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# QUARTERLY SVE OPERATION AND MONITORING REPORT

## CHEVRON SUNOL PIPELINE SUNOL, CALIFORNIA

*Prepared for*

Chevron Pipe Line Company  
4800 Fournace Place, E320C  
Bellaire, Texas 77401

March 2007

**URS**

URS Corporation  
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26815217



March 9, 2007

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

Subject: SLIC Case No. RO0002892, Chevron Sunol Pipeline, 2793 Calaveras Road, Sunol, CA – **Quarterly SVE Operation and Monitoring Report**

Dear Mr. Wickham:

On behalf of the Chevron Pipe Line Company (CPL), URS Corporation (URS) has operated a soil vapor extraction (SVE) system with nine SVE wells as a remedial measure for a gasoline pipeline release that occurred on August 14, 2005, at the Chevron Sunol Pipeline site (Site) in Sunol, California. This *Quarterly SVE Operation and Monitoring Report* (Report) discusses the release history as well as the previous investigation and remediation activities at the Site, summarizes the design of the SVE system, and presents the operation and monitoring of the system and the sampling results. This Report also evaluates the performance of the SVE system and presents recommendations.

This Report is intended to meet with the requests stated in the January 17, 2007 Alameda County Environmental Health comment letter to CPL. Specifically, this Report is intended to meet the requirement that a quarterly SVE operation and monitoring report be submitted by March 20, 2007. This Report covers the operation period from November 28, 2006 through March 1, 2007.

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

Sincerely yours,

URS CORPORATION

Joe Morgan III  
Senior Project Manager

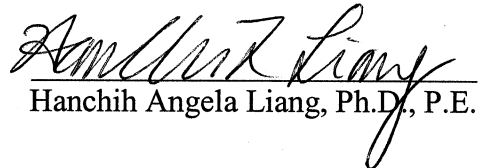
## DISCLOSURE

This report ("Quarterly SVE Operation and Monitoring Report, Chevron Sunol Pipeline, Sunol, California") was prepared under my direct supervision. The information and results presented in this report are based on our review of available data obtained from numerous sources, including studies performed by others, laboratory data produced by independent laboratories, and data generated by URS. To the best of our knowledge we have collected and incorporated into our findings and recommendations all relevant data from previous groundwater and soil quality studies at the Site.

The study reported herein was performed in accordance with the standard of care used for this type of study. The assumptions that were made and the interpretation of the data were based on our experience and on protocols reported in the literature for similar studies.



**URS Corporation**  
Approved by:

  
Hanchih Angela Liang, Ph.D., P.E.



Global Gas

**Jeff Cosgray**  
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October 16, 2006

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 "**Quarterly SVE Operation and Monitoring Report, Chevron Sunol Pipeline, Sunol, California**" are true and correct to the best of my knowledge at the present time.

Submitted by:

A handwritten signature in black ink that reads "Cosgray". The signature is written in a cursive style with a large, stylized initial "C".

Jeffrey Cosgray

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## Acronyms and Abbreviations

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ACEH	Alameda County Environmental Health
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
cfm	cubic foot per minute
CPL	Chevron Pipe Line Company
°F	degree Fahrenheit
g/m <sup>3</sup>	gram per cubic meter
HASP	Health and Safety Plan
hp	horsepower
HSA	hollow-stem auger
msl	mean sea level
Patm	atmospheric pressure
Pg	gauge pressure at the wellhead
PID	photoionization detector
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
scfm	standard cubic foot per minute
SFPUC	San Francisco Public Utilities Commission
Site	Chevron Sunol Pipeline site
SVE	soil vapor extraction
TPH-GRO	total petroleum hydrocarbons quantified as gasoline range organics
URS	URS Corporation
USEPA	U.S. Environmental Protection Agency
Work Plan	<i>Work Plan for Additional Groundwater Monitoring Well Installation and SVE System Expansion and Operation (URS 2006)</i>

On behalf of the Chevron Pipe Line Company (CPL), URS Corporation (URS) has operated a soil vapor extraction (SVE) system with nine SVE wells as a remedial measure for a gasoline pipeline release that occurred on August 14, 2005, at the Chevron Sunol Pipeline site (Site) in Sunol, California (Figure 1). This *Quarterly SVE Operation and Monitoring Report* (Report) discusses the release history as well as the previous investigation and remediation activities at the Site (Section 2), summarizes the design of the SVE system (Section 3), and presents the operation and monitoring of the SVE system and the sampling results (Section 4). This report also evaluates the performance of the SVE system and presents recommendations (Section 5). Section 6 describes the limitations applicable to this Report. Section 7 lists the references consulted in preparing this Report.

This Report is intended to meet with the requests stated in the January 17, 2007 Alameda County Environmental Health (ACEH) comment letter to CPL (Appendix A). Specifically, this Report is intended to meet the requirement that a quarterly SVE operation and monitoring report be submitted by March 20, 2007. This quarterly report covers the operation period from November 28, 2006 through March 1, 2007.



This section describes the release location and release history as well as the subsurface investigation that URS conducted at the Site.

## 2.1 RELEASE HISTORY AND LOCATION

A release of unleaded gasoline occurred at the Site on August 14, 2005, when a third party damaged an underground pipeline (the Bay Area Product Line) during dirt road grading activities. CPL estimated that approximately 700 barrels (29,400 gallons) of unleaded gasoline were released. Approximately 85 barrels (3,570 gallons) of gasoline were recovered while draining the line and approximately 615 barrels (25,830 gallons) were released as a spray downslope of the pipeline onto the adjacent hillside and Calaveras Road. A portion of the 615 barrels released downslope was recovered along with 152 tons of gasoline-impacted soil and debris, which were disposed of as part of the emergency remedial activities.

The location of the pipeline release is approximately 2.7 miles south of the intersection of Interstate 680 and Calaveras Road, between Mileposts 2.7 and 2.8 of Calaveras Road, in Sunol Valley, Valle de San Jose Mexican land grant (La Costa Valley Quadrangle) in Alameda County, California. The release location is approximately 4 miles southeast of the city of Sunol, California (Figure 1). The pipeline extends along Calaveras Road and traverses a steep hillside above the east side of the road (Figure 2). The San Francisco Public Utilities Commission (SFPUC) owns the property where the release occurred and leases it to a cattle rancher. A tree nursery (Valley Crest Tree Company) is located immediately west of Calaveras Road at the Site. This operation also leases the property from the SFPUC.

The release location is on a steep, west-facing slope with a grade of 80 to 90 percent in some locations. The grade directly beneath the release location was measured to be 84 percent using an inclinometer on August 25, 2005. Vegetation at the release location is predominantly oak woodlands. A very small stream is located approximately 150 to 200 feet north of and downhill from the release location. This stream flows into the Alameda Creek floodplain and joins Alameda Creek seasonally. URS and CPL staff observed no visible impacts to this stream immediately after the release. A surface-water sample was collected on October 19, 2005, and the sample results confirmed these visual observations (URS 2005). URS has continued to collect a sample from this stream to analyze for the presence of gasoline compounds during quarterly monitoring activities.

CPL conducted emergency remedial activities immediately after the release occurred. The pipeline rupture was repaired and surface soils surrounding the release were excavated, characterized, and disposed of off site at an appropriate landfill according to CPL's spill response contractor. In total, 152 tons of gasoline-impacted soil and debris were disposed of as part of the emergency remedial activities. The excavation for the repaired section of the pipeline was left open and exposed. The impacted portion of Calaveras Road was repaved. During May of 2006, CPL backfilled around the exposed portion of the pipeline, re-graded the dirt road, and placed bollards on either side of the pipeline across the dirt road.

## 2.2 PREVIOUS INVESTIGATION AND REMEDIAL ACTIVITIES

In response to ACEH's request to evaluate the soil and groundwater impacts of the release, CPL retained URS to conduct an initial subsurface investigation. The purpose of the initial subsurface investigation was to evaluate the lateral and vertical extent of gasoline impacts to soil and groundwater at the release location. As part of this investigation, URS advanced 19 direct push Geoprobe<sup>®</sup> borings, nine hand-augered borings, two hollow-stem auger (HSA) borings, and four air-rotary auger borings to collect soil and groundwater samples. These activities were conducted between August 25 and November 10, 2005. Three of the air-rotary borings were completed as groundwater monitoring wells (MW-1 through MW-3). The soil boring and monitoring well locations are shown on Figure 2. The investigation results were presented in the *Subsurface Investigation Report* (URS 2005), which was submitted to ACEH on December 15, 2005.

URS conducted the first phase of the initial investigation (10 soil borings [SB-1 through SB-10]) along Calaveras Road in the right-of-way of the County of Alameda Public Works Agency. Typically, the direct-push sampling equipment encountered refusal at approximately 20 feet below ground surface (bgs). No groundwater was encountered during this sampling effort.

The second phase of the initial investigation was conducted on SFPUC property on the east side of Calaveras Road on the hillside where the release occurred. This phase of the investigation included advancing nine direct-push borings and nine hand-augered borings (SB-11 through SB-27, and SB-13R). During this investigation high photoionization detector (PID) readings and strong gasoline odors were noted in soils from the borings located closest to the spill location. Reduced PID readings and weaker gasoline odors were noted in soils collected farther away from the spill location.

In the nursery on the west side of Calaveras Road, URS advanced two borings with an auger rig in an attempt to locate groundwater (HSA-1 and HSA-2) as part of the third phase of the initial investigation. Groundwater was apparently encountered in HSA-1 at 37 feet bgs, but not enough water was present to collect a sample. Groundwater was not encountered at HSA-2.

Although groundwater was not sampled, this drilling effort was successful in evaluating site geology to the depths of 37 and 50.5 feet bgs, where refusal was encountered for the two borings. In both borings a gravel layer was encountered where gasoline odors were present. The top of the gravel layer varied in depth from 17 to 23 feet bgs and the bottom of the layer varied from 37 to 43 feet bgs. Highly weathered clayey bedrock was encountered at 43 feet bgs at HSA-2; this bedrock was underlain by increasingly less weathered sandy siltstone bedrock from 45 feet bgs to the total explored depth of 50.5 feet bgs.

Due to the difficult drilling conditions encountered at the nursery (i.e., cobbles and refusal with the auger rig), an air-rotary casing hammer drill rig was used during the fourth phase of the initial investigation to drill four exploratory borings (AR-1 through AR-4) to a maximum depth of 108 feet bgs (AR-2) and complete three of them as monitoring wells (MW-1 through MW-3) to approximately 40 feet bgs. Groundwater was initially encountered in only two of the wells (MW-1 and MW-2), but was present in all three wells after winter rainfall. Although groundwater was not encountered at AR-2, a 75-foot-thick siltstone/claystone confining layer beneath the unconsolidated gravel layer was identified.

On November 5 and 8, 2005, as part of site remediation activities, URS installed four soil vapor extraction (SVE) wells (SVE-1D through SVE-4D) on the dirt road where the release occurred. URS installed and conducted a five-day pilot test of SVE with a mobile SVE system starting November 8, 2005. After the pilot test was completed, URS continued to operate the system until February 13, 2006. The SVE system removed approximately 1,042 gallons of hydrocarbons over the 3 months of operation. URS documented the design strategy, operation, monitoring, sampling activities, evaluation, and future recommendations of the SVE system in *Interim Remediation Report, Soil Vapor Extraction System for the Chevron Pipeline Release Location, Sunol, California* (URS 2006a).

URS conducted the fifth phase of subsurface investigation from January 17 to 31, 2006 to address the ACEH's request to fully define the extent of contamination in soil and groundwater

at the site. As part of the additional subsurface investigation activities URS installed four additional groundwater monitoring wells (MW-4 through MW-7, Figure 2). Three of the wells were installed along Calaveras Road into the confined sandstone water-bearing zone. One well was installed to the west of Calaveras Road to the north of MW-1 and MW-3 into the unconfined nursery water-bearing zone (URS 2006b).

The most recent and sixth phase of subsurface investigation was conducted on August 16 and 17, 2006 and included installing two additional groundwater monitoring wells (MW-8 and MW-9). MW-8 was installed along Calaveras Road within unconsolidated soils overlying the confined sandstone water-bearing zone. MW-8 was installed to monitor potential shallow contaminant migration from the hillside below the release location to the nursery unconfined water-bearing zone. MW-9 was installed to the northeast of MW-4 and to the north of MW-1 on the nursery property. MW-9 was installed to monitor potential northward contaminant migration observed at MW-1 during quarterly groundwater monitoring activities. MW-8 and MW-9 have been incorporated into the quarter groundwater monitoring program. The details of this investigation are presented in *Additional Groundwater Monitoring Well Installation and Third Quarter 2006 Groundwater Monitoring Report* (URS 2006c).

On November 7 through 10, 2006, as part of continued site remediation activities, URS installed five additional soil vapor extraction (SVE) wells (SVE-5 through SVE-9) below the dirt road on the steep hillside where the release occurred. URS conducted site improvements (stairs and pathways) prior to installing the additional SVE wells to allow safe access to the locations. The additional SVE wells were intended to expand the coverage provided by the existing SVE well network to include the impacted steep hillside area below the release location. The SVE system with nine SVE wells was restarted on November 28, 2006 and is currently in operation. URS documented the design strategy, and initial operation, monitoring, and sampling activities in *Soil Vapor Extraction System Start-Up, Chevron Sunol Pipeline, Sunol, California* (URS 2006d).

This section summarized the design of the SVE system and the monitoring and analysis program implemented at the Site.

### 3.1 SVE SYSTEM DESIGN

URS installed four SVE wells (SVE-1D, SVE-2S, SVE-3S, and SVE-4D) on the dirt road in November 2005. Upon ACEH's request, URS installed five additional SVE wells (SVE-5 through SVE 9) below the dirt road on the steep hillside in November 2006. The well construction details for the nine SVE wells are presented in Table 1.

The SVE treatment system was installed by URS subcontractor Stratus, Inc. (Stratus). The system consists of the following components:

- A trailer-mounted 200-cubic-feet-per-minute (cfm) thermal oxidizer (manufactured by CBA Equipment, LLC) that includes a 15-horsepower (hp) liquid ring blower and a 100-gallon knockout pot
- A 49-hp-rated propane electrical generator
- Conveyance pipes and manifold
- A 1000-gallon propane tank

The SVE treatment system is located north of the release location on SFPUC property (Figure 2). The SFPUC property is fenced and has a locked gate for security. An additional separate 8-foot-high, slatted chain-link fence with a locked gate encloses the SVE equipment compound. Vapors are extracted from the SVE wells with the liquid ring blower and conveyed to the treatment compound through two separate sets of piping. The first set of piping connects SVE-1D through SVE-5 to the treatment system and the second set of piping connects SVE-6 through SVE-9 to the treatment system. Both sets of piping are consisted of 2-inch-diameter Schedule 40 PVC conveyance pipes running from each wellhead to the appropriate manifold. The manifold for each set of piping consists of valves to regulate the flow to each well. A single 1.5-inch diameter Schedule 40 PVC conveyance pipe connects each manifold to the treatment system. The extracted vapor stream is conveyed from the manifold to the knockout pot, which separates and collects moisture from the vapor stream. Hydrocarbon-impacted vapors are abated by the thermal oxidizer before discharge to the atmosphere.

The required notification letter to the Bay Area Air Quality Management District (BAAQMD) is included in Appendix B. A copy of the permit for the SVE system from the BAAQMD is provided in Appendix C.

### 3.2 MONITORING AND ANALYSIS PROGRAM

System readings were collected weekly after the first two weeks. PID readings at each SVE wellhead and at the system influent point were recorded every week during site visits.

Grab vapor samples for laboratory analysis were collected at each wellhead and at the system influent point approximately every two to three weeks for confirmation purpose. All vapor samples for chemical analysis were transported under URS chain-of-custody to Lancaster Laboratories via FedEx. The vapor samples were analyzed for the following:

- Hydrocarbon concentrations as hexane by U.S. Environmental Protection Agency (USEPA) Method 25 Modified
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by USEPA Method TO-14A

Appendix D provides the complete laboratory analytical results.

This section describes the operation and monitoring results of the SVE system. The operational parameters, sampling results, and mass removal calculations for Wells SVE-1D through SVE-9 are presented in Table 2A through 2I.

#### 4.1 SYSTEM OPERATION RESULTS

After system start-up and stabilization, URS collected vapor samples on the day of start-up (November 28, 2006), and then once a week for the first two weeks of the SVE system operation. Site visits were conducted twice a week for the first two weeks of operation to confirm that the system was operating properly and to record system readings.

During the site visit on November 30, 2006, ice and water was observed in both extraction piping runs, which restricted airflow to the SVE System. Airflow from the lower piping run network, which connects wells SVE-6 through SVE-9, was completely stopped due to perched groundwater pulled from SVE-8. Ice and water were drained from the piping, and SVE-8 was closed off. Airflow from the upper piping run network, which connects wells SVE-1D through SVE-5, was not at its full capacity. The restriction of airflow might have resulted from extreme ambient temperature fluctuations. After both piping runs were cleared, the system was restarted and monitored to ensure that the system re-stabilized. SVE-8 has remained closed since November 30, 2006 due to perched water at this location. URS continues to monitor the groundwater in well SVE-8. If the groundwater level drops, URS will start soil vapor extraction through this well again.

On December 19, 2006, ice was observed again in both piping runs which caused blockage. Piping catches were installed in both piping runs to divert moisture condensate from the piping runs. The piping catches are drained weekly during site visits. The system has been running smoothly since the installation of piping catches.

Gasoline mass removal was calculated based on the PID readings collected at the wellheads. Table 2 presents the operation parameters, field sampling results, and mass removal calculations. Figure 3 shows the PID readings at each well. Figure 4 shows the cumulative mass of hydrocarbons removed from each well. Figure 5 shows the mass removal rate as pounds per day (lbs/day) at each well.

As shown in Figure 3, concentrations at wellheads started high and are decreasing over time. Wells SVE-1D through SVE-4D were part of the existing SVE system that was installed in November 2005. The existing system was operated for 3 months and removed a total of 7,294 pounds (approximately 1,042 gallons) during that period.

The PID readings measured at SVE-1D decreased significantly since December 15, 2006. As shown in Table 2A and on Figure 5, the mass removal rate at SVE-1D has been below 2 lbs/day since December 19, 2007. In addition, Figure 4 shows that the cumulative mass removal at SVE-1D has reached an asymptotic value. After three consecutive weekly readings of mass removal rate below 1 lb/day, SVE-1D was shut down on January 19, 2007. A total of 162 pounds of gasoline was removed from SVE-1D from November 28, 2006 through January 19, 2007. URS plans to re-start SVE-1D in the week of March 19 after a two-month hiatus to see if the mass recovery rate at this location will rebound.

The PID readings measured at SVE-2S has been relatively low since the start-up of the system. As shown in Table 2B and on Figure 5, the mass removal rate has been below 2 lbs/day since December 19, 2007. In addition, Figure 4 shows that the cumulative mass removal at SVE-2S has reached an asymptotic value. After three consecutive weekly readings of mass removal rate below 1 lb/day, SVE-2S was shut down on January 19, 2007. A total of 89 pounds of gasoline was removed from SVE-2S from November 28, 2006 through January 19, 2007. URS plans to re-start SVE-2S in the week of March 19 after a two-month hiatus to see if the mass recovery rate at this location will rebound.

SVE-3S, SVE-6, and SVE-7 have been recovering gasoline at more than 5 lbs/day. However, SVE-4D, SVE-5, and SVE-9 have mass removal rates less than 2 lbs/day as of March 1, 2007. URS will continue operating and monitoring these six SVE wells.

As of March 1, 2007, a total of 5,636 pounds (approximately 805 gallons) of hydrocarbons were removed from the nine SVE well locations since the extended SVE system startup on November 28, 2006, a period of approximately 3 months.

## 4.2 MASS REMOVAL CALCULATIONS

The assumptions used in the mass removal calculations were as follows:

- The relative vapor density of gasoline is approximately 3.3 (unitless).



- The vapor density of pure, dry air is 1,200 grams per cubic meter ( $\text{g/m}^3$ ) at 68° Fahrenheit ( $^{\circ}\text{F}$ ).

The vapor density of gasoline is therefore calculated as  $3.3 \times 1,200 \text{ g/m}^3 = 3,960 \text{ g/m}^3$  at 68°F.

Air flow in standard cubic foot per minute (SCFM) at 14.7 pounds per square inch atmosphere (psia) and 68°F is converted from air flow in cubic feet per minute as follows:

$$SCFM(\text{at } 14.7\text{psia and } 68^{\circ}\text{F}) = CFM \times [(Pg + Patm)/(Patm)] \times [(68 + 460)/(Tact + 460)]$$

where

- $Pg$  is the gauge pressure at the wellhead
- $Patm$  is the atmospheric pressure
- $Tact$  is the actual temperature
- 460 is the temperature conversion factor from Fahrenheit to Rankin.

The mass removed in pounds is calculated as follows:

$$\text{Pounds of Petroleum Hydrocarbons Removed} = (\text{flowrate in SCFM}) \times (\text{average concentration in ppmv}) \times (60 \text{ min/hr}) \times (106.88 \text{ lbs/molecule}) \times (\text{Operation Time in hr}) / 1000000 / 379$$

The expanded SVE system with nine SVE wells was successfully started up and operated since November 28, 2006. As of March 1, 2007, a total of 5,636 pounds (approximately 805 gallons) of hydrocarbons have been removed from the nine SVE well locations since the SVE system startup on November 28, 2006. The previous SVE system with 4 SVE wells removed a total of 7,294 pounds (approximately 1,042 gallons) of hydrocarbons from November 8, 2005, through February 13, 2006. Therefore, a total of 12,930 pounds (approximately 1,847 gallons) of hydrocarbons have been removed from the Site.

SVE-1D and SVE-2S were shut down on January 19, 2007 due to low mass removal rates. URS plans to re-start SVE-1D and SVE-2S in the week of March 19 after a two-month hiatus to see if the mass recovery rates at these two locations will rebound. SVE-8 has remained closed due to the accumulation of rainwater at the bottom of the well. URS will continue to monitor the groundwater in well SVE-8. If the groundwater level drops, URS will start soil vapor extraction through this well again.

URS recommends that the SVE system be operated for up to an additional 3 months depending on the on-going hydrocarbon removal rates during this period. URS will continue monitoring the system weekly. URS will review the PID readings and analytical results collected at each wellhead and assess the optimal duration for the SVE system operation.

URS' investigation and subsequent operation of the SVE system were based on its experience at other contaminated sites and the operation of other SVE systems. URS has performed services in a manner consistent with that level of care and skill ordinarily exercised by members of the same profession currently practicing in the same locality under similar conditions. No expressed or implied representation or warranty is included or intended in our reports, except that our services were performed, within the limits prescribed by our client and with the customary thoroughness and competence of our profession.

No third party shall have the right to rely on the opinions URS has rendered in connection with the services discussed in this document without URS' written consent and the third party's agreement to be bound to the same conditions and limitations as our client.

- URS Corporation. 2005. *Subsurface Investigation Report, Chevron Pipeline Release, Sunol, California*. December. (Referred to as Subsurface Investigation Report in text)
- URS Corporation. 2006a. *Interim Remediation Report, Soil Vapor Extraction System for the Chevron Pipeline Release Location, Sunol, California*. February.
- URS Corporation. 2006b. *Additional Subsurface Investigation Report, Chevron Sunol Pipeline, Sunol California*. May.
- URS Corporation. 2006c. *Additional Groundwater Monitoring Well Installation and Third Quarter 2006 Groundwater Monitoring Report, Chevron Sunol Pipeline, Sunol, California*. December.
- URS Corporation. 2006d. *Soil Vapor Extraction System Start-Up, Chevron Sunol Pipeline, Sunol California*. December.

## Tables

**TABLE 1**  
**SVE Well Construction Details**  
**Quarterly SVE Operation and Monitoring Report**  
**Chevron Sunol Pipeline**

Well ID	Date Completed	Easting	Northing	Ground Surface Elevation (feet msl)	Top of Casing Elevation (feet msl)	TOC-GS (ft)	Screen Top (feet bgs)	Screen Bottom (feet bgs)	Well Diameter	Comments
SVE-1D	11/5/2005	6168313.98	2025831.92	377.37	377.02	-0.35	12.6	19.6	4" PVC	
SVE-2S	11/5/2005	6168314.18	2025817.01	380.54	379.84	-0.70	5.4	10.4	4" PVC	
SVE-3S	11/5/2005	6168317.87	2025774.02	391.61	391.16	-0.45	5.6	10.6	4" PVC	
SVE-4D	11/8/2005	6168318.74	2025761.01	394.46	393.99	-0.47	17.6	27.6	4" PVC	
SVE-5	11/10/2006	6168320.76	2025747.84	396.52	396.62	0.10	29.6	39.6	2" PVC	
SVE-6	11/7/2006	6168297.14	2025747.97	384.51	385.49	0.98	9	14	1" PVC	Prepacked Well Screen
SVE-7	11/7/2006	6168285.07	2025768.50	375.41	376.35	0.94	4.7	9.7	1" PVC	Prepacked Well Screen
SVE-8	11/8/2006	6168277.22	2025792.96	361.33	362.30	0.97	2	7	1" PVC	Prepacked Well Screen
SVE-9	11/9/2006	6168258.23	2025741.67	355.53	356.80	1.27	2.2	7.2	1" PVC	Prepacked Well Screen

Notes:

bgs - below ground surface  
msl - average mean sea level

1. Northing and Easting coordinates based on the California Coordinate System Zone 3 NAD83 Datum.
2. Elevation coordinates based on the NAVD88 Datum.
3. SVE-1D through SVE-4D surveyed on February 14, 2006.
4. SVE-5 through SVE-9 surveyed on November 10, 2006.

TABLE 2A  
SVE-1D  
Operation Parameters, Sampling Results, and Mass Removal Calculations, Chevron Sunol Pipeline

Sample Date	Flowrate (fpm)	Temp (F)	Vacuum (inch water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	Total Operation Time (days)	Field TPH-g Concentration (ppm)	Mass Removal Rate (lbs/hr)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
11/28/06	465	54	3.4	10.14	10.33	2.4	0.1	1,120	0.17	4.12	0.41	0.41
11/30/06	808	61	6.85	17.63	17.56	44.6	1.9	803	0.25	6.01	11.17	11.59
12/04/06	864	58	8.08	18.85	18.83	138.8	5.8	422	0.17	4.11	23.34	34.93
12/08/06	854	62	7.4	18.63	18.50	234.6	9.8	1,793	0.30	7.30	29.12	64.05
12/15/06	1180	64	11.05	25.74	25.24	403.3	16.8	163	0.37	8.79	61.77	125.81
12/19/06	1022	62	11.02	22.30	21.94	503.9	21.0	325	0.08	1.91	7.99	133.80
12/28/06	974	59	10.46	21.25	21.06	715.4	29.8	150	0.07	1.78	15.69	149.50
01/04/07	1035	60	10.56	22.58	22.33	884.5	36.9	61	0.03	0.84	5.91	155.41
01/12/07	693	57	10	15.12	15.06	1075.8	44.8	100	0.02	0.43	3.44	158.85
01/19/07	536	48	12	11.69	11.80	1241.5	51.7	145	0.02	0.51	3.55	162.40
01/26/07	0					1363.7	56.8					162.40
02/02/07	0					1528.5	63.7					162.40
02/09/07	0					1697	70.7					162.40
02/16/07	0					1865.7	77.7					162.40
02/23/07	0					2033.3	84.7					162.40
03/01/07	0					2177.9	90.7					162.40

Note:

1. Inlet pipe diameter is 2".
2. Shaded areas indicate that measurements were not taken because flow to the well was shut off.

