F I N A L

QUARTERLY GROUNDWATER MONITORING REPORTING FOR FOURTH QUARTER 2012

PACIFIC COAST PIPELINE (PCPL) SUPERFUND SITE FILLMORE, CALIFORNIA

Submitted to:

Ms. Holly Hadlock (SFD-7-1)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105-3901

Prepared for:

Chevron Environmental Management Company
9525 Camino Media, Room BK5060/9016
Bakersfield, California 93302

February 15, 2013

URS

310 Golden Shore
Suite 100
Long Beach, California 90802

30990336

QUARTERLY GROUNDWATER MONITORING REPORT FOR FOURTH QUARTER 2012

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
9525 CAMINO MEDIA, ROOM BK5060/9014
BAKERSFIELD, CALIFORNIA 93302

This report presents the results of quarterly groundwater monitoring (Fourth Quarter 2012) activities conducted at the Texaco, Inc. Pacific Coast Pipeline (PCPL) Superfund Site (Site) located in Fillmore, California.

No express or implied representation or warranty is included or intended in this report except that the work was performed within the limits prescribed by Chevron with the customary thoroughness and competence of professionals working in the same area on similar projects.

David Brod
Project Manager

Brian Partington, PG, CHG
Principal Hydrogeologist

PROFESSIONAL GEOLOGIST
Brian Christopher Partington
No. 7612
03/13
STATE OF CALIFORNIA

TABLE OF CONTENTS

SECTION PAGE

1.0 INTRODUCTION 1-1

2.0 GROUNDWATER MONITORING 2-1

2.1 Well Gauging 2-1
2.2 Groundwater Sampling Procedures 2-1
2.3 Laboratory Analysis 2-2
2.4 LNAPL Recovery Procedures 2-3
2.5 Investigation Derived Waste and Recycled Materials 2-3

3.0 RESULTS 3-1

3.1 Groundwater Elevation 3-1
3.2 Groundwater Analytical 3-1
3.3 Bioattenuation Analytical 3-2
3.4 LNAPL Recovery 3-3

4.0 ANNUAL EVALUATION OF SAMPLING PROGRAM 4-1

5.0 REFERENCES 5-1

TABLES

1 Current Groundwater Monitoring Schedule Matrix
2 Well Construction Details
3 Gauging Data (Fourth Quarter 2012)
4 LNAPL Recovery (Fourth Quarter 2012)

FIGURES

1 Site Location Map
2 Groundwater Monitoring Well Locations
3 Groundwater Elevation Contours (Fourth Quarter 2012)
4a - e Historical Hydrographs
5 Benzene Distribution – Aquifer I (Fourth Quarter 2012)
6a - l Historical Benzene Results
7 Sulfate Distribution – Aquifer I (Fourth Quarter 2012)

APPENDICES

A Site History
B Historical LNAPL Removal Volumes
C Analytical / Bioattenuation Results
D Data Quality Assessment
E Analytical Laboratory Reports (CD-ROM)
F Historical Analytical Results

LIST OF ACRONYMS AND ABBREVIATIONS

BTEX	benzene, toluene, ethylbenzene, and xylenes
Chevron	Chevron Environmental Management Company
COC	chain-of-custody
DO	dissolved oxygen
E&A	England & Associates
EPA	Environmental Protection Agency
g/cm^3	grams per cubic centimeter
gal/min	gallons per minute
LARWQCB	Los Angeles Regional Water Quality Control Board
LNAPL	light non-aqueous phase liquid
M&CSP	Monitoring and Confirmation Sampling Plan
msl	mean sea level
MS/MSD	matrix spike/matrix spike duplicate
ORC®	Oxygen Release Compound®
ORP	oxidation reduction potential
PCPL	Pacific Coast Pipeline
Site	PCPL Superfund Site
TOC	top of well casing
TPHg	total petroleum hydrocarbons as gasoline
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirement

1.0 INTRODUCTION

On behalf of Texaco, Inc., Chevron Environmental Management Company (Chevron) is submitting this report to document groundwater monitoring activities (Fourth Quarter 2012) conducted at the Pacific Coast Pipeline (PCPL) Superfund Site (Site). The Site is located at 67 East Telegraph Road in Fillmore, California (Figure 1). A site history including background information is provided in Appendix A. The groundwater monitoring activities were conducted in general accordance with the following documents:

- *Monitoring and Confirmation Sampling Plan* (M&CSP) (E&A, 1995);
- *Revised Technical Memorandum - Recommended Modifications to the Ground Water Sampling Program* (E&A, 1997);
- *Work Plan for Implementation of Enhanced Bioattenuation Pilot Study* (England Geosystem, 2002a);
- *Request for Waste Discharge Permit for ORC® Injection* (England Geosystem, 2002b);
- *General Waste Discharge Requirements (WDR) for ORC® Injection Pilot Test (Order No. R4-2002-0030)* (LARWQCB, 2003a);
- *Amended Monitoring and Reporting Program* (LARWQCB, 2003b); and
- Email Documenting Reduction in Monitoring Frequency (England Geosystem, 2004).

Forty-three (43) groundwater monitoring wells are currently included in the groundwater monitoring program. The groundwater monitoring wells are completed within Aquifer I. The remaining groundwater monitoring wells existing on site are MW-10P (Perched Zone) and MW-31D (Aquifer II); however, these wells are not included in the groundwater monitoring program. The current groundwater monitoring schedule is provided in Table 1. The groundwater monitoring well construction details are summarized in Table 2. The groundwater monitoring well locations are illustrated on Figure 2.

On January 3, 2013, EPA approved the *Performance Groundwater Monitoring Plan* (URS, 2012) (Plan), which describes the optimized groundwater monitoring program in accordance with the 2011 ROD Amendment (USEPA, 2011). A revised monitoring well network and semiannual sampling schedule are features of the new program to be implemented in 2013. In addition, the Plan terminates the current light non-aqueous phase liquid (LNAPL) recovery program.

Wells in which LNAPL has been observed were gauged monthly during this reporting period. An automated product recovery system (Magnum Spill Buster™) manufactured by Clean Earth Technology, Inc. is maintained at monitoring well EW-4, and may be moved to other wells to remove LNAPL if a sufficient amount is gauged in the well. During this reporting period, no recoverable quantities of LNAPL were observed.

The quarterly groundwater monitoring results were reviewed, verified, and compared to historical data. Benzene results were compared to action criteria established in selected wells that might signal further migration of the benzene plume beneath the site. **During this reporting period, benzene did not exceed the action criteria in downgradient "trigger" wells.**

This report is organized as follows:

Section 1.0 – Introduction
Section 2.0 – Groundwater Monitoring
Section 3.0 – Results
Section 4.0 – Annual Report
Section 5.0 – References

2.0 GROUNDWATER MONITORING

Quarterly groundwater monitoring activities, consisting of well gauging and sampling, were conducted October 8, 2012 through October 19, 2012. The well gauging was conducted on October 8, 2012. The groundwater sampling was conducted from October 9 through October 19, 2012. The groundwater monitoring field activities are described below.

2.1 WELL GAUGING

During the event, depth to water (and product if detected) in each groundwater monitoring well was measured relative to the top of each well casing (TOC) and recorded to the nearest 0.01 foot. The groundwater measurements were converted to feet mean sea level (msl) based on a survey point located on the north side of each monitoring well casing. Where applicable, the groundwater elevations were corrected for wells containing LNAPL using a specific gravity of 0.90 grams per cubic centimeter (g/cm^3), consistent with previous conversions documented in previous reports. The well gauging sheets have been archived in the project files.

