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February 8, 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 – Fourth Quarter 2007 Groundwater Monitoring Report**" are true and correct to the best of my knowledge at the present time.

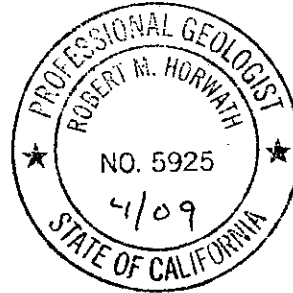
Submitted by:

Jeffrey Cosgray
Chevron Pipe Line Company

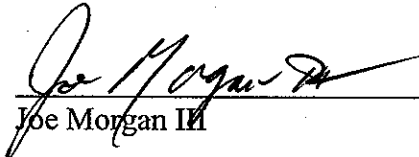


This letter report ("Fourth Quarter 2007 Groundwater Monitoring Report") was prepared under my direct supervision. The information presented in this report is based on our review of available data obtained during our additional monitoring well installation and quarterly sampling activities and our previous 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.

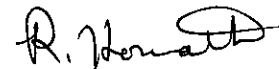
The fourth quarter 2007 groundwater monitoring report discussed herein was developed in accordance with the standard of care used to develop this type of report. The assumptions that were made and the recommendations for continued field activities were based on our professional experience and protocols reported in the literature for similar investigations.



URS Corporation
Approved by:



Joe Morgan III



Robert Horwath, P.G.



February 8, 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, Fourth Quarter 2007 Groundwater Monitoring Report

Dear Mr. Wickham:

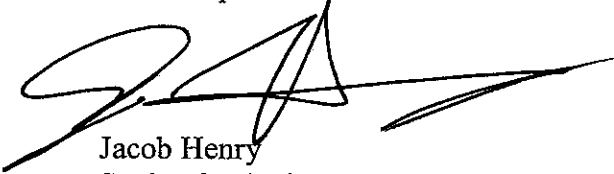
A December 30, 2005 letter provided by the Alameda County Environmental Health staff (ACEH) requested the initiation of a Quarterly Groundwater Monitoring Program. In response to this request, URS, on behalf of Chevron Pipe Line Company (CPL), has prepared this groundwater monitoring report for the CPL Sunol spill site (Site) for the fourth quarter of 2007. A Site vicinity map is included as Figure 1.

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. 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



Jacob Henry
Senior Geologist



Joe Morgan III
Senior Project Manager

cc: Mr. Jeff Cosgray, Chevron Pipeline Company
Ms. Amber Koster, URS Oakland
Mr. Greg White, URS Chicago

On December 11, 12 and 21, 2007, URS conducted field activities to assess the groundwater conditions at the Site. URS measured the fluid levels and attempted to collect analytical samples from Site groundwater monitoring wells (MW-1 through MW-4 and MW-8 through MW-11). URS received approval from ACEH on November 29, 2007 to discontinue groundwater monitoring activities from monitoring wells MW-5 through MW-7. URS also collected a surface water sample for analysis from the very small stream, located northwest of the release location, at the Site. However, this surface water sample was collected on January 24, 2008 due to an access issue at the time of the sampling event. The monitoring wells and surface water sampling location are provided on Figure 2.

1.1 SITE HYDROGEOLOGY

Prior to collecting groundwater samples, the water levels were measured at MW-1, MW-3, MW-4, and MW-8 through MW-11 from the top of casing using an electronic oil/water interface meter. Free product was measured in MW-1 with a thickness of 0.03 feet. Product or sheen was not detected in the other six wells during quarterly monitoring activities. The water level at MW-2 was not measured on December 12, 2007 because the field team could not remove the well cap. However, MW-2 was gauged on December 5, 2007 and the water level (290.63 feet above msl) was found to be below the bedrock surface. The well cap has since been removed and replaced. The measured water levels are displayed in Table 1 and the calculated groundwater and product elevations are displayed in Table 2.

Unconfined Water Bearing Zone

Due to unusually dry fall and winter conditions, the groundwater level within the unconfined water-bearing zone was the lowest it has been since the initiation of the groundwater monitoring program in February of 2006. Because of the low water table, MW-2, MW-3, and MW-4 were hydraulically disconnected from the unconfined water-bearing zone. The standing water levels in MW-2, MW-3, and MW-4 were 290.63, 290.88, and 290.67 feet above average mean sea level (msl), respectively.

Newly installed wells MW-10 and MW-11 were also gauged during fourth quarter monitoring activities. Prior to development, MW-10 and MW-11 both contained groundwater above the siltstone bedrock contact at elevations of 289.05 feet above msl and 287.16 feet above msl, respectively. Both monitoring wells were developed December 12, 2007 and sampled December 21, 2007, which allowed for sufficient groundwater recharge.

The groundwater elevations for the remaining unconfined water-bearing zone wells, MW-1 and MW-9, were 290.55 and 290.16 feet above msl. The groundwater elevation for MW-8 on the east side of Calaveras Road, which screens an apparent hillside unconfined groundwater recharge source for the Valley Crest Tree Company's (nursery) unconfined water-bearing zone, was 314.35 feet above msl.

Because MW-1 and MW-9 through MW-11 were the only wells hydraulically connected to the unconfined water-bearing zone and MW-10 and MW-11 required well development, the local groundwater flow direction and hydraulic gradient was not calculated. The groundwater recharge from the hillside appears to flow from the confined water-bearing zone into the unconfined nursery water-bearing zone in a northwesterly direction with a steep hydraulic gradient. The hydraulic gradient for the hillside has not been calculated because MW-8 is the only well

screened in the apparent hillside groundwater recharge source area. Figure 3 provides groundwater elevations for the local recharge source and the unconfined water-bearing zone wells and bedrock surface contours for the overburden-siltstone contact.

Confined Water Bearing Zone

As stated before, the confined sandstone water-bearing zone wells (MW-5 through MW-7), located along the eastern shoulder of Calaveras Road, are no longer a part of the groundwater monitoring program.