Assumptions:

1. Relative vapor density of gasoline is approximately 3.3.
2. Vapor density of pure, dry air is 1,200 g/m<sup>3</sup> at 20C.
3. Vapor density of gasoline is calculated to be 3,960 g/m<sup>3</sup> at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x([(Pg + Patm)/(Patm)] x [(68 +460)/(Tact +460)])
5. **Mass Removed Since Last Sampling Event (lbs)** = (flowrate scfm)\*(avg. conc. ppmv)\*(60 min/hr)\*(106.88 lbs/molecule)\*(Operation Time hr)/1000000/379

TABLE 2B  
SVE-2S  
Operation Parameters, Sampling Results, and Mass Removal Calculations, Chevron Sunol Pipeline

Sample Date	Flowrate (fpm)	Temp (F)	Vacuum (inch water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	Total Operation Time (days)	Field TPH-g Concentration (ppm)	Mass Removal Rate (lbs/hr)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
11/28/06	475	53	3.2	10.36	10.58	2.4	0.1	239	0.038	0.90	0.09	0.09
11/30/06	1056	60	6.74	23.04	23.01	44.6	1.9	417	0.112	2.69	4.99	5.08
12/04/06	1377	56	7.82	30.04	30.15	138.8	5.8	104	0.117	2.80	15.89	20.97
12/08/06	1453	57	7.1	31.70	31.81	234.6	9.8	953	0.249	5.99	23.89	44.87
12/15/06	317	62	11.50	6.92	6.80	403.3	16.8	177	0.057	1.37	9.61	54.48
12/19/06	455	62	11.49	9.93	9.76	503.9	21.0	705	0.064	1.53	6.42	60.90
12/28/06	555	55	10.83	12.11	12.08	715.4	29.8	200	0.081	1.95	17.16	78.06
01/04/07	579	58	11.03	12.63	12.53	884.5	36.9	61	0.024	0.58	4.10	82.16
01/12/07	226	56	10	4.93	4.92	1075.8	44.8	208	0.010	0.24	1.88	84.03
01/19/07	473	45	13	10.32	10.44	1241.5	51.7	183	0.030	0.73	5.02	89.05
01/26/07	0											89.05
02/02/07	0											89.05
02/09/07	0											89.05
02/16/07	0											89.05
02/23/07	0											89.05
03/01/07	0											89.05

Note:

1. Inlet pipe diameter is 2".
2. Shaded areas indicate that measurements were not taken because flow to the well was shut off.

Assumptions:

1. Relative vapor density of gasoline is approximately 3.3.
2. Vapor density of pure, dry air is 1,200 g/m<sup>3</sup> at 20C.
3. Vapor density of gasoline is calculated to be 3,960 g/m<sup>3</sup> at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x([(Pg + Patm)/(Patm)] x [(68 +460)/(Tact +460)])

5. **Mass Removed Since Last Sampling Event (lbs)** = (flowrate scfm)\*(avg. conc. ppmv)\*(60 min/hr)\*(106.88 lbs/molecule)\*(Operation Time hr)/1000000/379



TABLE 2C  
SVE-3S  
Operation Parameters, Sampling Results, and Mass Removal Calculations, Chevron Sunol Pipeline

Sample Date	Flowrate (fpm)	Temp (F)	Vacuum (inch water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	Total Operation Time (days)	Field TPH-g Concentration (ppm)	Mass Removal Rate (lbs/hr)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
11/28/06	180	52	3.3	3.93	4.02	2.4	0.1	3,170	0.19	4.53	0.45	0.45
11/30/06	325	60	7.1	7.09	7.07	44.6	1.9	3,674	0.36	8.62	16.02	16.47
12/04/06	547	55	8.47	11.93	11.98	138.8	5.8	2,971	0.59	14.17	80.54	97.01
12/08/06	474	56	7.8	10.34	10.38	234.6	9.8	4,754	0.59	14.27	56.97	153.98
12/15/06	726	60	11.50	15.84	15.63	403.3	16.8	3,270	0.93	22.32	156.91	310.90
12/19/06	359	63	11.47	7.83	7.68	503.9	21.0	4,060	0.42	10.03	42.03	352.93
12/28/06	495	52	10.81	10.80	10.84	715.4	29.8	1,844	0.47	11.39	100.41	453.34
01/04/07	700	57	11.01	15.27	15.17	884.5	36.9	1,791	0.41	9.82	69.19	522.52
01/12/07	297	56	10	6.48	6.47	1075.8	44.8	1,974	0.18	4.33	34.55	557.07
01/19/07	510	45	13	11.13	11.26	1241.5	51.7	2,045	0.34	8.06	55.63	612.70
01/26/07	648	63	15	14.14	13.75	1363.7	56.8	1,700	0.38	9.16	46.66	659.36
02/02/07	435	49	18	9.49	9.41	1528.5	63.7	1,825	0.25	5.90	40.54	699.91
02/09/07	463	60	16.5	10.10	9.84	1697.0	70.7	2,700	0.33	7.93	55.65	755.56
02/16/07	625	56	17.6	13.64	13.35	1865.7	77.7	1,373	0.40	9.68	68.04	823.60
02/23/07	550	45	18.8	12.00	11.97	2033.3	84.7	1,775	0.28	6.71	46.83	870.43
03/01/07	473	50	18.2	10.32	10.21	2177.9	90.7	1,975	0.28	6.81	41.05	911.48

Note:

1. Inlet pipe diameter is 2".

Assumptions:

1. Relative vapor density of gasoline is approximately 3.3.
2. Vapor density of pure, dry air is 1,200 g/m<sup>3</sup> at 20C.
3. Vapor density of gasoline is calculated to be 3,960 g/m<sup>3</sup> at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x([(Pg + Patm)/(Patm)] x [(68 +460)/(Tact +460)])

5. **Mass Removed Since Last Sampling Event (lbs)** = (flowrate scfm)\*(avg. conc. ppmv)\*(60 min/hr)\*(106.88 lbs/molecule)\*(Operation Time hr)/1000000/379

TABLE 2D  
SVE-4D  
Operation Parameters, Sampling Results, and Mass Removal Calculations, Chevron Sunol Pipeline

Sample Date	Flowrate (fpm)	Temp (F)	Vacuum (inch water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	Total Operation Time (days)	Field TPH-g Concentration (ppm)	Mass Removal Rate (lbs/hr)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
11/28/06	190	51	3.30	4.15	4.25	2.4	0.1	1,857	0.12	2.81	0.28	0.28
11/30/06	327	57	7.16	7.13	7.16	44.6	1.9	2,602	0.24	5.68	10.56	10.84
12/04/06	316	48	8.54	6.89	7.02	138.8	5.8	2,088	0.24	5.86	33.87	44.71
12/08/06	296	53	7.9	6.46	6.52	234.6	9.8	2,921	0.24	5.81	23.20	67.91
12/15/06	354	56	11.50	7.72	7.68	403.3	16.8	1,540	0.25	6.10	42.87	110.78
12/19/06	421	64	11.54	9.18	8.99	503.9	21.0	1,770.0	0.22	5.30	22.21	132.99
12/28/06	410	51	10.89	8.94	9.00	715.4	29.8	1,408	0.21	5.09	44.85	177.83
01/04/07	427	55	11.06	9.32	9.29	884.5	36.9	1,202	0.18	4.32	30.42	208.25
01/12/07	260	55	10.00	5.67	5.67	1075.8	44.8	1,308	0.11	2.53	20.20	228.45
01/19/07	418	44	12.00	9.12	9.27	1241.5	51.7	1,555	0.20	4.73	32.63	261.08
01/26/07	640	62	15.00	13.96	13.60	1363.7	56.8	1,049	0.26	6.31	32.11	293.19
02/02/07	467	49	18.00	10.19	10.10	1528.5	63.7	606	0.12	2.98	20.44	313.62
02/09/07	373	59	16.50	8.14	7.94	1697.0	70.7	736	0.08	1.90	13.32	326.94
02/16/07	640	55	17.70	13.96	13.69	1865.7	77.7	620	0.14	3.31	23.23	350.18
02/23/07	512	45	18.70	11.17	11.14	2033.3	84.7	635	0.10	2.49	17.38	367.56
03/01/07	410	49	18.10	8.94	8.87	2177.9	90.7	575	0.08	1.91	11.51	379.07

Note:

1. Inlet pipe diameter is 2".

Assumptions:

1. Relative vapor density of gasoline is approximately 3.3.
2. Vapor density of pure, dry air is 1,200 g/m<sup>3</sup> at 20C.
3. Vapor density of gasoline is calculated to be 3,960 g/m<sup>3</sup> at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x [(Pg + Patm)/(Patm)] x [(68 +460)/(Tact +460)]
5. **Mass Removed Since Last Sampling Event (lbs)** = (flowrate scfm)\*(avg. conc. ppmv)\*(60 min/hr)\*(106.88 lbs/molecule)\*(Operation Time hr)/1000000/379

TABLE 2E  
SVE-5  
Operation Parameters, Sampling Results, and Mass Removal Calculations, Chevron Sunol Pipeline

Sample Date	Flowrate (fpm)	Temp (F)	Vacuum (inch water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	Total Operation Time (days)	Field TPH-g Concentration (ppm)	Mass Removal Rate (lbs/hr)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
11/28/06	500	50	3.10	10.91	11.21	2.4	0.1	1,499	0.25	5.98	0.60	0.60
11/30/06	734	54	6.63	16.01	16.18	44.6	1.9	2,292	0.46	10.92	20.29	20.89
12/04/06	835	47	7.83	18.22	18.61	138.8	5.8	2,172	0.62	14.79	85.51	106.40
12/08/06	807	51	7.2	17.61	17.87	234.6	9.8	2,307	0.59	14.25	56.87	163.28
12/15/06	1177	55	10.40	25.68	25.65	403.3	16.8	1,132	0.65	15.71	110.39	273.67
12/19/06	1622	63	10.44	35.39	34.81	503.9	21.0	1,407.0	0.66	15.73	65.95	339.62
12/28/06	1133	48	9.82	24.72	25.07	715.4	29.8	973	0.44	10.62	93.61	433.23
01/04/07	1149	53	9.92	25.07	25.17	884.5	36.9	789	0.33	7.90	55.63	488.86
01/12/07	1060	55	8.00	23.13	23.24	1075.8	44.8	882	0.29	6.91	55.11	543.97
01/19/07	1067	43	12.00	23.28	23.72	1241.5	51.7	1,278	0.38	9.12	62.96	606.93
01/26/07	1064	60	14.00	23.21	22.76	1363.7	56.8	1,020	0.39	9.31	47.41	654.33
02/02/07	996	48	18.00	21.73	21.59	1528.5	63.7	214	0.20	4.74	32.56	686.89
02/09/07	1327	59	16.20	28.95	28.28	1697.0	70.7	380	0.12	2.99	21.00	707.89
02/16/07	1215	56	17.40	26.51	25.96	1865.7	77.7	304	0.13	3.16	22.22	730.11
02/23/07	814	44	18.70	17.76	17.75	2033.3	84.7	285	0.08	1.86	13.00	743.11
03/01/07	846	48	17.90	18.46	18.34	2177.9	90.7	245	0.07	1.73	10.43	753.54

Note:

1. Inlet pipe diameter is 2".

Assumptions:

1. Relative vapor density of gasoline is approximately 3.3.
2. Vapor density of pure, dry air is 1,200 g/m<sup>3</sup> at 20C.
3. Vapor density of gasoline is calculated to be 3,960 g/m<sup>3</sup> at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x([(Pg + Patm)/(Patm)] x [(68 +460)/(Tact +460)])
5. **Mass Removed Since Last Sampling Event (lbs)** = (flowrate scfm)\*(avg. conc. ppmv)\*(60 min/hr)\*(106.88 lbs/molecule)\*(Operation Time hr)/1000000/379

TABLE 2F  
SVE-6  
Operation Parameters, Sampling Results, and Mass Removal Calculations, Chevron Sunol Pipeline

Sample Date	Flowrate (fpm)	Temp (F)	Vacuum (inch water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	Total Operation Time (days)	Field TPH-g Concentration (ppm)	Mass Removal Rate (lbs/hr)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
11/28/06	640	53	9.60	13.96	14.03	2.4	0.1	1,908	0.40	9.53	0.95	0.95
11/30/06	987	54	14.20	21.53	21.35	44.6	1.9	2,800	0.75	17.89	33.25	34.20
12/04/06	935	46	17.84	20.40	20.35	138.8	5.8	2,514	0.80	19.25	111.35	145.55
12/08/06	808	47	17.1	17.63	17.59	234.6	9.8	3,619	0.80	19.20	76.64	222.19
12/15/06	1060	55	16.80	23.13	22.73	403.3	16.8	2,542	1.04	24.93	175.24	397.43
12/19/06	714	62	15.08	15.58	15.17	503.9	21.0	3,210.0	0.65	15.54	65.12	462.56
12/28/06	1006	47	15.23	21.95	22.00	715.4	29.8	1,906	0.83	20.04	176.58	639.14
01/04/07	1042	54	14.97	22.73	22.49	884.5	36.9	1,619	0.59	14.11	99.45	738.59
01/12/07	359	49	11.00	7.83	7.91	1075.8	44.8	2,062	0.22	5.18	41.29	779.87
01/19/07	360	43	5.00	7.85	8.14	1241.5	51.7	2,339	0.27	6.38	44.05	823.92
01/26/07	505	64	12.00	11.02	10.77	1363.7	56.8	1,732	0.33	7.81	39.76	863.68
02/02/07	383	45	14.00	8.36	8.44	1528.5	63.7	1,700	0.21	5.15	35.39	899.07
02/09/07	500	58	13.70	10.91	10.74	1697.0	70.7	1,782	0.28	6.66	46.76	945.83
02/16/07	410	57	15.50	8.94	8.79	1865.7	77.7	1,440	0.21	5.04	35.43	981.26
02/23/07	785	46	17.00	17.13	17.12	2033.3	84.7	1,460	0.37	8.84	61.74	1042.99
03/01/07	580	51	17.50	12.65	12.51	2177.9	90.7	1,475	0.27	6.54	39.39	1082.38

Note:

1. Inlet pipe diameter is 2".

Assumptions:

1. Relative vapor density of gasoline is approximately 3.3.
2. Vapor density of pure, dry air is 1,200 g/m<sup>3</sup> at 20C.
3. Vapor density of gasoline is calculated to be 3,960 g/m<sup>3</sup> at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x([(Pg + Patm)/(Patm)] x [(68 +460)/(Tact +460)])
5. **Mass Removed Since Last Sampling Event (lbs)** = (flowrate scfm)\*(avg. conc. ppmv)\*(60 min/hr)\*(106.88 lbs/molecule)\*(Operation Time hr)/1000000/379

TABLE 2G  
SVE-7  
Operation Parameters, Sampling Results, and Mass Removal Calculations, Chevron Sunol Pipeline

Sample Date	Flowrate (fpm)	Temp (F)	Vacuum (inch water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	Total Operation Time (days)	Field TPH-g Concentration (ppm)	Mass Removal Rate (lbs/hr)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
11/28/06	500	54	9.50	10.91	10.94	2.4	0.1	2,057	0.33	8.01	0.80	0.80
11/30/06	647	50	14.08	14.12	14.11	44.6	1.9	2,760	0.50	12.10	22.48	23.28
12/04/06	720	45	17.60	15.71	15.71	138.8	5.8	2,727	0.64	15.35	88.77	112.05
12/08/06	833	50	16.8	18.17	18.04	234.6	9.8	4,351	0.95	22.73	90.72	202.77
12/15/06	762	52	16.50	16.62	16.45	403.3	16.8	4,417	1.07	25.67	180.47	383.24
12/19/06	849	60	14.75	18.52	18.13	503.9	21.0	4,767.0	1.23	29.63	124.22	507.46
12/28/06	641	44	15.01	13.98	14.11	715.4	29.8	2,033	0.71	17.08	150.52	657.98
01/04/07	765	52	14.69	16.69	16.59	884.5	36.9	1,871	0.48	11.53	81.24	739.22
01/12/07	610	50	11.00	13.31	13.41	1075.8	44.8	2,448	0.43	10.31	82.15	821.37
01/19/07	560	42	5.00	12.22	12.69	1241.5	51.7	2,315	0.45	10.76	74.30	895.67
01/26/07	707	62	12.00	15.42	15.14	1363.7	56.8	1,894	0.47	11.35	57.77	953.44
02/02/07	394	46	14.00	8.60	8.66	1528.5	63.7	2,224	0.26	6.35	43.60	997.04
02/09/07	564	58	13.60	12.30	12.12	1697.0	70.7	2,154	0.39	9.45	66.33	1063.37
02/16/07	665	58	15.50	14.51	14.23	1865.7	77.7	1,607	0.40	9.52	66.95	1130.32
02/23/07	1208	45	17.10	26.35	26.40	2033.3	84.7	1,870	0.68	16.34	114.10	1244.42
03/01/07	833	50	17.40	18.17	18.01	2177.9	90.7	2,345	0.56	13.51	81.42	1325.84

Note:

1. Inlet pipe diameter is 2".

Assumptions:

1. Relative vapor density of gasoline is approximately 3.3.
2. Vapor density of pure, dry air is 1,200 g/m<sup>3</sup> at 20C.
3. Vapor density of gasoline is calculated to be 3,960 g/m<sup>3</sup> at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x([(Pg + Patm)/(Patm)] x [(68 +460)/(Tact +460)])
5. **Mass Removed Since Last Sampling Event (lbs)** = (flowrate scfm)\*(avg. conc. ppmv)\*(60 min/hr)\*(106.88 lbs/molecule)\*(Operation Time hr)/1000000/379

TABLE 2H  
SVE-8  
Operation Parameters, Sampling Results, and Mass Removal Calculations, Chevron Sunol Pipeline

Sample Date	Flowrate (fpm)	Temp (F)	Vacuum (inch water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	Total Operation Time (days)	Field TPH-g Concentration (ppm)	Mass Removal Rate (lbs/hr)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
11/28/06	300	53	10.00	6.54	6.57	2.4	0.1	1,923	0.19	4.50	0.45	0.45
11/30/06	0											0.45
12/04/06	0											0.45
12/08/06	0											0.45
12/15/06	0											0.45
12/19/06	0											0.45
12/28/06	0											0.45
01/04/07	0											0.45
01/12/07	0											0.45
01/19/07	0											0.45
01/26/07	0											0.45
02/02/07	0											0.45
02/09/07	0											0.45
02/16/07	0											0.45
02/23/07	0											0.45
03/01/07	0											0.45

Note:

1. Inlet pipe diameter is 2".
2. Shaded areas indicate that measurements were not taken because the well was shut off due to the presence of perched groundwater within the well.

Assumptions:

1. Relative vapor density of gasoline is approximately 3.3.
2. Vapor density of pure, dry air is 1,200 g/m<sup>3</sup> at 20C.
3. Vapor density of gasoline is calculated to be 3,960 g/m<sup>3</sup> at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x [(Pg + Patm)/(Patm)] x [(68 + 460)/(Tact + 460)]
5. **Mass Removed Since Last Sampling Event (lbs)** = (flowrate scfm)\*(avg. conc. ppmv)\*(60 min/hr)\*(106.88 lbs/molecule)\*(Operation Time hr)/1000000/379

TABLE 2I  
SVE-9  
Operation Parameters, Sampling Results, and Mass Removal Calculations, Chevron Sunol Pipeline

Sample Date	Flowrate (fpm)	Temp (F)	Vacuum (inch water)	Flowrate (cfm)	Flowrate (scfm)	Total Operation Time (hr)	Total Operation Time (days)	Field TPH-g Concentration (ppm)	Mass Removal Rate (lbs/hr)	Mass Removal Rate (lbs/day)	Mass Removed Since Last Sampling Event (lbs)	Cumulative Mass Removal (lbs)
11/28/06	610	53	10.00	13.31	13.36	2.4	0.1	3,623	0.72	17.23	1.72	1.72
11/30/06	1010	55	13.30	22.03	21.85	44.6	1.9	3,747	1.19	28.67	53.28	55.00
12/04/06	1357	52	15.50	29.61	29.37	138.8	5.8	2,443	1.35	32.36	187.16	242.16
12/08/06	1179	53	15	25.72	25.50	234.6	9.8	2,612	0.96	22.95	91.59	333.75
12/15/06	1386	57	15.20	30.24	29.73	403.3	16.8	1,223	0.85	20.30	142.66	476.41
12/19/06	1717	63	13.90	37.46	36.53	503.9	21.0	1,378.0	0.70	16.91	70.89	547.30
12/28/06	1325	50	13.86	28.91	28.91	715.4	29.8	924	0.49	11.85	104.40	651.70
01/04/07	1353	55	13.70	29.52	29.24	884.5	36.9	685	0.35	8.38	59.02	710.71
01/12/07	865	48	10.00	18.87	19.13	1075.8	44.8	848	0.22	5.22	41.62	752.33
01/19/07	677	44	10.00	14.77	15.09	1241.5	51.7	1,521	0.27	6.37	43.95	796.28
01/26/07	900	65	12.00	19.63	19.17	1363.7	56.8	783	0.33	7.86	40.02	836.30
02/02/07	632	45	13.00	13.79	13.96	1528.5	63.7	480	0.13	3.14	21.55	857.85
02/09/07	1060	58	13.50	23.13	22.79	1697.0	70.7	436	0.15	3.72	26.09	883.94
02/16/07	1020	58	15.00	22.25	21.85	1865.7	77.7	416	0.14	3.31	23.29	907.23
02/23/07	628	45	17.10	13.70	13.72	2033.3	84.7	380	0.08	1.94	13.58	920.81
03/01/07	664	52	17.50	14.49	14.30	2177.9	90.7	378	0.08	1.93	11.62	932.43

Note:

1. Inlet pipe diameter is 2".

Assumptions:

1. Relative vapor density of gasoline is approximately 3.3.
2. Vapor density of pure, dry air is 1,200 g/m<sup>3</sup> at 20C.
3. Vapor density of gasoline is calculated to be 3,960 g/m<sup>3</sup> at 20C.
4. SCFM(at 14.7psia and 68°F) = CFM x([(Pg + Patm)/(Patm)] x [(68 +460)/(Tact +460)])

5. **Mass Removed Since Last Sampling Event (lbs)** = (flowrate scfm)\*(avg. conc. ppmv)\*(60 min/hr)\*(106.88 lbs/molecule)\*(Operation Time hr)/1000000/379

## Figures



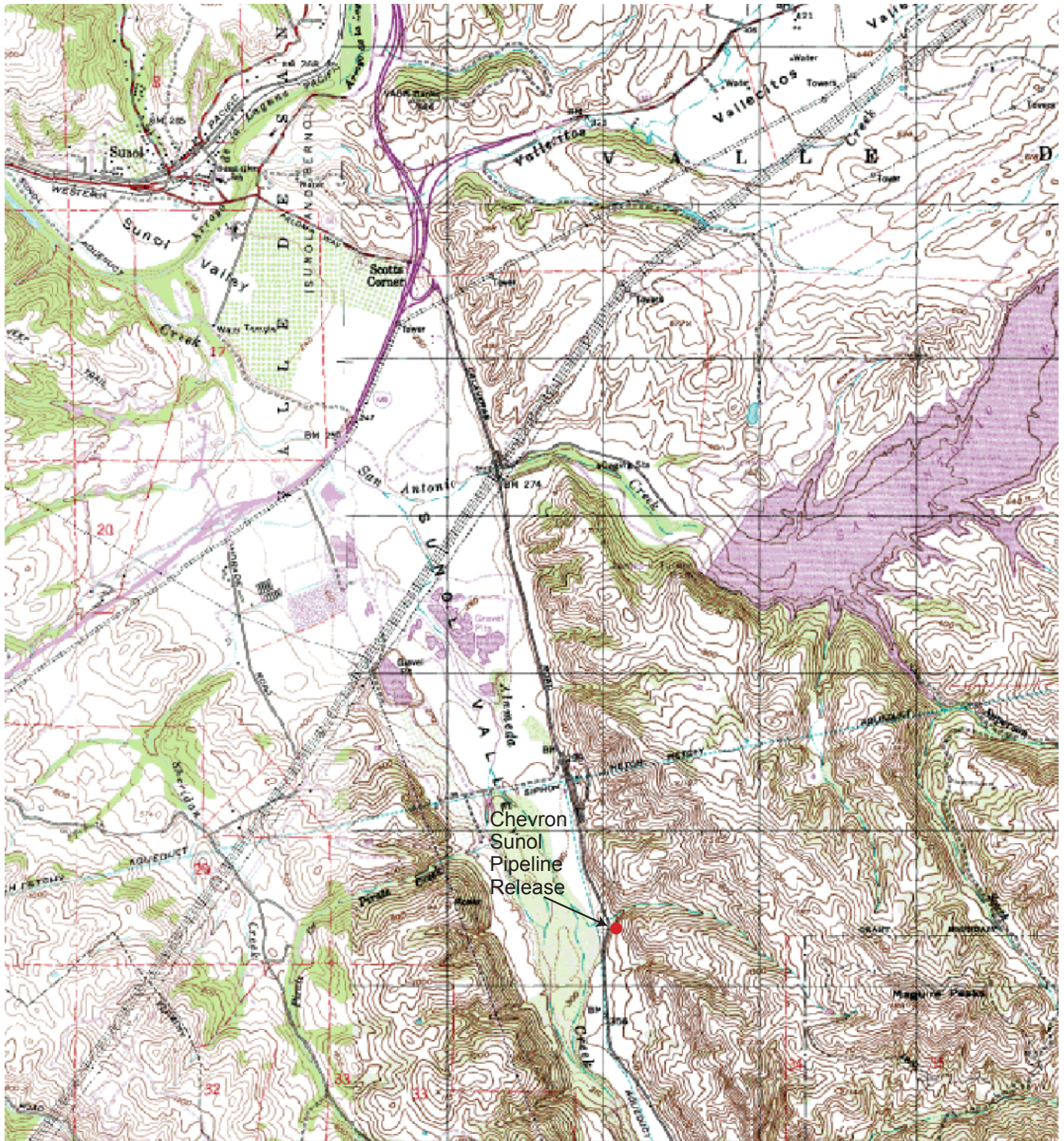
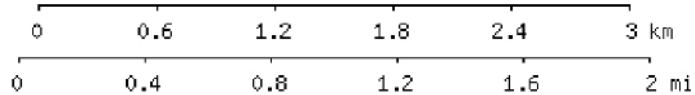


