Chevron

Global Gas

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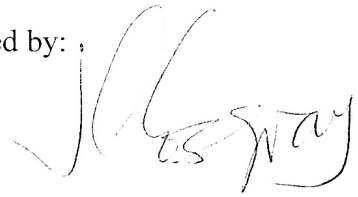
July 18, 2008

Mr. Jerry Wickham
Department of Environmental Health
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, California 94502

Dear Mr. Wickham:

I declare, under penalty of perjury, that the information and/or recommendations contained in URS' report titled "**SLIC Case No. RO0002892, Chevron Sunol Pipeline, 2793 Calaveras Road, Sunol, CA – Second Quarter 2008 Groundwater Monitoring Report**" are true and correct to the best of my knowledge at the present time.

Submitted by:



Jeff Cosgray

REPORT

SECOND QUARTER 2008 GROUNDWATER MONITORING REPORT

SLIC CASE #RO0002892
CHEVRON PIPELINE COMPANY
SUNOL SPILL
2793 CALAVERAS RD.
SUNOL, CA

Prepared for
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, CA 94502

August 11, 2008

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URS

August 11, 2008

Mr. Jerry Wickham
Department of Environmental Health
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, California 94502

Subject: SLIC Case No. RO0002892, Chevron Pipeline Company, Sunol Spill, 2793 Calaveras Rd, Sunol, CA, Second Quarter 2008 Groundwater Monitoring Report

Dear Mr. Wickham:

A December 30, 2005 letter provided by the Alameda County Environmental Health staff (ACEH) requested the initiation of a Quarterly Groundwater Monitoring Program. In response to this request, URS, on behalf of Chevron Pipe Line Company (CPL), has prepared this groundwater monitoring report for the CPL Sunol site (Site) for the second quarter of 2008.

Section 1 of this report discusses the groundwater monitoring program and details measured groundwater levels, sampling methodologies, and groundwater analytical results. Section 2 provides the findings and Section 3 presents the recommendations for the groundwater monitoring program and the status of the SVE system restart process. Section 4 describes the limitations applicable to this report.

If you have any questions on this report, please call Mr. Joe Morgan of URS at 510-874-3201.

Sincerely yours,

URS Corporation

PROFESSIONAL GEOLOGIST
JACOB T. HENRY
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Senior Geologist

Joe Morgan III
Senior Project Manager

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Ms. Amber Koster, URS Oakland
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This letter report ("**Second Quarter 2008 Groundwater Monitoring Report**") was prepared under my direct supervision. The information presented in this report is based on our review of available data obtained during our quarterly sampling activities and our previous subsurface investigation efforts. To the best of our knowledge, we have incorporated into our recommendations all relevant data pertaining to the Chevron Pipeline Release site in Sunol, California.

The second quarter 2008 groundwater monitoring report discussed herein was developed in accordance with the standard of care used to develop this type of report. The assumptions that were made and the recommendations for continued field activities were based on our professional experience and protocols reported in the literature for similar investigations.

URS Corporation
Approved by:

Joe Morgan III

Robert Horwath, P.G.

On June 5 and 6, 2008, URS conducted field activities to assess the groundwater conditions at the Site. A Site vicinity map is included as Figure 1. URS measured the fluid levels and attempted to collect analytical samples from groundwater monitoring wells MW-1 through MW-4 and MW-9 through MW-11. URS made the decision not to gauge or sample monitoring well MW-8 during second quarter 2008 field activities due to extreme overhead safety hazards posed by the dead trees located on the hillside above the well location. URS collected a surface water sample for analysis from the very small stream, located northwest of the release location, at the Site. The monitoring wells and surface water sampling location are provided on Figure 2. Monitoring wells MW-5 through MW-7 were destroyed on June 23, 2008 after the tree removal was completed during the week of June 18, 2008.

1.1 SITE HYDROGEOLOGY

Prior to collecting groundwater samples, the water levels were measured at MW-1 through MW-4 and MW-9 through MW-11 from the top of casing using an electronic oil/water interface meter. Product sheen was observed in MW-1 after purging the well, prior to groundwater sampling. Product or sheen was not detected in the other six wells during quarterly gauging activities. The measured groundwater levels are displayed in Table 1 and the calculated groundwater and product elevations are displayed in Table 2.

Unconfined Water Bearing Zone

Due to seasonal precipitation, the water table elevation increased since the last sampling event in March 2008, hydraulically reconnecting all wells screened within the unconfined water-bearing zone. The groundwater elevations for monitoring wells MW-1 through MW-4 and MW-9 through MW-11, located in the nursery, ranged from a high of 294.20 feet above average mean sea level (msl) at MW-3 to a low of 291.50 feet msl at MW-9. As mentioned above, MW-8, which screens an apparent recharge source for the nursery's unconfined water-bearing zone, was not gauged due to overhead hazards.

Based on data from MW-1 through MW-4 and MW-9 through MW-11, the local groundwater flow direction within the nursery's unconfined water-bearing zone is in a northeasterly direction with a calculated hydraulic gradient of 0.03 feet/feet. The groundwater recharge from the hillside appears to flow into the unconfined nursery water-bearing zone in a northwesterly direction with a steep hydraulic gradient. Figure 3 provides groundwater contours for the unconfined water-bearing zone as well as bedrock surface elevations for the gravel-siltstone contact for comparison.

Confined Water Bearing Zone

As stated before (MW-5 through MW-7), are no longer a part of the groundwater monitoring program. After four quarters of non-detect analytical results, ACEH agreed that further groundwater monitoring of the confined sandstone water-bearing zone was unnecessary. The wells were abandoned according to Alameda County Zone 7 Water Agency (Zone 7) standards on June 23, 2008.

2.1 QUARTERLY MONITORING ACTIVITIES

After measuring the fluid levels at each well, URS conducted groundwater sampling at monitoring wells MW-1 through MW-4 and MW-9 through MW-11. The rationale for each sampling method is described below:

- MW-1 was pumped with a Megatyphoon pump (6 well volumes) without using low-flow methods due to the presence of product sheen in discharge water.
- MW-2 through MW-4 and MW-9 through MW-10 were sampled using low-flow methods.
- MW-11 was bailed using a 2 inch diameter disposable bailer. MW-11 was bailed dry on June 5, 2008 and sampled on June 6, 2008.

A surface water sample was also collected from the very small stream northwest of the release location (Figure 2) on June 6, 2008.

2.1.1 MW-1 and MW-9 Sorbent Booms

URS has placed new sorbent booms (booms) in MW-1 and MW-9 as an interim remedial measure during the second quarter 2008 groundwater monitoring event. The booms have been successful in passively collecting and facilitating degradation of hydrocarbon product within the wells and allow for future quarterly groundwater samples to be collected when measurable product is not present. MW-1 and MW-9 were gauged several times after the booms were installed and product was not measured. Product was not measured in MW-1 or MW-9 during the second quarter monitoring event. However, product sheen was observed during the purging of MW-1.

2.1.2 MW-1 through MW-4, MW-9, and MW-10

Low-flow purging rates were between 200 to 400 milliliters per minute (mL/min) depending on the rate of recharge at each well. During low-flow purging, the water level in each of these wells was measured periodically to monitor draw down. In each of these wells a stabilized draw down of less than 0.33 feet was achieved. The low-flow groundwater sampling forms are included in Attachment A.

In addition to monitoring the water level at each well during low-flow sampling, parameters such as temperature, pH, conductivity, oxidation reduction potential (ORP), dissolved oxygen (DO) and turbidity of the groundwater were monitored using an in-line flow-through cell and multi-parameter device. The multi-parameter device was calibrated prior to sampling. During purging, the parameter readings described above were recorded every 3 minutes until the parameters stabilized.

In all of the wells where low-flow purging was conducted, the parameters were considered to be stable when three consecutive readings were within the following guidelines: pH +/- 0.2 pH units, conductivity +/- 3% of reading, ORP +/- 20 millivolts (mV), DO +/- 0.2 milligrams per liter (mg/L), turbidity +/- 1.0 nephelometric turbidity units (NTU).

After monitoring the field parameters, the flow through cell was detached from the pump and tubing assembly. Groundwater samples were collected directly from the pump tubing.

2.1.3 MW-11 Sampling

MW-11 was bailed June 5, 2008 using a disposable bailer due to a malfunction with the low flow pump. Approximately 5 gallons of groundwater was removed before MW-11 was dry. Due to the low groundwater recharge rate of MW-11, sampling did not take place until June 6, 2008 when sufficient water was present to collect the groundwater sample. The low flow pump, once repaired, was used to sample MW-11. The flow-rate during sample collection was approximately 200 mL/min.

2.1.4 Surface Water Sample

The sampling location along the very small stream is located at the base of the alluvial terrace within the Alameda Creek floodplain and is shown on Figure 2. The former sampling point (SW-Creek, sampled prior to the first quarter of 2007) is also provided on Figure 2 for reference. To the west, beyond the sampling location, the very small stream fans out into the floodplain and surface flow terminates within floodplain grasses.