2.1 QUARTERLY MONITORING ACTIVITIES

After measuring the fluid levels at each well, URS conducted groundwater sampling. Fourth quarter sampling efforts were influenced by the seasonally low groundwater levels. The rationale for the method used at each well is described below:

- MW-1 was not sampled due to the presence of measurable free product (0.3 ft).
- MW-2 through MW-4 were not sampled because they were hydraulically disconnected from the unconfined water-bearing zone.
- MW-5 through MW-7 were not sampled because ACEH has allowed discontinuation of monitoring activities.
- MW-8 and MW-9 were bailed and then sampled.
- MW-10 and MW-11 were developed (12/12/07) and then grab sampled (12/21/07) with a bailer.

Bailing was conducted using disposable clear polyvinyl chloride (PVC) bailers.

A surface water sample was also collected from the very small stream northwest of the release location (Figure 2) on January 24, 2008.

2.1.1 MW-1 and MW-9 Sorbent Booms

URS has installed and replaced as needed, sorbent booms (booms) in MW-1 and MW-9 as an interim remedial measure. 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. However, during fourth quarter fluid level measurements, product returned to the groundwater surface at MW-1 shortly after the boom was removed. Due to the presence of free product, MW-1 was not sampled. Because of low groundwater levels at the site, MW-9 was purged using a bailer. After removing approximately three well volumes (6.5 gallons), URS observed product in the bailer. Although product was present, a groundwater sample was collected in an effort to evaluate the dissolved phase contaminant levels at MW-9. The previous groundwater sample collected at this location was in November of 2006. The booms were reinstalled at each well after completing groundwater monitoring activities.

2.1.2 MW-8

Because of slow recharge rates, MW-8 was purged using a bailer. After removing approximately two well volumes (6 gallons), the well was purged dry. The sample was collected after the well was allowed to recharge.

2.1.3 MW-10 and MW-11 Well Development and Grab Sampling

On December 12, 2007, MW-10 and MW-11 contained sufficient groundwater to develop the wells. URS contracted RSI Drilling (C57-802334) to conduct well development activities. Each

well was surged for approximately 30 minutes then bailed dry using a stainless steel bailer. On December 21, 2007, after allowing the monitoring wells to recharge to their approximate pre-development water levels, MW-10 and MW-11 were grab sampled with a disposable clear PVC bailer.

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. Increased flow was observed in the very small stream during the January 24, 2008 site visit.

3.1 ANALYTICAL PROGRAM

The groundwater samples from each well 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 (2005) 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 fourth quarter groundwater sample results are as follows:

- MW-1 was not sampled due to the presence of measurable free product (0.3 ft).
- MW-2, MW-3, and MW-4 were hydraulically disconnected from the unconfined water-bearing zone and were not sampled.
- The MW-8 sample contained TPH-GRO at 4,900 micrograms per liter ($\mu\text{g/L}$), benzene at 350 $\mu\text{g/L}$, toluene at 300 $\mu\text{g/L}$, ethylbenzene at 490 $\mu\text{g/L}$, and total xylenes at 650 $\mu\text{g/L}$.
- The MW-9 sample contained TPH-GRO at 48,000 $\mu\text{g/L}$, benzene at 62 $\mu\text{g/L}$, toluene at 5,400 $\mu\text{g/L}$, ethylbenzene at 1,700 $\mu\text{g/L}$, and total xylenes at 12,000 $\mu\text{g/L}$.
- The MW-10 and MW-11 samples were below the laboratory reporting limits for TPH-GRO ($<0.5 \mu\text{g/L}$), benzene ($<0.5 \mu\text{g/L}$), toluene ($<0.5 \mu\text{g/L}$), ethylbenzene ($<0.5 \mu\text{g/L}$), and total xylenes ($<0.5 \mu\text{g/L}$).

3.2.2 Confined Water-Bearing Zone Wells

The confined water-bearing zone wells include MW-5 through MW-7 located along Calaveras Road. MW-5 through MW-7 have been removed from the groundwater monitoring program and were not sampled.

3.2.3 Surface Water Sample

The surface water sampling location is shown on Figure 2. Surface water concentrations were below laboratory reporting limits 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.

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.

- Measurable free product was observed in MW-1. No product or sheen was observed in monitoring wells MW-2 through MW-4 or MW-8 through MW-11 during gauging. Product was observed in MW-9 after purging the well for groundwater sampling.
- Due to unusually dry fall and winter conditions, the water table elevation continues to be below the bedrock elevation, hydraulically disconnecting MW-2, MW-3, and MW-4 from the unconfined water-bearing zone. As a result of the low water table, none of these wells were sampled during fourth quarter monitoring activities.
- The MW-8 sample contained TPH-GRO at 4,900 micrograms per liter ($\mu\text{g/L}$), benzene at 350 $\mu\text{g/L}$, toluene at 300 $\mu\text{g/L}$, ethylbenzene at 490 $\mu\text{g/L}$, and total xylenes at 650 $\mu\text{g/L}$.
- The MW-9 sample contained TPH-GRO at 48,000 $\mu\text{g/L}$, benzene at 62 $\mu\text{g/L}$, toluene at 5,400 $\mu\text{g/L}$, ethylbenzene at 1,700 $\mu\text{g/L}$, and total xylenes at 12,000 $\mu\text{g/L}$. Although product was present, a groundwater sample was collected in an effort to evaluate the dissolved phase contaminant levels at MW-9.
- The groundwater samples collected from MW-10 and MW-11 were below the laboratory reporting limits for TPH-GRO and BTEX.
- The contamination present in MW-1 and MW-9 is bounded both vertically and laterally by the clean monitoring wells MW-2 through MW-4, MW-10, and MW-11 and the hydrogeologic barriers of the Calaveras Fault (located under Calaveras Road) and the siltstone bedrock lower confining unit.