Image obtained from topozone.com



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





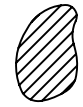



Chevron Pipeline Company

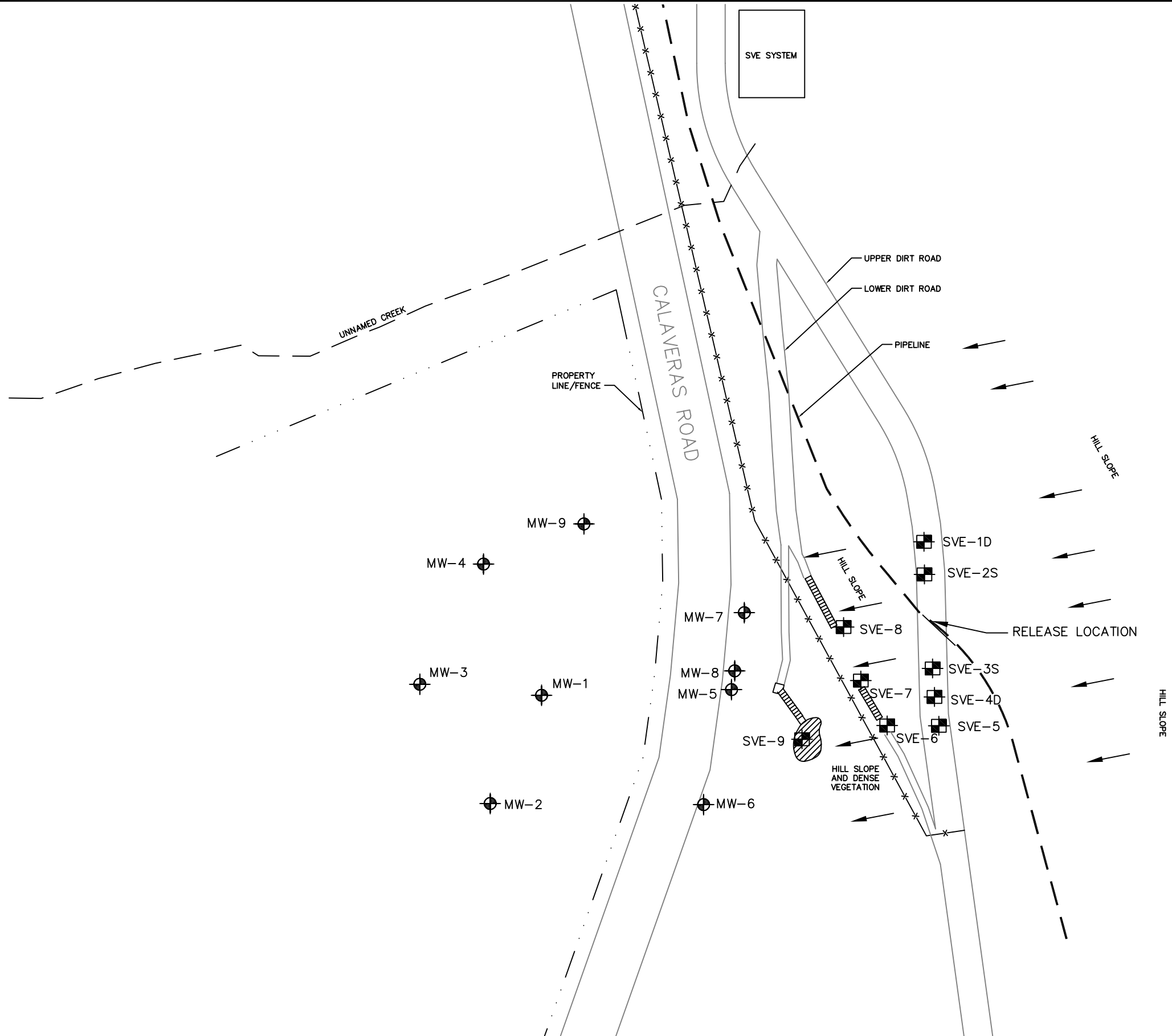
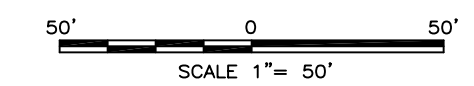
Project No. 26815217


SITE VICINITY MAP  
 CHEVRON SUNOL PIPELINE  
 SUNOL, CALIFORNIA

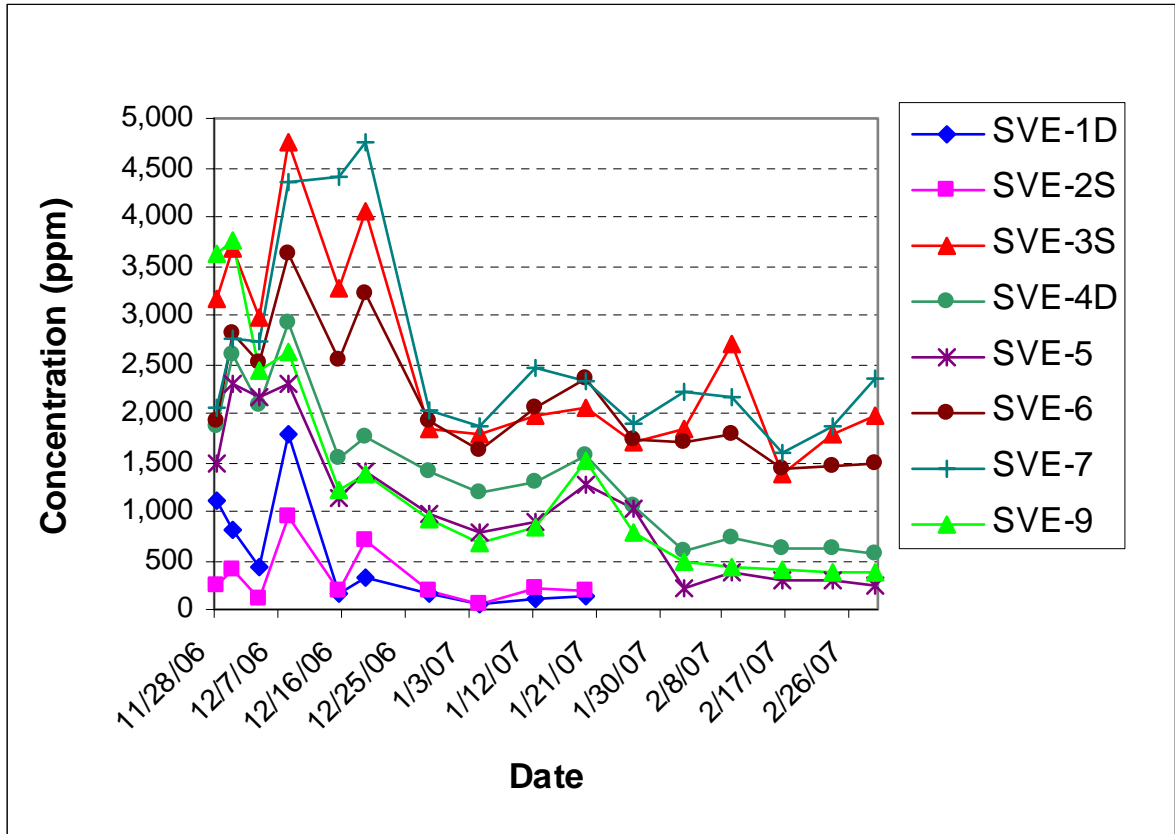
Figure  
 1

**LEGEND:**

-  MONITORING WELL
-  SVE WELL
-  SHELF
-  FENCE
-  PIPELINE
-  HILL SLOPE 80-90% GRADE



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

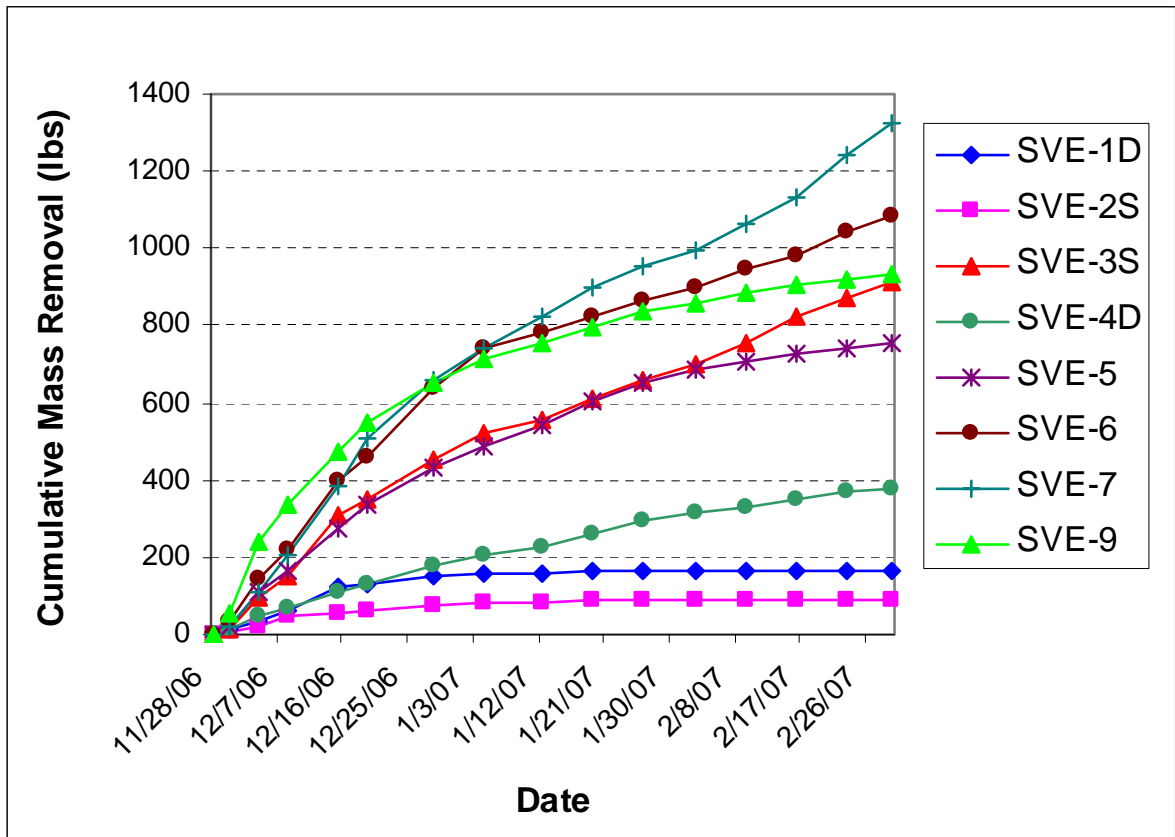



Chevron Pipe Line Company

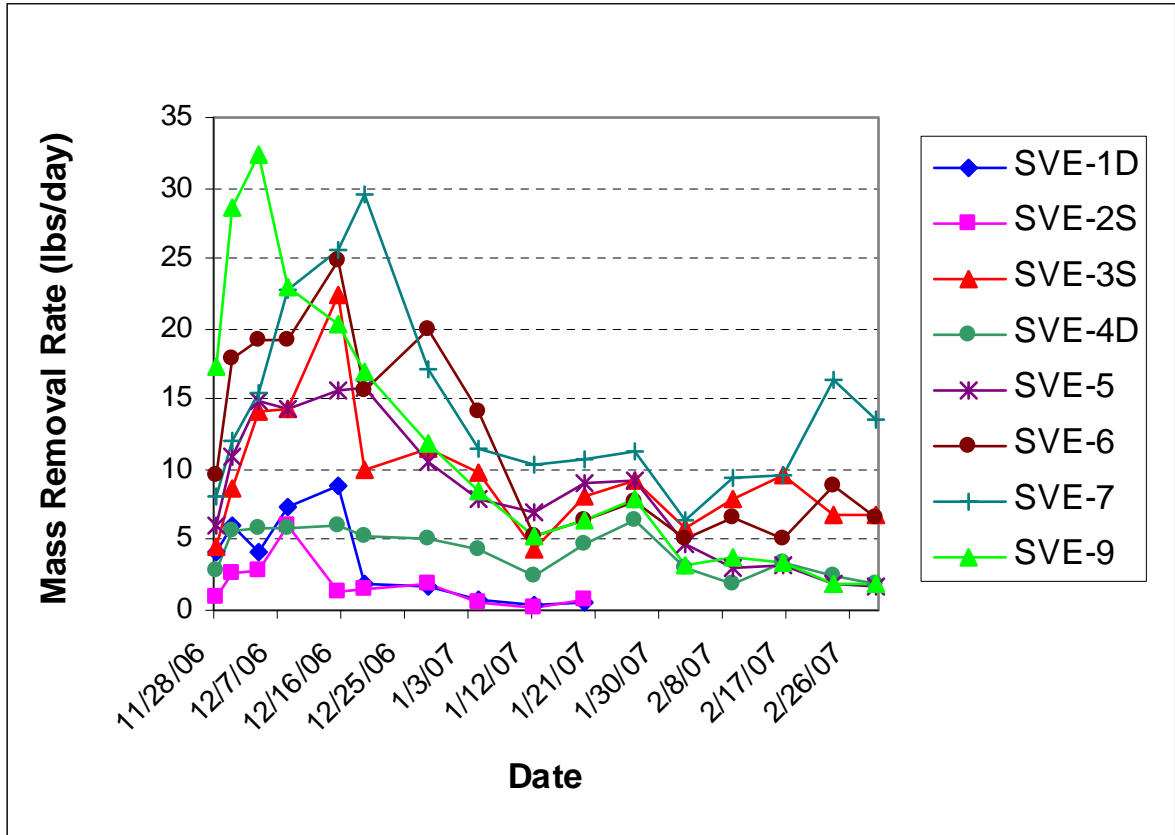
Project No. 26815217

Hydrocarbon Concentrations at Wellheads  
Chevron Sunoil Pipeline

Figure 3



	Chevron Pipe Line Company	<b>Cumulative Hydrocarbon Mass Removal at Wellheads Chevron Sunoil Pipeline</b>	<b>Figure 4</b>
	Project No. 26815217		



<b>URS</b>	Chevron Pipe Line Company	<b>Mass Removal Rate (Pounds/Day) at Wellheads Chevron Sunol Pipeline</b>	<b>Figure 5</b>
	Project No. 26815217		

**Appendix A**  
**ACEH Letter dated January 17, 2007**

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

January 17, 2007

Mr. Jeff Cosgray  
Chevron Pipe Line Company  
4800 Fournace Place  
Bellaire, TX 77401-2324

Subject: SLIC Case No. RO0002892, Chevron Sunol Pipeline, 2793 Calaveras Road, Sunol, CA

Dear Mr. Cosgray:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site including the reports entitled, "Additional Groundwater Monitoring Well Installation and Third Quarter 2006 Groundwater Monitoring Report," dated December 4, 2006 and "Soil Vapor Extraction System Start-Up Report," dated December 19, 2006. Both reports were prepared on your behalf by URS Corporation. The "Additional Groundwater Monitoring Well Installation and Third Quarter 2006 Groundwater Monitoring Report," presents the results from installation of two monitoring wells and analytical results from groundwater sampling conducted in August 2006. Groundwater monitoring well MW-8 was installed to monitor contaminant migration through a gravel layer above bedrock on the east side of Calaveras Road. Fuel hydrocarbons were detected at elevated concentrations in soil samples collected from the well boring and in the initial groundwater sample collected from MW-8. Well MW-9 was installed north of existing monitoring wells at the site to help evaluate the downgradient extent of contamination. Free-phase product was observed in well MW-9; therefore, the downgradient extent of dissolved phase contamination has not been determined. We request that you address the technical comments below and submit a Work Plan for additional investigation of the downgradient extent of contamination.

The "Soil Vapor Extraction System Start-Up Report," presents the results from installation of five additional soil vapor extraction (SVE) wells, soil sampling results, SVE start up, SVE system monitoring, and initial mass removal calculations. From system start up on November 28, 2006 to December 8, 2006, the system removed an estimated 920 pounds of hydrocarbons. Well SVE-8, which is located on the hillside slope is not operational due to groundwater in SVE-8. ACEH appreciates the efforts by Chevron Pipe Line Company to install the additional SVE wells on the steep hillside below the fuel release.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

**TECHNICAL COMMENTS**

1. **Downgradient Extent of Contamination and Potential Discharge to Unnamed Creek and Alameda Creek.** Free-phase product is present in well MW-9, which is located approximately 160 feet west northwest of the release location. The purpose of well MW-9

was to assess the downgradient extent of dissolved phase contamination. Based on these results, please present plans in the Work Plan requested below to fully define the extent of free-phase product and the downgradient extent of dissolved phase groundwater contamination.

2. **Potential Discharge to Unnamed Creek and Alameda Creek.** We concur with the proposal to move the sampling location for the unnamed creek to a new location northwest of well MW-9 where the creek flows into the floodplain. Please implement this recommendation during the next quarterly groundwater monitoring. The location of the sampling location for the unnamed creek is to be shown on a detailed topographic map in the next quarterly monitoring report. ACEH will provide technical comments as necessary on the new location following receipt of the quarterly monitoring report.
3. **Conclusions Regarding Unconfined Groundwater at Well MW-8.** The fourth bulleted conclusion in the "Additional Groundwater Monitoring Well Installation and Third Quarter 2006 Groundwater Monitoring Report," regarding unconfined groundwater at well MW-8 indicates that, "the hillside appears to act as a recharge source for the nursery unconfined water-bearing zone." The conclusion goes on to state that, "the presence of groundwater at MW-8, within unconsolidated soils above the sandstone bedrock contact, supports URS' previous hypothesis that groundwater from the hillside acts as a preferential pathway for groundwater transport (URS 2006d)." We assume that the conclusion meant to state that the gravel layer is a preferential pathway for groundwater rather than groundwater acts as a preferential pathway for groundwater. However, this conclusion does not appear to be consistent with previous conclusions and recommendations by URS. Please note that URS submitted correspondence entitled, "Response to ACEH June 5, 2006 Letter – Technical Comment 1. Gravel Layer as Preferential Pathway," dated July 7, 2006, which objected to the installation of well MW-8 and indicated that, "the gravel zone in this area is part of the unsaturated zone rather than a saturated zone migration pathway, nor would wells in this location aid in further understanding of TPH migration or extent because it is in the middle of the impacted and migration pathway area that has already been investigated." The observation of groundwater within the gravel zone does not appear to be consistent with an unsaturated zone. Furthermore, the detection of elevated concentrations of fuel hydrocarbons in groundwater within a saturated preferential pathway does provide useful information to assess the ongoing transport of fuel hydrocarbons from the hillside to the unconfined groundwater west of Calaveras Road. Please revise your evaluation of groundwater flow through the gravel layer and propose any additional investigation or well installation that may be required in the Work Plan requested below.
4. **Quarterly Groundwater Monitoring.** Please continue quarterly groundwater monitoring from the existing wells and a surface water location as discussed in technical comment 2. Since ethanol and methanol have not been detected in results to date, you may discontinue analysis for ethanol and methanol in future groundwater monitoring. The "Additional Groundwater Monitoring Well Installation and Third Quarter 2006 Groundwater Monitoring Report," recommends continuing analysis for geochemical indicators. Please note that ACEH has not requested that you conduct analysis for geochemical indicators. The purpose of analyzing for geochemical indicators is not clear given the groundwater monitoring well network for the site. Wells MWS-1 and MW-9 have free product; well MW-2 appears to be upgradient of the groundwater contamination; wells MW-3 and MW-4 do not appear to sample formation water; and wells MW-5, -6, and -7 monitor the confined bedrock aquifer.



None of these wells appear to effectively monitor a dissolved phase plume in the unconfined aquifer. Only well MW-8, which is directly downslope from the release and contains groundwater with 18,000 micrograms per liter of TPH as gasoline appears to monitor dissolved phase concentrations in the unconfined aquifer. Please describe the rationale for continued monitoring of geochemical indicators. Please present results of the quarterly groundwater sampling in the monitoring reports requested below.

5. **Operation of SVE System.** We concur with the recommendation to monitor the operation of the SVE system. We request that you present results from the SVE system monitoring on a quarterly basis in the monitoring reports requested below.

#### **TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **February 15, 2007** – Quarterly Groundwater Monitoring Report for the Fourth Quarter 2007
- **March 19, 2007** – Work Plan for Site Characterization
- **March 20, 2007** – Quarterly SVE Operation and Monitoring Report
- **May 15, 2007** – Quarterly Groundwater Monitoring Report for the First Quarter 2007
- **June 20, 2007** – Quarterly SVE Operation and Monitoring Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### **ELECTRONIC SUBMITTAL OF REPORTS**

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed

locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements ([http://www.swrcb.ca.gov/ust/cleanup/electronic\\_reporting](http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting)).

#### PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

#### AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,



Jerry Wickham  
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

Jeff Cosgray  
January 17, 2007  
Page 5

cc: Colleen Winey, QIC 80201  
Zone 7 Water Agency  
100 North Canyons Parkway,  
Livermore, CA 94551

Joe Morgan III  
URS Corporation  
1333 Broadway, Suite 800  
Oakland, CA 94612

Hanchih Angela Liang  
URS Corporation  
1333 Broadway, Suite 800  
Oakland, CA 94612

Joe Naras  
San Francisco Public Utilities Commission  
Natural Resources Division  
1657 Rollins Road  
Burlingame, CA 94010

Craig Freeman  
San Francisco Public Utilities Commission  
Environmental and Regulatory Compliance Division  
1145 Market Street, Suite 500  
San Francisco, CA 94103

Donna Drogos, ACEH  
Jerry Wickham, ACEH  
File

**Appendix B**  
**BAAQMD Permit for the SVE System**

# COPY



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

November 2, 2006  
Project No. U2042-2627-01

Mr. Robert Cave  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

Re: Notification of Proposed SVE Event  
(BAAQMD Application No. 12773 & Plant No. 17101)  
Chevron Pipeline Company  
Sunol Pipeline Spill Area  
Sunol, California

Dear Mr. Cave:

Stratus Environmental, Inc. (Stratus), on behalf of CBA Equipment, LLC (CBA), has prepared this letter to notify the Bay Area Air Quality Management District (BAAQMD) regarding a 6-month soil vapor extraction (SVE) event at Calaveras Road, Sunol, California (Figure 1). The SVE event is scheduled to be conducted between November 13, 2006, and May 13, 2006. The proposed SVE system will be operated 24 hours a day during the testing period, using a 30-horsepower (hp) rated propane generator, under a various location permit (Plant No. 17101).

An SVE event was conducted at this site for approximately three months between November 2005 and February 2006. CBA has been retained to conduct an additional 6-month SVE event to reduce the subsurface petroleum hydrocarbon mass.

During the proposed 6-month SVE event, petroleum hydrocarbon laden soil vapors will be extracted from existing vapor extraction wells (see Figure 1) using the 15-hp rated liquid ring blower of a CBA 200 cubic feet per minute (cfm) thermal oxidizer. The extracted soil vapors will be abated in a thermal oxidizer before discharging into the atmosphere (see Figure 2). A 25 kilowatt (30-hp) propane generator or similar will be used to energize the control panel of the SVE system.

## **SYSTEM START-UP AND OPERATION**

Stratus will conduct routine site visits during the 6-month period to verify system operation, optimize system performance, and conduct maintenance if warranted. In addition, influent and effluent air samples will be collected on a monthly basis to verify compliance with BAAQMD permit requirements.

November 2, 2006

During the system start-up and subsequent site visits, the following parameters will be monitored and recorded on field data sheets:

- Influent, operating, and effluent temperatures,
- Vapor extraction rate,
- Applied vacuum at each vapor extraction well,
- Influent flow into the system, and
- Photo-ionization detector (PID) measurements for organic vapors from the extraction wells.


Air samples will be collected on a monthly basis and forwarded to a state certified laboratory to be analyzed for gasoline range organics (GRO) by United States Environmental Protection Agency (USEPA) Method 8015, and for benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by USEPA Method 8020. Analytical results and field data collected will be used to calculate and verify the destruction efficiency of the system. The first set of influent and effluent air samples will be analyzed on a 24-hour turnaround time; the results will be forwarded to BAAQMD via facsimile. The remainder of the air samples will be analyzed on a standard turnaround time (2 to 3 weeks).

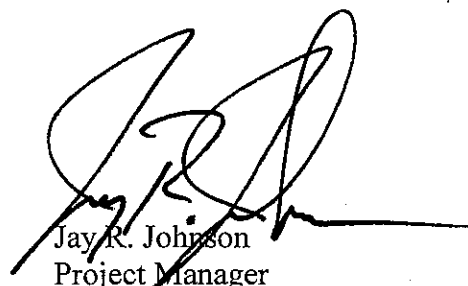
Stratus will prepare and submit quarterly reports to BAAQMD that will include a tabulated analytical summary, estimated mass emission rates, and destruction efficiency of the system.

If you have any questions regarding this notification, please call Kiran Nagaraju at (530) 676-6007.