2.1.5 Status of SVE Restart

With the removal of the trees, URS and CPL are moving forward with the restarting of the SVE system at the site. Stratus Environmental, Inc. (Stratus) has submitted the initial plans to the Alameda County Building Department (ACBD). The ACBD has involved the Alameda County Fire Department (ACFD) due to the potential fire hazards associated with on-site activities related to construction.

The San Francisco Public Utilities Commission (SFPUC) has approved the URS request to install the electrical power system that will be used to power the SVE system. URS has requested Stratus to conduct brush removal activities at the site prior to the beginning of the electrical and SVE system installation to minimize the potential for fire.

URS estimates electrical installation work can begin the week of July 28, 2008. The ACBD and ACFD approval process may delay the start of work. URS will update ACEH by August 15, 2008 or earlier, with developments of the above mentioned items and any other significant information pertaining to the restarting of the SVE system.

3.1 ANALYTICAL PROGRAM

The groundwater samples from each monitoring well and the very small stream were collected in clean laboratory provided containers, labeled with unique project specific identification, packed to prevent breakage, and placed on ice in a cooler immediately after collection. The sample cooler included a trip blank and was submitted to Lancaster Analytical Laboratory in Lancaster, Pennsylvania, a California Certified Laboratory, under URS chain-of-custody procedures. The samples were analyzed on a standard turn around time.

As discussed in URS' *February 2006 Groundwater Monitoring Report*, groundwater and surface water samples collected during quarterly sampling activities are analyzed for the following parameters:

- Benzene, toluene, ethylbenzene, xylenes (BTEX) by U.S. Environmental Protection Agency (USEPA) Method 8260B
- Total petroleum hydrocarbons – gasoline range organics (TPH-GRO) by N. CA LUFT GRO

3.2 GROUNDWATER ANALYTICAL RESULTS

A summary of the analytical results for the gasoline compounds and associated environmental screening levels (ESLs) developed by RWQCB (2008) are presented in Table 3 and the complete laboratory analytical results and chain of custodies are included as Attachment B.

3.2.1 Unconfined Water-Bearing Zone Wells

The unconfined water bearing zone wells include nursery unconfined water-bearing zone wells (MW-1 through MW-4 and MW-9 through MW-11) and the Calaveras Road shallow unconfined water-bearing zone well (MW-8), the apparent hillside groundwater recharge source for the nursery. The second quarter groundwater sample results are as follows:

- The MW-1 sample contained TPH-GRO at 8,200 micrograms per liter (µg/L), benzene at 1.0 µg/L, toluene at 2.0 µg/L, ethylbenzene at 3.0 µg/L, and total xylenes at 150 µg/L.
- MW-2 and MW-2-DUP, MW-3, and MW-4 samples were below the laboratory reporting limits for TPH-GRO (<50 µg/L), benzene (<0.5 µg/L), toluene (<0.5 µg/L), ethylbenzene (<0.5 µg/L), and total xylenes (<0.5 µg/L).
- MW-8 was not sampled due to the presence of overhead safety hazards.
- The MW-9 sample contained TPH-GRO at 31,000 (µg/L), benzene at 5 µg/L, toluene at 1,000 µg/L, ethylbenzene at 1,300 µg/L, and total xylenes at 9,000 µg/L.
- The MW-10 sample was below laboratory reporting limits for TPH-GRO, toluene, benzene, ethylbenzene, and total xylenes.
- The MW-11 sample was below laboratory reporting limits for TPH-GRO, benzene, toluene, ethylbenzene, and total xylenes.

3.2.2 Confined Water-Bearing Zone Wells

Wells MW-5 through MW-7 were abandoned June 23, 2008 as approved by ACEH in the November 29, 2007 ACEH letter.

3.2.3 Surface Water Sample

The surface water sampling location is shown on Figure 2. The surface water sample was below laboratory reporting limits for all constituents.

3.2.4 Analytical Result Comparison to ESLs

The groundwater samples collected from MW-2 through MW-4, and MW-10 and MW-11 were below the most stringent ESLs for all constituents. The surface water sample was also below the respective ESLs. MW-1 exceeded the ESLs for TPH-GRO and xylenes. MW-9 exceeded the ESLs for all constituents.

3.3 SUMMARY OF QA/QC REVIEW PARAMETERS

The certified analytical reports from the analytical laboratory were subjected to a quality assurance/quality control (QA/QC) review and data validation by URS. Laboratory and field QC sample results were evaluated to assess the quality of the individual sample results and overall method performance. The data evaluation performed included review of:

- Blanks (laboratory method blanks and trip blanks)
- Spikes (laboratory control spikes, matrix control spikes and surrogate spikes)
- Duplicates (laboratory control spike duplicates, matrix control spike duplicates and field duplicates)
- Sample integrity (chain-of-custody documentation, sample preservation, and holding time compliance)

All reported results for the laboratory method blanks were nondetect (less than the laboratory reporting limit), indicating no evidence of contamination from laboratory instrumentation. All reported results for the trip blank were non-detect (less than the laboratory reporting limit), indicating no evidence of contamination during shipping of the laboratory samples. One field duplicate sample, MW-X (MW-2), was collected during this sampling event. All reported results for samples MW-X and MW-2 were non-detect (less than the laboratory reporting limit), so the heterogeneity of the matrices could not be evaluated.

All reported laboratory control spike (LCS) sample recoveries, matrix control spike (MS) sample recoveries, and surrogate spike recoveries were within laboratory QC limits.

Chain-of-custody documentation was complete and consistent. Samples were preserved as required per method specifications. All samples were analyzed within the method-specified holding times.

The data quality evaluation indicated that no systematic problems were detected, and the overall data objectives for sample contamination, precision, accuracy, and sample integrity were met. These analytical data are of acceptable quality and may be used for their intended purposes.

The field activities conducted on June 5 and 6, 2008, included assessing the groundwater conditions at the Site and measuring the fluid levels and collecting analytical samples from groundwater monitoring wells MW-1 through MW-4 and MW-9 through MW-11. The findings are as follows:

- Due to seasonal precipitation, the water table elevation increased, hydraulically reconnecting all wells screened within the unconfined water-bearing zone.
- URS replaced the booms in MW-1 and MW-9 as an interim remedial measure during the second quarter 2008 groundwater monitoring event.
- No product or sheen was observed in monitoring wells MW-1 through MW-4 or MW-9 through MW-11 during gauging. Sheen was observed in MW-1 after purging the well for groundwater sampling.
- MW-8 was not gauged or sampled during first quarter 2008 field activities due to extreme overhead safety hazards posed by the dead trees located on the hillside above the well location. These overhead hazards were subsequently removed and sampling of this well will resume next quarter.
- The groundwater samples collected from MW-2 through MW-4, and MW-10 and MW-11 were below the most stringent ESLs for all constituents. Groundwater samples collected by MW-1 and MW-9 exceeded ESLs by one or more constituents.
- The surface water sample collected from the very small stream continues to be below laboratory reporting limits for all constituents.
- The contamination present in MW-1 and MW-9 is bounded laterally by monitoring wells MW-2 through MW-4, MW-10, and MW-11 and the hydrogeologic barriers of the Calaveras Fault (trending northwest to southeast beneath Calaveras Road) and vertically by the siltstone bedrock lower confining unit.

Based on the June 5 and 6, 2008 field observations and analytical results URS makes the following recommendations:

- Continue quarterly groundwater monitoring to further assess the effect of seasonal groundwater fluctuations on groundwater behavior and contaminant transport within the unconfined water-bearing zone.
- Sorbent booms will continue to be used as an interim remediation measure in wells containing hydrocarbon sheen or measurable product. Currently sorbent booms are installed in MW-1 and MW-9.
- URS and CPL continue to move forward on reinstalling a SVE system at the site. URS has scheduled Stratus and PG&E to install an electrical feed to the site in late July. CPL has requested and paid for an electrical service contract with PG&E. Once the electrical feed is installed, Stratus will re-mobilize a trailer-mounted SVE system and will work with URS to bring the current nine SVE well configuration back on-line. URS estimates that Stratus will re-mobilize the SVE system in late July, 2008.

No evaluation is thorough enough to preclude the possibility that materials that are currently considered hazardous or materials that may be considered hazardous in the future may be present at a site. Because regulatory evaluation criteria are constantly changing, concentrations of contaminants presently considered nonhazardous may, in the future, fall under different regulatory standards and require remediation. Opinions and judgments expressed herein, which are based on understanding and interpretation of current regulatory standards, should not be construed as legal opinions. This document and the information contained herein have been prepared solely for CPL's use, and reliance on this report by third parties will be at such party's sole risk.