- 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.
- Since no impacts have been observed in MW-10 and MW-11. Proposed wells north of the nursery will not be installed at this time.
- 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.
- MW-5 through MW-7 will be properly abandoned according to Zone 7 Alameda County Flood Control and Water Conservation District requirements. The monitoring wells will be abandoned once tree removal has taken place.
- URS is in the process of determining the best SVE system configuration as a replacement to the former SVE system. Once URS determines the best SVE system option, a system will be in place by the ACEH deadline of May 1, 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
Fourth Quarter 2007 Groundwater Monitoring Report
Chevron Sunol Pipeline

Well ID	Screen Interval (feet bgs)	Date	Depth to Groundwater (feet TOC-N)	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
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	--	--
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	--	--
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	--	--
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	--	--
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	--	--
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	--	--
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	--	--
		12/11/2008	19.58	--	--
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
		12/11/2008	42.91	--	--
MW-10	40.3-55.3	9/5/2007	54.86	--	--
		12/12/2007	46.84	--	--
MW-11	37.0-47.0	9/6/2007	Dry	--	--
		12/12/2007	42.73	--	--

Notes:

TABLE 1
Monitoring Well Groundwater Levels
Fourth Quarter 2007 Groundwater Monitoring Report
Chevron Sunol Pipeline

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

TABLE 2
Monitoring Well Groundwater Elevations
Fourth Quarter 2007 Groundwater Monitoring Report
Chevron Sunol Pipeline

Well ID	Date Completed	Ground Surface Elevation (feet msl)	Top of Casing Elevation (feet msl)	Date Measured	Groundwater Elevation (feet msl)	Product Elevation (feet msl)	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
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	--	--
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	--	--
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	--	--
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	--	--
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	--	--
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	--	--
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	--	--				
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	--	--				
MW-10	9/5/2007	336.55	335.89	9/12/2007	281.03	--	--
				12/12/2007	289.05	--	--
MW-11	9/6/2007	330.29	329.89	9/12/2007	Dry	--	--
				12/12/2007	287.16	--	--

Notes:

NM - Not measured

All elevations displayed in feet above average mean sea level (msl).

Groundwater and product elevations calculated from depths as measured from top of casing - north.

MW-1 through MW-3 surveyed on October 31, 2005.

TABLE 2
Monitoring Well Groundwater Elevations
Fourth Quarter 2007 Groundwater Monitoring Report
Chevron Sunol Pipeline

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.

TABLE 3
Summary of Groundwater Analytical Results
Gasoline Compounds
Fourth Quarter 2007 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)
ESL¹⁾		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	
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
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	
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	
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
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	

TABLE 3
Summary of Groundwater Analytical Results
Gasoline Compounds
Fourth Quarter 2007 Groundwater Monitoring Report
Chevron Sunol Pipeline

Well ID	Date	Gasoline Compounds				
		TPH-GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
ESL¹⁾		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
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
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
MW-10	Q3 2007 ⁴⁾	NS	NS	NS	NS	NS
	12/14/2007	<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
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
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

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, February 2005.

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 abandonment.

TABLE 4
 Summary of Groundwater Analytical Results
 Geochemical Indicators and Other Parameters
 Fourth Quarter 2006 Groundwater Monitoring Report
 Chevron Sunol Pipeline

Well ID	Date	Geochemical Indicators and Other Parameters											
		DO ¹⁾	ORP ¹⁾	Nitrate	Manganese	Ferrous Iron	Dissolved Iron	Sulfate	Methane	pH ¹⁾	TDS	Alkalinity to pH 4.5	Alkalinity to pH 8.3
		(mg/L)	(mV)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)		(mg/L)	(mg/L) as CaCO ₃	(mg/L) as CaCO ₃
MW-1	6/8/2006	0.28	88.15	2.60	0.116	<0.008	<0.052	48.30	<0.002	6.62	494.00	317.00	<0.46
	Q3 2006	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾
	11/15/2006	4.87 ⁶⁾	25.00	0.37 J	1.000	0.220	0.079	108.00	<0.002	6.67	882.00	597.00	<0.46
MW-2	6/7/2006	NR ³⁾	36.43	11.90	0.003	<0.008	<0.052	47.50	<0.002	6.56	465.00	286.00	<0.46
	8/23/2006	0.32	25.69	7.00	0.024	0.015	<0.052	121.00	0.005	6.63	811.00	470.00	<0.46
	11/14/2006	0.20	220.84	4.00	0.021	0.021	<0.052 UJ	126.00 J	0.004	6.72	867.00	530.00	<0.46
MW-3	6/7/2006	0.37	31.23	10.90	0.005	<0.008	<0.052	45.10	<0.002	6.56	446.00	274.00	<0.46
	8/23/2006	0.30	-1.80	<0.25	0.368	0.240	<0.052	26.30	1.500	6.60	711.00	421.00	<0.46
	11/14/2006	0.12	-17.57	NM ⁵⁾	NM ⁵⁾	NM ⁵⁾	NM ⁵⁾	NM ⁵⁾	0.42	6.95	NM ⁵⁾	NM ⁵⁾	NM ⁵⁾
MW-4	6/7/2006	0.28	29.57	9.20	0.020	0.059	<0.052	60.20	<0.002	6.65	423.00	282.00	<0.46
	8/23/2006	NR ³⁾	-22.49	<0.25	0.226	0.700	<0.052	78.40	0.003	6.62	590.00	396.00	<0.46
	11/15/2006	3.46 ⁶⁾	106.00	0.34 J	0.137	0.470	<0.052	90.30	0.003	6.74	672.00	490.00	<0.46
MW-5	6/8/2006	0.19	12.05	<0.25	0.029	0.120	<0.052	71.30	0.004	7.24	502.00	313.00	2.60
	8/24/2006	NR ³⁾	-151.92	<0.25	0.021	0.280	<0.052	72.20	0.0054 J	7.32	506.00	320.00	<0.46
	11/16/2006	0.08	-48.11	<0.25	0.020 J	0.280	<0.052	73.80 J	0.005	7.45	513.00	320.00	<0.46
MW-6	6/7/2006	NM ²⁾	NM ²⁾	<0.25	0.599	12.600	<0.052	41.60	<0.002	NM ²⁾	531.00	364.00	3.70
	8/22/2006	NM ²⁾	NM ²⁾	<0.25	0.600	5.500	<0.052	36.90	5.800	NM ²⁾	553.00	375.00	<0.46
	11/16/2006	0.04	-71.00	<0.25	0.203 J	0.700	<0.052	38.30 J	5.700	7.92	541.00	366.00	<0.46
MW-7	6/8/2006	NM ²⁾	NM ²⁾	<0.25	0.706	13.400	<0.052	70.40	0.022	NM ²⁾	542.00	310.00	5.90
	8/22/2006	NM ²⁾	NM ²⁾	<0.25	0.160	0.910	<0.052	75.70	0.094	NM ²⁾	534.00	335.00	<0.46
	11/16/2006	0.06	-24.00	<0.25	0.376	5.800	<0.052	77.60 J	0.061	7.42	533.00	358.00	<0.46
MW-8	8/24/2006	NM ²⁾	NM ²⁾	<0.25	0.171	0.140	<0.052	90.20	<0.002 UJ	NM ²⁾	563.00	362.00	<0.46
	11/16/2006	0.05	-74.00	<0.25	0.123	0.800	<0.052	78.60 J	0.002	7.22	564.00	350.00	<0.46
MW-9	Q3 2006	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾	NM ⁴⁾
	11/15/2006	3.01 ⁶⁾	4.00	<0.25 UJ	4.410	1.200	0.496	29.50	0.009	6.92	836.00	657.00	<0.46