2.2 GROUNDWATER SAMPLING PROCEDURES

Upon completing the well gauging event, groundwater sampling was generally performed using a Dedicator® groundwater sampling system manufactured by Instrumentation Northwest. The groundwater monitoring well was purged using a Grundfos® Redi-Flo2® submersible pump (included in the sampling system) at an extraction rate of approximately 1 to 2 gallons per minute (gal/min). In the event of equipment failure, a site dedicated groundwater sampling system is available for use, which is similar to the Dedicator® groundwater sampling system. While purging, depth to groundwater was periodically measured to limit the drawdown to less than 20% of the water column. The extracted groundwater was monitored in a flow-through cell using a calibrated water quality meter for parameters including pH, temperature, conductivity, dissolved oxygen (DO), oxidation reduction potential (ORP), and turbidity. Purging continued until the monitored parameters stabilized to within 10% of the previous two measurements. The field measurements were recorded on well sampling log forms.

Groundwater monitoring wells EW-5, EW-P2, MW-2S, MW-3S, and MW-9S were purged and sampled using the Site dedicated REEL E-Z® portable groundwater sampling system. Dedicator® groundwater sampling systems were removed from wells MW-2S and MW-3S because the groundwater elevation had decreased below the position of the dedicated pumps. MW-9S was also purged and sampled using the Site-dedicated portable groundwater sampling system. The dedicated sampling system for this well is inoperable. This well is scheduled for abandonment in accordance with the approved Performance Groundwater Monitoring Plan (URS, 2012).

Once monitored parameters stabilized, groundwater samples were collected directly from the pump discharge tubing. Following sample collection, the non-dedicated submersible pumping equipment (including water level sounder and REEL E-Z® portable groundwater sampling system) was removed for decontamination. The decontamination chain consisted of a three-bucket chain, which included a non-

phosphate detergent washing station (i.e., Liqui-Nox®), initial tap water rinse station, final deionized water rinse station, and air-drying station. The site-dedicated submersible pumping equipment was placed in a plastic bag for storage inside the on-site equipment shed.

Sample containers and handling procedures for groundwater samples conformed to established protocols for each specific parameter as described in Environmental Protection Agency (EPA) SW-846. The sample bottles, once filled and preserved as required, were properly labeled and logged on a chain-of-custody (COC) form. The sample label included the well identification number, sample number, date/time sampled, project number, client name, site location, and sampling personnel's initials. Sealed groundwater samples were temporarily placed in a transportation cooler maintained at a temperature of approximately four degrees Celsius. The groundwater samples were transported via a laboratory-supplied courier under COC documentation for analysis to TestAmerica Analytical Laboratory, a certified analytical laboratory located in Irvine, California.

In addition, quality control samples were collected. Quality control samples include duplicate groundwater samples (rate of 10%), equipment rinsate blank (if non-dedicated submersible sampling equipment is used), decontamination water field blank (if non-dedicated submersible sampling equipment is used), and trip blanks (one per cooler a day). The equipment rinsate blank is collected by pouring de-ionized water over the decontaminated submersible pump and collecting the rinsate in glass containers. The purpose of the equipment rinsate blank is to assess whether or not decontamination procedures were appropriate and whether cross-contamination may have occurred. The decontamination water field blank consists of a sample collected from source water used for decontamination. The laboratory-prepared trip blanks accompany groundwater samples to assess the potential for cross-contamination during sample storage and transport to the laboratory. In addition, the natural attenuation indicator parameter for dissolved oxygen is verified (rate of 10%) using a field kit manufactured by Hach.

2.3 LABORATORY ANALYSIS

Thirty-four (34) groundwater samples were collected during the event (including four duplicate samples). Duplicate groundwater samples were collected from groundwater monitoring wells EW-5, MW-20S, MW-30S, and MW-50S. Additional sample volume for matrix spike / matrix spike duplicate (MS/MSD) analysis was collected from groundwater monitoring wells EW-5, MW-20S, MW-30S, and MW-50S. The groundwater samples were submitted to the laboratory for analysis in accordance with the groundwater monitoring matrix (Table 1) as follows:

- EPA Method 8015M for Total Petroleum Hydrocarbons as Gasoline (TPHg);
- EPA Method 8021B for benzene, toluene, ethylbenzene, and xylenes (BTEX);
- EPA Method 300.0 for sulfate; and
- EPA Method 8260B for BTEX, 1,2-dichloroethane, and methylene chloride for five wells.

A trip blank was provided with each cooler submitted to the analytical laboratory for analysis of TPHg and BTEX. Equipment blanks were collected for analysis because the site-dedicated REEL EZ® portable

groundwater sampling system was used to sample MW-2S and MW-3S on October 18, and EW-5, EW-P2, and MW-9S on October 19.

2.4 LNAPL RECOVERY PROCEDURES

LNAPL occasionally accumulates in select monitoring wells. Typically, these wells include EW-1, EW-4, MW-8S, MW-9S, MW-17S, and MW-40S. Recovery is generally conducted during monthly site visits using a semi-mobile automated recovery pump system (Magnum Spill Buster™). The automated system consists of a control panel, submersible product recovery pump, discharge hosing, containment drum with an automatic high-level shutoff, and a secondary containment pallet.

During the site visit, the depth to water/product in each monitoring well was measured relative to TOC and recorded to the nearest 0.01 foot. After gauging is completed, the accumulated product within the containment drum (stored on a secondary containment pallet) was observed to determine product accumulation since the previous site visit. The equipment is normally staged at monitoring well EW-4 (based on free product thickness) for continued operation between site visits. However, the equipment may be temporarily staged at other wells during site visits to address LNAPL accumulation since the previous site visit, if necessary. The automated recovery system is used for product removal until diminishing returns are observed in the containment drum. Upon completion, the equipment is returned for continued operation at EW-4.

SoakEase® product pads are used to address LNAPL that may periodically accumulate in select groundwater monitoring wells not included in the automated recovery system operations due to limited thickness and/or occurrence. The pads are placed across the product/water interface to provide continuous recovery by wicking product into the oil absorbent pad.

2.5 INVESTIGATION DERIVED WASTE AND RECYCLED MATERIALS

Approximately 1,636 gallons of wastewater (purge/decontamination water) was generated during this groundwater monitoring event. The wastewater was temporarily stored on site in an aboveground poly tank. On October 25, 2012, the non-hazardous wastewater was removed from site to Clean Harbors' Buttonwillow, CA facility for recycling (see Status Report for Fourth Quarter 2012 (Chevron, January 17, 2013.). The product pads (including other personal protective equipment such as gloves, towels, etc.) were temporarily stored on site in 35-gallon drums pending transportation to an appropriately licensed waste disposal facility.

Accumulated LNAPL was temporarily stored on site in 55-gallon drums placed adjacent to the monitoring wells (EW-1 and EW-4). Drums are placed on a portable secondary containment pallet to capture potential leaks/spills. On December 19, 2012, recovered LNAPL, along with LNAPL removed from excavated pipelines during 2012 infrastructure removal activities, was shipped off site. A report on the 2012 infrastructure removal activities will contain shipping manifest documentation and information.

3.0 RESULTS

The groundwater monitoring results for this event are summarized below. The gauging results are summarized in Table 3. The LNAPL recovery results are provided in Table 4 and Appendix B. Groundwater elevation contours are shown on Figure 3. The historical hydrographs are shown on Figures 4a through 4e. The benzene distribution in groundwater (Aquifer I) is shown on Figure 5. The benzene concentrations versus time are shown on Figures 6a through 6l. The sulfate distribution in groundwater is shown in Figure 7. The analytical/bioattenuation results are summarized in Appendix C. A data quality assessment is provided in Appendix D. The analytical laboratory reports including COC documentation for this reporting period are included in Appendix E. Historical BTEX results are included in Appendix F.