Sincerely,

*STRATUS ENVIRONMENTAL, INC.*

  
Kiran Nagaraju  
Project Engineer

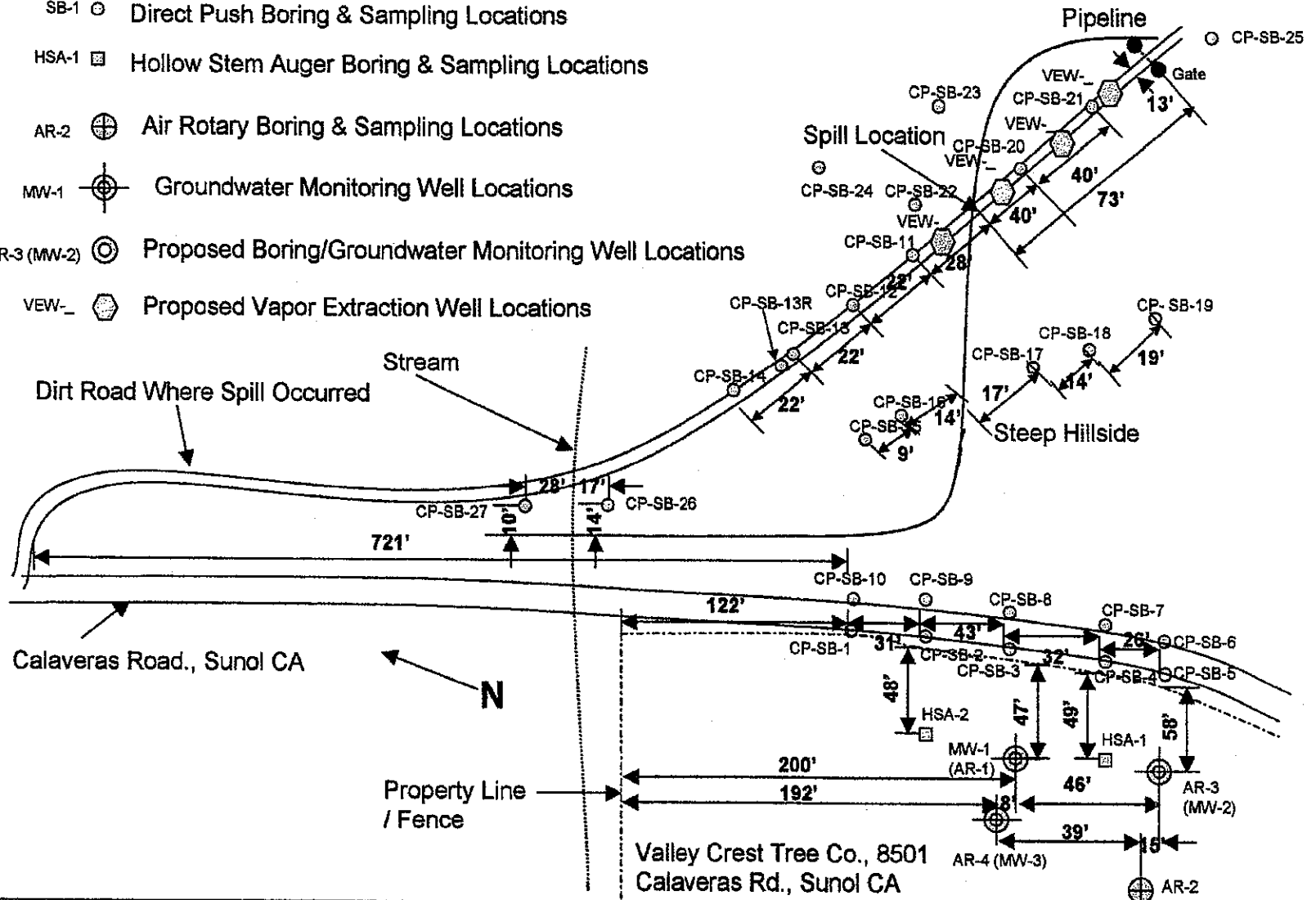
  
Jay R. Johnson  
Project Manager

Attachments    Figure 1        Site Plan – Boring and Proposed Well Locations  
                         Figure 2        Process Flow Diagram

cc: Ms. Angela Liang, URS Corporation Americas

**Explanation**

- SB-1 ○ Direct Push Boring & Sampling Locations
- HSA-1 □ Hollow Stem Auger Boring & Sampling Locations
- AR-2 ⊕ Air Rotary Boring & Sampling Locations
- MW-1 ⊕ Groundwater Monitoring Well Locations
- AR-3 (MW-2) ⊕ Proposed Boring/Groundwater Monitoring Well Locations
- VEW\_- ⊕ Proposed Vapor Extraction Well Locations

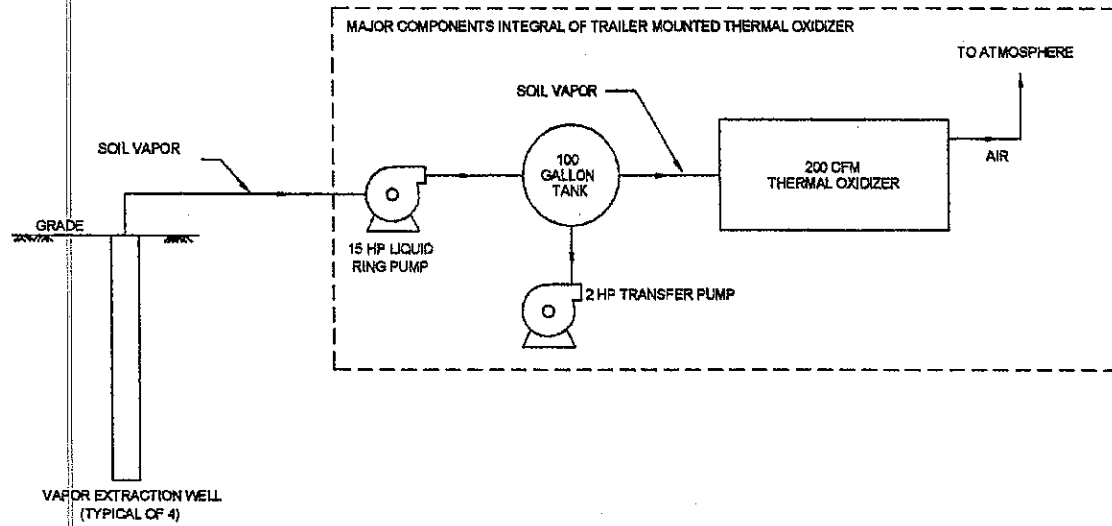


URS Corporation  
Oakland, CA

Not to Scale  
Revised 11/3/05

**Boring and Proposed Well Locations**  
Chevron Pipeline Company  
Sunol Pipeline Spill Area, Sunol, California

Figure 1



SOIL VAPOR EXTRACTION & ABATEMENT  
NOT TO SCALE

THIS IS A PROCESS FLOW DIAGRAM, THEREFORE INSTRUMENTATION AND CONTROL EQUIPMENT DETAILS ARE NOT SHOWN. INSTRUMENT FUNCTIONS AND INTERACTIONS ARE ALSO NOT SHOWN. EQUIPMENT SIZES ARE NOT PROPORTIONAL AND ARE NOT INDICATIVE OF FINAL SIZES.

**STRATUS**  
ENVIRONMENTAL, INC.

CHEVRON PIPELINE COMPANY  
SUNOL PIPELINE SPILL AREA  
SUNOL, CALIFORNIA  
PROCESS FLOW DIAGRAM

FIGURE  
**2**  
PROJECT NO.  
USUNOL



**Appendix C**  
**Notification Letter to BAAQMD**



**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

939 ELLIS STREET  
SAN FRANCISCO, CALIFORNIA 94109  
(415) 771-6000

**PERMIT  
TO OPERATE**

Plant# 17101

Page: 1

Expires: SEP 1, 2007

This document does not permit the holder to violate any District regulation or other law.

CBA Equipment, LLC  
24988 Blue Ravine, Ste 108 181  
Folsom, Ca 95630

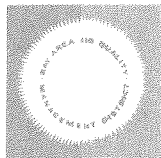
Location: 24988 Blue Ravine, Ste 108 181  
Folsom, Ca 95630

S#	DESCRIPTION	[Schedule]	PAID
1	CHEM> Contaminated soil remediation, Contaminated soil vapor Portable SVE System Abated by: A1 Afterburner	[G1, 382 days]	751

1 Permit Source, 0 Exempt Sources

\*\*\* See attached Permit Conditions \*\*\*

The operating parameters described above are based on information supplied by permit holder and may differ from the limits set forth in the attached conditions of the Permit to Operate. The limits of operation in the permit conditions are not to be exceeded. Exceeding these limits is considered a violation of District regulations subject to enforcement action.



**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

939 ELLIS STREET  
SAN FRANCISCO, CALIFORNIA 94109  
(415) 771-6000

**PERMIT  
TO OPERATE**

Plant# 17101

Page: 2

Expires: SEP 1, 2007

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\*\*\* PERMIT CONDITIONS \*\*\*

=====

CONDITION ID #22399

1. The operator of this source shall provide written notification to the Engineering Division at least 3 days prior to start-up of operation at any new location. The notification shall include:
  - a. Application Number (12773) and Plant Number (17101).
  - b. Street address, including zip code, for the location where the equipment will be operated.
  - c. The name and telephone number of a contact person where the equipment will be operated.
  - d. The date of initial start-up and estimated duration of operations at that location.
  - e. The distance from the source to the outer boundary of the nearest K-12 school, or indication that the distance is greater than 1500 feet.

In the event that the start-up is delayed less than 5 days, the operator may provide telephone notice of said change to the assigned Plant Engineer in the Engineering Division. If the start-up is delayed more than 5 days, written notification must be resubmitted.

2. This equipment shall not remain at any single location for a period in excess of 12 consecutive months, following the date of initial operation except as allowed under Section 2-1-220.10. If this portable equipment remains at any fixed location for more than 12 months, the portable permit will automatically revert to a conventional permanent location permit and will lose its portability. [basis: Reg. 2-1-220.2]
3. This portable equipment, S-1, shall operate at all times in conformance with the eligibility requirements set forth in Regulation 2-1-220 for portable equipment.



**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

939 ELLIS STREET  
SAN FRANCISCO, CALIFORNIA 94109  
(415) 771-6000

**PERMIT  
TO OPERATE**

Plant# 17101

Page: 3

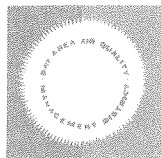
Expires: SEP 1, 2007

This document does not permit the holder to violate any District regulation or other law.

**\*\*\* PERMIT CONDITIONS \*\*\***

=====

4. This equipment is not to be operated within 1000 feet of the outer boundary of any K-12 school, unless the applicable requirements of the California Health and Safety Code Section 42301.6 have been met. This will require the submittal of an application for a revised permit to operate. [basis: Reg. 2-1-220.4]
5. This equipment shall be used exclusively for the removal of non-chlorinated volatile organic compounds associated with petroleum products from extracted soil vapor. This shall be demonstrated by onsite sampling required in condition 10 below. [basis: Health Risk Management Policy]
6. Precursor Organic Compound (POC) emissions from Source S-1 shall be abated by abatement device A-1, dual-mode thermal/catalytic oxidizer during all periods of operation. Soil vapor flow rate shall not exceed 200 scfm. [basis: Reg. 8-47-301.1,2]
7. The POC abatement efficiency of abatement device A-1 shall be maintained at a minimum of 98.5% by weight for inlet POC concentrations greater than or equal to 2000 ppmv (measured as C6). For inlet concentrations below 2000 ppmv and greater than or equal to 200 ppmv, a minimum abatement efficiency of 97% shall be maintained. For inlet concentrations below 200 ppmv, a minimum abatement efficiency of 90% shall be maintained. The minimum abatement efficiency shall be waived if outlet POC concentrations are shown to be less than 10 ppmv (measured as C6). In no event shall benzene emissions to the atmosphere exceed 0.250 pounds per day. Annual emissions of benzene shall not exceed 6.70 pounds per year. [basis: BACT; Health Risk Management Policy]
8. While operating as a Thermal Oxidizer, the minimum operating temperature of A-1 shall not be less than 1400 degrees Fahrenheit. While operating as a Catalytic Oxidizer, the minimum



**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

939 ELLIS STREET  
SAN FRANCISCO, CALIFORNIA 94109  
(415) 771-6000

**PERMIT  
TO OPERATE**

Plant# 17101

Page: 4

Expires: SEP 1, 2007

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\*\*\* PERMIT CONDITIONS \*\*\*

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operating temperature of A-1 shall not be less than 600 degrees Fahrenheit.

- 9. To determine compliance with Condition Number 8, the dual-mode thermal/catalytic oxidizer shall be equipped with continuous measuring and temperature recording instrumentation. The temperature data collected from the temperature recorder shall be maintained in a file which shall be available for District inspection for a period of at least 2 years following the date on which such data are recorded.
- 10. To determine compliance with Condition 7, within 24 hours after start-up of the catalytic oxidizer and within 24 hours after start-up of the thermal oxidizer at any new location, the operator of this source shall:
  - a. Analyze the inlet gas stream to determine the vapor flow rate and concentration of POC present.
  - b. Analyze exhaust gas to determine the flow rate, and the concentration of benzene and POC present.
  - c. Calculate the benzene emission rate in pounds per day based on the exhaust gas analysis and the operating exhaust flow rate. The soil vapor flow rate shall be decreased, if necessary, to demonstrate compliance with Condition 7.
  - d. Calculate the POC abatement efficiency based on the inlet and exhaust gas sampling analysis. For the purpose of determining compliance with condition 7, the POC concentration shall be reported as hexane.
  - e. Submit to the District's Engineering Division the test results and emission calculations within one month from the testing date. Samples shall be analyzed according to modified EPA test methods 8015 and 8021 or their equivalent to determine the concentrations of POC and benzene.
- 11. Within 30 days from the completion of each



**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

939 ELLIS STREET  
SAN FRANCISCO, CALIFORNIA 94109  
(415) 771-6000

**PERMIT  
TO OPERATE**

Plant# 17101

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Expires: SEP 1, 2007

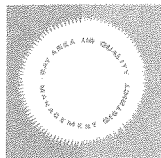
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\*\*\* PERMIT CONDITIONS \*\*\*

=====

treatment operation at a given location, the operator of this source shall provide the assigned Plant Engineer in the Engineering Division with a summary showing the following information:

- a. The dates and total number of days that the equipment was at that location and the dates, and total number of days that the equipment was operated at that location.
  - b. A summary of the abatement efficiency and benzene emission rate as determined and reported in the start-up sampling report required by condition 10e above.
  - c. The results of any additionally performed emission test, analysis, or monitoring result logged in for the day of operation they were taken.
  - d. The total throughput of contaminated soil vapor processed by S-1 at that location (indicated in cubic feet).
  - e. The total emissions of benzene at that location based on the sampling results required by condition 10 above. [basis: Reg. 1-523]
12. Within 30 days after the end of every calendar year, the operator of this source shall provide the assigned Plant Engineer in the Engineering Division a year end summary showing the following information:
- a. The location(s) at which the equipment was operated including the dates operated at each location.
  - b. The total throughput of contaminated soil vapor for the previous four quarters (indicated in cubic feet).
  - c. The total benzene emissions for the previous four quarters (indicated in pounds). [basis Reg. 1-523]
13. The operator shall maintain a file containing all measurements, records and other data that are required to be collected pursuant to the



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Plant# 17101

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Expires: SEP 1, 2007

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\*\*\* PERMIT CONDITIONS \*\*\*

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various provisions of this conditional Permit to Operate. All measurements, records and data required to be maintained by the operator shall be retained for at least two years following the date the data is recorded. [basis Reg. 1-523]