Notes:

- DO = Dissolved oxygen
- ORP = Oxygen reduction potential
- TDS = Total dissolved solids
- CaCO₃ = Calcium Carbonate
- NM = Not measured
- NR = Not Reported
- J = Estimated result
- UJ = Estimated result

- 1) DO, ORP, and pH values were obtained in the field using a flow-through cell and a multi-parameter meter unless otherwise noted.
- 2) Field data was not collected for DO, ORP, and pH because groundwater was removed from the well without using the in-line flow-through cell due to insufficient recharge.
- 3) DO meter did not appear to be functioning correctly.
- 4) The well was not sampled and parameters were not measured due to the presence of free product at this location.
- 5) The well was purged dry and recharge was insufficient to collect groundwater for geochemical analysis.
- 6) DO readings were artificially high because purge water was poured into the multi-parameter meter from a bailer.

Appendix A
Groundwater Sampling Forms



GROUNDWATER PURGE AND SAMPLING FORM

Well Identifier: MW-8 Date Sampled: 12/11/2007
 Project Name: Chevron Sunol Spill Project Number: 26815217
 Collector(s): RM/CP Time (Initial WL): 10:55
 Initial Water Level (WL): 19.58 ft. Depth to Product: NA
 Total Well Depth (T.D.): 24.5 ft. Casing Diameter (D): 2"
 Casing Volume (A): 0.74 gal. Saturated Sandpack Volume (B): 1.94 gal.
 Total Well Volume (A + B): 2.68 gal.

Time	Volume Removed	Temp.	pH	Cond.	Turb.	Odor	Color			Comments
11:00	6 gallons	NR	NR	NR	NR	Moderate	Clear			
12:35	Sample taken after recharge									

Units for Column Headings:
 Volume Removed - Gallons 6.5 Comments: _____
 Temperature - Temp (°C) NR _____
 Electric Conductivity - Cond. (µS/cm) NR _____
 Turbidity: Turb. (Visual) NR

PURGE METHOD: BAILER PUMP _____ OTHER _____

Start Purge Time: 11:00 End Purge Time: 12:35
 Final Water Level: NR ft. Time (Final WL): NR
 Total Volume Purged: 6 gal. Pump Rate: NA mL/min
 Purged Dry? Yes Comments: _____

SAMPLE ID	TIME	ANALYSES	REMARKS
MW-8	12:35	TPH-g/BTEX	

Formula for Calculating Casing Volume

$$[A] = \frac{\pi D^2 h}{4} * 7.48 \frac{gal}{ft^3}$$

D = Well diameter (feet)
 h = Height of water column (feet)

Formula for Calculating Volume of Water within the Filter Pack

$$[B] = \left[\frac{\pi D_b^2}{4} h_{sat} - \frac{\pi D_a^2}{4} h_{sat} \right] * [f_p] * 7.48 \frac{gal}{ft^3}$$

D_a = Well diameter (feet) h_{sat} = saturated filter pack length (ft)
 D_b = Boring diameter (feet) f_p = filter pack porosity = 30%



GROUNDWATER PURGE AND SAMPLING FORM

Well Identifier: MW-9 Date Sampled: 12/11/2007
 Project Name: Chevron Sunol Spill Project Number: 26815217
 Collector(s): RM/CP Time (Initial WL): 11:25
 Initial Water Level (WL): 47.00 ft. Depth to Product: NA
 Total Well Depth (T.D.): 42.91 ft. Casing Diameter (D): 2"
 Casing Volume (A): 0.61 gal. Saturated Sandpack Volume (B): 1.62 gal.
 Total Well Volume (A + B): 2.23 gal.

Time	Volume Removed	Temp.	pH	Cond.	Turb.	Odor	Color			Comments
12:10	6.5 gallons	NR	NR	NR	NR	Moderate	Clear			
12:15	Sample taken after recharge									

Units for Column Headings:
 Volume Removed - Gallons 6.5 Comments: _____
 Temperature - Temp (°C) NR _____
 Electric Conductivity - Cond. (µS/cm) NR _____
 Turbidity: Turb. (Visual) NR _____

PURGE METHOD: BAILER X PUMP _____ OTHER _____

Start Purge Time: 12:10 End Purge Time: 12:15
 Final Water Level: NR ft. Time (Final WL): NR
 Total Volume Purged: 8 gal. Pump Rate: NA mL/min
 Purged Dry? Yes Comments: _____

SAMPLE ID	TIME	ANALYSES	REMARKS
MW-9	12:15	TPH-g/BTEX	

Formula for Calculating Casing Volume

$$[A] = \frac{\pi D^2 h}{4} * 7.48 \frac{\text{gal}}{\text{ft}^3}$$

D = Well diameter (feet)
 h = Height of water column (feet)

Formula for Calculating Volume of Water within the Filter Pack

$$[B] = \left[\frac{\pi D_b^2}{4} h_{\text{sat}} - \frac{\pi D_a^2}{4} h_{\text{sat}} \right] * [f_p] * 7.48 \frac{\text{gal}}{\text{ft}^3}$$

D_a = Well diameter (feet) h_{sat} = saturated filter pack length (ft)
 D_b = Boring diameter (feet) f_p = filter pack porosity = 30%



GROUNDWATER PURGE AND SAMPLING FORM

Well Identifier: MW-10 Date Sampled: 12/21/2007 Dev. On 12/12/07
 Project Name: Chevron Sunol Spill Project Number: 26815217
 Collector(s): JH/CP Time (Initial WL): 11:30
 Initial Water Level (WL): 46.84 ft. Depth to Product: NA
 Total Well Depth (T.D.): 55 ft. Casing Diameter (D): 2"
 Casing Volume (A): 1.3 gal. Saturated Sandpack Volume (B): NC gal.
 Total Well Volume (A + B): gal.