3.1 GROUNDWATER ELEVATION

During the event, groundwater beneath the Site (excluding EW-4, which contained a small amount of LNAPL, and EW-1, MW-9S, MW-17S, and MW-40S, which exhibited an oily residue), ranged from 43.36 feet below TOC (MW-18S) to 109.77 feet below TOC (MW-1S). The groundwater elevations (excluding wells which contained LNAPL) ranged from 428.19 feet above msl (MW-18S) to 418.10 feet above msl (MW-36S). The general groundwater surface across the Site is somewhat flat with a westerly gradient of approximately 0.006 feet/foot (0.6 foot vertical drop per 100 feet horizontal). This is consistent with measurements of the groundwater surface completed during previous quarterly groundwater monitoring events.

Historically, groundwater elevations rose approximately 30 feet from early 1991 to early 1993. This appears to be the historical high based on water level data from wells in the Fillmore area dating back to the 1920s. Since that time, groundwater elevations have experienced seasonal fluctuations in general response to winter rainy seasons and summer dry seasons. The First Quarter 2005 increase in groundwater elevation appears to be the second largest increase recorded at the Site, with groundwater elevation near the historic high (Figures 4a – 4e). During the Fourth Quarter 2012 reporting period, groundwater elevation generally decreased an average of approximately 0.84 feet (Table 3), which is typical of seasonal fluctuation at the Site. The seasonal fluctuations in groundwater elevations have created submerged screen conditions in select groundwater monitoring wells as noted in Table 3.

3.2 GROUNDWATER ANALYTICAL

Groundwater samples from 31 of 34 scheduled monitoring wells were collected during the sampling event for analysis according to the sampling schedule matrix (Table 1). The following wells were not sampled because they contained LNAPL: MW-40S, EW-1, and EW-4. Based on the data quality assessment described in Appendix D, the data as qualified are useable for their intended purpose.

The groundwater analytical data are evaluated using trigger criteria established by the oversight agency (USEPA). The trigger criteria include action limits to ensure benzene was not migrating downgradient of the Site. The benzene concentrations did not exceed action limit trigger criteria during this reporting period. The trigger criteria are summarized as follows:

- **Northern Plume:** A benzene concentration exceeding 20 micrograms per liter (µg/L) in groundwater monitoring wells MW-48S / MW-49S; or
- **Southern Plume:** A benzene concentration exceeding 150 µg/L (highest concentration three years prior to bioattenuation study) in groundwater monitoring well MW-45S or 1 µg/L in groundwater monitoring wells MW-35S / MW-44S.

The benzene distribution in groundwater (Aquifer I) was generally consistent with previous monitoring events (Figure 5). The maximum detectable benzene concentrations within the Northern/Southern plumes were 110 µg/L (EW-P2) and 350 µg/L (MW-50S), respectively. The fourth quarter benzene results are consistent with declining historical results.

The groundwater analytical data obtained from five wells by EPA Method 8260B were evaluated against site cleanup standards established in the 1992 ROD (USEPA, 1992). Cleanup standards were established for five parameters in groundwater listed as follows:

Contaminant	Cleanup Standard (µg/L)
Benzene	1
1,2-Dichloroethane (1,2-DCA)	0.5
Ethylbenzene	680
Methylene Chloride	5
Toluene	100

Benzene results by EPA Method 8260B exceeded the cleanup standard in the five groundwater monitoring wells scheduled for sampling: MW-6S, MW-39S, MW-42S, MW-45S, and MW-50S. The benzene concentrations analyzed by EPA Method 8260B ranged from 4.9 µg/L (MW-6S) to 230 µg/L (MW-50S).

Toluene was reported in one of the five wells at the cleanup standard: MW-50S at 100 µg/L.

The cleanup standards were not exceeded for the remaining 1992 ROD constituents including ethylbenzene, methylene chloride and 1,2-DCA. All sample results were non-detect.

3.3 BIOATTENUATION ANALYTICAL

Bioattenuation monitoring was conducted in a flow-through cell using a calibrated water quality meter for parameters including pH, temperature, conductivity, DO, and ORP. The bioattenuation results are summarized in Appendix C.

The bioattenuation monitoring results were generally consistent with previous monitoring events. ORP values are negative across the site, indicative of intrinsic bioremediation. The DO values continue to be depleted across the Site, another indicator of intrinsic bioremediation. The remaining measurements (temperature, pH, conductivity) are generally consistent with past groundwater monitoring events.

The preferential bioattenuation pathway appears to be dominated by sulfate reducing conditions as noted by lower sulfate concentrations within each benzene plume. The sulfate distribution in groundwater

(Aquifer I) was generally consistent with previous monitoring events (Figure 7). The lowest sulfate concentrations were below reporting limits within the Northern plume (MW-42S) and within the Southern plume (MW-8S, MW-19S, MW-41S, and MW-50S). The evident stability and declining concentrations of the dissolved benzene plumes confirm on-going biodegradation.

3.4 LNAPL RECOVERY

Three LNAPL recovery events were conducted during this reporting period (October 22, November 27, December 26). During these site visits, six wells were checked for presence of LNAPL (MW-8S, MW-9S, MW-17S, MW-40S, EW-1, and EW-4) (Table 4). During the fourth quarter, no recoverable quantities of LNAPL were observed. The SoakEase® product pads were used during this reporting period to address product accumulation in groundwater monitoring wells EW-1, MW-8S, MW-9S, and MW-40S.

A total of approximately 1,367 gallons of LNAPL has been recovered from the Site wells since the first quarter of 1994. The LNAPL recovery results during this reporting period are summarized on Table 4. The historical LNAPL recovery volumes are summarized in Appendix B.

4.0 ANNUAL EVALUATION OF SAMPLING PROGRAM

The overall objective of the annual and quarterly groundwater sampling program is to provide ongoing characterization of the groundwater contaminant plumes at the site as well as groundwater elevation and gradient measurements. A bioattenuation monitoring program is also conducted to further evaluate the degree and extent of biodegradation.

Groundwater analytical results are compared to both the ROD cleanup standards and trigger criteria, shown in Section 3.0. During the year, the trigger criteria for benzene were not exceeded. While benzene results in some of the monitoring wells did exceed the ROD cleanup criteria (1 µg/L), the results for the year continue to reflect a sustained decline in concentrations over time (Figure 6a – 6l). Toluene exceeded the ROD cleanup criteria at four well locations (EW-P2, MW-20S, MW-39S, and MW-50S) during the year; none of the other 1992 ROD parameters (ethylbenzene, 1,2-DCA, and methylene chloride) exceeded the cleanup standards during the year.

During 2012, groundwater elevations averaged across the site decreased 3.63 feet over the year. Each quarter groundwater elevations decreased, more so in the summer months. In general the groundwater elevations observed are following a well-established pattern of seasonal fluctuation (Figure 4a – 4e).

During 2012, one well produced a recoverable amount of LNAPL, a total of 3.5 gallons for the year Chevron maintained a semi-mobile automated recovery pump system (Magnum Spill Buster) on site to remove the LNAPL from the wells, and maintained a regular maintenance schedule to remove the recovered oil from the site. The total amount of LNAPL recovered from the wells in 2012 decreased compared to 2011 (Appendix B).

As stated in Section 1.0, EPA approved the Performance Groundwater Monitoring Plan to implement the requirements in the 2011 ROD Amendment. Effective 2013, the optimized groundwater monitoring network will be installed, semiannual groundwater sampling conducted in the 2nd and 4th quarters of the calendar year, and LNAPL recovery will be discontinued.

5.0 REFERENCES

Chevron, 2013. *Status Report for Fourth Quarter 2012*. January 17, 2013.