TABLE 1
Monitoring Well Groundwater Levels
Second Quarter 2008 Groundwater Monitoring Report
Chevron Sunol Pipeline

Well ID	Screen Interval (feet bgs)[1]	Date	Depth to Groundwater (feet TOC-N)[2]	Depth to Product (feet TOC-N)	Product Thickness (feet)
MW-1	29.3-39.3	2/21/2006	36.34	--	--
		6/7/2006	34.28	--	--
		8/22/2006	37.11	37.08	0.03
		11/14/2006	37.05	--	--
		2/20/2007	36.14	--	--
		6/5/2007	37.21	--	--
		9/12/2007	37.67	37.55	0.12
		12/11/2007	37.49	37.46	0.03
		3/19/2008	35.94	--	--
		5/20/2008	35.51	--	--
		6/5/2008	35.69	--	--
MW-2	23.3-38.3	2/21/2006	32.19	--	--
		6/7/2006	30.23	--	--
		8/22/2006	33.11	--	--
		11/14/2006	33.01	--	--
		2/20/2007	31.93	--	--
		6/5/2007	33.23	--	--
		9/12/2007	33.62	--	--
		12/5/2007	33.52	--	--
		3/19/2008	31.76	--	--
		5/20/2008	31.41	--	--
		6/5/2008	31.56	--	--
MW-3	21.3-36.3	2/21/2006	31.97	--	--
		6/7/2006	30.91	--	--
		8/22/2006	34.66	--	--
		11/14/2006	34.71	--	--
		2/20/2007	31.66	--	--
		6/5/2007	34.63	--	--
		9/12/2007	34.71	--	--
		12/11/2007	34.77	--	--
		3/19/2008	31.64	--	--
		5/20/2008	31.26	--	--
		6/5/2008	31.45	--	--
MW-4	30.7-40.7	2/21/2006	36.72	--	--
		6/7/2006	35.76	--	--
		8/22/2006	38.79	--	--
		11/14/2006	38.84	--	--
		2/20/2007	36.54	--	--
		6/5/2007	38.77	--	--
		9/12/2007	38.93	--	--
		12/11/2008	39.00	--	--
		3/19/2008	36.29	--	--
		5/20/2008	36.27	--	--
		6/5/2008	36.38	--	--
MW-5	39.5-49.5	2/21/2006	11.48	--	--
		6/7/2006	10.61	--	--
		8/22/2006	11.93	--	--
		11/14/2006	11.37	--	--
		2/20/2007	11.41	--	--
		6/5/2007	13.59	--	--
		9/12/2007	15.65	--	--
		12/11/2008	NM	--	--
		Q1 2008	NM	--	--
		Q2 2008	NM	--	--

TABLE 1
Monitoring Well Groundwater Levels
Second Quarter 2008 Groundwater Monitoring Report
Chevron Sunol Pipeline

Well ID	Screen Interval (feet bgs)[1]	Date	Depth to Groundwater (feet TOC-N)[2]	Depth to Product (feet TOC-N)	Product Thickness (feet)
MW-6	34.7-49.7	2/21/2006	18.02	--	--
		6/7/2006	16.83	--	--
		8/22/2006	18.66	--	--
		11/14/2006	17.37	--	--
		2/20/2007	17.51	--	--
		6/5/2007	19.44	--	--
		9/12/2007	23.46	--	--
		12/11/2008	NM	--	--
		Q1 2008	NM	--	--
		Q2 2008	NM	--	--
MW-7	34.7-49.7	2/21/2006	15.43	--	--
		6/7/2006	16.68	--	--
		8/22/2006	16.77	--	--
		11/14/2006	16.99	--	--
		2/20/2007	18.34	--	--
		6/5/2007	19.88	--	--
		9/12/2007	21.76	--	--
		12/11/2008	NM	--	--
		Q1 2008	NM	--	--
		Q2 2008	NM	--	--
MW-8	14.5-24.5	8/22/2006	18.71	--	--
		11/14/2006	18.73	--	--
		2/20/2007	19.23	--	--
		6/5/2007	20.48	--	--
		9/12/2007	21.47	--	--
		12/11/2007	19.58	--	--
		Q1 2008	NM	--	--
		5/20/2008	NM	--	--
		6/5/2008	NM	--	--
		Q1 2008	NM	--	--
		Q2 2008	NM	--	--
MW-9	36.0-46.0	8/22/2006	42.59	42.55	0.04
		11/14/2006	42.62	42.54	0.08
		2/20/2007	41.91	41.86	0.05
		6/5/2007	42.71	42.69	0.02
		9/12/2007	43.09	43.01	0.08
		12/11/2007	42.91	--	--
		3/20/2007	41.76	41.75	0.01
		12/11/2007	42.91	--	--
		5/20/2008	41.33	--	--
		6/5/2008	41.57	--	--
MW-10	40.3-55.3	9/5/2007	54.86	--	--
		12/12/2007	46.84	--	--
		3/20/2008	44.41	--	--
		5/20/2008	44.09	--	--
		6/5/2008	43.67	--	--
MW-11	37.0-47.0	9/6/2007	Dry	--	--
		12/12/2007	42.73	--	--
		3/20/2008	37.29	--	--
		5/20/2008	37.06	--	--
		6/4/2008	37.18	--	--

Notes:
NM - Not measured
1.Screen intervals measured from feet below ground surface (feet bgs)
2. Groundwater and product levels measured from top of casing - north (TOC-N).

TABLE 2
Monitoring Well Groundwater Elevations
Second Quarter 2008 Groundwater Monitoring Report
Chevron Sunol Pipeline

Well ID	Date Completed	Ground Surface Elevation (feet msl)[1]	Top of Casing Elevation (feet msl)[1, 2]	Date Measured	Groundwater Elevation (feet msl)[1]	Product Elevation (feet msl)[1]	Product Thickness (feet)
MW-1	10/20/2005	328.49	328.04	2/21/2006	291.70	--	--
				6/7/2006	293.76	--	--
				8/22/2006	290.93	290.96	0.03
				11/14/2006	290.99	--	--
				2/20/2007	291.90	--	--
				6/5/2007	290.83	--	--
				9/12/2007	290.37	--	--
				12/11/2007	290.55	290.58	0.03
				3/19/2008	292.10	--	--
				5/20/2008	292.53	--	--
				6/5/2008	292.35	--	--
MW-2	10/21/2005	324.85	324.15	2/21/2006	291.96	--	--
				6/7/2006	293.92	--	--
				8/22/2006	291.04	--	--
				11/14/2006	291.14	--	--
				2/20/2007	292.22	--	--
				6/5/2007	290.92	--	--
				9/12/2007	290.53	--	--
				12/5/2007	290.63	--	--
				3/19/2008	292.39	--	--
				5/20/2008	292.74	--	--
				6/5/2008	292.59	--	--
MW-3	10/21/2005	326.05	325.65	2/21/2006	293.68	--	--
				6/7/2006	294.74	--	--
				8/22/2006	290.99	--	--
				11/14/2006	290.94	--	--
				2/20/2007	293.99	--	--
				6/5/2007	291.02	--	--
				9/12/2007	290.94	--	--
				12/11/2007	290.88	--	--
				3/19/2008	294.01	--	--
				5/20/2008	294.39	--	--
				6/5/2008	294.20	--	--
MW-4	1/31/2006	329.97	329.67	2/21/2006	292.95	--	--
				6/7/2006	293.91	--	--
				8/22/2006	290.88	--	--
				11/14/2006	290.83	--	--
				2/20/2007	293.13	--	--
				6/5/2007	290.90	--	--
				9/12/2007	290.74	--	--
				12/11/2007	290.67	--	--
				3/19/2008	293.38	--	--
				5/20/2008	293.40	--	--
				6/5/2008	293.29	--	--
MW-5	1/27/2006	335.14	334.81	2/21/2006	323.33	--	--
				6/7/2006	324.20	--	--
				8/22/2006	322.88	--	--
				11/14/2006	323.44	--	--
				2/20/2007	323.40	--	--
				6/5/2007	321.22	--	--
				9/12/2007	319.16	--	--
				12/11/2007	NM	--	--
				Q1 2008	NM	--	--
				Q2 2008	NM	--	--

TABLE 2
Monitoring Well Groundwater Elevations
Second Quarter 2008 Groundwater Monitoring Report
Chevron Sunol Pipeline

Well ID	Date Completed	Ground Surface Elevation (feet msl)[1]	Top of Casing Elevation (feet msl)[1, 2]	Date Measured	Groundwater Elevation (feet msl)[1]	Product Elevation (feet msl)[1]	Product Thickness (feet)
MW-6	1/27/2006	332.61	332.38	2/21/2006	314.36	--	--
				6/7/2006	315.55	--	--
				8/22/2006	313.72	--	--
				11/14/2006	315.01	--	--
				2/20/2007	314.87	--	--
				6/5/2007	312.94	--	--
				9/12/2007	308.92	--	--
				12/11/2007	NM	--	--
				Q1 2008	NM	--	--
				Q2 2008	NM	--	--
MW-7	1/27/2006	336.46	336.22	2/21/2006	320.79	--	--
				6/7/2006	319.54	--	--
				8/22/2006	319.45	--	--
				11/14/2006	319.23	--	--
				2/20/2007	317.88	--	--
				6/5/2007	316.34	--	--
				9/12/2007	314.46	--	--
				12/11/2007	NM	--	--
				Q1 2008	NM	--	--
				Q2 2008	NM	--	--
MW-8	8/15/2006	335.23	333.93	8/22/2006	315.22	--	--
				11/14/2006	315.20	--	--
				2/20/2007	314.70	--	--
				6/5/2007	313.45	--	--
				9/12/2007	312.46	--	--
				12/11/2007	314.35	--	--
				Q1 2008	NM	--	--
				Q2 2008	NM	--	--
MW-9	8/16/2006	333.49	333.07	8/22/2006	290.48	290.52	0.04
				11/14/2006	290.45	290.53	0.08
				2/20/2007	291.16	291.21	0.05
				6/5/2007	290.36	290.38	0.02
				9/12/2007	289.98	290.06	0.08
				12/11/2007	290.16	--	--
				3/20/2007	291.31	--	--
				12/11/2007	290.16	--	--
				5/20/2008	291.74	--	--
				6/5/2008	291.50	--	--
MW-10	9/5/2007	336.55	335.89	9/12/2007	281.03	--	--
				12/12/2007	289.05	--	--
				3/20/2008	291.48	--	--
				5/20/2008	291.80	--	--
				6/5/2008	292.22	--	--
MW-11	9/6/2007	330.29	329.89	9/12/2007	Dry	--	--
				12/12/2007	287.16	--	--
				3/20/2008	292.60	--	--
				5/20/2008	292.83	--	--
				6/5/2008	292.71	--	--