Time	Vol. Removed (gal)	Temp.	pH	Cond.	Turb.	Odor	Color			Comments
12:08	1.0	18.2°	8.54	2.85	138	None	Brown			
12:11	1.0	17.0°	8.72	2.9	114	None	Brown			
12:14	1.0	16.7°	8.77	2.84	118	None	Brown			
12:16	1.0	16.4°	8.83	2.85	98	None	Brown			
12:19	1.0	16.7°	8.77	2.84	104	None	Brown			
12:21	0.75	16.5°	8.79	2.85	109	Earthy	Brown			
12:24	0.5	NR	NR	NR	NR	NR	NR			Purged Dry
13:45	0.25	17.0°	8.68	2.85	105	None	Brown			GW below BR
Sampled 12/21/07 after sufficient recharge had taken place.										

Units for Column Headings:

Volume Removed - Gallons 6.5 Comments:
 Temperature - Temp (°C) NR
 Electric Conductivity - Cond. (µS/cm) NR
 Turbidity: Turb. (Visual) NR

PURGE METHOD: BAILER X PUMP OTHER

Start Purge Time: 12:08 End Purge Time: 13:45
 Final Water Level: 55.56 ft. Time (Final WL): 13:50
 Total Volume Purged: 6.5 gal. Pump Rate: NA mL/min
 Purged Dry? Yes Comments:

SAMPLE ID	TIME	ANALYSES	REMARKS
MW-10	13:00	TPH-g/BTEX	Sampled 12/21/07

Formula for Calculating Casing Volume

$$[A] = \frac{\pi D^2 h}{4} * 7.48 \frac{gal}{ft^3}$$

D = Well diameter (feet)
 h = Height of water column (feet)

Formula for Calculating Volume of Water within the Filter Pack

$$[B] = \left[\frac{\pi D_b^2}{4} h_{sat} - \frac{\pi D_a^2}{4} h_{sat} \right] * [f_p] * 7.48 \frac{gal}{ft^3}$$

D_a = Well diameter (feet) h_{sat} = saturated filter pack length (ft)
 D_b = Boring diameter (feet) f_p = filter pack porosity = 30%

Appendix B
Laboratory Analytical Results

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 17605-2425SAMPLE GROUP

The sample group for this submittal is 1069392. Samples arrived at the laboratory on Wednesday, December 12, 2007. The PO# for this group is 0015010091 and the release number is COSGRAY.

Client DescriptionMW-9-12/11/07 NA Water
MW-8-12/11/07 NA Water
Trip_Blank NA WaterLancaster Labs Number5234736
5234737
5234738

ELECTRONIC URS

Attn: Joe Morgan

COPY TO

ELECTRONIC URS

Attn: April Giangerelli

COPY TO

ELECTRONIC URS

Attn: Jacob Henry

COPY TO

ELECTRONIC URS

Attn: Joe Petsche

COPY TO

ELECTRONIC URS

Attn: Renee McFarlan

COPY TO

ELECTRONIC URS

Attn: Amber Koster

COPY TO

ELECTRONIC URS Corporation

Attn: Greg White

COPY TO

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

Respectfully Submitted,



Christine Dulaney
Senior Specialist



Analysis Report

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

Page 1 of 1

Lancaster Laboratories Sample No. WW 5234736

MW-9-12/11/07 NA Water

NA URSO

Sunol Pipeline SL0600100443 MW-9

Collected: 12/11/2007 12:15 by RM

Account Number: 11875

Submitted: 12/12/2007 10:00

Chevron Pipeline Co.

Reported: 12/21/2007 at 17:21

4800 Fournace Place - E320 D

Discard: 01/21/2008

Bellaire TX 77401

SNL09

I 5E w

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters	n.a.	48,000.		500.	ug/l	10
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.						
06053	BTEX by 8260B						
05401	Benzene	71-43-2	62.		5.	ug/l	10
05407	Toluene	108-88-3	5,400.		25.	ug/l	50
05415	Ethylbenzene	100-41-4	1,700.		5.	ug/l	10
06310	Xylene (Total)	1330-20-7	12,000.		25.	ug/l	50

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		Analyst	Dilution Factor
				Date	Time		
01728	TPH-GRO - Waters	SW-846 8015B modified	1	12/13/2007	21:06	K. Robert Caulfeild-James	10
06053	BTEX by 8260B	SW-846 8260B	1	12/20/2007	02:36	Michael A Ziegler	10
06053	BTEX by 8260B	SW-846 8260B	1	12/20/2007	02:59	Michael A Ziegler	50
01146	GC VOA Water Prep	SW-846 5030B	1	12/13/2007	21:06	K. Robert Caulfeild-James	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/20/2007	02:36	Michael A Ziegler	10
01163	GC/MS VOA Water Prep	SW-846 5030B	2	12/20/2007	02:59	Michael A Ziegler	50



Analysis Report

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

Lancaster Laboratories Sample No. WW 5234737

MW-8-12/11/07 NA Water

NA URSO

Sunol Pipeline SL0600100443 MW-8

Collected: 12/11/2007 12:35 by RM

Account Number: 11875

Submitted: 12/12/2007 10:00

Chevron Pipeline Co.