England & Associates (E&A), 1995. *Monitoring and Confirmation Sampling Plan (M&CSP),* September 18, 1995.

_____, 1997. *Revised Technical Memorandum - Recommended Modifications to the Ground Water Sampling Program,* May 15, 1997.

England Geosystem, 2002a. *Work Plan for Implementation of Enhanced Bioattenuation Pilot Study*. November 5, 2002.

_____, 2002b. *Request for Waste Discharge Permit for ORC® Injection,* November 27, 2002.

_____, 2004. Email from Joni Fisher to Holly Hadlock Documenting Reduction in Monitoring Frequency, July 16, 2004.

LARWQCB, 2003a. *General Waste Discharge Requirements for ORC Injection Pilot Test (Order No. R4-2002-0030*, February 6, 2003.

_____, 2003b. *Amended Monitoring and Reporting Program*, September 26, 2003.

URS Corporation, 2012. *Performance Groundwater Monitoring Plan*. December 6, 2012.

U.S. Environmental Protection Agency (USEPA) 1992. *Record of Decision (ROD) - Pacific Coast Pipeline, Texaco Fillmore Facility*, April 2, 1992.

_____, 2004. *Test Methods for Evaluating Solid Waste Physical/Chemical (SW846),* online, updated July 7, 2004.

_____, 2008. *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*. EPA-540-R-08-01. June 2008.

_____, 2010. *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review*. OWSER 9240.1-51/EPA-540-R-10-011.January 2010.

_____, 2011, *Record of Decision Amendment, Pacific Coast Pipeline USEPA ID: CAD980636781; Fillmore, CA*. September 2011.

Tables

Table 1
Current Groundwater Monitoring Schedule Matrix

Well	First Quarter	Second Quarter		Third Quarter	Fourth Quarter		
	Quarterly Parameters	Quarterly Parameters	Semi-annual Parameters	Quarterly Parameters	Quarterly Parameters	Semi-annual Parameters	Annual Parameters
MW-1S		☑	☑		☑	☑	
MW-2S		☑	☑		☑	☑	
MW-3S		☑	☑		☑	☑	
MW-6S	☑	☑	☑	☑	☑	☑	☑
MW-8S		☑	☑		☑	☑	
MW-9S		☑	☑		☑	☑	
MW-11S		☑	☑		☑	☑	
MW-14S		☑	☑		☑	☑	
MW-17S		☑	☑		☑	☑	
MW-18S		☑	☑		☑	☑	
MW-19S		☑	☑		☑	☑	
MW-20S		☑	☑		☑	☑	
MW-25S		☑	☑		☑	☑	
MW-28S		☑	☑		☑	☑	
MW-29S		☑	☑		☑	☑	
MW-30S		☑	☑		☑	☑	
MW-35S	☑	☑	☑	☑	☑	☑	
MW-37S		☑	☑		☑	☑	
MW-38S		☑	☑		☑	☑	
MW-39S	☑	☑	☑	☑	☑	☑	☑
MW-40S		☑	☑		☑	☑	
MW-41S	☑	☑	☑	☑	☑	☑	
MW-42S	☑	☑	☑	☑	☑	☑	☑
MW-43S		☑	☑		☑	☑	
MW-44S	☑	☑	☑	☑	☑	☑	
MW-45S	☑	☑	☑	☑	☑	☑	☑
MW-48S	☑	☑	☑	☑	☑	☑	
MW-49S	☑	☑	☑	☑	☑	☑	
MW-50S	☑	☑	☑	☑	☑	☑	☑
EW-P2	☑	☑	☑	☑	☑	☑	
EW-1	☑	☑	☑	☑	☑	☑	
EW-2		☑	☑		☑	☑	
EW-4	☑	☑	☑	☑	☑	☑	
EW-5	☑	☑	☑	☑	☑	☑	

Quarterly Parameters include: total petroleum hydrocarbons as gasoline (TPHG) by EPA Method 8015M; benzene, toluene, ethyl benzene, and xylenes (BTEX) by EPA Method 8021B; dissolved oxygen (DO), oxidation reduction potential (ORP), pH, conductivity, and temperature by field measurement.

Semi-annual Parameters include: sulfate by EPA Method 300.

Annual Parameters include: BTEX, methylene chloride, 1,2-dichloroethane (1,2-DCA) by EPA Method 8260B.

Table 2
Well Construction Details
Texaco PCPL Superfund Site (Fillmore, CA)