Notes:
NM - Not measured
1. All elevations displayed in feet above average mean sea level (msl).
2. Groundwater and product elevations calculated from depths as measured from top of casing - north.
MW-1 through MW-3 surveyed on October 31, 2005.
MW-4 through MW-7 surveyed on February 14, 2006.
MW-8 and MW-9 surveyed on November 10, 2006.
MW-10 and MW-11 surveyed on September 13, 2007.
MW-5 through MW-7 abandoned 6/23/08.

TABLE 3
Summary of Groundwater Analytical Results
Gasoline Compounds
Second Quarter 2008 Groundwater Monitoring Report
Chevron Sunol Pipeline

Well ID	Date	Gasoline Compounds				
		TPH-GRO	Benzene	Toluene	Ethylbenzene	Xylenes
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
ESL[1)]		100	1	40	30	20
MW-1	2/22/2006	**57,000**	**38**	**2,700**	**3,000**	**8,700**
	6/8/2006	**37,000**	**10**	**330**	**120**	**8,200**
	Q3 2006[3)]	NS	NS	NS	NS	NS
	11/15/2006	**38,000**	**14**	**110**	**38**	**5,900**
	2/21/2007	**18,000**	**4**	**7**	**8**	**1,600**
	6/5/2007	**17,000**	**3**	**7**	**4**	**1,100**
	Q3 2007[3)]	NS	NS	NS	NS	NS
	Q4 2007[3)]	NS	NS	NS	NS	NS
	3/19/2008	**12,000**	**0.8**	**1**	**1**	**320**
	6/6/2008	**8,200**	**1**	**2**	**3**	**150**
MW-2	2/21/2006[2)]	<50 / <50	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5
	6/7/2006	<50	<0.5	<0.5	<0.5	<0.5
	8/23/2006	<50	0.5	<0.5	<0.5	<0.5
	11/14/2006	<50	**0.7**	<0.5	<0.5	<0.5
	2/21/2007	<50	<0.5	<0.5	<0.5	<0.5
	6/5/2007	<50	<0.5	<0.5	<0.5	<0.5
	Q3 2007[4)]	NS	NS	NS	NS	NS
	Q4 2007[4)]	NS	NS	NS	NS	NS
	3/19/2008	<50	<0.5	<0.5	<0.5	<0.5
	6/5/2008 [2)]	<50 / <50	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5
MW-3	2/21/2006	<50	<0.5	<0.5	<0.5	<0.5
	6/7/2006	<50	<0.5	<0.5	<0.5	<0.5
	8/23/2006	**170**	<0.5	<0.5	<0.5	<0.5
	11/14/2006	**86**	<0.5	**1**	<0.5	<0.5
	2/21/2007	<50	<0.5	<0.5	<0.5	<0.5
	Q2 2007[4)]	NS	NS	NS	NS	NS
	Q3 2007[4)]	NS	NS	NS	NS	NS
	Q4 2007[4)]	NS	NS	NS	NS	NS
	3/19/2008	<50	<0.5	<0.5	<0.5	<0.5
	6/5/2008	<50	<0.5	<0.5	<0.5	<0.5
MW-4	2/21/2006	<50	<0.5	<0.5	<0.5	<0.5
	6/7/2006	<50	<0.5	<0.5	<0.5	<0.5
	8/23/2006	**70**	**0.6**	<0.5	<0.5	**1**
	11/15/2006	<50	<0.5	<0.5	<0.5	0.5
	2/21/2007	<50	<0.5	<0.5	<0.5	<0.5
	Q2 2007[4)]	NS	NS	NS	NS	NS
	Q3 2007[4)]	NS	NS	NS	NS	NS
	Q4 2007[4)]	NS	NS	NS	NS	NS
	3/19/2008	<50	<0.5	<0.5	<0.5	<0.5
	6/6/2008	<50	<0.5	<0.5	<0.5	<0.5
MW-5	2/22/2006	<50	<0.5	**0.6**	<0.5	**1**
	6/8/2006	<50	<0.5	<0.5	<0.5	<0.5
	8/24/2006	<50	<0.5	<0.5	<0.5	<0.5
	11/16/2006	<50	<0.5	**2**	<0.5	<0.5
	2/20/2007	<50	<0.5	<0.5	<0.5	<0.5
	6/6/2007	<50	<0.5	<0.5	<0.5	<0.5
	9/12/2007	<50	<0.5	<0.5	<0.5	<0.5
	Q4 2007[5)]	NS	NS	NS	NS	NS
	Q1 2008[5)]	NS	NS	NS	NS	NS
	Q2 2008[7)]	NS	NS	NS	NS	NS
MW-6	2/22/2006	<50	<0.5	<0.5	<0.5	<0.5
	6/7/2006	<50	<0.5	<0.5	<0.5	<0.5
	8/22/2006	<50	<0.5	<0.5	<0.5	<0.5
	11/16/2006	<50	<0.5	<0.5	<0.5	<0.5
	2/20/2007	<50	<0.5	<0.5	<0.5	<0.5
	6/6/2007	<50	<0.5	<0.5	<0.5	<0.5
	9/12/2007	<50	<0.5	<0.5	<0.5	<0.5
	Q4 2007[5)]	NS	NS	NS	NS	NS
	Q1 2008[5)]	NS	NS	NS	NS	NS
	Q2 2008[7)]	NS	NS	NS	NS	NS

TABLE 3
Summary of Groundwater Analytical Results
Gasoline Compounds
Second Quarter 2008 Groundwater Monitoring Report
Chevron Sunol Pipeline

Well ID	Date	Gasoline Compounds				
		TPH-GRO	Benzene	Toluene	Ethylbenzene	Xylenes
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
ESL[1)]		100	1	40	30	20
MW-7	2/22/2006	<50	**0.7**	**2**	**0.9**	**5**
	6/8/2006	<50	**0.7**	<0.5	**1**	**4**
	8/22/2006[2)]	<50 / <50	**2 / 2**	<0.5 / <0.5	**1 / 0.6 J**	**3 / 2 J**
	11/16/2006	<50	**0.7**	**2**	**0.6**	**2**
	2/20/2007[2)]	<50 / <50	**0.7 / 0.6**	**1 / 0.9**	**0.9 / 0.6 J**	**3 / 2 J**
	6/6/2007	<50	**0.7**	**0.8**	**0.8**	**2**
	9/12/2007[2)]	<50 / <50	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5
	Q4 2007[5)]	NS	NS	NS	NS	NS
	Q1 2008[5)]	NS	NS	NS	NS	NS
	Q2 2008[7)]	NS	NS	NS	NS	NS
MW-8	8/24/2006	**18,000**	**190**	**2,600**	**590**	**2,800**
	11/16/2006	**990**	**76**	**80**	**69**	**190**
	2/20/2007	**2,000**	**180**	**57**	**170**	**74**
	6/6/2007	**3,600**	**340**	**92**	**370**	**210**
	9/12/2007	**4,200**	**470**	**230**	**630**	**320**
	12/11/2007	**4,900**	**350**	**300**	**490**	**650**
	Q1 2008[6)]	NS	NS	NS	NS	NS
	Q2 2008[6)]	NS	NS	NS	NS	NS
MW-9	Q3 2006[3)]	NS	NS	NS	NS	NS
	11/15/2006	**74,000**	**480**	**12,000**	**2,200**	**17,000**
	Q1 2007[3)]	NS	NS	NS	NS	NS
	Q2 2007[3)]	NS	NS	NS	NS	NS
	Q3 2007[3)]	NS	NS	NS	NS	NS
	12/11/2007	**48,000**	**62**	**5,400**	**1,700**	**12,000**
	Q1 2008[3)]	NS	NS	NS	NS	NS
	6/6/2008	**31,000**	**5**	**1,000**	**1,300**	**9,000**
MW-10	Q3 2007[4)]	NS	NS	NS	NS	NS
	12/14/2007	<50	<0.5	<0.5	<0.5	<0.5
	3/20/2008	<50	**0.9**	<0.5	<0.5	<0.5
	6/6/2008	<50	<0.5	<0.5	<0.5	<0.5
MW-11	Q3 2007[4)]	NS	NS	NS	NS	NS
	12/14/2007	<50	<0.5	<0.5	<0.5	<0.5
	3/20/2008[2)]	<50 / <50	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5	<0.5 / <0.5
	6/6/2008	<50	<0.5	<0.5	<0.5	<0.5
SW-Creek	6/7/2006	<50	<0.5	<0.5	<0.5	<0.5
	8/22/2006	<50	<0.5	<0.5	<0.5	<0.5
	11/15/2006	<50	<0.5	<0.5	<0.5	<0.5
	11/15/2006	<50	<0.5	<0.5	<0.5	<0.5
Stream	2/21/2007	<50	<0.5	<0.5	<0.5	<0.5
	6/5/2007	<50	<0.5	<0.5	<0.5	<0.5
	9/12/2007	<50	<0.5	<0.5	<0.5	<0.5
	1/25/2008	<50	<0.5	<0.5	<0.5	<0.5
	3/20/2008	<50	<0.5	<0.5	<0.5	<0.5
	6/5/2008	<50	<0.5	<0.5	<0.5	<0.5