Reported: 12/21/2007 at 17:21

4800 Fournace Place - E320 D

Discard: 01/21/2008

Bellaire TX 77401

SNL08

I 5E w

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters	n.a.	4,900.		250.	ug/l	5
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.						
06053	BTEX by 8260B						
05401	Benzene	71-43-2	350.		3.	ug/l	5
05407	Toluene	108-88-3	300.		3.	ug/l	5
05415	Ethylbenzene	100-41-4	490.		3.	ug/l	5
06310	Xylene (Total)	1330-20-7	650.		3.	ug/l	5

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	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01728	TPH-GRO - Waters	SW-846 8015B modified	1	12/13/2007 21:35	K. Robert Caulfeild-James	5
06053	BTEX by 8260B	SW-846 8260B	1	12/20/2007 03:45	Michael A Ziegler	5
01146	GC VOA Water Prep	SW-846 5030B	1	12/13/2007 21:35	K. Robert Caulfeild-James	5
01163	GC/MS VOA Water Prep	SW-846 5030B	2	12/20/2007 03:45	Michael A Ziegler	5

Lancaster Laboratories Sample No. WW 5234738

Trip_Blank NA Water

NA URSO

Sunol Pipeline SL0600100443 Trip_Blank

Collected: 12/11/2007

Account Number: 11875

Submitted: 12/12/2007 10:00

Chevron Pipeline Co.

Reported: 12/21/2007 at 17:21

4800 Fournace Place - E320 D

Discard: 01/21/2008

Bellaire TX 77401

SNLTR

I 5E w

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
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	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
06053	BTEX by 8260B	SW-846 8260B	1	12/21/2007 00:52	Michael A Ziegler	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/21/2007 00:52	Michael A Ziegler	1

Quality Control Summary

 Client Name: Chevron Pipeline Co.
 Reported: 12/21/07 at 05:21 PM

Group Number: 1069392

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 07347A08A TPH-GRO - Waters	Sample number(s): 5234736-5234737							
	N.D.	50.	ug/l	93	93	75-135	0	30
Batch number: D073534AA	Sample number(s): 5234736-5234737							
Benzene	N.D.	0.5	ug/l	98	98	78-119		
Toluene	N.D.	0.5	ug/l	102	102	85-115		
Ethylbenzene	N.D.	0.5	ug/l	98	98	82-119		
Xylene (Total)	N.D.	0.5	ug/l	100	100	83-113		
Batch number: D073544AA	Sample number(s): 5234738							
Benzene	N.D.	0.5	ug/l	101	97	78-119	4	30
Toluene	N.D.	0.5	ug/l	111	107	85-115	3	30
Ethylbenzene	N.D.	0.5	ug/l	104	100	82-119	4	30
Xylene (Total)	N.D.	0.5	ug/l	106	102	83-113	4	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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 07347A08A TPH-GRO - Waters	Sample number(s): 5234736-5234737			UNSPK: P233684					
	134		63-154						
Batch number: D073534AA	Sample number(s): 5234736-5234737			UNSPK: P233683					
Benzene	98	97	83-128	1	30				
Toluene	107	103	83-127	3	30				
Ethylbenzene	101	98	82-129	3	30				
Xylene (Total)	103	101	82-130	2	30				
Batch number: D073544AA	Sample number(s): 5234738			UNSPK: P233483					
Benzene	99		83-128						
Toluene	106		83-127						
Ethylbenzene	102		82-129						
Xylene (Total)	104		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.

*- 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.
Reported: 12/21/07 at 05:21 PM

Group Number: 1069392

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters
Batch number: 07347A08A
Trifluorotoluene-F

5234736	106
5234737	87
Blank	84
LCS	90
LCSD	90
MS	93

Limits: 63-135

Analysis Name: BTEX by 8260B
Batch number: D073534AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5234736	80	86	94	94
5234737	81	90	95	92
Blank	82	89	94	89
LCS	82	89	92	94
MS	83	93	96	97
MSD	84	92	96	97

Limits: 80-116 77-113 80-113 78-113

Analysis Name: BTEX by 8260B
Batch number: D073544AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5234738	85	93	97	92
Blank	83	92	94	89
LCS	80	88	93	95
LCSD	82	91	94	96
MS	82	90	93	93

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.

Chevron California Region Analysis Request/Chain of Custody



Acct. #: 11875 For Lancaster Laboratories use only
 Sample #: 5234736-38

242037

SCR#:

C# 1069392

Facility #: _____ Site Address: <u>Sunol, CA</u> Chevron PM: <u>Jeff Cosgray</u> Lead Consultant: <u>URS</u> Consultant/Office: <u>URS/Oakland</u> Consultant Prj. Mgr.: <u>Joe Morgan</u> Consultant Phone #: <u>510-893-3600</u> Fax #: <u>510-874-3268</u> Sampler: <u>Renee McFarlan, Cliff Pearson</u> Service Order #: _____ <input type="checkbox"/> Non SAR: _____							Analyses Requested:										Preservative Codes H = HCl* T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other			
							Preservation Codes										<input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds 8021 MTBE Confirmation <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run ___ oxy's on highest hit <input type="checkbox"/> Run ___ oxy's on all hits			
							Total Number of Containers BTEX + MTBE 8260 <input type="checkbox"/> 8021 <input type="checkbox"/> TPH 8015 MOD GRO <input type="checkbox"/> TPH 8015 MOD DRO <input type="checkbox"/> Silica Gel Cleanup 8260 full scan <input type="checkbox"/> Oxygenates <input type="checkbox"/> Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/> BTEX010UG													
Field Point Name Matrix Repeat Sample Top Depth Year Month Day Time Collected New Field Pt.							Grab	Composite												
MW9-12/11/07 W 07 12 11 1215																			Comments / Remarks Report to Joe Morgan, Jake Henry, Amber Rester	
MW8-12/11/07 ↓ 1235																				

Turnaround Time Requested (TAT) (please circle)			Relinquished by: <u>Renee McFarlan</u>		Date: <u>12/11/07</u> Time: <u>1300</u>		Received by: _____		Date: _____ Time: _____	
<u>STD. TAT</u> 72 hour 48 hour 24 hour 4 day 5 day			Relinquished by: _____		Date: _____ Time: _____		Received by: _____		Date: _____ Time: _____	
Data Package Options (please circle if required)			Relinquished by: _____		Date: _____ Time: _____		Received by: _____		Date: _____ Time: _____	
QC Summary Type I - Full Type VI (Raw Data) <input type="checkbox"/> Coelt Deliverable not needed WIP (RWQCB) Disk			Relinquished by: _____ Commercial Carrier: _____ UPS <u>FedEx</u> Other: _____		Received by: <u>Kathy Binkley</u>		Date: <u>12-12-07</u> Time: <u>1000</u>		Custody Seals Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <u>N/A</u>	
Temperature Upon Receipt: <u>1.90</u> °C										

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 <u>limit of quantitation</u> , 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 quantitated 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.