- 14. Any non-compliance with these conditions shall be reported to the Compliance and Enforcement Division at the time that it is first discovered. The submittal shall detail the corrective action taken and shall include the data showing the exceedance as well as the time of occurrence.

~~~~~ END OF CONDITIONS ~~~~~

---

| S#          | Source Description  | Annual Average lbs/day |      |     |     |    |
|-------------|---------------------|------------------------|------|-----|-----|----|
|             |                     | PART                   | ORG  | NOx | SO2 | CO |
| 1           | Portable SVE System | -                      | 1.23 | -   | -   | -  |
| T O T A L S |                     |                        | 1.23 |     |     |    |

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**Appendix D**  
**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 1015970. Samples arrived at the laboratory on Thursday, November 30, 2006. The PO# for this group is 0015010091 and the release number is COSGRAY.

| <u>Client Description</u> |          | <u>Lancaster Labs Number</u> |
|---------------------------|----------|------------------------------|
| SVE-1D                    | Grab Air | 4926265                      |
| SVE-2S                    | Grab Air | 4926266                      |
| SVE-3S                    | Grab Air | 4926267                      |
| SVE-4D                    | Grab Air | 4926268                      |
| SVE-5                     | Grab Air | 4926269                      |
| SVE-6                     | Grab Air | 4926270                      |
| SVE-7                     | Grab Air | 4926271                      |
| SVE-8                     | Grab Air | 4926272                      |
| SVE-9                     | Grab Air | 4926273                      |
| SVE-Influent              | Grab Air | 4926274                      |

|                    |     |                    |
|--------------------|-----|--------------------|
| ELECTRONIC COPY TO | URS | Attn: Angela Liang |
| ELECTRONIC COPY TO | URS | Attn: Joe Morgan   |
| ELECTRONIC COPY TO | URS | Attn: Greg White   |

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

Respectfully Submitted,



Michele J. Smith  
Group Leader

**Lancaster Laboratories Sample No. AQ 4926265**
**SVE-1D Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-1D**

Collected: 11/28/2006 16:56 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF  |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|-----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |     |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 2,000.                   | 1.0  | ppm(v) | 7,000.                   | 3.5  | mg/m3 | 1   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |     |
| 07238   | Benzene                     | 71-43-2    | 340.                     | 100. | ppb(v) | 1,100.                   | 320. | ug/m3 | 500 |
| 07250   | Toluene                     | 108-88-3   | 4,900.                   | 100. | ppb(v) | 18,000.                  | 380. | ug/m3 | 500 |
| 07261   | Ethylbenzene                | 100-41-4   | 380.                     | 100. | ppb(v) | 1,600.                   | 430. | ug/m3 | 500 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 3,800.                   | 100. | ppb(v) | 17,000.                  | 430. | ug/m3 | 500 |
| 07263   | o-Xylene                    | 95-47-6    | 1,500.                   | 100. | ppb(v) | 6,300.                   | 430. | ug/m3 | 500 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/01/2006 18:59       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/06/2006 00:32       | Gregory K Fisher | 500             |

**Lancaster Laboratories Sample No. AQ 4926266**
**SVE-2S Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-2S**

Collected: 11/28/2006 16:54 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |    |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 27.                      | 1.0 | ppm(v) | 95.                      | 3.5 | mg/m3 | 1  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |    |
| 07238   | Benzene                     | 71-43-2    | 78.                      | 10. | ppb(v) | 250.                     | 32. | ug/m3 | 50 |
| 07250   | Toluene                     | 108-88-3   | 2,200.                   | 10. | ppb(v) | 8,300.                   | 38. | ug/m3 | 50 |
| 07261   | Ethylbenzene                | 100-41-4   | 430.                     | 10. | ppb(v) | 1,900.                   | 43. | ug/m3 | 50 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 2,400.                   | 10. | ppb(v) | 11,000.                  | 43. | ug/m3 | 50 |
| 07263   | o-Xylene                    | 95-47-6    | 1,200.                   | 10. | ppb(v) | 5,100.                   | 43. | ug/m3 | 50 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/01/2006 19:30       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/06/2006 01:54       | Gregory K Fisher | 50              |

**Lancaster Laboratories Sample No. AQ 4926267**
**SVE-3S Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-3S**

Collected: 11/28/2006 16:52 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 3,100.                   | 10.    | ppm(v) | 11,000.                  | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 26,000.                  | 1,000. | ppb(v) | 83,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 340,000.                 | 1,000. | ppb(v) | 1,300,000.               | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 26,000.                  | 1,000. | ppb(v) | 110,000.                 | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 100,000.                 | 1,000. | ppb(v) | 440,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 35,000.                  | 1,000. | ppb(v) | 150,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis      |       | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|---------------|-------|------------------|-----------------|
|         |                             |                 |        | Date and Time |       |                  |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/04/2006    | 19:47 | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/06/2006    | 20:08 | Fanella S Zamcho | 5000            |

**Lancaster Laboratories Sample No. AQ 4926268**
**SVE-4D Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-4D**

Collected: 11/28/2006 16:50 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 5,100.                   | 10.    | ppm(v) | 18,000.                  | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 19,000.                  | 1,000. | ppb(v) | 62,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 140,000.                 | 1,000. | ppb(v) | 530,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 9,500.                   | 1,000. | ppb(v) | 41,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 90,000.                  | 1,000. | ppb(v) | 390,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 35,000.                  | 1,000. | ppb(v) | 150,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/04/2006 20:17       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/06/2006 04:39       | Gregory K Fisher | 5000            |

**Lancaster Laboratories Sample No. AQ 4926269**
**SVE-5 Grab Air URSO**  
**NA Sunol Pipeline SL0600100443 SVE-5**

Collected: 11/28/2006 16:48 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 12,000.                  | 10.    | ppm(v) | 42,000.                  | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 24,000.                  | 1,000. | ppb(v) | 77,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 120,000.                 | 1,000. | ppb(v) | 460,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 16,000.                  | 1,000. | ppb(v) | 71,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 150,000.                 | 1,000. | ppb(v) | 630,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 54,000.                  | 1,000. | ppb(v) | 230,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/04/2006 20:48       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/06/2006 06:08       | Gregory K Fisher | 5000            |



**Lancaster Laboratories Sample No. AQ 4926270**
**SVE-6 Grab Air URSO**  
**NA Sunol Pipeline SL0600100443 SVE-6**

Collected: 11/28/2006 16:42 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF    |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 3,500.                   | 10.    | ppm(v) | 12,000.                  | 35.    | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |       |
| 07238   | Benzene                     | 71-43-2    | 33,000.                  | 2,000. | ppb(v) | 100,000.                 | 6,400. | ug/m3 | 10000 |
| 07250   | Toluene                     | 108-88-3   | 160,000.                 | 2,000. | ppb(v) | 620,000.                 | 7,500. | ug/m3 | 10000 |
| 07261   | Ethylbenzene                | 100-41-4   | 5,300.                   | 2,000. | ppb(v) | 23,000.                  | 8,700. | ug/m3 | 10000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 34,000.                  | 2,000. | ppb(v) | 150,000.                 | 8,700. | ug/m3 | 10000 |
| 07263   | o-Xylene                    | 95-47-6    | 15,000.                  | 2,000. | ppb(v) | 67,000.                  | 8,700. | ug/m3 | 10000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/04/2006 21:18       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/06/2006 08:23       | Gregory K Fisher | 10000           |

**Lancaster Laboratories Sample No. AQ 4926271**
**SVE-7 Grab Air URSO**  
**NA**  
**Sunol Pipeline SL0600100443 SVE-7**

Collected: 11/28/2006 16:45 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL     | Units  | As Received Final Result | MDL     | Units | DF    |
|---------|-----------------------------|------------|--------------------------|---------|--------|--------------------------|---------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |         |        |                          |         |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 16,000.                  | 10.     | ppm(v) | 56,000.                  | 35.     | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |         |        |                          |         |       |       |
| 07238   | Benzene                     | 71-43-2    | 290,000.                 | 10,000. | ppb(v) | 940,000.                 | 32,000. | ug/m3 | 50000 |
| 07250   | Toluene                     | 108-88-3   | 1,900,000.               | 10,000. | ppb(v) | 7,300,000.               | 38,000. | ug/m3 | 50000 |
| 07261   | Ethylbenzene                | 100-41-4   | 91,000.                  | 10,000. | ppb(v) | 400,000.                 | 43,000. | ug/m3 | 50000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 280,000.                 | 10,000. | ppb(v) | 1,200,000.               | 43,000. | ug/m3 | 50000 |
| 07263   | o-Xylene                    | 95-47-6    | 69,000.                  | 10,000. | ppb(v) | 300,000.                 | 43,000. | ug/m3 | 50000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

State of California Lab Certification No. 2116

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MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/04/2006 21:48       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/06/2006 21:32       | Gregory K Fisher | 50000           |

**Lancaster Laboratories Sample No. AQ 4926272**
**SVE-8 Grab Air URSO**  
**NA Sunol Pipeline SL0600100443 SVE-8**

Collected: 11/28/2006 16:40 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF  |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|-----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |     |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 2,800.                   | 10.  | ppm(v) | 9,900.                   | 35.  | mg/m3 | 10  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |     |
| 07238   | Benzene                     | 71-43-2    | 3,600.                   | 100. | ppb(v) | 12,000.                  | 320. | ug/m3 | 500 |
| 07250   | Toluene                     | 108-88-3   | 30,000.                  | 100. | ppb(v) | 110,000.                 | 380. | ug/m3 | 500 |
| 07261   | Ethylbenzene                | 100-41-4   | 2,400.                   | 100. | ppb(v) | 10,000.                  | 430. | ug/m3 | 500 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 35,000.                  | 100. | ppb(v) | 150,000.                 | 430. | ug/m3 | 500 |
| 07263   | o-Xylene                    | 95-47-6    | 17,000.                  | 100. | ppb(v) | 72,000.                  | 430. | ug/m3 | 500 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/04/2006 22:19       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/06/2006 23:37       | Gregory K Fisher | 500             |

**Lancaster Laboratories Sample No. AQ 4926273**
**SVE-9 Grab Air URSO**  
**NA**  
**Sunol Pipeline SL0600100443 SVE-9**

Collected: 11/28/2006 16:35 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 3,600.                   | 10.    | ppm(v) | 13,000.                  | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 5,200.                   | 1,000. | ppb(v) | 16,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 110,000.                 | 1,000. | ppb(v) | 430,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 9,500.                   | 1,000. | ppb(v) | 41,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 200,000.                 | 1,000. | ppb(v) | 880,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 110,000.                 | 1,000. | ppb(v) | 460,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/04/2006 22:49       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/07/2006 00:18       | Gregory K Fisher | 5000            |

**Lancaster Laboratories Sample No. AQ 4926274**
**SVE-Influent Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-Inf**

Collected: 11/28/2006 17:00 by GW Account Number: 11875

 Submitted: 11/30/2006 09:05 Chevron Pipeline Co.  
 Reported: 12/10/2006 at 11:16 4800 Fournace Place - E320 D  
 Discard: 01/10/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 3,600.                   | 10.    | ppm(v) | 13,000.                  | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 32,000.                  | 1,000. | ppb(v) | 100,000.                 | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 280,000.                 | 1,000. | ppb(v) | 1,000,000.               | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 23,000.                  | 1,000. | ppb(v) | 100,000.                 | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 180,000.                 | 1,000. | ppb(v) | 760,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 82,000.                  | 1,000. | ppb(v) | 360,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis      |       | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|---------------|-------|------------------|-----------------|
|         |                             |                 |        | Date and Time |       |                  |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/04/2006    | 23:20 | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/07/2006    | 02:23 | Gregory K Fisher | 5000            |

## Quality Control Summary

 Client Name: Chevron Pipeline Co.  
 Reported: 12/10/06 at 11:16 AM

Group Number: 1015970

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: A0633930A     | Sample number(s): 4926265-4926266,4926268-4926270 |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                                              | 0.20             | ppb (v)             | 123             |                  | 75-138                 |            |                |
| Toluene                     | N.D.                                              | 0.20             | ppb (v)             | 111             |                  | 75-150                 |            |                |
| Ethylbenzene                | N.D.                                              | 0.20             | ppb (v)             | 106             |                  | 75-144                 |            |                |
| m/p-Xylene                  | N.D.                                              | 0.20             | ppb (v)             | 99              |                  | 74-145                 |            |                |
| o-Xylene                    | N.D.                                              | 0.20             | ppb (v)             | 103             |                  | 78-152                 |            |                |
| Batch number: A0633930B     | Sample number(s): 4926267,4926271-4926274         |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                                              | 0.20             | ppb (v)             | 123             |                  | 75-138                 |            |                |
| Toluene                     | N.D.                                              | 0.20             | ppb (v)             | 111             |                  | 75-150                 |            |                |
| Ethylbenzene                | N.D.                                              | 0.20             | ppb (v)             | 106             |                  | 75-144                 |            |                |
| m/p-Xylene                  | N.D.                                              | 0.20             | ppb (v)             | 99              |                  | 74-145                 |            |                |
| o-Xylene                    | N.D.                                              | 0.20             | ppb (v)             | 103             |                  | 78-152                 |            |                |
| Batch number: M063381ZA     | Sample number(s): 4926265-4926266                 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                                              | 1.0              | ppm (v)             |                 |                  |                        |            |                |
| Batch number: M063391ZA     | Sample number(s): 4926267-4926274                 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                                              | 1.0              | ppm (v)             |                 |                  |                        |            |                |

\*- Outside of specification

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

# Chevron California Region Analysis Request/Chain of Custody



61P # 1015970  
 For Lancaster Laboratories use only  
 242022  
 Acct. #: 11875 Sample #: 4926205-75 SCR#: \_\_\_\_\_

| Facility #:<br>Site Address: <u>Chevron Sunol Pipeline</u><br>Chevron PM: _____ Lead Consultant: _____<br>Consultant/Office: <u>URS - Oakland</u><br>Consultant Prj. Mgr.: <u>Joe Morgan</u><br>Consultant Phone #: <u>510-874-3201</u> Fax #: <u>510-874-3268</u><br>Sampler: <u>Greg White</u><br>Service Order #: _____ <input type="checkbox"/> Non SAR: _____ |        |               |           |      |       |     |                | Analyses Requested |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  | Preservative Codes |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|-----------|------|-------|-----|----------------|--------------------|------|-----------|----------------------------|-------------------------------------------------------------------------|------------------|--------------------------------------------------------------|----------------|------------|------------------------------------------------------------------|--------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                    |        |               |           |      |       |     |                | Preservation Codes |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  | Preservative Codes |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| Field Point Name                                                                                                                                                                                                                                                                                                                                                   | Matrix | Repeat Sample | Top Depth | Year | Month | Day | Time Collected | New Field Pt.      | Grab | Composite | Total Number of Containers | BTEX + MTBE 8260 <input type="checkbox"/> 8021 <input type="checkbox"/> | TPH 8015 MOD GRO | TPH 8015 MOD DRO <input type="checkbox"/> Silica Gel Cleanup | 8260 full scan | Oxygenates | Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/> | TO-14 BTEX         | TO-18 TPH-GRO | H = HCl      T = Thiosulfate<br>N = HNO <sub>3</sub> B = NaOH<br>S = H <sub>2</sub> SO <sub>4</sub> O = Other<br><br><input type="checkbox"/> J value reporting needed<br><input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds<br><br>8021 MTBE Confirmation<br><input type="checkbox"/> Confirm highest hit by 8260<br><input type="checkbox"/> Confirm all hits by 8260<br><input type="checkbox"/> Run ___ oxy's on highest hit<br><input type="checkbox"/> Run ___ oxy's on all hits |  |  |  |
| SVE-1D                                                                                                                                                                                                                                                                                                                                                             | A      |               |           | 11   | 2     | 06  | 1656           |                    | X    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  | X                  | X             | Comments / Remarks<br><br>Please Email Results to Joe Morgan, Angela Liang, Greg White of URS                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |
| SVE-2S                                                                                                                                                                                                                                                                                                                                                             |        |               |           |      |       |     | 1654           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-3S                                                                                                                                                                                                                                                                                                                                                             |        |               |           |      |       |     | 1652           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-4D                                                                                                                                                                                                                                                                                                                                                             |        |               |           |      |       |     | 1650           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-5                                                                                                                                                                                                                                                                                                                                                              |        |               |           |      |       |     | 1648           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-6                                                                                                                                                                                                                                                                                                                                                              |        |               |           |      |       |     | 1642           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-7                                                                                                                                                                                                                                                                                                                                                              |        |               |           |      |       |     | 1645           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-8                                                                                                                                                                                                                                                                                                                                                              |        |               |           |      |       |     | 1640           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-9                                                                                                                                                                                                                                                                                                                                                              |        |               |           |      |       |     | 1635           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-Influent                                                                                                                                                                                                                                                                                                                                                       |        |               |           |      |       |     | 1700           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-Effluent                                                                                                                                                                                                                                                                                                                                                       |        |               |           |      |       |     | 1630           |                    |      |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |

|                                                                                                                                                                                      |  |  |                                                                                 |  |                                                                                                           |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------|--|
| Turnaround Time Requested (TAT) (please circle)<br><b>STD. TAT</b> 72 hour      48 hour<br>24 hour      4 day      5 day                                                             |  |  | Relinquished by: <u>[Signature]</u><br>Date: <u>11/21/06</u> Time: <u>16:00</u> |  | Received by: _____<br>Date: _____ Time: _____                                                             |  |
| Data Package Options (please circle if required)<br>QC Summary      Type I - Full<br>Type VI (Raw Data) <input type="checkbox"/> Coelt Deliverable not needed<br>WIP (RWQCB)<br>Disk |  |  | Relinquished by Commercial Carrier:<br>UPS <b>FedEx</b> Other _____             |  | Received by: <u>Kathy Binkley</u><br>Date: <u>11-30-06</u> Time: <u>09:05</u>                             |  |
|                                                                                                                                                                                      |  |  | Temperature Upon Receipt: <b>N/A</b> °C                                         |  | Custody Seals Intact?      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <b>N/A</b> |  |

## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

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

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

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is <CRDL, but ≥IDL                                |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike amount not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | 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 1016570. Samples arrived at the laboratory on Tuesday, December 05, 2006. The PO# for this group is 0015010091 and the release number is COSGRAY.

| <u>Client Description</u> |          | <u>Lancaster Labs Number</u> |
|---------------------------|----------|------------------------------|
| SVE-1D                    | Grab Air | 4930057                      |
| SVE-2S                    | Grab Air | 4930058                      |
| SVE-3S                    | Grab Air | 4930059                      |
| SVE-4D                    | Grab Air | 4930060                      |
| SVE-5                     | Grab Air | 4930061                      |
| SVE-6                     | Grab Air | 4930062                      |
| SVE-7                     | Grab Air | 4930063                      |
| SVE-9                     | Grab Air | 4930064                      |
| SVE-Influent              | Grab Air | 4930065                      |

ELECTRONIC URS

Attn: Angela Liang

COPY TO

ELECTRONIC URS

Attn: Joe Morgan

COPY TO

ELECTRONIC URS

Attn: Greg White

COPY TO

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

Respectfully Submitted,



Michele J. Smith  
Group Leader

**Lancaster Laboratories Sample No. AQ 4930057**
**SVE-1D Grab Air URSO**  
**NA SLO600100443 SVE-1D**

Collected: 12/04/2006 09:24 by GW Account Number: 11875

 Submitted: 12/05/2006 10:10 Chevron Pipeline Co.  
 Reported: 12/15/2006 at 17:02 4800 Fournace Place - E320 D  
 Discard: 01/15/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF  |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|-----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |     |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 400.                     | 1.0  | ppm(v) | 1,400.                   | 3.5  | mg/m3 | 1   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |     |
| 07238   | Benzene                     | 71-43-2    | 190.                     | 100. | ppb(v) | 610.                     | 320. | ug/m3 | 500 |
| 07250   | Toluene                     | 108-88-3   | 3,800.                   | 100. | ppb(v) | 14,000.                  | 380. | ug/m3 | 500 |
| 07261   | Ethylbenzene                | 100-41-4   | 420.                     | 100. | ppb(v) | 1,800.                   | 430. | ug/m3 | 500 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 5,900.                   | 100. | ppb(v) | 26,000.                  | 430. | ug/m3 | 500 |
| 07263   | o-Xylene                    | 95-47-6    | 2,900.                   | 100. | ppb(v) | 12,000.                  | 430. | ug/m3 | 500 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/06/2006 13:49       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/11/2006 16:22       | Fanella S Zamcho | 500             |

**Lancaster Laboratories Sample No. AQ 4930058**
**SVE-2S Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-2S**

Collected: 12/04/2006 09:22 by GW Account Number: 11875

 Submitted: 12/05/2006 10:10 Chevron Pipeline Co.  
 Reported: 12/15/2006 at 17:02 4800 Fournace Place - E320 D  
 Discard: 01/15/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |    |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 17.                      | 1.0 | ppm(v) | 60.                      | 3.5 | mg/m3 | 1  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |    |
| 07238   | Benzene                     | 71-43-2    | 140.                     | 10. | ppb(v) | 440.                     | 32. | ug/m3 | 50 |
| 07250   | Toluene                     | 108-88-3   | 3,700.                   | 10. | ppb(v) | 14,000.                  | 38. | ug/m3 | 50 |
| 07261   | Ethylbenzene                | 100-41-4   | 710.                     | 10. | ppb(v) | 3,100.                   | 43. | ug/m3 | 50 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 3,400.                   | 10. | ppb(v) | 15,000.                  | 43. | ug/m3 | 50 |
| 07263   | o-Xylene                    | 95-47-6    | 1,900.                   | 10. | ppb(v) | 8,300.                   | 43. | ug/m3 | 50 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/06/2006 14:19       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/08/2006 22:27       | Fanella S Zamcho | 50              |

**Lancaster Laboratories Sample No. AQ 4930059**
**SVE-3S Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-3S**

Collected: 12/04/2006 09:20 by GW Account Number: 11875

 Submitted: 12/05/2006 10:10 Chevron Pipeline Co.  
 Reported: 12/15/2006 at 17:02 4800 Fournace Place - E320 D  
 Discard: 01/15/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL     | Units  | As Received Final Result | MDL     | Units | DF    |
|---------|-----------------------------|------------|--------------------------|---------|--------|--------------------------|---------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |         |        |                          |         |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 6,800.                   | 10.     | ppm(v) | 24,000.                  | 35.     | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |         |        |                          |         |       |       |
| 07238   | Benzene                     | 71-43-2    | 45,000.                  | 10,000. | ppb(v) | 140,000.                 | 32,000. | ug/m3 | 50000 |
| 07250   | Toluene                     | 108-88-3   | 460,000.                 | 10,000. | ppb(v) | 1,700,000.               | 38,000. | ug/m3 | 50000 |
| 07261   | Ethylbenzene                | 100-41-4   | 46,000.                  | 10,000. | ppb(v) | 200,000.                 | 43,000. | ug/m3 | 50000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 170,000.                 | 10,000. | ppb(v) | 720,000.                 | 43,000. | ug/m3 | 50000 |
| 07263   | o-Xylene                    | 95-47-6    | 58,000.                  | 10,000. | ppb(v) | 250,000.                 | 43,000. | ug/m3 | 50000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis         |  | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------|--|------------------|-----------------|
|         |                             |                 |        | Date and Time    |  |                  |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/07/2006 17:17 |  | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/08/2006 23:09 |  | Fanella S Zamcho | 50000           |

**Lancaster Laboratories Sample No. AQ 4930060**
**SVE-4D Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-4D**

Collected: 12/04/2006 09:18 by GW Account Number: 11875

 Submitted: 12/05/2006 10:10 Chevron Pipeline Co.  
 Reported: 12/15/2006 at 17:02 4800 Fournace Place - E320 D  
 Discard: 01/15/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF   |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 2,100.                   | 1.0  | ppm(v) | 7,400.                   | 3.5  | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |      |
| 07238   | Benzene                     | 71-43-2    | 8,600.                   | 200. | ppb(v) | 27,000.                  | 640. | ug/m3 | 1000 |
| 07250   | Toluene                     | 108-88-3   | 73,000.                  | 200. | ppb(v) | 270,000.                 | 750. | ug/m3 | 1000 |
| 07261   | Ethylbenzene                | 100-41-4   | 4,300.                   | 200. | ppb(v) | 18,000.                  | 870. | ug/m3 | 1000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 34,000.                  | 200. | ppb(v) | 150,000.                 | 870. | ug/m3 | 1000 |
| 07263   | o-Xylene                    | 95-47-6    | 15,000.                  | 200. | ppb(v) | 64,000.                  | 870. | ug/m3 | 1000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/06/2006 15:20       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/09/2006 01:13       | Fanella S Zamcho | 1000            |

**Lancaster Laboratories Sample No. AQ 4930061**
**SVE-5 Grab Air URSO**  
**NA SL0600100443 SVE-5**  
**Sunol Pipeline**

Collected: 12/04/2006 09:16 by GW Account Number: 11875

 Submitted: 12/05/2006 10:10 Chevron Pipeline Co.  
 Reported: 12/15/2006 at 17:02 4800 Fournace Place - E320 D  
 Discard: 01/15/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF    |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 3,500.                   | 10.    | ppm(v) | 12,000.                  | 35.    | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |       |
| 07238   | Benzene                     | 71-43-2    | 13,000.                  | 2,000. | ppb(v) | 40,000.                  | 6,400. | ug/m3 | 10000 |
| 07250   | Toluene                     | 108-88-3   | 150,000.                 | 2,000. | ppb(v) | 550,000.                 | 7,500. | ug/m3 | 10000 |
| 07261   | Ethylbenzene                | 100-41-4   | 9,100.                   | 2,000. | ppb(v) | 40,000.                  | 8,700. | ug/m3 | 10000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 72,000.                  | 2,000. | ppb(v) | 310,000.                 | 8,700. | ug/m3 | 10000 |
| 07263   | o-Xylene                    | 95-47-6    | 28,000.                  | 2,000. | ppb(v) | 120,000.                 | 8,700. | ug/m3 | 10000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/07/2006 18:07       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/09/2006 01:54       | Fanella S Zamcho | 10000           |

**Lancaster Laboratories Sample No. AQ 4930062**
**SVE-6 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-6**

Collected: 12/04/2006 09:06 by GW Account Number: 11875

 Submitted: 12/05/2006 10:10 Chevron Pipeline Co.  
 Reported: 12/15/2006 at 17:02 4800 Fournace Place - E320 D  
 Discard: 01/15/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 3,400.                   | 10.    | ppm(v) | 12,000.                  | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 44,000.                  | 1,000. | ppb(v) | 140,000.                 | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 400,000.                 | 1,000. | ppb(v) | 1,500,000.               | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 32,000.                  | 1,000. | ppb(v) | 140,000.                 | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 140,000.                 | 1,000. | ppb(v) | 630,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 69,000.                  | 1,000. | ppb(v) | 300,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis      |       | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|---------------|-------|------------------|-----------------|
|         |                             |                 |        | Date and Time |       |                  |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/07/2006    | 18:42 | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/09/2006    | 03:58 | Fanella S Zamcho | 5000            |



**Lancaster Laboratories Sample No. AQ 4930063**
**SVE-7 Grab Air URSO**  
**NA SLO600100443 SVE-7**  
**Sunol Pipeline**

Collected: 12/04/2006 09:04 by GW Account Number: 11875

 Submitted: 12/05/2006 10:10 Chevron Pipeline Co.  
 Reported: 12/15/2006 at 17:02 4800 Fournace Place - E320 D  
 Discard: 01/15/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL     | Units  | As Received Final Result | MDL     | Units | DF    |
|---------|-----------------------------|------------|--------------------------|---------|--------|--------------------------|---------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |         |        |                          |         |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 11,000.                  | 10.     | ppm(v) | 39,000.                  | 35.     | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |         |        |                          |         |       |       |
| 07238   | Benzene                     | 71-43-2    | 140,000.                 | 10,000. | ppb(v) | 450,000.                 | 32,000. | ug/m3 | 50000 |
| 07250   | Toluene                     | 108-88-3   | 2,300,000.               | 10,000. | ppb(v) | 8,600,000.               | 38,000. | ug/m3 | 50000 |
| 07261   | Ethylbenzene                | 100-41-4   | 140,000.                 | 10,000. | ppb(v) | 630,000.                 | 43,000. | ug/m3 | 50000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 520,000.                 | 10,000. | ppb(v) | 2,200,000.               | 43,000. | ug/m3 | 50000 |
| 07263   | o-Xylene                    | 95-47-6    | 150,000.                 | 10,000. | ppb(v) | 660,000.                 | 43,000. | ug/m3 | 50000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/07/2006 19:12       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/09/2006 04:39       | Fanella S Zamcho | 50000           |

**Lancaster Laboratories Sample No. AQ 4930064**
**SVE-9 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-9**

Collected: 12/04/2006 09:08 by GW Account Number: 11875

 Submitted: 12/05/2006 10:10 Chevron Pipeline Co.  
 Reported: 12/15/2006 at 17:03 4800 Fournace Place - E320 D  
 Discard: 01/15/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,900.                   | 1.0    | ppm(v) | 6,700.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 2,800.                   | 1,000. | ppb(v) | 8,800.                   | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 68,000.                  | 1,000. | ppb(v) | 260,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 7,200.                   | 1,000. | ppb(v) | 31,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 100,000.                 | 1,000. | ppb(v) | 440,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 58,000.                  | 1,000. | ppb(v) | 250,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/06/2006 17:22       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/09/2006 06:02       | Fanella S Zamcho | 5000            |

**Lancaster Laboratories Sample No. AQ 4930065**
**SVE-Influent Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-Inf**

Collected: 12/04/2006 09:30 by GW Account Number: 11875

 Submitted: 12/05/2006 10:10 Chevron Pipeline Co.  
 Reported: 12/15/2006 at 17:03 4800 Fournace Place - E320 D  
 Discard: 01/15/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF    |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 2,300.                   | 10.    | ppm(v) | 8,100.                   | 35.    | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |       |
| 07238   | Benzene                     | 71-43-2    | 15,000.                  | 2,000. | ppb(v) | 49,000.                  | 6,400. | ug/m3 | 10000 |
| 07250   | Toluene                     | 108-88-3   | 210,000.                 | 2,000. | ppb(v) | 810,000.                 | 7,500. | ug/m3 | 10000 |
| 07261   | Ethylbenzene                | 100-41-4   | 19,000.                  | 2,000. | ppb(v) | 82,000.                  | 8,700. | ug/m3 | 10000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 100,000.                 | 2,000. | ppb(v) | 450,000.                 | 8,700. | ug/m3 | 10000 |
| 07263   | o-Xylene                    | 95-47-6    | 48,000.                  | 2,000. | ppb(v) | 210,000.                 | 8,700. | ug/m3 | 10000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/07/2006 19:43       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/09/2006 07:24       | Fanella S Zamcho | 10000           |

## Quality Control Summary

Client Name: Chevron Pipeline Co.  
Reported: 12/15/06 at 05:03 PM

Group Number: 1016570

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: A0634230A     | Sample number(s): 4930058-4930065                   |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                                                | 0.20             | ppb (v)             | 92              | 91               | 75-138                 | 2          | 20             |
| Toluene                     | N.D.                                                | 0.20             | ppb (v)             | 107             | 105              | 75-150                 | 2          | 20             |
| Ethylbenzene                | N.D.                                                | 0.20             | ppb (v)             | 96              | 98               | 75-144                 | 2          | 20             |
| m/p-Xylene                  | N.D.                                                | 0.20             | ppb (v)             | 91              | 91               | 74-145                 | 0          | 20             |
| o-Xylene                    | N.D.                                                | 0.20             | ppb (v)             | 108             | 107              | 78-152                 | 2          | 20             |
| Batch number: A0634230B     | Sample number(s): 4930057                           |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                                                | 0.20             | ppb (v)             | 92              | 91               | 75-138                 | 2          | 20             |
| Toluene                     | N.D.                                                | 0.20             | ppb (v)             | 107             | 105              | 75-150                 | 2          | 20             |
| Ethylbenzene                | N.D.                                                | 0.20             | ppb (v)             | 96              | 98               | 75-144                 | 2          | 20             |
| m/p-Xylene                  | N.D.                                                | 0.20             | ppb (v)             | 91              | 91               | 74-145                 | 0          | 20             |