Notes:
Bold values exceed laboratory reporting limits.
J qualifier - The reported value is the approximate concentration of the analyte in the sample due to sample heterogeneity.
µg/L - micrograms per liter
NS - Not Sampled
TPH-GRO - Total Petroleum Hydrocarbons as Gasoline Range Organics

1) Environmental Screening Levels (ESLs) for groundwater as a current or potential source of drinking water were obtained from the San Francisco Regional Water Quality Control Board (RWQCB) Interim Final: Table A, May 2008.
2) Both sample and duplicate concentrations from well location are displayed.
3) Sample not collected during quarterly monitoring due to the presence of measurable free product.
4) Sample not collected during quarterly monitoring because well is not hydraulically connected to unconfined water-bearing zone.
5) Sample not collected, ACEH approved well abandonement.
6) Sample not collected due to extreme overhead hazards posed by dead trees on the 80-90% grade directly uphill from the sampling location.
7) Monitoring wells MW-5 through MW-7 Abandoned 6/23/08

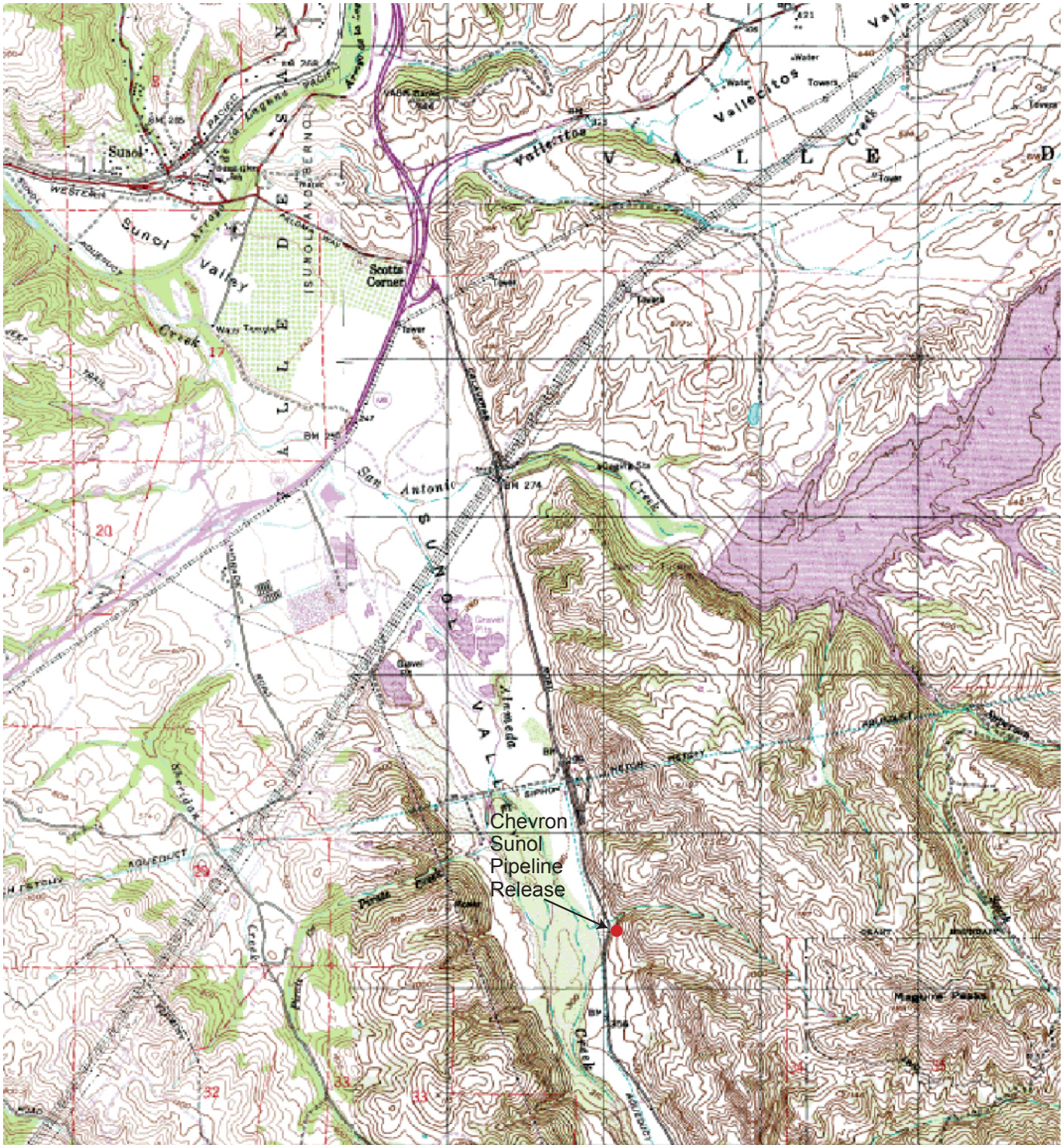


Image obtained from topozone.com

N

MAP REFERENCE:

PORTION OF U.S.G.S. QUANDRANGLE MAP
7 1/2 MINUTE SERIES (TOPOGRAPHIC)
LA COSTA VALLEY QUADRANGLE

URS	Chevron Pipeline Company Project No. 26815217	SITE VICINITY MAP CHEVRON SUNOL PIPELINE SUNOL, CALIFORNIA	Figure 1

NORTH

0 50 100

SCALE IN FEET

CURRENT STREAM SAMPLE LOCATION

VERY SMALL STREAM

SW–CREEK
(Former Surface Water Sampling Location)