WARRANTY AND LIMITS OF LIABILITY – In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.

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 17605-2425SAMPLE GROUP

The sample group for this submittal is 1071096. Samples arrived at the laboratory on Saturday, December 22, 2007. The PO# for this group is 0015010091 and the release number is COSGRAY.

Client DescriptionMW-10 Grab Water
MW-11 Grab Water
Trip Blank NA WaterLancaster Labs Number5245270
5245271
5245272

ELECTRONIC URS

Attn: Joe Morgan

COPY TO

ELECTRONIC URS

Attn: April Giangerelli

COPY TO

ELECTRONIC URS

Attn: Jacob Henry

COPY TO

ELECTRONIC URS

Attn: Joe Petsche

COPY TO

ELECTRONIC URS

Attn: Renee McFarlan

COPY TO

ELECTRONIC URS

Attn: Amber Koster

COPY TO

ELECTRONIC URS Corporation

Attn: Greg White

COPY TO

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

Respectfully Submitted,



Marla S. Lord
Senior Specialist



Analysis Report

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

Page 1 of 1

Lancaster Laboratories Sample No. **WW5245270**

Group No. **1071096**

MW-10 Grab Water

NA URSO

Sunol Pipeline SL0600100443 MW-10

Collected: 12/21/2007 13:00 by JH

Account Number: 11875

Submitted: 12/22/2007 11:00

Chevron Pipeline Co.

Reported: 01/07/2008 at 09:21

4800 Fournace Place - E320 D

Discard: 02/07/2008

Bellaire TX 77401

SUN10

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CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters	n.a.	N.D.	50.		ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.						
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	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01728	TPH-GRO - Waters	SW-846 8015B modified	1	12/27/2007 08:40	K. Robert Caulfeild-James	1
06053	BTEX by 8260B	SW-846 8260B	1	12/30/2007 10:36	Dawn M Harle	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/27/2007 08:40	K. Robert Caulfeild-James	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/30/2007 10:36	Dawn M Harle	1



Analysis Report

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

Page 1 of 1

Lancaster Laboratories Sample No. **WW5245271**

Group No. **1071096**

MW-11 Grab Water

NA URSO

Sunol Pipeline SL0600100443 MW-11

Collected: 12/21/2007 13:10 by JH

Account Number: 11875

Submitted: 12/22/2007 11:00

Chevron Pipeline Co.

Reported: 01/07/2008 at 09:21

4800 Fournace Place - E320 D

Discard: 02/07/2008

Bellaire TX 77401

SUN11

E if thI 5E w

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters	n.a.	N.D.		50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.						
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	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
01728	TPH-GRO - Waters	SW-846 8015B modified	1	12/27/2007 09:05	K. Robert Caulfeild-James	1
06053	BTEX by 8260B	SW-846 8260B	1	12/30/2007 11:48	Dawn M Harle	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/27/2007 09:05	K. Robert Caulfeild-James	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/30/2007 11:48	Dawn M Harle	1

Lancaster Laboratories Sample No. **WW5245272**

Group No. **1071096**

Trip Blank NA Water

NA URSO

Sunol Pipeline SL0600100443 Trip Blank

Collected: 12/21/2007 13:10 by JH

Account Number: 11875

Submitted: 12/22/2007 11:00

Reported: 01/07/2008 at 09:21

Discard: 02/07/2008

Chevron Pipeline Co.

4800 Fournace Place - E320 D

Bellaire TX 77401

SUNTB

E if thI 5E w

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
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	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
06053	BTEX by 8260B	SW-846 8260B	1	12/30/2007 12:12	Dawn M Harle	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/30/2007 12:12	Dawn M Harle	1

Quality Control Summary

 Client Name: Chevron Pipeline Co.
 Reported: 01/07/08 at 09:21 AM

Group Number: 1071096

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 07360A54A TPH-GRO - Waters	N.D.	50.	ug/l	123	124	75-135	1	30
Batch number: Z073642AA	Sample number(s): 5245270-5245272							
Benzene	N.D.	0.5	ug/l	91		78-119		
Toluene	N.D.	0.5	ug/l	89		85-115		
Ethylbenzene	N.D.	0.5	ug/l	89		82-119		
Xylene (Total)	N.D.	0.5	ug/l	90		83-113		

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 07360A54A TPH-GRO - Waters	Sample number(s): 5245270-5245271 UNSPK: P243608								
	122	120	63-154	2	30				
Batch number: Z073642AA	Sample number(s): 5245270-5245272 UNSPK: 5245270								
Benzene	96	97	83-128	1	30				
Toluene	93	95	83-127	2	30				
Ethylbenzene	92	93	82-129	2	30				
Xylene (Total)	93	93	82-130	0	30				

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: 07360A54A
 Trifluorotoluene-F

5245270	83
5245271	88
Blank	85
LCS	94
LCSD	93
MS	93
MSD	91

*- 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.
Reported: 01/07/08 at 09:21 AM

Group Number: 1071096

Surrogate Quality Control

Limits: 63-135

Analysis Name: BTEX by 8260B
Batch number: Z073642AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5245270	104	111	94	86
5245271	101	105	97	86
5245272	102	110	95	86
Blank	103	111	95	87
LCS	103	110	95	88
MS	104	111	95	88
MSD	104	110	96	87
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.