| o-Xylene                    | N.D.                                                | 0.20             | ppb (v)             | 108             | 107              | 78-152                 | 2          | 20             |
| Batch number: M063411ZA     | Sample number(s): 4930057-4930058, 4930060, 4930064 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                                                | 1.0              | ppm (v)             |                 |                  |                        |            |                |
| Batch number: M063421ZA     | Sample number(s): 4930059, 4930061-4930063, 4930065 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                                                | 1.0              | ppm (v)             |                 |                  |                        |            |                |

\*- Outside of specification

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

# Chevron Generic Analysis Request/Chain of Custody



004270

For Lancaster Laboratories use only  
Acct. #: 11875 Sample #: 4930057-65 SCR#:

1016570

Facility #: \_\_\_\_\_  
Site Address: Chevron Sunol Pipeline  
Chevron PM: \_\_\_\_\_ Lead Consultant: \_\_\_\_\_  
Consultant/Office: URS Oakland  
Consultant Prj. Mgr.: Joe Morgen  
Consultant Phone #: 510-874-3201 Fax #: 510-874-3268  
Sampler: Greg White  
Service Order #: \_\_\_\_\_  Non SAR:

Matrix  
 Potable Water  
 NPDES  
 Soil  
 Air

**Analyses Requested**

| Preservation Codes |  | Total Number of Containers | BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input type="checkbox"/> Naphth <input type="checkbox"/> | 8260 full scan | Oxygenates | TPH G | TPH D <input type="checkbox"/> Extended Ring<br><input type="checkbox"/> Silica Gel Cleanup | Lead Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method | VPH/EPH | NWT/PH H/CID <input type="checkbox"/> quantification | TO-14 BTEX | TO-18 TPH-GRO |
|--------------------|--|----------------------------|---------------------------------------------------------------------------------------------------------|----------------|------------|-------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------|------------------------------------------------------|------------|---------------|
|                    |  |                            |                                                                                                         |                |            |       |                                                                                             |                                                                           |         |                                                      |            |               |

**Preservative Codes**  
H = HCl      T = Thiosulfate  
N = HNO<sub>3</sub>    B = NaOH  
S = H<sub>2</sub>SO<sub>4</sub>    O = Other

- J value reporting needed
- Must meet lowest detection limits possible for 8260 compounds
- 8021 MTBE Confirmation
- Confirm MTBE + Naphthalene
- Confirm highest hit by 8260
- Confirm all hits by 8260
- Run \_\_\_ oxy's on highest hit
- Run \_\_\_ oxy's on all hits

| Sample Identification | Date Collected | Time Collected | Grab | Composite |
|-----------------------|----------------|----------------|------|-----------|
| SVE-1D                | 12/4/06        | 0924           | X    |           |
| SVE-2S                | ↓              | 0922           | ↓    |           |
| SVE-3S                | ↓              | 0920           | ↓    |           |
| SVE-4D                | ↓              | 0918           | ↓    |           |
| SVE-5                 | ↓              | 0916           | ↓    |           |
| SVE-6                 | ↓              | 0906           | ↓    |           |
| SVE-7                 | ↓              | 0904           | ↓    |           |
| SVE-9                 | ↓              | 0908           | ↓    |           |
| SVE-Influent          | ↓              | 0930           | ↓    |           |

**Comments / Remarks**  
Please Email Results to Joe Morgen, Angela Liang, Greg White of URS

**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)      Disk / EDD  
 WIP (RWQCB)      Standard Format  
 Disk      Other.

|                                                                                                    |                      |                   |                                 |                      |                                        |
|----------------------------------------------------------------------------------------------------|----------------------|-------------------|---------------------------------|----------------------|----------------------------------------|
| Relinquished by: <u>[Signature]</u>                                                                | Date: <u>12/4/06</u> | Time: <u>1200</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:<br>UPS <input checked="" type="radio"/> FedEx      Other _____ |                      |                   | Received by: <u>[Signature]</u> | Date: <u>12/5/06</u> | Time: <u>1010</u>                      |
| Temperature Upon Receipt: <u>N/A</u> °C                                                            |                      |                   | Custody Seals intact?           | Yes                  | No <input checked="" type="checkbox"/> |

## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

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

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

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is <CRDL, but ≥IDL                                |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike amount not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | 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 17605-2425**SAMPLE GROUP**

The sample group for this submittal is 1017511. Samples arrived at the laboratory on Saturday, December 09, 2006. The PO# for this group is 0015010091 and the release number is COSGRAY.

**Client Description**

SYS EFF            Grab    Air

**Lancaster Labs Number**

4935626

ELECTRONIC    URS

COPY TO

Attn: Angela Liang

ELECTRONIC    URS

COPY TO

Attn: Joe Morgan

ELECTRONIC    URS

COPY TO

Attn: Greg White

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

Respectfully Submitted,



Richard H. Karam  
Group Leader



Lancaster Laboratories Sample No. AQ 4935626

SYS EFF Grab Air  
 NA URSO  
 Sunol Pipeline SL0600100443 SYS EFF

Collected: 12/08/2006 08:00 by GW Account Number: 11875

Submitted: 12/09/2006 10:25 Chevron Pipeline Co.  
 Reported: 12/12/2006 at 16:30 4800 Fournace Place - E320 D  
 Discard: 01/12/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |    |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | N.D.                     | 1.0  | ppm(v) | N.D.                     | 3.5  | mg/m3 | 1  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |    |
| 07238   | Benzene                     | 71-43-2    | 0.52                     | 0.20 | ppb(v) | 1.7                      | 0.64 | ug/m3 | 1  |
| 07250   | Toluene                     | 108-88-3   | 4.7                      | 0.20 | ppb(v) | 18.                      | 0.75 | ug/m3 | 1  |
| 07261   | Ethylbenzene                | 100-41-4   | 0.39                     | 0.20 | ppb(v) | 1.7                      | 0.87 | ug/m3 | 1  |
| 07262   | m/p-Xylene                  | 1330-20-7  | 1.1                      | 0.20 | ppb(v) | 4.8                      | 0.87 | ug/m3 | 1  |
| 07263   | o-Xylene                    | 95-47-6    | 0.41                     | 0.20 | ppb(v) | 1.8                      | 0.87 | ug/m3 | 1  |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/10/2006 17:26       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/11/2006 12:30       | Fanella S Zamcho | 1               |

## Quality Control Summary

Client Name: Chevron Pipeline Co.  
Reported: 12/12/06 at 04:30 PM

Group Number: 1017511

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: A0634230A     | Sample number(s): 4935626 |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                      | 0.20             | ppb (v)             | 92              | 91               | 75-138                 | 2          | 20             |
| Toluene                     | N.D.                      | 0.20             | ppb (v)             | 107             | 105              | 75-150                 | 2          | 20             |
| Ethylbenzene                | N.D.                      | 0.20             | ppb (v)             | 96              | 98               | 75-144                 | 2          | 20             |
| m/p-Xylene                  | N.D.                      | 0.20             | ppb (v)             | 91              | 91               | 74-145                 | 0          | 20             |
| o-Xylene                    | N.D.                      | 0.20             | ppb (v)             | 108             | 107              | 78-152                 | 2          | 20             |
| Batch number: M063451ZA     | Sample number(s): 4935626 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                      | 1.0              | ppm(v)              |                 |                  |                        |            |                |

\*- Outside of specification

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

# Chevron Generic Analysis Request/Chain of Custody



004251

**\* URGENT \***

For Lancaster Laboratories use only  
 Acct. #: 11875 Sample #: 4935626 SCR#: \_\_\_\_\_

| Facility #: _____<br>Site Address: <u>Chevron Sunol Pipeline - Milpitas 27 Calaveras Rd</u><br>Chevron PM: _____ Lead Consultant: _____<br>Consultant/Office: <u>URS - Oakland</u><br>Consultant Prj. Mgr.: <u>Joe Morgan</u><br>Consultant Phone #: <u>510-874-3201</u> Fax #: <u>510-874-3247</u><br>Sampler: <u>G. White, J. Patsch, C. Hill</u><br>Service Order #: _____ <input type="checkbox"/> Non SAR: _____ |                          |                          |                          | <b>Matrix</b><br>Soil <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/><br>Water <input type="checkbox"/> Air <input checked="" type="checkbox"/> |                                                                                                    | <b>Analyses Requested</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="10">Preservation Codes</th> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td colspan="5">BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input type="checkbox"/> Naphth <input type="checkbox"/></td> <td colspan="5">8260 full scan <input type="checkbox"/></td> </tr> <tr> <td colspan="5">Oxygenates <input type="checkbox"/></td> <td colspan="5">TPH G <input type="checkbox"/></td> </tr> <tr> <td colspan="5">TPHD <input type="checkbox"/> Extended Ring <input type="checkbox"/> Silica Gel Cleanup <input type="checkbox"/></td> <td colspan="5">Lead Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method <input type="checkbox"/></td> </tr> <tr> <td colspan="5">VPH/EPH <input type="checkbox"/></td> <td colspan="5">NWT/PH H CID <input type="checkbox"/> quantification <input type="checkbox"/></td> </tr> <tr> <td colspan="5">TO-14 <input checked="" type="checkbox"/> BTEX</td> <td colspan="5">TO-18 <input checked="" type="checkbox"/> TPH-GRO</td> </tr> </table> |                          |                          |                                                                                                                                      |                            |                  |      |                |            |       | Preservation Codes |               |                    |            |       |        |         |              |                                     |                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                                                                                                                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input type="checkbox"/> Naphth <input type="checkbox"/> |  |  |  |  | 8260 full scan <input type="checkbox"/> |  |  |  |  | Oxygenates <input type="checkbox"/> |  |  |  |  | TPH G <input type="checkbox"/> |  |  |  |  | TPHD <input type="checkbox"/> Extended Ring <input type="checkbox"/> Silica Gel Cleanup <input type="checkbox"/> |  |  |  |  | Lead Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method <input type="checkbox"/> |  |  |  |  | VPH/EPH <input type="checkbox"/> |  |  |  |  | NWT/PH H CID <input type="checkbox"/> quantification <input type="checkbox"/> |  |  |  |  | TO-14 <input checked="" type="checkbox"/> BTEX |  |  |  |  | TO-18 <input checked="" type="checkbox"/> TPH-GRO |  |  |  |  | <b>Preservative Codes</b><br>H = HCl      T = Thiosulfate<br>N = HNO <sub>3</sub> B = NaOH<br>S = H <sub>2</sub> SO <sub>4</sub> O = Other<br><input type="checkbox"/> J value reporting needed<br><input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds<br>8021 MTBE Confirmation<br><input type="checkbox"/> Confirm MTBE + Naphthalene<br><input type="checkbox"/> Confirm highest hit by 8260<br><input type="checkbox"/> Confirm all hits by 8260<br><input type="checkbox"/> Run ___ oxy's on highest hit<br><input type="checkbox"/> Run ___ oxy's on all hits |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------|------|----------------|------------|-------|--------------------|---------------|--------------------|------------|-------|--------|---------|--------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------------------------|--|--|--|--|-----------------------------------------|--|--|--|--|-------------------------------------|--|--|--|--|--------------------------------|--|--|--|--|------------------------------------------------------------------------------------------------------------------|--|--|--|--|----------------------------------------------------------------------------------------------------|--|--|--|--|----------------------------------|--|--|--|--|-------------------------------------------------------------------------------|--|--|--|--|------------------------------------------------|--|--|--|--|---------------------------------------------------|--|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Preservation Codes                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                          |                                                                                                                                                                                          |                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                                                                                                                      |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                                                                                                                                                 | <input type="checkbox"/>                                                                           | <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                                                                                             |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input type="checkbox"/> Naphth <input type="checkbox"/>                                                                                                                                                                                                                                                                                                               |                          |                          |                          |                                                                                                                                                                                          | 8260 full scan <input type="checkbox"/>                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                                                                                                                      |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Oxygenates <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                          |                                                                                                                                                                                          | TPH G <input type="checkbox"/>                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                                                                                                                      |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| TPHD <input type="checkbox"/> Extended Ring <input type="checkbox"/> Silica Gel Cleanup <input type="checkbox"/>                                                                                                                                                                                                                                                                                                      |                          |                          |                          |                                                                                                                                                                                          | Lead Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method <input type="checkbox"/> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                                                                                                                      |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| VPH/EPH <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                      |                          |                          |                          |                                                                                                                                                                                          | NWT/PH H CID <input type="checkbox"/> quantification <input type="checkbox"/>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                                                                                                                      |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| TO-14 <input checked="" type="checkbox"/> BTEX                                                                                                                                                                                                                                                                                                                                                                        |                          |                          |                          |                                                                                                                                                                                          | TO-18 <input checked="" type="checkbox"/> TPH-GRO                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                                                                                                                      |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Sample Identification                                                                                                                                                                                                                                                                                                                                                                                                 |                          | Date Collected           | Time Collected           | Grab                                                                                                                                                                                     | Composite                                                                                          | Soil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Water                    | Oil                      | Air                                                                                                                                  | Total Number of Containers | BTEX + MTBE 8021 | 8260 | 8260 full scan | Oxygenates | TPH G | TPHD               | Extended Ring | Silica Gel Cleanup | Lead Total | Diss. | Method | VPH/EPH | NWT/PH H CID | quantification                      | TO-14                               | BTEX                     | TO-18                    | TPH-GRO                                                                                                                                                                 | Comments / Remarks       |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| <u>SYSEFF</u>                                                                                                                                                                                                                                                                                                                                                                                                         |                          | <u>12/8/06</u>           | <u>0800</u>              | <input checked="" type="checkbox"/>                                                                                                                                                      |                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          | <input checked="" type="checkbox"/>                                                                                                  | <u>2</u>                   |                  |      |                |            |       |                    |               |                    |            |       |        |         |              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                          |                          | * Need Results *<br>by<br>* Monday 12/11 *<br>Please Email Results to Greg White, Angela Liang, Joe Morgan (URS)<br>* Verbal Results to Greg White ASAP<br>847-409-7564 |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Turnaround Time Requested (TAT) (please circle)</b><br>STD. TAT      72 hour      48 hour<br><input checked="" type="checkbox"/> 24 hour <input checked="" type="checkbox"/> 0.5 TAT      4 day      5 day                                                                                                                                                                                                         |                          |                          |                          |                                                                                                                                                                                          |                                                                                                    | Relinquished by: <u>[Signature]</u><br>Date: <u>12/8/06</u> Time: <u>14:30</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                          | Received by: _____<br>Date: _____ Time: _____                                                                                        |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Data Package Options (please circle if required)</b><br>QC Summary      Type I - Full<br>Type VI (Raw Data)      Disk / EDD<br>WIP (RWQCB)      Standard Format<br>Disk      _____ Other.                                                                                                                                                                                                                          |                          |                          |                          |                                                                                                                                                                                          |                                                                                                    | Relinquished by: _____<br>Date: _____ Time: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                          | Received by: _____<br>Date: _____ Time: _____                                                                                        |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Relinquished by Commercial Carrier:<br>UPS <input checked="" type="checkbox"/> FedEx <input checked="" type="checkbox"/> Other _____                                                                                                                                                                                                                                                                                  |                          |                          |                          |                                                                                                                                                                                          |                                                                                                    | Received by: <u>[Signature]</u><br>Date: <u>12/4/06</u> Time: <u>1025</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                          | Temperature Upon Receipt: <u>N/A</u> °C<br>Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                            |                  |      |                |            |       |                    |               |                    |            |       |        |         |              |                                     |                                     |                          |                          |                                                                                                                                                                         |                          |                          |                          |                          |                          |                          |                          |                                                                                                         |  |  |  |  |                                         |  |  |  |  |                                     |  |  |  |  |                                |  |  |  |  |                                                                                                                  |  |  |  |  |                                                                                                    |  |  |  |  |                                  |  |  |  |  |                                                                               |  |  |  |  |                                                |  |  |  |  |                                                   |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |

91P 1017511

## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

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

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

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is <CRDL, but ≥IDL                                |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike amount not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | 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 1018928. Samples arrived at the laboratory on Wednesday, December 20, 2006. The PO# for this group is 0015010091 and the release number is COSGRAY.

| <u>Client Description</u> |      |     | <u>Lancaster Labs Number</u> |
|---------------------------|------|-----|------------------------------|
| SVE-1D                    | Grab | Air | 4944578                      |
| SVE-2S                    | Grab | Air | 4944579                      |
| SVE-3S                    | Grab | Air | 4944580                      |
| SVE-4D                    | Grab | Air | 4944581                      |
| SVE-5                     | Grab | Air | 4944582                      |
| SVE-6                     | Grab | Air | 4944583                      |
| SVE-7                     | Grab | Air | 4944584                      |
| SVE-9                     | Grab | Air | 4944585                      |
| SVE-Influent              | Grab | Air | 4944586                      |

|                    |     |                    |
|--------------------|-----|--------------------|
| ELECTRONIC COPY TO | URS | Attn: Angela Liang |
| ELECTRONIC COPY TO | URS | Attn: Joe Morgan   |
| ELECTRONIC COPY TO | URS | Attn: Greg White   |

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

Respectfully Submitted,



Richard H. Karam  
Group Leader

**Lancaster Laboratories Sample No. AQ 4944578**
**SVE-1D Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-1D**

Collected: 12/19/2006 09:16 by GW Account Number: 11875

 Submitted: 12/20/2006 10:10 Chevron Pipeline Co.  
 Reported: 01/21/2007 at 14:30 4800 Fournace Place - E320 D  
 Discard: 02/21/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |    |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 100.                     | 1.0 | ppm(v) | 350.                     | 3.5 | mg/m3 | 1  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |    |
| 07238   | Benzene                     | 71-43-2    | 79.                      | 10. | ppb(v) | 250.                     | 32. | ug/m3 | 50 |
| 07250   | Toluene                     | 108-88-3   | 1,100.                   | 10. | ppb(v) | 4,300.                   | 38. | ug/m3 | 50 |
| 07261   | Ethylbenzene                | 100-41-4   | 260.                     | 10. | ppb(v) | 1,100.                   | 43. | ug/m3 | 50 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 1,900.                   | 10. | ppb(v) | 8,400.                   | 43. | ug/m3 | 50 |
| 07263   | o-Xylene                    | 95-47-6    | 1,200.                   | 10. | ppb(v) | 5,300.                   | 43. | ug/m3 | 50 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/22/2006 14:55       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/23/2006 20:55       | Gregory K Fisher | 50              |

**Lancaster Laboratories Sample No. AQ 4944579**
**SVE-2S Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-2S**

Collected: 12/19/2006 09:14 by GW Account Number: 11875

 Submitted: 12/20/2006 10:10 Chevron Pipeline Co.  
 Reported: 01/21/2007 at 14:30 4800 Fournace Place - E320 D  
 Discard: 02/21/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |    |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 14.                      | 1.0 | ppm(v) | 49.                      | 3.5 | mg/m3 | 1  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |    |
| 07238   | Benzene                     | 71-43-2    | 92.                      | 10. | ppb(v) | 290.                     | 32. | ug/m3 | 50 |
| 07250   | Toluene                     | 108-88-3   | 2,300.                   | 10. | ppb(v) | 8,700.                   | 38. | ug/m3 | 50 |
| 07261   | Ethylbenzene                | 100-41-4   | 550.                     | 10. | ppb(v) | 2,400.                   | 43. | ug/m3 | 50 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 2,700.                   | 10. | ppb(v) | 12,000.                  | 43. | ug/m3 | 50 |
| 07263   | o-Xylene                    | 95-47-6    | 1,200.                   | 10. | ppb(v) | 5,200.                   | 43. | ug/m3 | 50 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/22/2006 15:26       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/23/2006 21:37       | Gregory K Fisher | 50              |



**Lancaster Laboratories Sample No. AQ 4944580**
**SVE-3S Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-3S**

Collected: 12/19/2006 09:12 by GW Account Number: 11875

 Submitted: 12/20/2006 10:10 Chevron Pipeline Co.  
 Reported: 01/21/2007 at 14:31 4800 Fournace Place - E320 D  
 Discard: 02/21/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF    |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 3,700.                   | 10.    | ppm(v) | 13,000.                  | 35.    | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |       |
| 07238   | Benzene                     | 71-43-2    | 48,000.                  | 2,000. | ppb(v) | 150,000.                 | 6,400. | ug/m3 | 10000 |
| 07250   | Toluene                     | 108-88-3   | 390,000.                 | 2,000. | ppb(v) | 1,500,000.               | 7,500. | ug/m3 | 10000 |
| 07261   | Ethylbenzene                | 100-41-4   | 33,000.                  | 2,000. | ppb(v) | 140,000.                 | 8,700. | ug/m3 | 10000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 130,000.                 | 2,000. | ppb(v) | 550,000.                 | 8,700. | ug/m3 | 10000 |
| 07263   | o-Xylene                    | 95-47-6    | 42,000.                  | 2,000. | ppb(v) | 180,000.                 | 8,700. | ug/m3 | 10000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis         |  | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------|--|------------------|-----------------|
|         |                             |                 |        | Date and Time    |  |                  |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/19/2007 08:26 |  | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/23/2006 23:00 |  | Gregory K Fisher | 10000           |

**Lancaster Laboratories Sample No. AQ 4944581**
**SVE-4D Grab Air URSO**  
**NA SLO600100443 SVE-4D**

Collected: 12/19/2006 09:10 by GW Account Number: 11875

 Submitted: 12/20/2006 10:10 Chevron Pipeline Co.  
 Reported: 01/21/2007 at 14:31 4800 Fournace Place - E320 D  
 Discard: 02/21/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 2,000.                   | 1.0    | ppm(v) | 7,000.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 18,000.                  | 1,000. | ppb(v) | 56,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 220,000.                 | 1,000. | ppb(v) | 820,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 22,000.                  | 1,000. | ppb(v) | 95,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 92,000.                  | 1,000. | ppb(v) | 400,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 38,000.                  | 1,000. | ppb(v) | 170,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/22/2006 16:26       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/24/2006 00:22       | Gregory K Fisher | 5000            |

**Lancaster Laboratories Sample No. AQ 4944582**
**SVE-5 Grab Air URSO**  
**NA Sunol Pipeline SL0600100443 SVE-5**

Collected: 12/19/2006 09:08 by GW Account Number: 11875

 Submitted: 12/20/2006 10:10 Chevron Pipeline Co.  
 Reported: 01/21/2007 at 14:31 4800 Fournace Place - E320 D  
 Discard: 02/21/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,100.                   | 1.0  | ppm(v) | 3,900.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 8,700.                   | 500. | ppb(v) | 28,000.                  | 1,600. | ug/m3 | 2500 |
| 07250   | Toluene                     | 108-88-3   | 120,000.                 | 500. | ppb(v) | 440,000.                 | 1,900. | ug/m3 | 2500 |
| 07261   | Ethylbenzene                | 100-41-4   | 9,100.                   | 500. | ppb(v) | 39,000.                  | 2,200. | ug/m3 | 2500 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 34,000.                  | 500. | ppb(v) | 150,000.                 | 2,200. | ug/m3 | 2500 |
| 07263   | o-Xylene                    | 95-47-6    | 9,500.                   | 500. | ppb(v) | 41,000.                  | 2,200. | ug/m3 | 2500 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/22/2006 16:57       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/24/2006 01:45       | Gregory K Fisher | 2500            |

**Lancaster Laboratories Sample No. AQ 4944583**
**SVE-6 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-6**

Collected: 12/19/2006 08:58 by GW Account Number: 11875

 Submitted: 12/20/2006 10:10 Chevron Pipeline Co.  
 Reported: 01/21/2007 at 14:31 4800 Fournace Place - E320 D  
 Discard: 02/21/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 560.                     | 10.    | ppm(v) | 2,000.                   | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 7,000.                   | 1,000. | ppb(v) | 22,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 210,000.                 | 1,000. | ppb(v) | 790,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 26,000.                  | 1,000. | ppb(v) | 110,000.                 | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 330,000.                 | 1,000. | ppb(v) | 1,400,000.               | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 170,000.                 | 1,000. | ppb(v) | 750,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis         |  | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------|--|------------------|-----------------|
|         |                             |                 |        | Date and Time    |  |                  |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/19/2007 08:56 |  | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/24/2006 03:08 |  | Gregory K Fisher | 5000            |

**Lancaster Laboratories Sample No. AQ 4944584**
**SVE-7 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-7**

Collected: 12/19/2006 08:56 by GW Account Number: 11875

 Submitted: 12/20/2006 10:10 Chevron Pipeline Co.  
 Reported: 01/21/2007 at 14:31 4800 Fournace Place - E320 D  
 Discard: 02/21/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF    |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 4,100.                   | 10.    | ppm(v) | 14,000.                  | 35.    | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |       |
| 07238   | Benzene                     | 71-43-2    | 24,000.                  | 2,000. | ppb(v) | 77,000.                  | 6,400. | ug/m3 | 10000 |
| 07250   | Toluene                     | 108-88-3   | 330,000.                 | 2,000. | ppb(v) | 1,200,000.               | 7,500. | ug/m3 | 10000 |
| 07261   | Ethylbenzene                | 100-41-4   | 33,000.                  | 2,000. | ppb(v) | 140,000.                 | 8,700. | ug/m3 | 10000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 160,000.                 | 2,000. | ppb(v) | 690,000.                 | 8,700. | ug/m3 | 10000 |
| 07263   | o-Xylene                    | 95-47-6    | 57,000.                  | 2,000. | ppb(v) | 250,000.                 | 8,700. | ug/m3 | 10000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis         |  | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------|--|------------------|-----------------|
|         |                             |                 |        | Date and Time    |  |                  |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/19/2007 09:27 |  | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 12/24/2006 04:31 |  | Gregory K Fisher | 10000           |

**Lancaster Laboratories Sample No. AQ 4944585**
**SVE-9 Grab Air URSO**  
**NA SL0600100443 SVE-9**  
**Sunol Pipeline**

Collected: 12/19/2006 09:00 by GW Account Number: 11875

 Submitted: 12/20/2006 10:10 Chevron Pipeline Co.  
 Reported: 01/21/2007 at 14:31 4800 Fournace Place - E320 D  
 Discard: 02/21/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF   |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 590.                     | 1.0  | ppm(v) | 2,100.                   | 3.5  | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |      |
| 07238   | Benzene                     | 71-43-2    | 1,400.                   | 200. | ppb(v) | 4,500.                   | 640. | ug/m3 | 1000 |
| 07250   | Toluene                     | 108-88-3   | 29,000.                  | 200. | ppb(v) | 110,000.                 | 750. | ug/m3 | 1000 |
| 07261   | Ethylbenzene                | 100-41-4   | 3,500.                   | 200. | ppb(v) | 15,000.                  | 870. | ug/m3 | 1000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 43,000.                  | 200. | ppb(v) | 190,000.                 | 870. | ug/m3 | 1000 |
| 07263   | o-Xylene                    | 95-47-6    | 22,000.                  | 200. | ppb(v) | 96,000.                  | 870. | ug/m3 | 1000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

## Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/22/2006 18:28       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/02/2007 15:34       | Fanella S Zamcho | 1000            |

**Lancaster Laboratories Sample No. AQ 4944586**
**SVE-Influent Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-Inf**

Collected: 12/19/2006 14:00 by GW Account Number: 11875

 Submitted: 12/20/2006 10:10 Chevron Pipeline Co.  
 Reported: 01/21/2007 at 14:31 4800 Fournace Place - E320 D  
 Discard: 02/21/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,900.                   | 1.0    | ppm(v) | 6,700.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 12,000.                  | 1,000. | ppb(v) | 40,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 130,000.                 | 1,000. | ppb(v) | 490,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 13,000.                  | 1,000. | ppb(v) | 56,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 56,000.                  | 1,000. | ppb(v) | 240,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 20,000.                  | 1,000. | ppb(v) | 89,000.                  | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 12/22/2006 18:58       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/02/2007 16:57       | Fanella S Zamcho | 5000            |

## Quality Control Summary

 Client Name: Chevron Pipeline Co.  
 Reported: 01/21/07 at 02:31 PM

Group Number: 1018928

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: A0635630B     | Sample number(s): 4944578-4944584                                   |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                                                                | 0.20             | ppb (v)             | 102             | 100              | 75-138                 | 2          | 20             |
| Toluene                     | N.D.                                                                | 0.20             | ppb (v)             | 124             | 115              | 75-150                 | 7          | 20             |
| Ethylbenzene                | N.D.                                                                | 0.20             | ppb (v)             | 114             | 106              | 75-144                 | 8          | 20             |
| m/p-Xylene                  | N.D.                                                                | 0.20             | ppb (v)             | 119             | 111              | 74-145                 | 7          | 20             |
| o-Xylene                    | N.D.                                                                | 0.20             | ppb (v)             | 120             | 116              | 78-152                 | 3          | 20             |
| Batch number: A0635630C     | Sample number(s): 4944585-4944586                                   |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                                                                | 0.20             | ppb (v)             | 102             | 100              | 75-138                 | 2          | 20             |
| Toluene                     | N.D.                                                                | 0.20             | ppb (v)             | 124             | 115              | 75-150                 | 7          | 20             |
| Ethylbenzene                | N.D.                                                                | 0.20             | ppb (v)             | 114             | 106              | 75-144                 | 8          | 20             |
| m/p-Xylene                  | N.D.                                                                | 0.20             | ppb (v)             | 119             | 111              | 74-145                 | 7          | 20             |
| o-Xylene                    | N.D.                                                                | 0.20             | ppb (v)             | 120             | 116              | 78-152                 | 3          | 20             |
| Batch number: M070031ZA     | Sample number(s): 4944578-4944579, 4944581-4944582, 4944585-4944586 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                                                                | 1.0              | ppm (v)             |                 |                  |                        |            |                |
| Batch number: M070191ZA     | Sample number(s): 4944580, 4944583-4944584                          |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                                                                | 1.0              | ppm (v)             |                 |                  |                        |            |                |

\*- Outside of specification

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



# Chevron California Region Analysis Request/Chain of Custody



Grp # 1018928  
 For Lancaster Laboratories use only  
 242025  
 Acct. #: 11875 Sample #: 4944578-86 SCR#:

| Facility #: _____<br>Site Address: <u>Chevron Sunol Pipeline</u><br>Chevron PM: _____ Lead Consultant: _____<br>Consultant/Office: <u>URS - Oakland</u><br>Consultant Prj. Mgr.: <u>Joe Morgan</u><br>Consultant Phone #: <u>510-874-3201</u> Fax #: <u>510-874-3268</u><br>Sampler: <u>Greg White</u><br>Service Order #: _____ <input type="checkbox"/> Non SAR: _____ |        |                  |                    |                |                |               | <b>Analyses Requested</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           |                            |             |         |                                                 |              |                                                   |                  |                                               | <b>Preservative Codes</b><br>H = HCl      T = Thiosulfate<br>N = HNO <sub>3</sub> B = NaOH<br>S = H <sub>2</sub> SO <sub>4</sub> O = Other |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------|--------------------|----------------|----------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------|-------------|---------|-------------------------------------------------|--------------|---------------------------------------------------|------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|------|-------|------|-------|---------|-----------------------------------------------------------------------------|--|-------------|------|------|--|--|--|--|--|--|--|--|--------------|-----|------------------|--------------------|----------------|------------|-----------|------|-------|------|-------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                                                                                                                                                                                                                                                                                          |        |                  |                    |                |                |               | <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th colspan="10">Preservation Codes</th> </tr> <tr> <td style="width: 5%;">BTEX + MTBE</td> <td style="width: 5%;">8260</td> <td style="width: 5%;">8021</td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> <tr> <td>TPH 8015 MOD</td> <td>GRO</td> <td>TPH 8015 MOD DRO</td> <td>Silica Gel Cleanup</td> <td>8260 full scan</td> <td>Oxygenates</td> <td>Lead 7420</td> <td>7421</td> <td>TO-14</td> <td>BTEX</td> <td>TO-18</td> <td>TPH-GRO</td> </tr> </table> |           |                            |             |         |                                                 |              |                                                   |                  |                                               | Preservation Codes                                                                                                                         |            |           |      |       |      |       |         |                                                                             |  | BTEX + MTBE | 8260 | 8021 |  |  |  |  |  |  |  |  | TPH 8015 MOD | GRO | TPH 8015 MOD DRO | Silica Gel Cleanup | 8260 full scan | Oxygenates | Lead 7420 | 7421 | TO-14 | BTEX | TO-18 | TPH-GRO | <input type="checkbox"/> J value reporting needed<br><input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds<br>8021 MTBE Confirmation<br><input type="checkbox"/> Confirm highest hit by 8260<br><input type="checkbox"/> Confirm all hits by 8260<br><input type="checkbox"/> Run ___ oxy's on highest hit<br><input type="checkbox"/> Run ___ oxy's on all hits |  |
| Preservation Codes                                                                                                                                                                                                                                                                                                                                                       |        |                  |                    |                |                |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| BTEX + MTBE                                                                                                                                                                                                                                                                                                                                                              | 8260   | 8021             |                    |                |                |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| TPH 8015 MOD                                                                                                                                                                                                                                                                                                                                                             | GRO    | TPH 8015 MOD DRO | Silica Gel Cleanup | 8260 full scan | Oxygenates     | Lead 7420     | 7421                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | TO-14     | BTEX                       | TO-18       | TPH-GRO |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Field Point Name                                                                                                                                                                                                                                                                                                                                                         | Matrix | Repeat Sample    | Top Depth          | Year Month Day | Time Collected | New Field Pt. | Grab                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Composite | Total Number of Containers | BTEX + MTBE | 8260    | 8021                                            | TPH 8015 MOD | GRO                                               | TPH 8015 MOD DRO | Silica Gel Cleanup                            | 8260 full scan                                                                                                                             | Oxygenates | Lead 7420 | 7421 | TO-14 | BTEX | TO-18 | TPH-GRO | Comments / Remarks                                                          |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| SVE-1D                                                                                                                                                                                                                                                                                                                                                                   | A      |                  |                    | 12/19/06       | 0916           |               | X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         | Email Results to<br>Joe Morgan,<br>Angela Liang,<br>Greg White<br>of<br>URS |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| SVE-2S                                                                                                                                                                                                                                                                                                                                                                   |        |                  |                    |                | 0914           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| SVE-3S                                                                                                                                                                                                                                                                                                                                                                   |        |                  |                    |                | 0912           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| SVE-4D                                                                                                                                                                                                                                                                                                                                                                   |        |                  |                    |                | 0910           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| SVE-5                                                                                                                                                                                                                                                                                                                                                                    |        |                  |                    |                | 0908           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| SVE-6                                                                                                                                                                                                                                                                                                                                                                    |        |                  |                    |                | 0858           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| SVE-7                                                                                                                                                                                                                                                                                                                                                                    |        |                  |                    |                | 0856           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| SVE-8 SVE-9<br>SVE- Influent                                                                                                                                                                                                                                                                                                                                             |        |                  |                    |                | 0900<br>1400   |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                            |             |         |                                                 |              |                                                   |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <b>Turnaround Time Requested (TAT) (please circle)</b><br>(STD. TAT)      72 hour      48 hour<br>24 hour          4 day          5 day                                                                                                                                                                                                                                  |        |                  |                    |                |                |               | Relinquished by: <u>[Signature]</u><br>Date: <u>12/19/06</u> Time: <u>1500</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |                            |             |         | Received by: _____<br>Date: _____ Time: _____   |              | Relinquished by: _____<br>Date: _____ Time: _____ |                  | Received by: _____<br>Date: _____ Time: _____ |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <b>Data Package Options (please circle if required)</b><br>QC Summary      Type I - Full<br>Type VI (Raw Data) <input type="checkbox"/> Coelt Deliverable not needed<br>WIP (RWQCB)<br>Disk                                                                                                                                                                              |        |                  |                    |                |                |               | Relinquished by: _____<br>Date: _____ Time: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |                            |             |         | Received by: _____<br>Date: _____ Time: _____   |              | Relinquished by: _____<br>Date: _____ Time: _____ |                  | Received by: _____<br>Date: _____ Time: _____ |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Relinquished by: _____<br>UPS      (FedEx)      Other _____<br>Temperature Upon Receipt: <u>N/A</u> °C                                                                                                                                                                                                                                                                   |        |                  |                    |                |                |               | Received by: <u>[Signature]</u><br>Date: <u>12/20/06</u> Time: <u>1010</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |                            |             |         | Custody Seals Intact?    Yes    No <u>(N/A)</u> |              | _____<br>Date: _____ Time: _____                  |                  |                                               |                                                                                                                                            |            |           |      |       |      |       |         |                                                                             |  |             |      |      |  |  |  |  |  |  |  |  |              |     |                  |                    |                |            |           |      |       |      |       |         |                                                                                                                                                                                                                                                                                                                                                                                                   |  |

## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

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

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

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is <CRDL, but ≥IDL                                |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike amount not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | 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 17605-2425

## SAMPLE GROUP

The sample group for this submittal is 1020368. Samples arrived at the laboratory on Friday, January 05, 2007. The PO# for this group is 0015010091 and the release number is COSGRAY.

| <u>Client Description</u> |      |     | <u>Lancaster Labs Number</u> |
|---------------------------|------|-----|------------------------------|
| SVE-Influent              | Grab | Air | 4952547                      |
| SVE-Effluent              | Grab | Air | 4952548                      |
| SVE-1D                    | Grab | Air | 4952549                      |
| SVE-2S                    | Grab | Air | 4952550                      |
| SVE-3S                    | Grab | Air | 4952551                      |
| SVE-4D                    | Grab | Air | 4952552                      |
| SVE-5                     | Grab | Air | 4952553                      |
| SVE-6                     | Grab | Air | 4952554                      |
| SVE-7                     | Grab | Air | 4952555                      |
| SVE-9                     | Grab | Air | 4952556                      |

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Attn: Angela Liang

Attn: Joe Morgan

Attn: Greg White

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

Respectfully Submitted,



Michele J. Smith  
Group Leader

**Lancaster Laboratories Sample No. AQ 4952547**
**SVE-Influent Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-Inf**

Collected: 01/04/2007 09:50 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,000.                   | 1.0    | ppm(v) | 3,500.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 6,700.                   | 1,000. | ppb(v) | 21,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 78,000.                  | 1,000. | ppb(v) | 300,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 7,900.                   | 1,000. | ppb(v) | 34,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 38,000.                  | 1,000. | ppb(v) | 160,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 14,000.                  | 1,000. | ppb(v) | 61,000.                  | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/05/2007 20:11       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/16/2007 16:18       | Fanella S Zamcho | 5000            |

**Lancaster Laboratories Sample No. AQ 4952548**
**SVE-Effluent Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-Eff**

Collected: 01/04/2007 09:52 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |    |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 11.                      | 1.0  | ppm(v) | 39.                      | 3.5  | mg/m3 | 1  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |    |
| 07238   | Benzene                     | 71-43-2    | 2.0                      | 0.20 | ppb(v) | 6.5                      | 0.64 | ug/m3 | 1  |
| 07250   | Toluene                     | 108-88-3   | 9.5                      | 0.20 | ppb(v) | 36.                      | 0.75 | ug/m3 | 1  |
| 07261   | Ethylbenzene                | 100-41-4   | 0.65                     | 0.20 | ppb(v) | 2.8                      | 0.87 | ug/m3 | 1  |
| 07262   | m/p-Xylene                  | 1330-20-7  | 2.3                      | 0.20 | ppb(v) | 10.0                     | 0.87 | ug/m3 | 1  |
| 07263   | o-Xylene                    | 95-47-6    | 0.67                     | 0.20 | ppb(v) | 2.9                      | 0.87 | ug/m3 | 1  |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/05/2007 20:42       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/18/2007 17:31       | Fanella S Zamcho | 1               |

**Lancaster Laboratories Sample No. AQ 4952549**
**SVE-1D Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-1D**

Collected: 01/04/2007 09:44 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |    |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 42.                      | 1.0 | ppm(v) | 150.                     | 3.5 | mg/m3 | 1  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |    |
| 07238   | Benzene                     | 71-43-2    | 57.                      | 5.0 | ppb(v) | 180.                     | 16. | ug/m3 | 25 |
| 07250   | Toluene                     | 108-88-3   | 490.                     | 5.0 | ppb(v) | 1,800.                   | 19. | ug/m3 | 25 |
| 07261   | Ethylbenzene                | 100-41-4   | 67.                      | 5.0 | ppb(v) | 290.                     | 22. | ug/m3 | 25 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 380.                     | 5.0 | ppb(v) | 1,600.                   | 22. | ug/m3 | 25 |
| 07263   | o-Xylene                    | 95-47-6    | 230.                     | 5.0 | ppb(v) | 1,000.                   | 22. | ug/m3 | 25 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|-----------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/05/2007 21:12       | David I Ressler | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/16/2007 02:26       | Jeffrey B Smith | 25              |

**Lancaster Laboratories Sample No. AQ 4952550**
**SVE-2S Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-2S**

Collected: 01/04/2007 09:42 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |    |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 13.                      | 1.0 | ppm(v) | 46.                      | 3.5 | mg/m3 | 1  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |    |
| 07238   | Benzene                     | 71-43-2    | 120.                     | 10. | ppb(v) | 370.                     | 32. | ug/m3 | 50 |
| 07250   | Toluene                     | 108-88-3   | 1,700.                   | 10. | ppb(v) | 6,400.                   | 38. | ug/m3 | 50 |
| 07261   | Ethylbenzene                | 100-41-4   | 310.                     | 10. | ppb(v) | 1,300.                   | 43. | ug/m3 | 50 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 1,400.                   | 10. | ppb(v) | 6,200.                   | 43. | ug/m3 | 50 |
| 07263   | o-Xylene                    | 95-47-6    | 650.                     | 10. | ppb(v) | 2,800.                   | 43. | ug/m3 | 50 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/05/2007 21:42       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/16/2007 21:16       | Fanella S Zamcho | 50              |



**Lancaster Laboratories Sample No. AQ 4952551**
**SVE-3S Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-3S**

Collected: 01/04/2007 09:40 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL     | Units | DF    |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|---------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |         |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 2,200.                   | 10.    | ppm(v) | 7,800.                   | 35.     | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |         |       |       |
| 07238   | Benzene                     | 71-43-2    | 78,000.                  | 5,000. | ppb(v) | 250,000.                 | 16,000. | ug/m3 | 25000 |
| 07250   | Toluene                     | 108-88-3   | 490,000.                 | 5,000. | ppb(v) | 1,800,000.               | 19,000. | ug/m3 | 25000 |
| 07261   | Ethylbenzene                | 100-41-4   | 28,000.                  | 5,000. | ppb(v) | 120,000.                 | 22,000. | ug/m3 | 25000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 120,000.                 | 5,000. | ppb(v) | 510,000.                 | 22,000. | ug/m3 | 25000 |
| 07263   | o-Xylene                    | 95-47-6    | 51,000.                  | 5,000. | ppb(v) | 220,000.                 | 22,000. | ug/m3 | 25000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis         |  | Analyst         | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------|--|-----------------|-----------------|
|         |                             |                 |        | Date and Time    |  |                 |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/10/2007 15:56 |  | David I Ressler | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/16/2007 08:40 |  | Jeffrey B Smith | 25000           |

**Lancaster Laboratories Sample No. AQ 4952552**
**SVE-4D Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-4D**

Collected: 01/04/2007 09:38 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF  |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|-----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |     |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,500.                   | 1.0  | ppm(v) | 5,300.                   | 3.5  | mg/m3 | 1   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |     |
| 07238   | Benzene                     | 71-43-2    | 4,600.                   | 100. | ppb(v) | 15,000.                  | 320. | ug/m3 | 500 |
| 07250   | Toluene                     | 108-88-3   | 44,000.                  | 100. | ppb(v) | 170,000.                 | 380. | ug/m3 | 500 |
| 07261   | Ethylbenzene                | 100-41-4   | 3,200.                   | 100. | ppb(v) | 14,000.                  | 430. | ug/m3 | 500 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 16,000.                  | 100. | ppb(v) | 68,000.                  | 430. | ug/m3 | 500 |
| 07263   | o-Xylene                    | 95-47-6    | 6,700.                   | 100. | ppb(v) | 29,000.                  | 430. | ug/m3 | 500 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|-----------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/05/2007 22:43       | David I Ressler | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/16/2007 10:48       | Jeffrey B Smith | 500             |

**Lancaster Laboratories Sample No. AQ 4952553**
**SVE-5 Grab Air URSO**  
**NA SL0600100443 SVE-5**  
**Sunol Pipeline**

Collected: 01/04/2007 09:36 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 690.                     | 1.0    | ppm(v) | 2,400.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 11,000.                  | 1,000. | ppb(v) | 34,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 100,000.                 | 1,000. | ppb(v) | 390,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 8,200.                   | 1,000. | ppb(v) | 36,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 35,000.                  | 1,000. | ppb(v) | 150,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 12,000.                  | 1,000. | ppb(v) | 54,000.                  | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|-----------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/05/2007 23:14       | David I Ressler | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/16/2007 11:31       | Jeffrey B Smith | 5000            |

**Lancaster Laboratories Sample No. AQ 4952554**
**SVE-6 Grab Air URSO**  
**NA Sunol Pipeline SL0600100443 SVE-6**

Collected: 01/04/2007 09:26 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF    |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,400.                   | 10.    | ppm(v) | 4,900.                   | 35.    | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |       |
| 07238   | Benzene                     | 71-43-2    | 19,000.                  | 2,000. | ppb(v) | 59,000.                  | 6,400. | ug/m3 | 10000 |
| 07250   | Toluene                     | 108-88-3   | 210,000.                 | 2,000. | ppb(v) | 790,000.                 | 7,500. | ug/m3 | 10000 |
| 07261   | Ethylbenzene                | 100-41-4   | 18,000.                  | 2,000. | ppb(v) | 79,000.                  | 8,700. | ug/m3 | 10000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 82,000.                  | 2,000. | ppb(v) | 350,000.                 | 8,700. | ug/m3 | 10000 |
| 07263   | o-Xylene                    | 95-47-6    | 29,000.                  | 2,000. | ppb(v) | 130,000.                 | 8,700. | ug/m3 | 10000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/10/2007 16:26       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/16/2007 17:00       | Fanella S Zamcho | 10000           |

**Lancaster Laboratories Sample No. AQ 4952555**
**SVE-7 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-7**

Collected: 01/04/2007 09:24 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL     | Units | DF    |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|---------|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |         |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 3,300.                   | 10.    | ppm(v) | 12,000.                  | 35.     | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |         |       |       |
| 07238   | Benzene                     | 71-43-2    | 30,000.                  | 5,000. | ppb(v) | 95,000.                  | 16,000. | ug/m3 | 25000 |
| 07250   | Toluene                     | 108-88-3   | 490,000.                 | 5,000. | ppb(v) | 1,800,000.               | 19,000. | ug/m3 | 25000 |
| 07261   | Ethylbenzene                | 100-41-4   | 49,000.                  | 5,000. | ppb(v) | 210,000.                 | 22,000. | ug/m3 | 25000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 200,000.                 | 5,000. | ppb(v) | 880,000.                 | 22,000. | ug/m3 | 25000 |
| 07263   | o-Xylene                    | 95-47-6    | 72,000.                  | 5,000. | ppb(v) | 310,000.                 | 22,000. | ug/m3 | 25000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis         |  | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------|--|------------------|-----------------|
|         |                             |                 |        | Date and Time    |  |                  |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/10/2007 16:56 |  | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/16/2007 18:26 |  | Fanella S Zamcho | 25000           |

**Lancaster Laboratories Sample No. AQ 4952556**
**SVE-9 Grab Air URSO**  
**NA Sunol Pipeline SL0600100443 SVE-9**

Collected: 01/04/2007 09:28 by GW Account Number: 11875

 Submitted: 01/05/2007 09:15 Chevron Pipeline Co.  
 Reported: 01/19/2007 at 13:44 4800 Fournace Place - E320 D  
 Discard: 02/19/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 420.                     | 1.0  | ppm(v) | 1,500.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 1,200.                   | 500. | ppb(v) | 3,900.                   | 1,600. | ug/m3 | 2500 |
| 07250   | Toluene                     | 108-88-3   | 21,000.                  | 500. | ppb(v) | 79,000.                  | 1,900. | ug/m3 | 2500 |
| 07261   | Ethylbenzene                | 100-41-4   | 2,500.                   | 500. | ppb(v) | 11,000.                  | 2,200. | ug/m3 | 2500 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 31,000.                  | 500. | ppb(v) | 130,000.                 | 2,200. | ug/m3 | 2500 |
| 07263   | o-Xylene                    | 95-47-6    | 16,000.                  | 500. | ppb(v) | 71,000.                  | 2,200. | ug/m3 | 2500 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/06/2007 00:45       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/16/2007 19:51       | Fanella S Zamcho | 2500            |

## Quality Control Summary

 Client Name: Chevron Pipeline Co.  
 Reported: 01/19/07 at 01:44 PM

Group Number: 1020368

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: A0701530A     | Sample number(s): 4952549,4952551-4952553                 |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                                                      | 0.20             | ppb (v)             | 108             | 106              | 75-138                 | 2          | 20             |
| Toluene                     | N.D.                                                      | 0.20             | ppb (v)             | 110             | 110              | 75-150                 | 0          | 20             |
| Ethylbenzene                | N.D.                                                      | 0.20             | ppb (v)             | 105             | 101              | 75-144                 | 4          | 20             |
| m/p-Xylene                  | N.D.                                                      | 0.20             | ppb (v)             | 98              | 96               | 74-145                 | 2          | 20             |
| o-Xylene                    | N.D.                                                      | 0.20             | ppb (v)             | 105             | 103              | 78-152                 | 2          | 20             |
| Batch number: A0701530B     | Sample number(s): 4952547,4952550,4952554-4952556         |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                                                      | 0.20             | ppb (v)             | 108             | 106              | 75-138                 | 2          | 20             |
| Toluene                     | N.D.                                                      | 0.20             | ppb (v)             | 110             | 110              | 75-150                 | 0          | 20             |
| Ethylbenzene                | N.D.                                                      | 0.20             | ppb (v)             | 105             | 101              | 75-144                 | 4          | 20             |
| m/p-Xylene                  | N.D.                                                      | 0.20             | ppb (v)             | 98              | 96               | 74-145                 | 2          | 20             |
| o-Xylene                    | N.D.                                                      | 0.20             | ppb (v)             | 105             | 103              | 78-152                 | 2          | 20             |
| Batch number: A0701830A     | Sample number(s): 4952548                                 |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                                                      | 0.20             | ppb (v)             | 110             | 120              | 75-138                 | 8          | 20             |
| Toluene                     | N.D.                                                      | 0.20             | ppb (v)             | 119             | 123              | 75-150                 | 3          | 20             |
| Ethylbenzene                | N.D.                                                      | 0.20             | ppb (v)             | 117             | 119              | 75-144                 | 2          | 20             |
| m/p-Xylene                  | N.D.                                                      | 0.20             | ppb (v)             | 119             | 120              | 74-145                 | 1          | 20             |
| o-Xylene                    | N.D.                                                      | 0.20             | ppb (v)             | 119             | 119              | 78-152                 | 1          | 20             |
| Batch number: M070081ZA     | Sample number(s): 4952547-4952550,4952552-4952553,4952556 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                                                      | 1.0              | ppm (v)             |                 |                  |                        |            |                |
| Batch number: M070121ZA     | Sample number(s): 4952551,4952554-4952555                 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                                                      | 1.0              | ppm (v)             |                 |                  |                        |            |                |

\*- Outside of specification

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

# Chevron California Region Analysis Request/Chain of Custody



For Lancaster Laboratories use only 6/P # 1020368  
 Acct. #: 11815 Sample #: 78 4952577-56 SCR#: 242023

| Facility #:<br>Site Address: <u>Chevron Sanol Pipeline</u><br>Chevron PM: _____ Lead Consultant: _____<br>Consultant/Office: <u>URS - Oakland</u><br>Consultant Prj. Mgr.: <u>Joe Morgan</u><br>Consultant Phone #: <u>510-874-3201</u> Fax #: <u>510-874-3268</u><br>Sampler: <u>Greg White</u><br>Service Order #: _____ <input type="checkbox"/> Non SAR: _____ |        |               |           |                |                |               | Analyses Requested |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |            | Preservative Codes |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|-----------|----------------|----------------|---------------|--------------------|-----------|----------------------------|-------------------------------------------------------------------------|------------------|--------------------------------------------------------------|----------------|------------|------------------------------------------------------------------|------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                    |        |               |           |                |                |               | Preservation Codes |           |                            |                                                                         |                  |                                                              |                |            |                                                                  |            | Preservative Codes |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| Field Point Name                                                                                                                                                                                                                                                                                                                                                   | Matrix | Repeat Sample | Top Depth | Year Month Day | Time Collected | New Field Pt. | Grab               | Composite | Total Number of Containers | BTEX + MTBE 8260 <input type="checkbox"/> 8021 <input type="checkbox"/> | TPH 8015 MOD GRO | TPH 8015 MOD DRO <input type="checkbox"/> Silica Gel Cleanup | 8260 full scan | Oxygenates | Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/> | TO-14 BTEX | TO-18 TPH-GRO      | H = HCl      T = Thiosulfate<br>N = HNO <sub>3</sub> B = NaOH<br>S = H <sub>2</sub> SO <sub>4</sub> O = Other<br><br><input type="checkbox"/> J value reporting needed<br><input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds<br><br>8021 MTBE Confirmation<br><input type="checkbox"/> Confirm highest hit by 8260<br><input type="checkbox"/> Confirm all hits by 8260<br><input type="checkbox"/> Run ___ oxy's on highest hit<br><input type="checkbox"/> Run ___ oxy's on all hits |  |  |  |
| SVE-Infused-1.4.07                                                                                                                                                                                                                                                                                                                                                 | A      |               |           | 1/4/07         | 0950           |               | X                  |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  | X          | X                  | Comments / Remarks<br><br>Please Email Results to Joe Morgan, Angela Lings, Greg White of URS                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |
| SVE-ETI-1.4.07                                                                                                                                                                                                                                                                                                                                                     |        |               |           |                | 0952           |               |                    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  |            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-1D-1.4.07                                                                                                                                                                                                                                                                                                                                                      |        |               |           |                | 0944           |               |                    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  |            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-2S-1.4.07                                                                                                                                                                                                                                                                                                                                                      |        |               |           |                | 0942           |               |                    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  |            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-3S-1.4.07                                                                                                                                                                                                                                                                                                                                                      |        |               |           |                | 0940           |               |                    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  |            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-4D-1.4.07                                                                                                                                                                                                                                                                                                                                                      |        |               |           |                | 0938           |               |                    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  |            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-5-1.4.07                                                                                                                                                                                                                                                                                                                                                       |        |               |           |                | 0936           |               |                    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  |            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-6-1.4.07                                                                                                                                                                                                                                                                                                                                                       |        |               |           |                | 0926           |               |                    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  |            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-7-1.4.07                                                                                                                                                                                                                                                                                                                                                       |        |               |           |                | 0924           |               |                    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  |            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| SVE-9-1.4.07                                                                                                                                                                                                                                                                                                                                                       | ✓      |               |           |                | 0928           |               |                    |           | 1                          |                                                                         |                  |                                                              |                |            |                                                                  |            |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |

|                                                                                                                                                                                      |                                                                     |                                                       |                    |                                 |                     |                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------|--------------------|---------------------------------|---------------------|-------------------|
| <b>Turnaround Time Requested (TAT)</b> (please circle)<br>(STD. TAT) 72 hour      48 hour<br>24 hour                  4 day                  5 day                                   | Relinquished by: <u>[Signature]</u>                                 | Date: <u>1/4/07</u>                                   | Time: <u>12:00</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:<br>UPS <u>FedEx</u> Other _____ | Date:                                                 | Time:              | Received by: <u>[Signature]</u> | Date: <u>1/5/07</u> | Time: <u>0915</u> |
| Data Package Options (please circle if required)<br>QC Summary      Type I - Full<br>Type VI (Raw Data) <input type="checkbox"/> Coelt Deliverable not needed<br>WIP (RWQCB)<br>Disk | Temperature Upon Receipt: <u>N/A</u> °C                             | Custody Seals Intact?    Yes    No <u>[Signature]</u> |                    |                                 |                     |                   |



## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

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

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

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is <CRDL, but ≥IDL                                |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike amount not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | 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 17605-2425**SAMPLE GROUP**

The sample group for this submittal is 1023302. Samples arrived at the laboratory on Saturday, January 27, 2007. The PO# for this group is 0015010091 and the release number is COSGRAY.

| <u>Client Description</u> |      |     | <u>Lancaster Labs Number</u> |
|---------------------------|------|-----|------------------------------|
| SVE-4D-070126             | Grab | Air | 4968332                      |
| SVE-3S-070126             | Grab | Air | 4968333                      |
| SVE-5-070126              | Grab | Air | 4968334                      |
| SVE-6-070126              | Grab | Air | 4968335                      |
| SVE-7-070126              | Grab | Air | 4968336                      |
| SVE-9-070126              | Grab | Air | 4968337                      |
| SVE-Influent-070126       | Grab | Air | 4968338                      |

ELECTRONIC URS

Attn: Angela Liang

COPY TO

ELECTRONIC URS

Attn: Joe Morgan

COPY TO

ELECTRONIC URS

Attn: Greg White

COPY TO

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

Respectfully Submitted,



Richard H. Karam  
Group Leader

**Lancaster Laboratories Sample No. AQ 4968332**
**SVE-4D-070126 Grab Air URSO**  
**NA SLO600100443 SVE-4D**

Collected: 01/26/2007 12:42 by GW Account Number: 11875

 Submitted: 01/27/2007 10:10 Chevron Pipeline Co.  
 Reported: 02/06/2007 at 13:14 4800 Fournace Place - E320 D  
 Discard: 03/09/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,300.                   | 1.0  | ppm(v) | 4,600.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 11,000.                  | 500. | ppb(v) | 34,000.                  | 1,600. | ug/m3 | 2500 |
| 07250   | Toluene                     | 108-88-3   | 53,000.                  | 500. | ppb(v) | 200,000.                 | 1,900. | ug/m3 | 2500 |