Well ID	Install Date	Easting	Northing	Top of Casing Elevation (ft msl)	Ground Surface Elevation (ft msl)	Casing Diameter (inches)	Total Depth of Well Casing		Screen Interval	
							ft bgs	ft msl	ft bgs	ft msl
Aquifer I										
MW-1S	08/12/83	727342.21	330290.20	532.18	529.80	4	114.96	414.84	104.00 to 114.00	425.80 to 415.80
MW-2S	08/16/83	727169.29	329825.76	512.27	513.25	4	93.87	419.38	82.50 to 92.50	430.75 to 420.75
MW-3S	08/15/83	727280.39	329670.99	508.71	505.06	4	83.80	421.26	72.50 to 82.50	432.56 to 422.56
MW-4S	06/25/85	727208.35	329242.85	498.17	497.50	4	102.49	395.01	95.00 to 105.00	402.50 to 392.50
MW-6S	07/02/85	727020.00	330103.29	517.38	516.22	4	115.91	400.31	104.00 to 114.00	412.22 to 402.22
MW-8S	02/20/86	727661.29	328874.47	484.39	483.72	4	71.55	412.17	45.00 to 71.00	438.72 to 412.72
MW-9S	02/20/86	727856.54	328947.83	483.60	482.43	4	68.73	413.70	48.00 to 68.50	434.43 to 413.93
MW-11S	02/21/86	727860.06	329546.59	501.78	500.61	4	87.88	412.73	65.00 to 86.50	435.61 to 414.11
MW-12S	04/23/87	728037.50	329020.26	486.31	485.39	4	60.43	424.96	45.00 to 65.00	440.39 to 420.39
MW-14S	04/24/87	727146.13	329639.32	504.43	504.84	4	91.57	413.27	70.00 to 90.00	434.84 to 414.84
MW-17S	01/14/88	727487.61	329153.60	490.60	489.47	4	73.95	415.52	53.00 to 73.00	436.47 to 416.47
MW-18S	09/06/90	728103.85	328592.25	471.55	469.58	4	69.69	399.89	45.00 to 69.00	424.58 to 400.58
MW-19S	08/20/90	727655.56	328656.71	479.14	479.59	4	78.00	401.59	58.00 to 78.00	421.59 to 401.59
MW-20S	08/28/90	727369.25	328995.85	488.58	489.25	4	92.00	397.25	73.00 to 93.00	416.25 to 396.25
MW-21S	09/05/90	727173.46	329575.29	502.29	502.98	4	113.99	388.99	93.00 to 113.00	409.98 to 389.98
MW-22S	07/30/90	726825.80	330149.27	521.99	522.45	4	137.86	384.59	117.00 to 137.00	405.45 to 385.45
MW-25S	07/31/90	727446.52	329513.25	502.60	501.28	4	101.96	399.32	81.00 to 101.00	420.28 to 400.28
MW-26S	07/25/90	727501.86	329157.71	491.53	489.99	4	91.03	398.96	70.00 to 90.00	419.99 to 399.99
MW-27S	11/27/90	727356.04	330249.49	530.92	529.09	4	135.35	393.74	115.00 to 135.00	414.09 to 394.09
MW-28S	11/28/90	727347.52	329874.12	511.69	512.00	4	118.00	394.00	98.00 to 118.00	414.00 to 394.00
MW-29S	11/30/90	727750.03	329201.35	494.07	492.40	4	97.71	394.69	77.00 to 97.00	415.40 to 395.40
MW-30S	12/03/90	727932.93	328870.15	482.88	481.41	4	85.75	395.66	65.00 to 85.00	416.41 to 396.41
MW-32S	12/11/90	727017.61	329927.16	513.12	513.47	4	125.02	388.45	105.00 to 125.00	408.47 to 388.47
MW-34S	12/17/90	727080.30	329092.02	491.95	492.66	4	115.42	377.24	95.00 to 115.00	397.66 to 377.66
MW-35S	10/14/91	726513.10	328728.10	487.30	487.99	4	98.57	389.42	80.00 to 97.00	407.99 to 390.99
MW-36S	10/25/91	726563.94	328404.61	476.00	476.33	4	86.12	390.21	70.00 to 85.00	406.33 to 391.33
MW-37S	04/23/93	727455.27	329722.38	507.85	506.55	4	93.92	412.63	65.00 to 95.00	441.55 to 411.55
MW-38S	04/30/93	727649.02	329559.18	503.12	501.61	4	86.66	414.95	56.00 to 86.00	445.61 to 415.61
MW-39S	10/19/93	727445.95	328873.48	485.83	484.61	4	73.32	411.29	53.00 to 73.00	431.61 to 411.61
MW-40S	10/18/93	727716.97	328581.84	476.58	477.08	4	63.68	413.40	32.00 to 62.00	445.08 to 415.08
MW-41S	10/20/93	727241.24	329148.70	496.38	494.75	4	85.15	409.60	65.00 to 85.00	429.75 to 409.75
MW-42S	10/22/93	727024.82	329909.47	515.09	512.87	4	103.60	409.27	75.00 to 105.00	437.87 to 407.87
MW-43S	05/10/94	727136.89	329353.84	499.55	499.98	4	106.52	393.46	65.00 to 105.00	434.98 to 394.98
MW-44S	05/17/94	726897.27	329066.55	492.68	493.13	4	107.38	385.75	57.00 to 107.00	436.13 to 386.13
MW-45S	05/09/94	727139.94	328831.25	485.30	485.74	4	96.61	389.13	45.00 to 95.00	440.74 to 390.74
MW-48S	09/16/98	726833.28	329919.01	516.12	520.12	4	105.00	415.12	75.00 to 105.00	445.12 to 415.12
MW-49S	09/20/98	726838.53	330141.11	521.17	526.67	4	115.00	411.67	85.00 to 115.00	441.67 to 411.67
MW-50S	11/21/02	727368.36	328871.65	484.02	484.82	4	79.20	405.62	55.00 to 75.00	429.82 to 409.82
EW-P2	01/03/97	727365.20	329889.80	511.12	511.80	6	112.00	399.80	62.00 to 112.00	449.80 to 399.80
EW-1	04/26/93	727463.77	329103.55	489.79	490.33	6	95.00	395.33	65.00 to 90.00	425.33 to 400.33
EW-2	05/03/94	727162.20	329758.95	506.57	507.32	6	116.41	390.91	80.30 to 95.30	427.02 to 412.02
EW-4	05/02/94	727540.45	328879.86	483.40	484.26	6	107.98	376.28	49.50 to 67.50	434.76 to 416.76
EW-5	05/03/94	727711.73	328581.48	476.14	477.22	6	98.38	378.84	45.00 to 50.00	432.22 to 427.22
Aquifer II										
MW-31D	12/12/90	727467.74	329054.72	488.57	487.73	4	135.19	352.54	125.00 to 135.00	362.73 to 352.73
Perched Aquifer										
MW-10P	2/21/1986	727849.90	329580.12	502.47	501.49	4	48.52	452.97	38.00 to 48.00	463.49 to 453.49

Notes:
ft bgs = feet below ground surface
ft msl = feet relative to mean sea level. Negative values are shown in parentheses and indicate elevation is below msl.

Table 3
Gauging Data (Fourth Quarter 2012)
Texaco PCPL Superfund Site (Fillmore, CA)

Well No.	Date	Depth to LNAPL (ft btoc)	Depth to Groundwater (ft btoc)	LNAPL Thickness (feet)	Groundwater Elevation (ft msl)	Groundwater Elevation Corrected for LNAPL (ft msl)	LNAPL Elevation (ft msl)	Change Since Previous Event		Screen Interval (ft msl)	Submerged Screened Interval
								LNAPL Thickness (feet)	Groundwater Elevation (feet)		
MW-1S	10/08/12		109.77	0	422.41	422.41	0	0	-1.32	425.80 to 415.80	
MW-2S	10/08/12		93.55	0	421.72	421.72	0	0	-1.32	430.75 to 420.75	
MW-3S	10/08/12		85.50	0	423.21	423.21	0	0	-1.12	432.56 to 422.56	
MW-4S	10/08/12		76.45	0	421.72	421.72	0	0	-0.95	402.50 to 392.50	☑
MW-6S	10/08/12		97.00	0	420.38	420.38	0	0	-1.21	412.22 to 402.22	☑
MW-8S	10/08/12		57.84	0	426.55	426.55	0	0	-0.86	438.72 to 412.72	
MW-9S*	10/08/12		55.97	0	427.63	427.63	0	0	-0.35	434.43 to 413.93	
MW-11S	10/08/12		75.52	0	426.26	426.26	0	0	-0.90	435.61 to 414.11	
MW-12S	10/08/12		59.16	0	427.15	427.15	0	0	-0.68	440.39 to 420.39	
MW-14S	10/08/12		83.44	0	420.99	420.99	0	0	-1.12	434.84 to 414.84	
MW-17S*	10/08/12		64.97	0	425.63	425.63	0	0	-1.02	436.47 to 416.47	
MW-18S	10/08/12		43.36	0	428.19	428.19	0	0	-0.39	424.58 to 400.58	☑
MW-19S	10/08/12		52.70	0	426.44	426.44	0	0	-0.73	421.59 to 401.59	☑
MW-20S	10/08/12		64.73	0	423.85	423.85	0	0	-0.94	416.25 to 396.25	☑
MW-21S	10/08/12		80.64	0	421.65	421.65	0	0	-1.08	409.98 to 389.98	☑
MW-22S	10/08/12		102.97	0	419.02	419.02	0	0	-1.16	405.45 to 385.45	☑
MW-25S	10/08/12		77.47	0	425.13	425.13	0	0	-1.00	420.28 to 400.28	☑
MW-26S	10/08/12		65.85	0	425.68	425.68	0	0	-0.91	419.99 to 399.99	☑
MW-27S	10/08/12		108.74	0	422.18	422.18	0	0	-1.28	414.09 to 394.09	☑
MW-28S	10/08/12		89.00	0	422.69	422.69	0	0	-1.20	414.00 to 394.00	☑
MW-29S	10/08/12		67.74	0	426.33	426.33	0	0	-0.82	415.40 to 395.40	☑
MW-30S	10/08/12		55.70	0	427.18	427.18	0	0	-0.64	416.41 to 396.41	☑
MW-32S	10/08/12		92.85	0	420.27	420.27	0	0	-1.13	408.47 to 388.47	☑
MW-34S	10/08/12		71.98	0	419.97	419.97	0	0	-0.87	397.66 to 377.66	☑
MW-35S	10/08/12		66.94	0	420.36	420.36	0	0	-0.52	404.86 to 387.86	☑
MW-36S	10/08/12		57.90	0	418.10	418.10	0	0	-0.38	406.33 to 391.33	☑
MW-37S	10/08/12		83.03	0	424.82	424.82	0	0	-1.07	441.55 to 411.55	
MW-38S	10/08/12		77.41	0	425.71	425.71	0	0	-0.97	445.61 to 415.61	
MW-39S	10/08/12		62.86	0	422.97	422.97	0	0	-1.05	431.61 to 411.61	
MW-40S*	10/08/12		49.86	0	426.72	426.72	0	0	-0.61	445.08 to 415.08	
MW-41S	10/08/12		74.00	0	422.38	422.38	0	0	-1.05	429.75 to 409.75	
MW-42S	10/08/12		94.74	0	420.35	420.35	0	0	-1.28	437.87 to 407.87	
MW-43S	10/08/12		78.72	0	420.83	420.83	0	0	-0.98	434.98 to 394.98	
MW-44S	10/08/12		73.28	0	419.40	419.40	0	0	-0.91	436.13 to 386.13	
MW-45S	10/08/12		65.48	0	419.82	419.82	0	0	-0.96	440.74 to 390.74	
MW-48S	10/08/12		96.33	0	419.79	419.79	0	0	-1.12	445.12 to 415.12	
MW-49S	10/08/12		101.66	0	419.51	419.51	0	0	-1.12	441.67 to 411.67	
MW-50S	10/08/12		59.75	0	424.27	424.27	0	0	-1.05	429.82 to 409.82	
EW-1*	10/08/12		64.23	0	425.56	425.56	0	0	-0.94	425.33 to 400.33	☑
EW-2	10/08/12		85.47	0	421.10	421.10	0	0	-1.19	427.02 to 412.02	
EW-4	10/08/12	57.25	57.28	0.03	426.12	426.15	426.15	-0.19	-1.15	434.76 to 416.76	
EW-5	10/08/12		49.27	0	426.87	426.87	0	0	-0.44	432.22 to 427.22	
EW-P2	10/08/12		88.09	0	423.03	423.03	0	0	-1.24	449.80 to 399.80	