Chevron California Region Analysis Request/Chain of Custody

242050



For Lancaster Laboratories use only

Acct. #: 11875

Sample #: 5245270-2
G# 1071096

SCR#: _____

Facility #: _____
 Site Address: MP 27 Calaveras Rd., Sunoh, CA
 Chevron PM: J. Cosgray Lead Consultant: URS Corp.
 Consultant/Office: 1333 Broadway, Ste-800 Oakland, CA 94612
 Consultant Prj. Mgr.: J. Morgan / J. Henry
 Consultant Phone #: 510-893-3600 Fax #: 510-874-3268
 Sampler: J. Henry
 Service Order #: _____ Non SAR: _____

Analyses Requested

Preservation Codes	
F	H
BTEX ONLY	TPH 8015 MOD GRO
<input type="checkbox"/> 8021	<input type="checkbox"/> Silica Gel Cleanup
<input checked="" type="checkbox"/> 8260	<input type="checkbox"/> 8260 full scan
<input type="checkbox"/> 8015 MOD DRO	Oxygenates
<input type="checkbox"/> Lead 7420	<input type="checkbox"/> 7421

Preservative Codes
 H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ O = Other

J value reporting needed
 Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
 Confirm highest hit by 8260
 Confirm all hits by 8260
 Run ___ oxy's on highest hit
 Run ___ oxy's on all hits

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MGE 8260	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	Oxygenates	Lead 7420	7421
MW-10	Water	No	-	2007-12-21	1300	Yes	X		6	X	X					
MW-11	Water	No	-	2007-12-21	1310	Yes	X		6	X	X					
Trip Blank	Water	No	-	2007-12-21	1310	No			1	X						

Comments / Remarks
 Please analyze for BTEX Only by EPA 8260.

Turnaround Time Requested (TAT) (please circle)

STD. TAT 72 hour 48 hour
 24 hour 4 day 5 day

Data Package Options (please circle if required)

QC Summary Type I - Full
 Type VI (Raw Data) Coelt Deliverable not needed
 WIP (RWQCB)
 Disk

Relinquished by: <u>J. Henry</u>	Date: <u>12/21/07</u>	Time: <u>1600</u>	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	Date: _____	Time: _____
Relinquished by Commercial Carrier: UPS <u>FedEx</u> Other _____	Temperature Upon Receipt: <u>26</u> °C		Received by: <u>[Signature]</u>	Date: <u>12/21/07</u>	Time: <u>1600</u>
Custody Seals Intact? <u>Yes</u> No					

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 <u>limit of quantitation</u> , 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
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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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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 17605-2425SAMPLE GROUP

The sample group for this submittal is 1074807. Samples arrived at the laboratory on Friday, January 25, 2008. The PO# for this group is 0015010091 and the release number is COSGRAY.

Client DescriptionStream Grab Water
Trip_Blank NA WaterLancaster Labs Number5264949
5264950

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

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

Respectfully Submitted,



Christine Dulaney
Senior Specialist



Analysis Report

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

Lancaster Laboratories Sample No. WW5264949

Group No. 1074807

Stream Grab Water

NA URSO

Sunol Pipeline SL0600100443 Stream

Collected: 01/24/2008 12:20 by JH

Account Number: 11875

Submitted: 01/25/2008 09:25

Chevron Pipeline Co.

Reported: 02/01/2008 at 07:35

4800 Fournace Place - E320 D

Discard: 03/03/2008

Bellaire TX 77401

SNLST

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
01728	TPH-GRO - Waters	n.a.	N.D.		50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.						
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		Analyst	Dilution Factor
				Date	Time		
01728	TPH-GRO - Waters	SW-846 8015B modified	1	01/29/2008	04:14	K. Robert Caulfeild-James	1
06053	BTEX by 8260B	SW-846 8260B	1	01/29/2008	14:30	Ginelle L Feister	1
01146	GC VOA Water Prep	SW-846 5030B	1	01/29/2008	04:14	K. Robert Caulfeild-James	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/29/2008	14:30	Ginelle L Feister	1

Lancaster Laboratories Sample No. **WW5264950**

Group No. **1074807**

Trip Blank NA Water

NA URSO

Sunol Pipeline SL0600100443 QA

Collected: 01/24/2008 12:20

Account Number: 11875

Submitted: 01/25/2008 09:25

Chevron Pipeline Co.

Reported: 02/01/2008 at 07:35

4800 Fournace Place - E320 D

Discard: 03/03/2008

Bellaire TX 77401

SNLTB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
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

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CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
06053	BTEX by 8260B	SW-846 8260B	1	01/29/2008 14:55	Ginelle L Feister	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/29/2008 14:55	Ginelle L Feister	1

Quality Control Summary

 Client Name: Chevron Pipeline Co.
 Reported: 02/01/08 at 07:35 AM

Group Number: 1074807

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 08028B08A TPH-GRO - Waters	N.D.	50.	ug/l	115	113	75-135	1	30
Batch number: Z080292AA	Sample number(s): 5264949-5264950							
Benzene	N.D.	0.5	ug/l	100		78-119		
Toluene	N.D.	0.5	ug/l	111		85-115		
Ethylbenzene	N.D.	0.5	ug/l	109		82-119		
Xylene (Total)	N.D.	0.5	ug/l	110		83-113		

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 08028B08A TPH-GRO - Waters	Sample number(s): 5264949 UNSPK: P265625								
	117		63-154						
Batch number: Z080292AA	Sample number(s): 5264949-5264950 UNSPK: P264863								
Benzene	110	111	83-128	1	30				
Toluene	125	130*	83-127	4	30				
Ethylbenzene	121	123	82-129	1	30				
Xylene (Total)	121	123	82-130	2	30				

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: 08028B08A
 Trifluorotoluene-F

5264949	77
Blank	80
LCS	82
LCSD	82
MS	86
<hr/>	
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.
Reported: 02/01/08 at 07:35 AM

Group Number: 1074807

Surrogate Quality Control

Analysis Name: BTEX by 8260B

Batch number: Z080292AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5264949	100	95	103	90
5264950	98	96	103	89
Blank	94	95	103	90
LCS	92	92	101	98
MS	97	96	102	98
MSD	95	92	103	99
Limits:	80-116	77-113	80-113	78-113

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