| 07261   | Ethylbenzene                | 100-41-4   | 5,100.                   | 500. | ppb(v) | 22,000.                  | 2,200. | ug/m3 | 2500 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 19,000.                  | 500. | ppb(v) | 84,000.                  | 2,200. | ug/m3 | 2500 |
| 07263   | o-Xylene                    | 95-47-6    | 8,800.                   | 500. | ppb(v) | 38,000.                  | 2,200. | ug/m3 | 2500 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/29/2007 14:22       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/30/2007 19:53       | Fanella S Zamcho | 2500            |

**Lancaster Laboratories Sample No. AQ 4968333**
**SVE-3S-070126 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-3S**

Collected: 01/26/2007 12:44 by GW Account Number: 11875

 Submitted: 01/27/2007 10:10 Chevron Pipeline Co.  
 Reported: 02/06/2007 at 13:14 4800 Fournace Place - E320 D  
 Discard: 03/09/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 2,900.                   | 10.    | ppm(v) | 10,000.                  | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 41,000.                  | 1,000. | ppb(v) | 130,000.                 | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 260,000.                 | 1,000. | ppb(v) | 980,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 23,000.                  | 1,000. | ppb(v) | 100,000.                 | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 87,000.                  | 1,000. | ppb(v) | 380,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 34,000.                  | 1,000. | ppb(v) | 150,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/30/2007 08:46       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/30/2007 21:20       | Fanella S Zamcho | 5000            |

**Lancaster Laboratories Sample No. AQ 4968334**
**SVE-5-070126 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-5**

Collected: 01/26/2007 12:40 by GW Account Number: 11875

 Submitted: 01/27/2007 10:10 Chevron Pipeline Co.  
 Reported: 02/06/2007 at 13:14 4800 Fournace Place - E320 D  
 Discard: 03/09/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,800.                   | 1.0  | ppm(v) | 6,300.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 3,500.                   | 500. | ppb(v) | 11,000.                  | 1,600. | ug/m3 | 2500 |
| 07250   | Toluene                     | 108-88-3   | 31,000.                  | 500. | ppb(v) | 120,000.                 | 1,900. | ug/m3 | 2500 |
| 07261   | Ethylbenzene                | 100-41-4   | 2,800.                   | 500. | ppb(v) | 12,000.                  | 2,200. | ug/m3 | 2500 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 24,000.                  | 500. | ppb(v) | 110,000.                 | 2,200. | ug/m3 | 2500 |
| 07263   | o-Xylene                    | 95-47-6    | 11,000.                  | 500. | ppb(v) | 49,000.                  | 2,200. | ug/m3 | 2500 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/29/2007 15:23       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/30/2007 22:47       | Fanella S Zamcho | 2500            |



# Analysis Report

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Lancaster Laboratories Sample No. AQ 4968335

SVE-6-070126 Grab Air URSO  
NA  
Sunol Pipeline SL0600100443 SVE-6

Collected: 01/26/2007 12:56 by GW Account Number: 11875

Submitted: 01/27/2007 10:10 Chevron Pipeline Co.  
Reported: 02/06/2007 at 13:14 4800 Fournace Place - E320 D  
Discard: 03/09/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 2,400.                   | 10.    | ppm(v) | 8,500.                   | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 18,000.                  | 1,000. | ppb(v) | 57,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 220,000.                 | 1,000. | ppb(v) | 840,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 22,000.                  | 1,000. | ppb(v) | 97,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 100,000.                 | 1,000. | ppb(v) | 450,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 44,000.                  | 1,000. | ppb(v) | 190,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

## Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/30/2007 09:17       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/31/2007 00:13       | Fanella S Zamcho | 5000            |

**Lancaster Laboratories Sample No. AQ 4968336**
**SVE-7-070126 Grab Air URSO**  
**NA SLO600100443 SVE-7**  
**Sunol Pipeline**

Collected: 01/26/2007 12:54 by GW Account Number: 11875

 Submitted: 01/27/2007 10:10 Chevron Pipeline Co.  
 Reported: 02/06/2007 at 13:14 4800 Fournace Place - E320 D  
 Discard: 03/09/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 4,600.                   | 10.    | ppm(v) | 16,000.                  | 35.    | mg/m3 | 10   |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 24,000.                  | 1,000. | ppb(v) | 76,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 410,000.                 | 1,000. | ppb(v) | 1,600,000.               | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 53,000.                  | 1,000. | ppb(v) | 230,000.                 | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 230,000.                 | 1,000. | ppb(v) | 1,000,000.               | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 96,000.                  | 1,000. | ppb(v) | 410,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/30/2007 09:47       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/31/2007 01:39       | Fanella S Zamcho | 5000            |



**Lancaster Laboratories Sample No. AQ 4968337**
**SVE-9-070126 Grab Air URSO**  
**NA SLO600100443 SVE-9**  
**Sunol Pipeline**

Collected: 01/26/2007 12:58 by GW Account Number: 11875

 Submitted: 01/27/2007 10:10 Chevron Pipeline Co.  
 Reported: 02/06/2007 at 13:14 4800 Fournace Place - E320 D  
 Discard: 03/09/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF   |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 620.                     | 1.0  | ppm(v) | 2,200.                   | 3.5  | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |      |
| 07238   | Benzene                     | 71-43-2    | 1,300.                   | 200. | ppb(v) | 4,200.                   | 640. | ug/m3 | 1000 |
| 07250   | Toluene                     | 108-88-3   | 20,000.                  | 200. | ppb(v) | 77,000.                  | 750. | ug/m3 | 1000 |
| 07261   | Ethylbenzene                | 100-41-4   | 2,500.                   | 200. | ppb(v) | 11,000.                  | 870. | ug/m3 | 1000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 32,000.                  | 200. | ppb(v) | 140,000.                 | 870. | ug/m3 | 1000 |
| 07263   | o-Xylene                    | 95-47-6    | 18,000.                  | 200. | ppb(v) | 79,000.                  | 870. | ug/m3 | 1000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/29/2007 16:54       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/31/2007 03:05       | Fanella S Zamcho | 1000            |



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Lancaster Laboratories Sample No. AQ 4968338

SVE-Influent-070126 Grab Air  
 NA URSO  
 Sunol Pipeline SL0600100443 SVE-Inf

Collected: 01/26/2007 13:10 by GW Account Number: 11875

Submitted: 01/27/2007 10:10 Chevron Pipeline Co.  
 Reported: 02/06/2007 at 13:14 4800 Fournace Place - E320 D  
 Discard: 03/09/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL    | Units  | As Received Final Result | MDL    | Units | DF   |
|---------|-----------------------------|------------|--------------------------|--------|--------|--------------------------|--------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |        |        |                          |        |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 2,100.                   | 1.0    | ppm(v) | 7,400.                   | 3.5    | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |        |        |                          |        |       |      |
| 07238   | Benzene                     | 71-43-2    | 14,000.                  | 1,000. | ppb(v) | 46,000.                  | 3,200. | ug/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 160,000.                 | 1,000. | ppb(v) | 600,000.                 | 3,800. | ug/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 18,000.                  | 1,000. | ppb(v) | 78,000.                  | 4,300. | ug/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 88,000.                  | 1,000. | ppb(v) | 380,000.                 | 4,300. | ug/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 38,000.                  | 1,000. | ppb(v) | 160,000.                 | 4,300. | ug/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

## Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 01/29/2007 17:25       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 01/31/2007 04:30       | Fanella S Zamcho | 5000            |

## Quality Control Summary

Client Name: Chevron Pipeline Co.  
Reported: 02/06/07 at 01:14 PM

Group Number: 1023302

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: A0703030A     | Sample number(s): 4968332-4968338 |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                              | 0.20             | ppb (v)             | 81              | 84               | 75-138                 | 4          | 20             |
| Toluene                     | N.D.                              | 0.20             | ppb (v)             | 93              | 92               | 75-150                 | 1          | 20             |
| Ethylbenzene                | N.D.                              | 0.20             | ppb (v)             | 88              | 89               | 75-144                 | 1          | 20             |
| m/p-Xylene                  | N.D.                              | 0.20             | ppb (v)             | 85              | 83               | 74-145                 | 2          | 20             |
| o-Xylene                    | N.D.                              | 0.20             | ppb (v)             | 95              | 91               | 78-152                 | 5          | 20             |
| Batch number: M070301ZA     | Sample number(s): 4968332-4968338 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                              | 1.0              | ppm (v)             |                 |                  |                        |            |                |

\*- Outside of specification

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

# Chevron California Region Analysis Request/Chain of Custody



242026

Acc. #: 11875 For Lancaster Laboratories use only Sample #: 4968332-38 SCR#: \_\_\_\_\_

| Facility #: _____<br>Site Address: <u>Chevron Sunol Pipeline</u><br>Chevron PM: _____ Lead Consultant: _____<br>Consultant/Office: <u>URS - Oakland</u><br>Consultant Prj. Mgr.: <u>Joe Morgan</u><br>Consultant Phone #: <u>510-874-3209</u> Fax #: <u>510-874-3268</u><br>Sampler: <u>Greg White</u><br>Service Order #: _____ <input type="checkbox"/> Non SAR: _____ |          |               |           |                |                |               | <b>Analyses Requested</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      | 9/1023302                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |          |          |                                                                              |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------|-----------|----------------|----------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|----------------|------------|-----------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|------------------------------------------------------------------------------|--|--|
|                                                                                                                                                                                                                                                                                                                                                                          |          |               |           |                |                |               | <b>Preservation Codes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      | <b>Preservative Codes</b><br>H = HCl      T = Thiosulfate<br>N = HNO <sub>3</sub> B = NaOH<br>S = H <sub>2</sub> SO <sub>4</sub> O = Other<br><input type="checkbox"/> J value reporting needed<br><input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds<br>8021 MTBE Confirmation<br><input type="checkbox"/> Confirm highest hit by 8260<br><input type="checkbox"/> Confirm all hits by 8260<br><input type="checkbox"/> Run ___ oxy's on highest hit<br><input type="checkbox"/> Run ___ oxy's on all hits |          |          |          |                                                                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                                          |          |               |           |                |                |               | Total Number of Containers<br>BTEX + MTBE 8260 <input type="checkbox"/> 8021 <input type="checkbox"/><br>TPH 8015 MOD GRO <input type="checkbox"/><br>TPH 8015 MOD DRO <input type="checkbox"/> Silica Gel Cleanup<br>8260 full scan <input type="checkbox"/><br>Oxygenates <input type="checkbox"/><br>Lead 7420 <input type="checkbox"/> 7421 <input type="checkbox"/><br>TO-14 BTEX <input type="checkbox"/><br>TO-15 TPH-GRO <input type="checkbox"/> |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |
| Field Point Name                                                                                                                                                                                                                                                                                                                                                         | Matrix   | Repeat Sample | Top Depth | Year Month Day | Time Collected | New Field Pt. | Grab                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Composite | Total Number of Containers                                                                                                                                                          | BTEX + MTBE 8260 | TPH 8015 MOD GRO | TPH 8015 MOD DRO | 8260 full scan | Oxygenates | Lead 7420 | 7421 | TO-14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | BTEX     | TO-15    | TPH-GRO  | Comments / Remarks                                                           |  |  |
| <u>SVE-4D-1/26/07</u>                                                                                                                                                                                                                                                                                                                                                    | <u>A</u> |               |           | <u>1/26/07</u> | <u>1242</u>    |               | <u>X</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      | <u>X</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <u>X</u> | <u>X</u> | <u>X</u> | Please Email<br>Results to Joe Morgan,<br>Angela Lissy, Greg White<br>of URS |  |  |
| <u>SVE-3S-1/26/07</u>                                                                                                                                                                                                                                                                                                                                                    |          |               |           |                | <u>1244</u>    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |
| <u>SVE-5-1/26/07</u>                                                                                                                                                                                                                                                                                                                                                     |          |               |           |                | <u>1240</u>    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |
| <u>SVE-6-1/26/07</u>                                                                                                                                                                                                                                                                                                                                                     |          |               |           |                | <u>1256</u>    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |
| <u>SVE-7-1/26/07</u>                                                                                                                                                                                                                                                                                                                                                     |          |               |           |                | <u>1254</u>    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |
| <u>SVE-9-1/26/07</u>                                                                                                                                                                                                                                                                                                                                                     |          |               |           |                | <u>1258</u>    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |
| <u>SVE-Juribead-1/26/07</u>                                                                                                                                                                                                                                                                                                                                              |          |               |           |                | <u>1310</u>    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           |                                                                                                                                                                                     |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |
| <b>Turnaround Time Requested (TAT) (please circle)</b><br>(STD. TAT) 72 hour      48 hour<br>24 hour      4 day      5 day                                                                                                                                                                                                                                               |          |               |           |                |                |               | Relinquished by: <u>[Signature]</u> Date: <u>1/26/07</u> Time: <u>14:18</u>                                                                                                                                                                                                                                                                                                                                                                               |           | Received by: _____      Date: _____      Time: _____                                                                                                                                |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |
| <b>Data Package Options (please circle if required)</b><br>QC Summary      Type I - Full<br>Type VI (Raw Data) <input type="checkbox"/> Coelt Deliverable not needed<br>WIP (RWQCB)<br>Disk                                                                                                                                                                              |          |               |           |                |                |               | Relinquished by: _____      Date: _____      Time: _____                                                                                                                                                                                                                                                                                                                                                                                                  |           | Received by: _____      Date: _____      Time: _____                                                                                                                                |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |
| Relinquished by Commercial Carrier:<br>UPS <u>FedEx</u> Other _____                                                                                                                                                                                                                                                                                                      |          |               |           |                |                |               | Received by: <u>[Signature]</u> Date: <u>1/26/07</u> Time: <u>1010</u>                                                                                                                                                                                                                                                                                                                                                                                    |           | Temperature Upon Receipt: <u>NA</u> °C<br>Custody Seal Intact? <u>Yes</u> <input checked="" type="checkbox"/> <u>MA</u> <input type="checkbox"/> <u>No</u> <input type="checkbox"/> |                  |                  |                  |                |            |           |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |          |                                                                              |  |  |

## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

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

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

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is <CRDL, but ≥IDL                                |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike amount not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | 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 17605-2425**SAMPLE GROUP**

The sample group for this submittal is 1025930. Samples arrived at the laboratory on Saturday, February 17, 2007. The PO# for this group is 0015010091 and the release number is COSGRAY.

| <u>Client Description</u> |      |     | <u>Lancaster Labs Number</u> |
|---------------------------|------|-----|------------------------------|
| SVE-3S                    | Grab | Air | 4984575                      |
| SVE-4D                    | Grab | Air | 4984576                      |
| SVE-5                     | Grab | Air | 4984577                      |
| SVE-6                     | Grab | Air | 4984578                      |
| SVE-7                     | Grab | Air | 4984579                      |
| SVE-9                     | Grab | Air | 4984580                      |
| SVE-Influent              | Grab | Air | 4984581                      |
| SVE-Effluent              | Grab | Air | 4984582                      |

|                    |     |                    |
|--------------------|-----|--------------------|
| ELECTRONIC COPY TO | URS | Attn: Angela Liang |
| ELECTRONIC COPY TO | URS | Attn: Joe Morgan   |
| ELECTRONIC COPY TO | URS | Attn: Greg White   |

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

Respectfully Submitted,



Michele J. Smith  
Group Leader

**Lancaster Laboratories Sample No. AQ 4984575**
**SVE-3S Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-3S**

Collected: 02/16/2007 09:34 by GW Account Number: 11875

 Submitted: 02/17/2007 10:15 Chevron Pipeline Co.  
 Reported: 03/01/2007 at 07:27 4800 Fournace Place - E320 D  
 Discard: 04/01/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF    |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 5,000.                   | 10. | ppm(v) | 18,000.                  | 35. | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |       |
| 07238   | Benzene                     | 71-43-2    | 120.                     | 2.0 | ppm(v) | 390.                     | 6.4 | mg/m3 | 10000 |
| 07250   | Toluene                     | 108-88-3   | 950.                     | 2.0 | ppm(v) | 3,600.                   | 7.6 | mg/m3 | 10000 |
| 07261   | Ethylbenzene                | 100-41-4   | 110.                     | 2.0 | ppm(v) | 470.                     | 8.6 | mg/m3 | 10000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 450.                     | 2.0 | ppm(v) | 1,900.                   | 8.6 | mg/m3 | 10000 |
| 07263   | o-Xylene                    | 95-47-6    | 160.                     | 2.0 | ppm(v) | 690.                     | 8.6 | mg/m3 | 10000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 02/20/2007 08:55       | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 02/26/2007 12:18       | Fanella S Zamcho | 10000           |



**Lancaster Laboratories Sample No. AQ 4984576**
**SVE-4D Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-4D**

Collected: 02/16/2007 09:32 by GW Account Number: 11875

 Submitted: 02/17/2007 10:15 Chevron Pipeline Co.  
 Reported: 03/01/2007 at 07:27 4800 Fournace Place - E320 D  
 Discard: 04/01/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF   |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 720.                     | 1.0 | ppm(v) | 2,500.                   | 3.5 | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |      |
| 07238   | Benzene                     | 71-43-2    | 14.                      | 1.0 | ppm(v) | 44.                      | 3.2 | mg/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 140.                     | 1.0 | ppm(v) | 540.                     | 3.8 | mg/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 13.                      | 1.0 | ppm(v) | 57.                      | 4.3 | mg/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 66.                      | 1.0 | ppm(v) | 280.                     | 4.3 | mg/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 25.                      | 1.0 | ppm(v) | 110.                     | 4.3 | mg/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 02/19/2007 16:52       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 02/26/2007 13:41       | Fanella S Zamcho | 5000            |

**Lancaster Laboratories Sample No. AQ 4984577**
**SVE-5 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-5**

Collected: 02/16/2007 09:30 by GW Account Number: 11875

 Submitted: 02/17/2007 10:15 Chevron Pipeline Co.  
 Reported: 03/01/2007 at 07:27 4800 Fournace Place - E320 D  
 Discard: 04/01/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL  | Units  | As Received Final Result | MDL  | Units | DF   |
|---------|-----------------------------|------------|--------------------------|------|--------|--------------------------|------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |      |        |                          |      |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 260.                     | 1.0  | ppm(v) | 920.                     | 3.5  | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |      |        |                          |      |       |      |
| 07238   | Benzene                     | 71-43-2    | 1.1                      | 0.20 | ppm(v) | 3.4                      | 0.64 | mg/m3 | 1000 |
| 07250   | Toluene                     | 108-88-3   | 18.                      | 0.20 | ppm(v) | 70.                      | 0.76 | mg/m3 | 1000 |
| 07261   | Ethylbenzene                | 100-41-4   | 1.7                      | 0.20 | ppm(v) | 7.4                      | 0.86 | mg/m3 | 1000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 8.2                      | 0.20 | ppm(v) | 35.                      | 0.86 | mg/m3 | 1000 |
| 07263   | o-Xylene                    | 95-47-6    | 3.1                      | 0.20 | ppm(v) | 13.                      | 0.86 | mg/m3 | 1000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 02/19/2007 17:22       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 02/26/2007 15:05       | Fanella S Zamcho | 1000            |

**Lancaster Laboratories Sample No. AQ 4984578**
**SVE-6 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-6**

Collected: 02/16/2007 09:46 by GW Account Number: 11875

 Submitted: 02/17/2007 10:15 Chevron Pipeline Co.  
 Reported: 03/01/2007 at 07:27 4800 Fournace Place - E320 D  
 Discard: 04/01/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF   |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,700.                   | 1.0 | ppm(v) | 6,000.                   | 3.5 | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |      |
| 07238   | Benzene                     | 71-43-2    | 18.                      | 1.0 | ppm(v) | 59.                      | 3.2 | mg/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 270.                     | 1.0 | ppm(v) | 1,000.                   | 3.8 | mg/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 40.                      | 1.0 | ppm(v) | 170.                     | 4.3 | mg/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 180.                     | 1.0 | ppm(v) | 800.                     | 4.3 | mg/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 81.                      | 1.0 | ppm(v) | 350.                     | 4.3 | mg/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 02/19/2007 17:52       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 02/26/2007 16:29       | Fanella S Zamcho | 5000            |

**Lancaster Laboratories Sample No. AQ 4984579**
**SVE-7 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-7**

Collected: 02/16/2007 09:48 by GW Account Number: 11875

 Submitted: 02/17/2007 10:15 Chevron Pipeline Co.  
 Reported: 03/01/2007 at 07:27 4800 Fournace Place - E320 D  
 Discard: 04/01/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF    |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|-------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |       |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 4,000.                   | 10. | ppm(v) | 14,000.                  | 35. | mg/m3 | 10    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |       |
| 07238   | Benzene                     | 71-43-2    | 22.                      | 1.0 | ppm(v) | 72.                      | 3.2 | mg/m3 | 5000  |
| 07250   | Toluene                     | 108-88-3   | 460.                     | 10. | ppm(v) | 1,700.                   | 38. | mg/m3 | 50000 |
| 07261   | Ethylbenzene                | 100-41-4   | 100.                     | 1.0 | ppm(v) | 450.                     | 4.3 | mg/m3 | 5000  |
| 07262   | m/p-Xylene                  | 1330-20-7  | 460.                     | 1.0 | ppm(v) | 2,000.                   | 4.3 | mg/m3 | 5000  |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Analysis |                  | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|----------|------------------|------------------|-----------------|
|         |                             |                 | Trial#   | Date and Time    |                  |                 |
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1        | 02/20/2007 09:29 | David I Ressler  | 10              |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1        | 02/26/2007 17:53 | Fanella S Zamcho | 5000            |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1        | 02/27/2007 13:35 | Fanella S Zamcho | 50000           |

**Lancaster Laboratories Sample No. AQ 4984580**
**SVE-9 Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-9**

Collected: 02/16/2007 09:55 by GW Account Number: 11875

 Submitted: 02/17/2007 10:15 Chevron Pipeline Co.  
 Reported: 03/01/2007 at 07:27 4800 Fournace Place - E320 D  
 Discard: 04/01/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL   | Units  | As Received Final Result | MDL   | Units | DF   |
|---------|-----------------------------|------------|--------------------------|-------|--------|--------------------------|-------|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |       |        |                          |       |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 290.                     | 1.0   | ppm(v) | 1,000.                   | 3.5   | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |       |        |                          |       |       |      |
| 07238   | Benzene                     | 71-43-2    | 0.72                     | 0.020 | ppm(v) | 2.3                      | 0.064 | mg/m3 | 100  |
| 07250   | Toluene                     | 108-88-3   | 12.                      | 0.20  | ppm(v) | 45.                      | 0.76  | mg/m3 | 1000 |
| 07261   | Ethylbenzene                | 100-41-4   | 2.3                      | 0.020 | ppm(v) | 9.7                      | 0.086 | mg/m3 | 100  |
| 07262   | m/p-Xylene                  | 1330-20-7  | 18.                      | 0.20  | ppm(v) | 78.                      | 0.86  | mg/m3 | 1000 |
| 07263   | o-Xylene                    | 95-47-6    | 8.9                      | 0.20  | ppm(v) | 38.                      | 0.86  | mg/m3 | 1000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 02/19/2007 18:53       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 02/26/2007 19:17       | Fanella S Zamcho | 1000            |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 02/26/2007 19:59       | Fanella S Zamcho | 100             |

**Lancaster Laboratories Sample No. AQ 4984581**
**SVE-Influent Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-Infl**

Collected: 02/16/2007 10:10 by GW Account Number: 11875

 Submitted: 02/17/2007 10:15 Chevron Pipeline Co.  
 Reported: 03/01/2007 at 07:27 4800 Fournace Place - E320 D  
 Discard: 04/01/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL | Units  | As Received Final Result | MDL | Units | DF   |
|---------|-----------------------------|------------|--------------------------|-----|--------|--------------------------|-----|-------|------|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |     |        |                          |     |       |      |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 1,200.                   | 1.0 | ppm(v) | 4,200.                   | 3.5 | mg/m3 | 1    |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |     |        |                          |     |       |      |
| 07238   | Benzene                     | 71-43-2    | 12.                      | 1.0 | ppm(v) | 39.                      | 3.2 | mg/m3 | 5000 |
| 07250   | Toluene                     | 108-88-3   | 200.                     | 1.0 | ppm(v) | 760.                     | 3.8 | mg/m3 | 5000 |
| 07261   | Ethylbenzene                | 100-41-4   | 31.                      | 1.0 | ppm(v) | 130.                     | 4.3 | mg/m3 | 5000 |
| 07262   | m/p-Xylene                  | 1330-20-7  | 140.                     | 1.0 | ppm(v) | 620.                     | 4.3 | mg/m3 | 5000 |
| 07263   | o-Xylene                    | 95-47-6    | 62.                      | 1.0 | ppm(v) | 270.                     | 4.3 | mg/m3 | 5000 |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 02/19/2007 19:24       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 02/26/2007 20:41       | Fanella S Zamcho | 5000            |

**Lancaster Laboratories Sample No. AQ 4984582**
**SVE-Effluent Grab Air**  
**NA** **URSO**  
**Sunol Pipeline SL0600100443 SVE-Effl**

Collected: 02/16/2007 10:05 by GW Account Number: 11875

 Submitted: 02/17/2007 10:15 Chevron Pipeline Co.  
 Reported: 03/01/2007 at 07:27 4800 Fournace Place - E320 D  
 Discard: 04/01/2007 Bellaire TX 77401

| CAT No. | Analysis Name               | CAS Number | As Received Final Result | MDL     | Units  | As Received Final Result | MDL     | Units | DF |
|---------|-----------------------------|------------|--------------------------|---------|--------|--------------------------|---------|-------|----|
| 07548   | >C4-C10 Hydrocarbons in Air |            |                          |         |        |                          |         |       |    |
| 07551   | >C4-C10 Hydrocarbons hexane | n.a.       | 12.                      | 1.0     | ppm(v) | 42.                      | 3.5     | mg/m3 | 1  |
| 07869   | TO-14A VOA Ext. List Tedlar |            |                          |         |        |                          |         |       |    |
| 07238   | Benzene                     | 71-43-2    | 0.00082                  | 0.00020 | ppm(v) | 0.0026                   | 0.00064 | mg/m3 | 1  |
| 07250   | Toluene                     | 108-88-3   | 0.0073                   | 0.00020 | ppm(v) | 0.028                    | 0.00076 | mg/m3 | 1  |
| 07261   | Ethylbenzene                | 100-41-4   | 0.00085                  | 0.00020 | ppm(v) | 0.0037                   | 0.00086 | mg/m3 | 1  |
| 07262   | m/p-Xylene                  | 1330-20-7  | 0.0033                   | 0.00020 | ppm(v) | 0.014                    | 0.00086 | mg/m3 | 1  |
| 07263   | o-Xylene                    | 95-47-6    | 0.0011                   | 0.00020 | ppm(v) | 0.0046                   | 0.00086 | mg/m3 | 1  |

The sample was collected in a Tedlar bag which is not the container referenced in the EPA method.

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.

MDL = Method Detection Limit

### Laboratory Chronicle

| CAT No. | Analysis Name               | Method          | Trial# | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------|--------|------------------------|------------------|-----------------|
| 07548   | >C4-C10 Hydrocarbons in Air | EPA 25 modified | 1      | 02/19/2007 19:54       | David I Ressler  | 1               |
| 07869   | TO-14A VOA Ext. List Tedlar | EPA TO14A       | 1      | 02/27/2007 22:26       | Fanella S Zamcho | 1               |

## Quality Control Summary

 Client Name: Chevron Pipeline Co.  
 Reported: 03/01/07 at 07:27 AM

Group Number: 1025930

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: A0705330B     | Sample number(s): 4984575-4984581 |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                              | 0.00020          | ppm(v)              | 106             | 102              | 75-138                 | 4          | 20             |
| Toluene                     | N.D.                              | 0.00020          | ppm(v)              | 111             | 105              | 75-150                 | 5          | 20             |
| Ethylbenzene                | N.D.                              | 0.00020          | ppm(v)              | 114             | 109              | 75-144                 | 4          | 20             |
| m/p-Xylene                  | N.D.                              | 0.00020          | ppm(v)              | 113             | 112              | 74-145                 | 1          | 20             |
| o-Xylene                    | N.D.                              | 0.00020          | ppm(v)              | 115             | 116              | 78-152                 | 1          | 20             |
| Batch number: A0705330C     | Sample number(s): 4984582         |                  |                     |                 |                  |                        |            |                |
| Benzene                     | N.D.                              | 0.00020          | ppm(v)              | 106             | 102              | 75-138                 | 4          | 20             |
| Toluene                     | N.D.                              | 0.00020          | ppm(v)              | 111             | 105              | 75-150                 | 5          | 20             |
| Ethylbenzene                | N.D.                              | 0.00020          | ppm(v)              | 114             | 109              | 75-144                 | 4          | 20             |
| m/p-Xylene                  | N.D.                              | 0.00020          | ppm(v)              | 113             | 112              | 74-145                 | 1          | 20             |
| o-Xylene                    | N.D.                              | 0.00020          | ppm(v)              | 115             | 116              | 78-152                 | 1          | 20             |
| Batch number: M070511ZA     | Sample number(s): 4984575-4984582 |                  |                     |                 |                  |                        |            |                |
| >C4-C10 Hydrocarbons hexane | N.D.                              | 1.0              | ppm(v)              |                 |                  |                        |            |                |

\*- Outside of specification

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



# Chevron Generic Analysis Request/Chain of Custody



004272

For Lancaster Laboratories use only

Acct. #: 11875 Sample #: 4984575-8L SCR#: \_\_\_\_\_

g/hp 1025930

Facility #: \_\_\_\_\_  
 Site Address: Chevron Sunol Apaline  
 Chevron PM: \_\_\_\_\_ Lead Consultant: \_\_\_\_\_  
 Consultant/Office: URS-Oakland  
 Consultant Prj. Mgr.: Joe Morgen  
 Consultant Phone #: 510-874-3201 Fax #: 510-874-3268  
 Sampler: G. White  
 Service Order #: \_\_\_\_\_  Non SAR: \_\_\_\_\_

| Matrix |       | Analyses Requested |                                     |                            |             |                          |                          |                          |                |            |       |                          |                          |                          |                          |                          |         |         |      |                |       |      |       |        |  |
|--------|-------|--------------------|-------------------------------------|----------------------------|-------------|--------------------------|--------------------------|--------------------------|----------------|------------|-------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------|---------|------|----------------|-------|------|-------|--------|--|
|        |       | Preservation Codes |                                     |                            |             |                          |                          |                          |                |            |       |                          |                          |                          |                          |                          |         |         |      |                |       |      |       |        |  |
| Soil   | Water | Oil                | Air                                 | Total Number of Containers | BTEX + MTBE | 8021                     | 8260                     | Naphth                   | 8260 full scan | Oxygenates | TPH G | TPH D                    | TPH E                    | Lead Total               | Diss.                    | Method                   | VP/IEPH | NWTPH H | HCID | quantification | TO-14 | BTEX | TO-18 | TPHGRD |  |
|        |       |                    | <input checked="" type="checkbox"/> |                            |             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                |            |       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |         |         |      |                |       |      |       |        |  |

**Preservative Codes**

H = HCl      T = Thiosulfate  
 N = HNO<sub>3</sub>      B = NaOH  
 S = H<sub>2</sub>SO<sub>4</sub>      O = Other

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

8021 MTBE Confirmation

Confirm MTBE + Naphthalene  
 Confirm highest hit by 8260  
 Confirm all hits by 8260  
 Run \_\_\_ oxy's on highest hit  
 Run \_\_\_ oxy's on all hits

| Sample Identification       | Date Collected | Time Collected | Grab | Composite |
|-----------------------------|----------------|----------------|------|-----------|
| <del>PRE-32530</del> SVE-35 | 2/16/07        | 0934           | X    |           |
| SVE-4D                      |                | 0932           |      |           |
| SVE-5                       |                | 0930           |      |           |
| SVE-6                       |                | 0946           |      |           |
| SVE-7                       |                | 0948           |      |           |
| SVE-9                       |                | 0955           |      |           |
| SVE- Influent               |                | 1010           |      |           |
| SVE- Effluent               |                | 1005           |      |           |

**Comments / Remarks**

Send reports to  
 Joe Morgen,  
 Angela Lyons,  
 Greg White  
 or  
 URS

**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)      Disk / EDD  
 WIP (RWQCB)      Standard Format  
 Disk      \_\_\_\_\_ Other.

|                                                                 |                                    |                    |                                                                       |                    |             |
|-----------------------------------------------------------------|------------------------------------|--------------------|-----------------------------------------------------------------------|--------------------|-------------|
| Relinquished by: <u>[Signature]</u>                             | Date: <u>2/16/07</u>               | Time: <u>17:30</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: _____                       | Received by: <u>[Signature]</u>    |                    | Date: <u>2/16/07</u>                                                  | Time: <u>10:15</u> |             |
| UPS <input checked="" type="checkbox"/> FedEx      Other: _____ | Temperature Upon Receipt: _____ C° |                    | Custody Seals Intact?      Yes <input checked="" type="checkbox"/> No |                    |             |

## Lancaster Laboratories Explanation of Symbols and Abbreviations

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

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

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

### Inorganic Qualifiers

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