UPPER DIRT ROAD

LOWER DIRT ROAD

PIPELINE

CALAVERAS ROAD

MW–10

PROPERTY LINE/FENCE

MW–11

MW–9

MW–4

MW–3

MW–1

MW–2

MW–7

MW–8

MW–5

MW–6

SVE–1D

SVE–2S

SVE–8

SVE–3S

SVE–7

SVE–4D

SVE–5

SVE–6

SVE–9

RELEASE LOCATION

HILL SLOPE

HILL SLOPE

HILL SLOPE

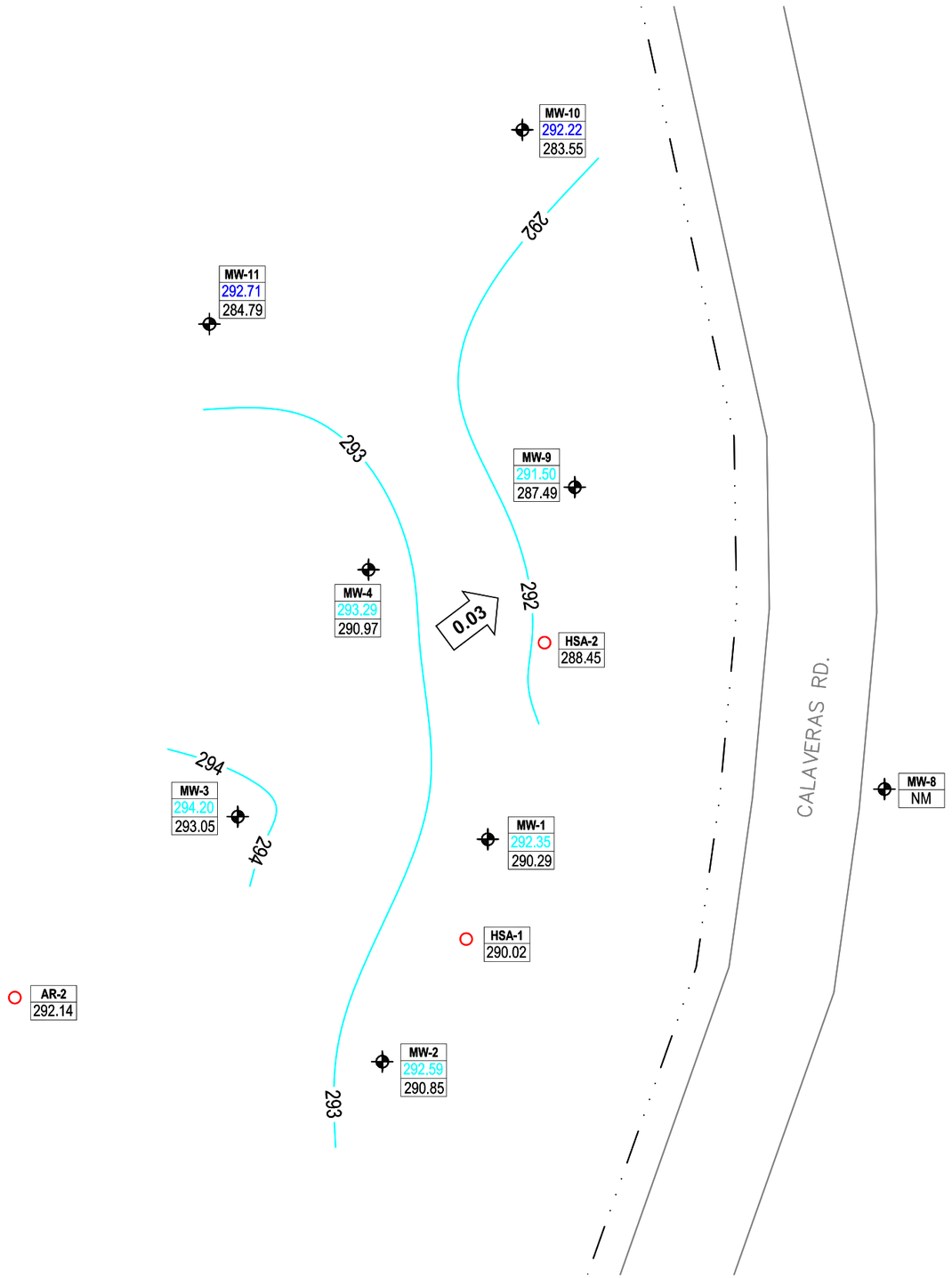
HILL SLOPE AND DENSE VEGETATION

LEGEND:

- SURFACE WATER SAMPLE LOCATIONS
- MONITORING WELL
- ABANDONED MONITORING WELLS
- SVE WELL
- SHELF
- STAIRS
- FENCE
- PIPELINE
- SMALL STREAM
- PROPERTY LINE/FENCE
- HILL SLOPE 80–90% GRADE

URS	CHEVRON PIPELINE COMPANY Project No. 26815217	SVE AND GROUNDWATER MONITORING WELL LOCATIONS CHEVRON SUNOL PIPELINE	Figure 2

Jul 16, 2008 – 4:49pm
X:\x_env_waste\Chevron Pipeline Company\Sunol Spill\Site Figures\Current CADD\FIGURE 2.dwg



LEGEND:

- MONITORING WELL
- MW-11 / 292.71 / 284.79 — MONITORING WELL LABEL / GROUNDWATER ELEVATION / BEDROCK CONTACT ELEVATION
- SOIL BORING
- HSA-2 / 288.45 — SOIL BORING LABEL / BEDROCK CONTACT ELEVATION
- 294 — GROUNDWATER ELEVATION CONTOUR
- NM — NOT MEASURED
- 0.03 — INFERRED GROUNDWATER FLOW DIRECTION

NOTES:

1. ELEVATIONS IN FEET ABOVE AVERAGE MEAN SEA LEVEL (msl).
2. GROUNDWATER ELEVATIONS FOR MW-1 THROUGH MW-4 AND MW-9 THROUGH MW-11, AS MEASURED ON JUNE 5, 2008.
3. MW-8 NOT MEASURED (NM) DUE TO SAFETY ISSUE RELATED TO IMPACTED TREES.
4. BEDROCK ELEVATION DATA OBTAINED FROM THE BORING LOGS OF MW-1 THROUGH MW-4, MW-9 THROUGH MW-11, HSA-1, HSA-2, AND AR-2.
5. THE BEDROCK ELEVATIONS SHOWN REPRESENT THE OVERBURDEN CONTACT WITH THE WEATHERED SILTSTONE/CLAYSTONE BEDROCK UNIT (POSSIBLY CRETACEOUS-AGE CLAY SHALE OF THE PANOCHE FORMATION).
6. CALCULATED GROUNDWATER GRADIENT IN NORTHEASTERLY FLOW DIRECTION: i = 0.03 ft/ft

NORTH

0 30' 60'

SCALE: 1" = 30'

URS	CHEVRON PIPELINE COMPANY Project No. 26815217	UNCONFINED WATER-BEARING ZONE GROUNDWATER CONTOUR AND BEDROCK ELEVATIONS MAP CHEVRON SUNOL PIPLINE	Figure 3

Jul 16, 2008 - 4:48pm
X:\x_env_waste\Chevron Pipeline Company\Sunol Spill\Site Figures\Current CADD\FIGURE 3.dwg

Appendix A
Groundwater Sampling Forms

URS

Troll 9000 | Low-Flow System
06/06/08 | ISI Low-Flow Log

Project Information:

Operator Name	Cliff Pearson
Company Name	URS
Project Name	Chevron Sunol Pipeline
Site Name	Sunol

Pump Information:

Pump Model/Type	Mega Typhoon
Tubing Type	LDPE
Tubing Diameter	.38 [in]
Tubing Length	40 [ft]
Pump placement from TOC	38 [ft]

Well Information:

Well Id	MW-1
Well diameter	4 [in]
Well total depth	NM
Depth to top of screen	29.3 [ft]
Screen length	10 [ft]
Depth to Water	35.69 [ft]

Pumping information:

Final pumping rate	200 [mL/min]
Flowcell volume	--
Calculated Sample Rate	--
Sample rate	--
Stabilized drawdown	0.48 [ft]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond. [µS/cm]	Turb [NTU]	DO [mg/L]	ORP [mV]
Stabilization Settings			+/-0	+/-0	+/-0	+/-0	+/-0
Last 5 Readings		64.76	6.76	707	8.9	405	12
		65.2	6.76	709.56	10.3	400	13
		65.43	6.76	711.92	9.8	386	15
		65.52	6.76	713.39	9.8	386	16
		65.59	6.75	715.2	10.1	385	19
Variance in last 3 readings		0.23	0.00	2.36	-0.50	-14.00	2.00
		0.09	0.00	1.47	0.00	0.00	1.00
		0.07	-0.01	1.81	0.30	-1.00	3.00

Notes:

Initial depth to water = 35.72 feet
Initial Pump Rate = 300 mL/min
Final depth to water = 35.24 feet
Final Pump Rate = 200 mL/min
Sample collected at 11:10
NM = Not Measured

URS

Troll 9000 | Low-Flow System
06/05/08 | ISI Low-Flow Log

Project Information:

Operator Name	Cliff Pearson
Company Name	URS
Project Name	Chevron Sunol Pipeline
Site Name	Sunol

Pump Information:

Pump Model/Type	Mega Typhoon
Tubing Type	LDPE
Tubing Diameter	0.38 [in]
Tubing Length	38 [ft]
Pump placement from TOC	35 [ft]

Well Information:

Well Id	MW-2
Well diameter	4 [in]
Well total depth	NM
Depth to top of screen	23.3 [ft]
Screen length	15 [ft]
Depth to Water	31.56 [ft]

Pumping information:

Final pumping rate	400 [mL/min]
Flowcell volume	--
Calculated Sample Rate	--
Sample rate	--
Stabilized drawdown	0 [ft]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond. [µS/cm]	Turb [NTU]	DO [mg/L]	ORP [mV]
Stabilization Settings			+/-0	+/-0	+/-0	+/-0	+/-0
Last 5 Readings		60.55	6.69	681.39	2.9	3697	151
		60.84	6.71	694.14	3.6	3292	125
		60.62	6.7	691.48	3	3180	108
Variance in last 3 readings		0.29	0.02	12.75	0.70	-405.00	-26.00
		-0.22	-0.01	-2.66	-0.60	-112.00	-17.00

Notes:

Initial depth to water = 31.56 feet
Initial Pump Rate = 400 mL/min
Total Volume Purged = 4 gallons
Final depth to water = 31.56 feet
Final Pump Rate = 400 mL/min
Sample collected at 10:05
NM = Not Measured

URS

Troll 9000 | Low-Flow System
06/05/08 | ISI Low-Flow Log

Project Information:

Operator Name	Cliff Pearson
Company Name	URS
Project Name	Chevron Sunol Pipeline
Site Name	Sunol

Pump Information:

Pump Model/Type	Mega Typhoon
Tubing Type	LDPE
Tubing Diameter	0.38 [in]
Tubing Length	36 [ft]
Pump placement from TOC	34 [ft]

Well Information:

Well Id	MW-3
Well diameter	4 [in]
Well total depth	NM
Depth to top of screen	21.3 [ft]
Screen length	15 [ft]
Depth to Water	31.45 [ft]

Pumping information:

Final pumping rate	700 [mL/min]
Flowcell volume	--
Calculated Sample Rate	--
Sample rate	--
Stabilized drawdown	0.03 [ft]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond. [µS/cm]	Turb [NTU]	DO [mg/L]	ORP [mV]
Stabilization Settings			+/-0	+/-0	+/-0	+/-0	+/-0
Last 5 Readings		61.33	6.77	624.95	2.3	2347	173
		60.84	6.76	617.05	2.7	2301	170
		59.67	6.75	609.85	2.2	2221	167
		60.04	6.76	610.26	2.1	2131	163
		59.73	6.76	610.76	2.8	2139	160
Variance in last 3 readings		-1.17	-0.01	-7.20	-0.50	-80.00	-3.00
		0.37	0.01	0.41	-0.10	-90.00	-4.00
		-0.31	0.00	0.50	0.70	8.00	-3.00

Notes:

Initial Depth to Water = 32.44 feet
Initial Pump Rate = 500 mL/min
Total Volume Purged = 8 gallons
Final Depth to Water = 32.47 feet
Final Pump Rate = 700 mL/min
Sample collected at 11:35
NM = Not Measured

URS

Troll 9000 | Low-Flow System
06/06/08 | ISI Low-Flow Log

Project Information:

Operator Name	Cliff Pearson
Company Name	URS
Project Name	Chevron Sunol Pipeline
Site Name	Sunol

Pump Information:

Pump Model/Type	Mega Typhoon
Tubing Type	LDPE
Tubing Diameter	0.38 [in]
Tubing Length	41 [ft]
Pump placement from TOC	38 [ft]

Well Information:

Well Id	MW-4
Well diameter	4 [in]
Well total depth	NM
Depth to top of screen	30.7 [ft]
Screen length	10 [ft]
Depth to Water	36.38 [ft]

Pumping information:

Final pumping rate	500 mL/min
Flowcell volume	--
Calculated Sample Rate	--
Sample rate	--
Stabilized drawdown	0 [ft]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond. [µS/cm]	Turb [NTU]	DO [mg/L]	ORP [mV]
Stabilization Settings			+/-0	+/-0	+/-0	+/-0	+/-0
Last 5 Readings		60.33	6.76	612.55	0.8	1290	137
		60.51	6.76	616.67	0.1	1327	144
		60.44	6.76	613.81	0.3	1362	148
		60.3	6.77	609.48	1.1	1374	149
		60.25	6.76	607.99	2.7	1345	149
Variance in last 3 readings		-0.07	0.00	-2.86	0.20	35.00	4.00
		-0.14	0.01	-4.33	0.80	12.00	1.00
		-0.05	-0.01	-1.49	1.60	-29.00	0.00

Notes:

Initial depth to water = 36.41 feet
Initial pump rate = 200 mL/min
Final depth to water = 36.41 feet
Final pump rate = 500 mL/min
Total volume purged = 9 gallons
Sample collected at 8:20
NM = Not Measured

URS

Troll 9000 | Low-Flow System
06/06/08 | ISI Low-Flow Log

Project Information:

Operator Name	Cliff Pearson
Company Name	URS
Project Name	Chevron Sunol Pipeline
Site Name	Sunol

Pump Information:

Pump Model/Type	Mega Typhoon
Tubing Type	LDPE
Tubing Diameter	0.38 [in]
Tubing Length	46 [ft]
Pump placement from TOC	43 [ft]

Well Information:

Well Id	MW-9
Well diameter	2 [in]
Well total depth	NM
Depth to top of screen	36.0 [ft]
Screen length	10 [ft]
Depth to Water	41.57 [ft]

Pumping information:

Final pumping rate	500 [mL/min}
Flowcell volume	--
Calculated Sample Rate	--
Sample rate	--
Stabilized drawdown	0 [ft]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond. [µS/cm]	Turb [NTU]	DO [mg/L]	ORP [mV]
Stabilization Settings			+/-0	+/-0	+/-0	+/-0	+/-0
Last 5 Readings		63.99	6.75	732.56	4.3	341	-221
		63.79	6.75	728.04	3.1	327	-220
		64.1	6.75	727.21	2.6	331	-219
		64.22	6.74	728.73	2.5	325	-219
		64.18	6.75	726.83	2.1	338	-217
Variance in last 3 readings		0.31	0.00	-0.83	-0.50	4.00	1.00
		0.12	-0.01	1.52	-0.10	-6.00	0.00
		-0.04	0.01	-1.90	-0.40	13.00	2.00

Notes:

Initial depth to water = 36.41 feet
Initial Pump Rate = 200 mL/min
Total Volume Purged = 9 gallons
Final depth to water = 36.41 feet
Final Pump Rate = 500 mL/min
Sample collected at 9:15
NM = Not Measured

URS

Troll 9000 | Low-Flow System
06/05/08 | ISI Low-Flow Log

Project Information:

Operator Name	Cliff Pearson
Company Name	URS
Project Name	Chevron Sunol Pipeline
Site Name	Sunol

Pump Information:

Pump Model/Type	Mega Typhoon
Tubing Type	LDPE
Tubing Diameter	0.38 [in]
Tubing Length	55 [ft]
Pump placement from TOC	54.5 [ft]

Well Information:

Well Id	MW-10
Well diameter	2 [in]
Well total depth	NM
Depth to top of screen	40.3 [ft]
Screen length	15 [ft]
Depth to Water	43.67 [ft]

Pumping information:

Final pumping rate	300 [mL/min]
Flowcell volume	--
Calculated Sample Rate	--
Sample rate	--
Stabilized drawdown	7.89 [ft]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond. [µS/cm]	Turb [NTU]	DO [mg/L]	ORP [mV]
Stabilization Settings			+/-0	+/-0	+/-0	+/-0	+/-0
Last 5 Readings		74.86	6.86	2170.6	53.9	789	-11
		75.06	6.86	2170.56	55.8	796	-12
		77.61	6.85	2252.05	55.4	794	-12
		69.63	6.88	2038.6	53.6	853	-11
		69.26	6.89	2027.63	695.1	731	-22
Variance in last 3 readings		2.55	-0.01	81.49	-0.40	-2.00	0.00
		-7.98	0.03	-213.45	-1.80	59.00	1.00
		-0.37	0.01	-10.97	641.50	-122.00	-11.00

Notes:

Initial depth to water = 44.21 feet
Initial pump rate = 300 mL/min
Pump stopped working because too much sediment in well. Sample by bailing on 06/06/08 at 9:15.
Final depth to water = 52.1 feet
NM = Not Measured

Appendix B
Laboratory Analytical Results

Lancaster Laboratories

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

713-432-3335

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1095015. Samples arrived at the laboratory on Saturday, June 07, 2008. The PO# for this group is 0015013514 and the release number is COSGRAY.

Client Description	Lancaster Labs Number
MW-10 NA Water	5383321
MW-11 NA Water	5383322
MW-9 NA Water	5383323
MW-4 NA Water	5383324
MW-3 NA Water	5383325
MW-2 NA Water	5383326
MW-1 NA Water	5383327
MW-X NA Water	5383328
Stream NA Water	5383329
Trip Blank NA Water	5383330

ELECTRONIC COPY TO	URS	Attn: Joe Morgan
ELECTRONIC COPY TO	URS	Attn: April Giangerelli
ELECTRONIC COPY TO	URS	Attn: Jacob Henry
ELECTRONIC COPY TO	URS	Attn: Amber Koster
ELECTRONIC COPY TO	URS Corporation	Attn: Greg White

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Analysis Report

Questions? Contact your Client Services Representative
Megan A Moeller at (717) 656-2300

Respectfully Submitted,

Dorothy M. Love

Dorothy M. Love
Group Leader

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW5383321 Group No. 1095015

MW-10 NA Water
NA URSO
Sunol Pipeline SL0600100443 MW-10
Collected:06/06/2008 09:15 by CP

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

21710

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
06053	BTEX by 8260B					
05401	Benzene	71-43-2	0.5	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/12/2008 21:46	K. Robert Caulfeild-James	1
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 10:22	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2008 21:46	K. Robert Caulfeild-James	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 10:22	Ginelle L Feister	1

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Analysis Report

Lancaster Laboratories Sample No. WW5383322 Group No. 1095015

MW-11 NA Water
NA URSO
Sunol Pipeline SL0600100443 MW-11
Collected:06/06/2008 08:00 by CP

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

21711

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
06053	BTEX by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/12/2008 22:06	K. Robert Caulfeild-James	1
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 11:35	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2008 22:06	K. Robert Caulfeild-James	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 11:35	Ginelle L Feister	1

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Analysis Report

Lancaster Laboratories Sample No. WW5383323 **Group No. 1095015**

MW-9 NA Water
NA URSO
Sunol Pipeline SL0600100443 MW-9
Collected:06/06/2008 09:45 by CP

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

217-9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	31,000.	500.	ug/l	10
06053	BTEX by 8260B					
05401	Benzene	71-43-2	5.	3.	ug/l	5
05407	Toluene	108-88-3	1,000.	50.	ug/l	100
05415	Ethylbenzene	100-41-4	1,300.	50.	ug/l	100
06310	Xylene (Total)	1330-20-7	9,000.	50.	ug/l	100