Notes:
ft btoc = feet below top of casing
ft msl = feet mean sea level
* A sheen was observed on the groundwater from EW-1, MW-9S, MW-17S, and MW-40S

Table 4
LNAPL Recovery (Fourth Quarter 2012)
Texaco PCPL Superfund Site (Fillmore, CA)

Well	Sample Date	Removal Method	Reference Elevation (ft msl)	Depth to LNAPL (ft btoc)	Depth to Groundwater (ft btoc)	LNAPL Thickness (feet)	Groundwater Elevation (ft msl)	Groundwater Elevation Corrected (ft msl)	Free Product Removed from Well (gallons)	Cumulative Free Product Removed (gallons)	Free Product Removed from Site (gallons)	Comment
EW-1	10/22/12	--	489.79	ND	63.65	0.00	426.14	426.14	0.00	0.00	0.00	Sheen on water
	11/27/12	--	489.79	ND	62.65	0.00	427.14	427.14	0.00	0.00	0.00	Sheen on water
	12/26/12	--	489.79	ND	62.12	0.00	427.67	427.67	0.00	0.00	0.00	Sheen on water
EW-4	10/22/12	MSB	483.40	56.80	56.81	0.01	426.59	426.60	0.00	24.50	0.00	Residual 2011-3Q12 = 24.5 gallons
	11/27/12	MSB	483.40	55.70	55.75	0.05	427.65	427.70	0.00	24.50	0.00	
	12/26/12	MSB	483.40	55.10	55.13	0.03	428.27	428.30	0.00	24.50	0.00	
MW-8S	10/22/12	--	484.39	ND	57.24	0.00	427.15	427.15	0.00	0.00	0.00	
	11/27/12	--	484.39	ND	56.18	0.00	428.21	428.21	0.00	0.00	0.00	
	12/26/12	--	484.39	ND	55.62	0.00	428.77	428.77	0.00	0.00	0.00	
MW-9S	10/22/12	--	483.60	ND	55.92	0.00	427.68	427.68	0.00	0.00	0.00	Sheen on water
	11/27/12	--	483.60	ND	54.21	0.00	429.39	429.39	0.00	0.00	0.00	Sheen on water
	12/26/12	--	483.60	ND	53.37	0.00	430.23	430.23	0.00	0.00	0.00	Sheen on water
MW-17S	10/22/12	--	490.60	ND	64.55	0.00	426.05	426.05	0.00	0.00	0.00	Sheen on water
	11/27/12	--	490.60	ND	63.45	0.00	427.15	427.15	0.00	0.00	0.00	Sheen on water
	12/26/12	--	490.60	ND	62.87	0.00	427.73	427.73	0.00	0.00	0.00	Sheen on water
MW-40S	10/22/12	--	476.58	ND	49.28	0.00	427.30	427.30	0.00	0.00	0.00	
	11/27/12	--	476.58	ND	48.17	0.00	428.41	428.41	0.00	0.00	0.00	Sheen on water
	12/26/12	--	476.58	ND	47.67	0.00	428.91	428.91	0.00	0.00	0.00	

Notes:

ft btoc - feet below top of casing

ft msl - feet mean sea level

ND - indicates not detected

Groundwater elevation corrections based on specific gravity of 0.90 g/cm^3 in accordance with the Monitoring and Confirmation Sampling Plan (England & Assoc., 1995)

-- indicates reading not collected due to malfunctioning oil/water interface probe and/or free product recovery not performed

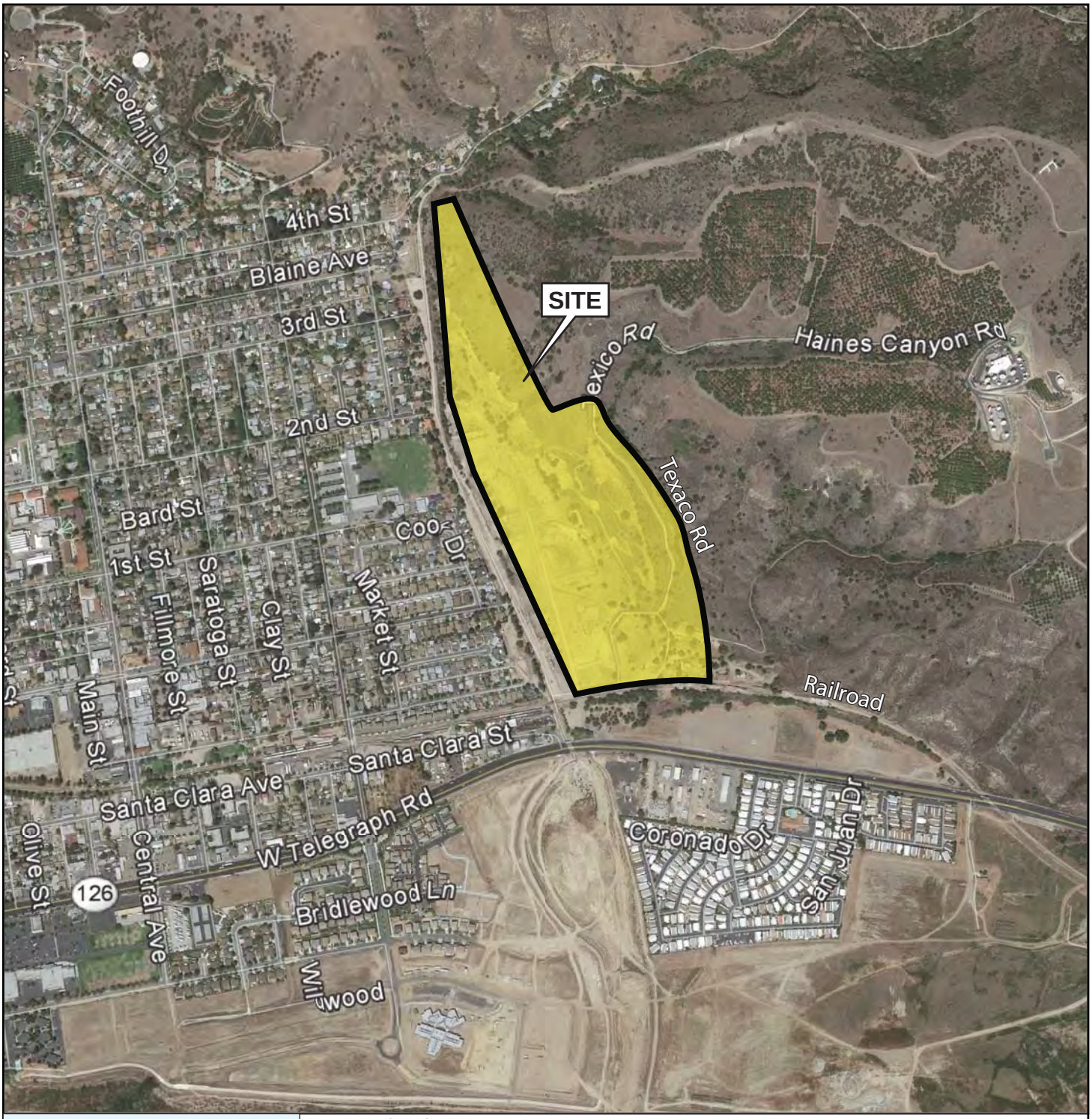
manual - indicates free product removal conducted using a disposible bailer and/or passive product recovery socks

