phone#: (530)297-4800
wgt(lbs): 35
Reference: SUBS 87588, ...
Reference 2: 600

Ship To Company:	*Service:* **S**
CALSCIENCE ENVIRONMENTAL LABS **7440 LINCOLN WAY** **GARDEN GROVE, CA 92841** **SAMPLE RECEIVING (714)895-5494**	*Sort Code:* **ORG** *Special Services:* **Signature Required**

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-0264

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: KLSF

DATE: 03/05/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.7 °C - 0.3 °C (CF) = 1.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 836

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A Checked by: 836

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 603

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☐	☐	☑
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☑250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister Other: ☐_____ Trip Blank Lot#:_____ Labeled/Checked by: 603

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 657

Preservative: h: HCL n: HNO_3 na_2:$Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered Scanned by: 657

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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:	**1Q14 Geowell**
Facility Global ID:	**T0600113164**
Facility Name:	**BAY COUNTIES PETROLEUM**
File Name:	**GEO_WELL.zip**
Organization Name:	**Stratus Environmental, Inc.**
Username:	**STRATUS NOCAL**
IP Address:	**50.192.223.97**
Submittal Date/Time:	**3/12/2014 8:39:48 AM**
Confirmation Number:	**6043786227**

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:	1Q14 Analytical 1 of 2
Report Type:	Monitoring Report - Semi-Annually
Facility Global ID:	T0600113164
Facility Name:	BAY COUNTIES PETROLEUM
File Name:	14030264.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	3/12/2014 7:20:41 AM
Confirmation Number:	6734276950

VIEW QC REPORT

VIEW DETECTIONS REPORT

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:	1Q14 Analytical 2 of 2
Report Type:	Monitoring Report - Semi-Annually
Facility Global ID:	T0600113164
Facility Name:	BAY COUNTIES PETROLEUM
File Name:	EDF_BayCountiesPetroleum_87592.ZIP
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	3/12/2014 7:21:26 AM
Confirmation Number:	2272361099

VIEW QC REPORT

VIEW DETECTIONS REPORT