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/12/2008 22:27	K. Robert Caulfeild-James	10
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 11:59	Ginelle L Feister	5
06053	BTEX by 8260B	SW-846 8260B	1	06/18/2008 09:57	Ginelle L Feister	100
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2008 22:27	K. Robert Caulfeild-James	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 11:59	Ginelle L Feister	5
01163	GC/MS VOA Water Prep	SW-846 5030B	2	06/18/2008 09:57	Ginelle L Feister	100

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Analysis Report

Lancaster Laboratories Sample No. WW5383324 **Group No. 1095015**

MW-4 NA Water
NA URSO
Sunol Pipeline SL0600100443 MW-4
Collected:06/06/2008 08:20 by CP

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

217-4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
06053	BTEX by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/17/2008 15:20	Steven A Skiles	1
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 12:23	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	2	06/17/2008 15:20	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 12:23	Ginelle L Feister	1

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Analysis Report

Lancaster Laboratories Sample No. WW5383325 **Group No. 1095015**

MW-3 NA Water
NA URSO
Sunol Pipeline SL0600100443 MW-3
Collected:06/05/2008 11:35 by CP

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

217-3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
06053	BTEX by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/17/2008 15:53	Steven A Skiles	1
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 12:47	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	2	06/17/2008 15:53	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 12:47	Ginelle L Feister	1

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Analysis Report

Lancaster Laboratories Sample No. WW5383326 Group No. 1095015

MW-2 NA Water
NA URSO
Sunol Pipeline SL0600100443 MW-2
Collected:06/05/2008 10:05 by CP

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

217-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
06053	BTEX by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/17/2008 16:26	Steven A Skiles	1
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 13:12	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2008 23:27	K. Robert Caulfeild-James	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 13:12	Ginelle L Feister	1

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Analysis Report

Lancaster Laboratories Sample No. WW5383327 **Group No. 1095015**

MW-1 NA Water
NA URSO
Sunol Pipeline SL0600100443 MW-1
Collected:06/06/2008 11:10 by CP

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

217-1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	8,200.	50.	ug/l	1
06053	BTEX by 8260B					
05401	Benzene	71-43-2	1.	0.5	ug/l	1
05407	Toluene	108-88-3	2.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	3.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	150.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/13/2008 21:55	Carrie E Youtzy	1
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 13:36	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/13/2008 21:55	Carrie E Youtzy	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 13:36	Ginelle L Feister	1

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Analysis Report

Lancaster Laboratories Sample No. WW5383328 **Group No. 1095015**

MW-X NA Water
NA URSO
Sunol Pipeline SL0600100443 MW-X
Collected:06/05/2008 10:05 by CP

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

217-X

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
06053	BTEX by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/13/2008 22:15	Carrie E Youtzy	1
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 14:25	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/13/2008 22:15	Carrie E Youtzy	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 14:25	Ginelle L Feister	1

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Analysis Report

Lancaster Laboratories Sample No. WW5383329 **Group No. 1095015**

Stream NA Water
NA URSO
Sunol Pipeline SL0600100443 Stream
Collected:06/05/2008 08:40 by CP

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

ST217

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
06053	BTEX by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/17/2008 18:52	Steven A Skiles	1
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 14:49	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	2	06/17/2008 18:52	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 14:49	Ginelle L Feister	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW5383330 **Group No. 1095015**

Trip Blank NA Water
NA URSO
Sunol Pipeline SL0600100443 Trip Blank
Collected:06/05/2008

Account Number: 11875

Submitted: 06/07/2008 10:30
Reported: 06/19/2008 at 16:39
Discard: 07/20/2008

Chevron Pipeline Co.
4800 Fournace Place - E320 D
Bellaire TX 77401

217TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
06053	BTEX by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	SW-846 8015B modified	1	06/12/2008 19:07	K. Robert Caulfeild-James	1
06053	BTEX by 8260B	SW-846 8260B	1	06/13/2008 15:13	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2008 19:07	K. Robert Caulfeild-James	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/13/2008 15:13	Ginelle L Feister	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: Chevron Pipeline Co. Group Number: 1095015
Reported: 06/19/08 at 04:39 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 08164A15A	Sample number(s): 5383321-5383323,5383330							
TPH-GRO - Waters	N.D.	50.	ug/l	106	102	75-135	4	30
Batch number: 08165B15A	Sample number(s): 5383327-5383328							
TPH-GRO - Waters	N.D.	50.	ug/l	100	109	75-135	9	30
Batch number: 08166A07B	Sample number(s): 5383324-5383326,5383329							
TPH-GRO - Waters	N.D.	50.	ug/l	114	113	75-135	2	30
Batch number: Z081652AA	Sample number(s): 5383321-5383330							
Benzene	N.D.	0.5	ug/l	90		78-119		
Toluene	N.D.	0.5	ug/l	93		85-115		
Ethylbenzene	N.D.	0.5	ug/l	96		82-119		
Xylene (Total)	N.D.	0.5	ug/l	96		83-113		
Batch number: Z081702AA	Sample number(s): 5383323							
Toluene	N.D.	0.5	ug/l	98	96	85-115	2	30
Ethylbenzene	N.D.	0.5	ug/l	101	98	82-119	3	30
Xylene (Total)	N.D.	0.5	ug/l	103	101	83-113	2	30

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 08164A15A	Sample number(s): 5383321-5383323,5383330 UNSPK: 5383322								
TPH-GRO - Waters	110		63-154						
Batch number: 08165B15A	Sample number(s): 5383327-5383328 UNSPK: P383572								
TPH-GRO - Waters	109		63-154						
Batch number: 08166A07B	Sample number(s): 5383324-5383326,5383329 UNSPK: P388908								
TPH-GRO - Waters	111		63-154						
Batch number: Z081652AA	Sample number(s): 5383321-5383330 UNSPK: 5383321								
Benzene	97	99	83-128	2	30				
Toluene	100	103	83-127	3	30				
Ethylbenzene	103	106	82-129	3	30				
Xylene (Total)	102	106	82-130	4	30				
Batch number: Z081702AA	Sample number(s): 5383323 UNSPK: P385062								
Toluene	104		83-127						
Ethylbenzene	108		82-129						

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Pipeline Co. Group Number: 1095015
Reported: 06/19/08 at 04:39 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Xylene (Total)	108		82-130						

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-GRO - Waters
Batch number: 08164A15A

	Trifluorotoluene-F
5383321	96
5383322	97
5383323	108
5383330	90
Blank	116
LCS	122
LCSD	120
MS	117
Limits:	63-135

Analysis Name: TPH-GRO - Waters
Batch number: 08165B15A

	Trifluorotoluene-F
5383327	104
5383328	97
Blank	99
LCS	112
LCSD	113
MS	113
Limits:	63-135

Analysis Name: TPH-GRO - Waters
Batch number: 08166A07B

	Trifluorotoluene-F
5383324	108
5383325	111
5383326	112
5383329	110
Blank	112
LCS	124
LCSD	123
MS	123
Limits:	63-135

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Pipeline Co. Group Number: 1095015
Reported: 06/19/08 at 04:39 PM

Surrogate Quality Control

Analysis Name: BTEX by 8260B
Batch number: Z081652AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5383321	96	89	99	94
5383322	97	91	97	93
5383323	94	88	100	109
5383324	97	90	98	95
5383325	97	89	98	93
5383326	97	91	98	94
5383327	91	86	100	105
5383328	96	89	98	95
5383329	98	91	97	95
5383330	98	90	98	94
Blank	97	91	98	95
LCS	94	89	97	102
MS	96	88	97	101
MSD	95	88	97	103
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Master Scan (water)
Batch number: Z081702AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	98	90	97	95
LCS	97	90	96	102
LCSD	96	88	96	101
MS	97	89	98	102
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11875 Group# 1095015 Sample # 5383321-30

COC # 0166756

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: CHEVRON Acct. #: 11875
Project Name/#: 26815217 PWSID #:
Project Manager: J. HENRY P.O.#:
Sampler: C. PEARSON & R. NACCARATI Quote #:
Name of state where samples were collected: CA

(2) Sample Identification	Date Collected	Time Collected	(3) # of Containers	Matrix: Soil	Matrix: Water	Matrix: Other	(4) Total # of Containers	(5) Analyses Requested — Preservation Codes: BTEX 8260 B	TPH-GRO 8015M	(6) Remarks
MW-10	6/6/08	915			X		6	X	X	NO MTBE
MW-11	6/6/08	800			X		6	X	X	
MW-9	6/6/08	945			X		6	X	X	
MW-4	6/6/08	820			X		6	X	X	
MW-3	6/5/08	1135			X		6	X	X	
MW-2	6/5/08	1005			X		6	X	X	
MW-1	6/6/08	1110			X		6	X	X	
MW-X	6/5/08	1005			X		6	X	X	
STREAM	6/5/08	340			X		6	X	X	

For Lab Use Only
FSC:
SCR#:

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: 510-874-3252 Fax #: 510-874-3268
E-mail address: JACOB_HENRY@URSCORP.COM

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	6/6/08	1345			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	6/7/08	0830

(9)

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

2102.03

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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