MSB - indicates free product removal conducted using automatic recovery pump manufactured by Clean Earth Technologies (Magnum Spill Buster)

HB - Hand bailed

Site Removal: 24.5 gallons removed from site on 12/19/2012. Shipped off site with oil recovered from pipeline removal.

Figures



Source: Google Earth Pro., 2013.

N

0 500 1000

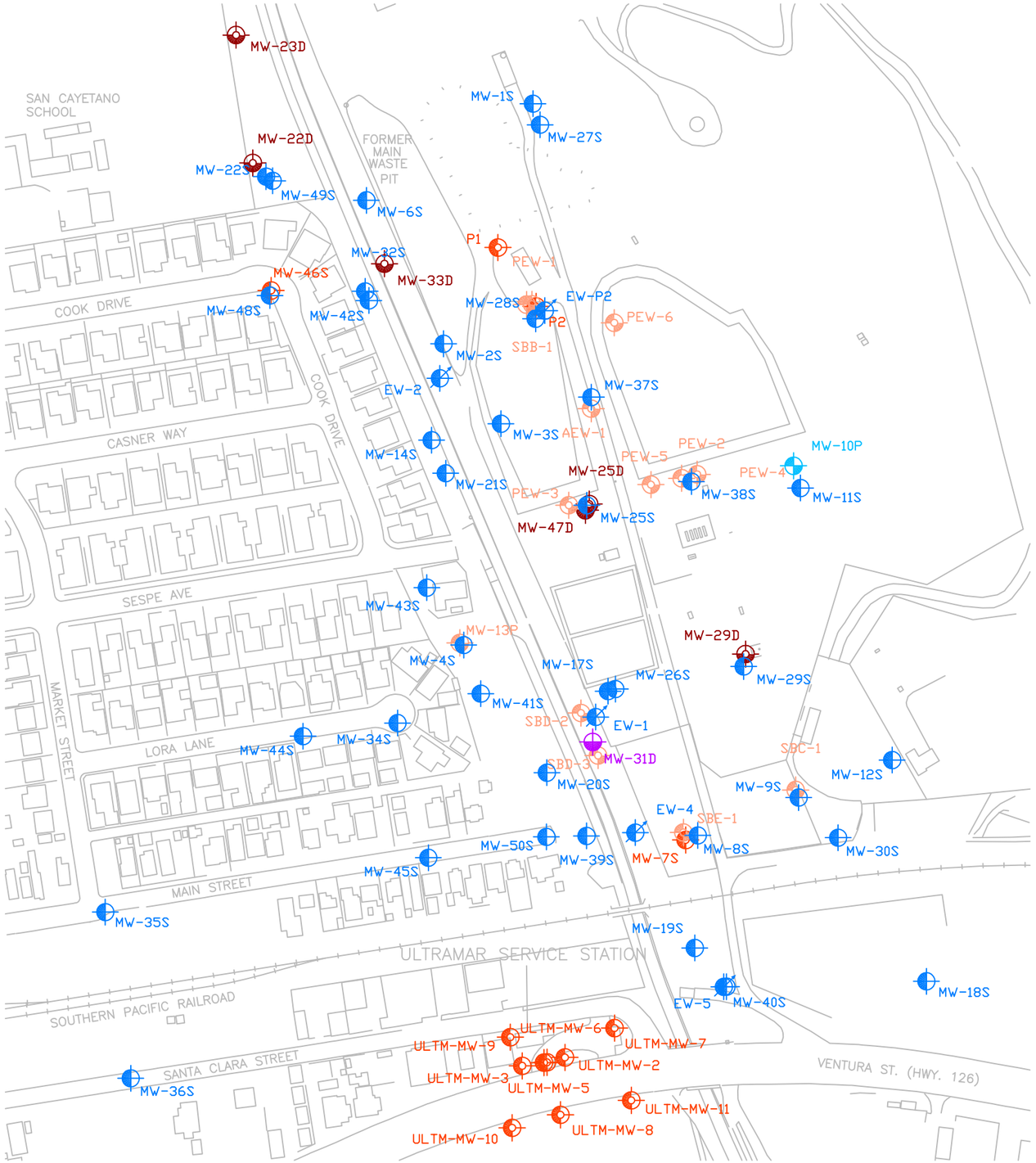
Scale in Feet

URS

SITE LOCATION MAP

Proj. No.: 30990336	Date: February 2013
Project: CHEVRON PCPL SUPERFUND SITE FILLMORE, CALIFORNIA	Figure: 1

2/4/13 hk T:\Chevron Fillmore\Graphics\Jan13\Fig1_slm_jan13.ai



LEGEND:

MW-10P	EXISTING PERCHED MONITORING WELL
MW-11S	EXISTING AQUIFIER I MONITORING WELL
MW-31D	EXISTING AQUIFIER II MONITORING WELL
EW-1	EXISTING AQUIFIER & EXTRACTION/MONITORING WELL
AEW-1	DESTROYED PERCH MONITORING WELL
MW-5S	DESTROYED AQUIFIER I MONITORING WELL
MW-33D	DESTROYED AQUIFIER II MONITORING WELL

N

0 125 250 500

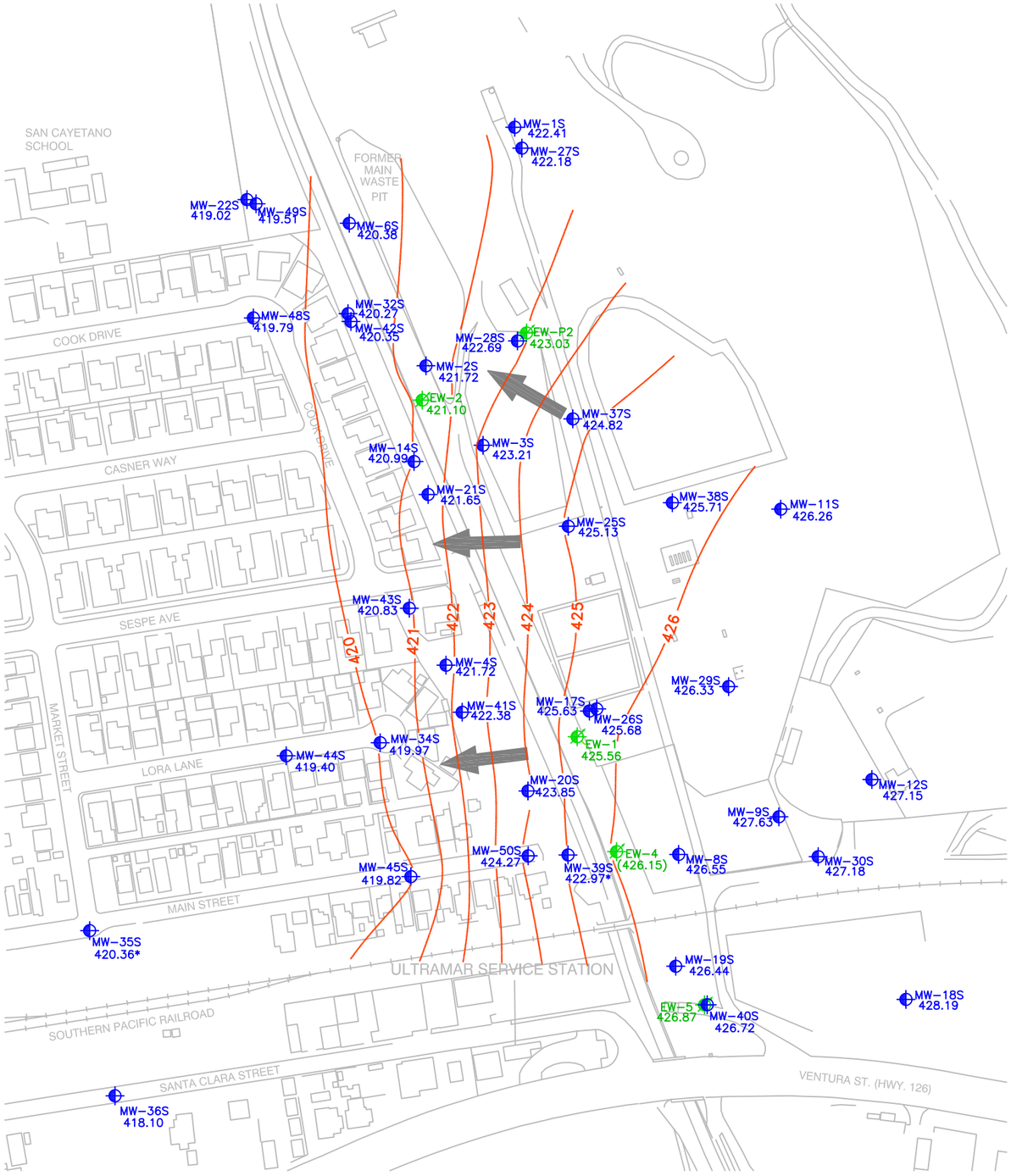
SCALE: IN FEET

URS Corporation

GROUNDWATER MONITORING WELL LOCATIONS

Proj. No.: 29875030		Date: August 2012	
Project: Texaco, Inc. PCPL (Fillmore, Ca)		CAD ID.: ---	
Drawn by: AS	Checked by: BP	Figure: 2	

P:\00 – CHEVRON FILLMORE\29875030 PCPL Superfund Site 2012\FINAL (Read only)\Figure 2 Sitemap.dwg



LEGEND:

MW-11S	EXISTING AQUIFIER I MONITORING WELL
EW-1	EXISTING AQUIFIER I EXTRACTION/MONITORING WELL
426.26	GROUNDWATER ELEVATION (FEET MEAN SEA LEVEL)
428 ——— ——?	GROUNDWATER ELEVATION CONTOUR, DASHED WHERE INFERRED QUERIED WHERE UNCERTAIN
	GROUNDWATER FLOW DIRECTION (APPROXIMATE)
*	ANOMALOUS DATA. NOT USED FOR CONTOURING.
(426.15)	GROUNDWATER ELEVATION CORRECTED FOR FREE PRODUCT

N

0 125 250 500

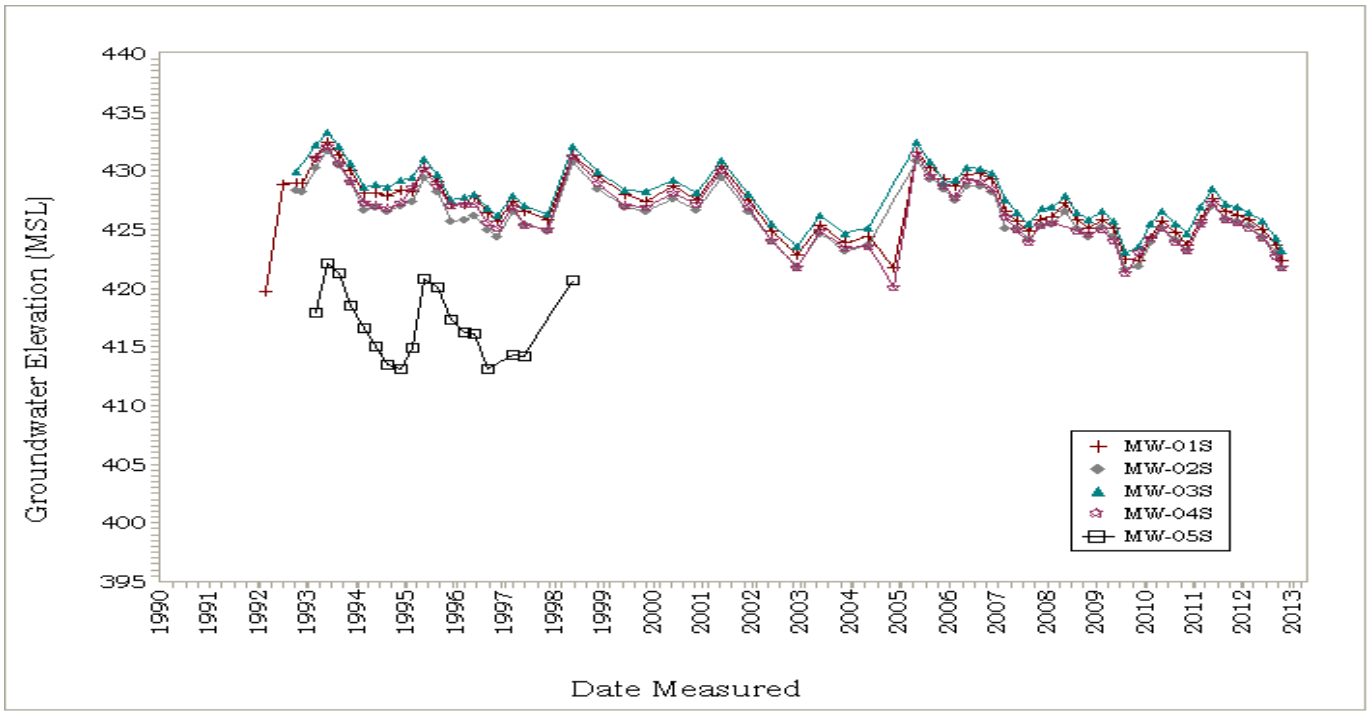
SCALE: IN FEET

URS Corporation

GROUNDWATER ELEVATION CONTOURS
(FOURTH QUARTER 2012)

Proj. No.: 29875030		Date: JANUARY 2013	
Project: TEXACO PCPL (Fillmore, Ca)		CAD ID.: ---	
Drawn by: JV	Checked by: BP	Figure: 3	

T:\2004\Chevron PCPL (Fillmore Refinery)\Deliverables (Finals in El Seg)\Reports\Groundwater Status Reports\12 Q4\Q412 GW Elev.dwg



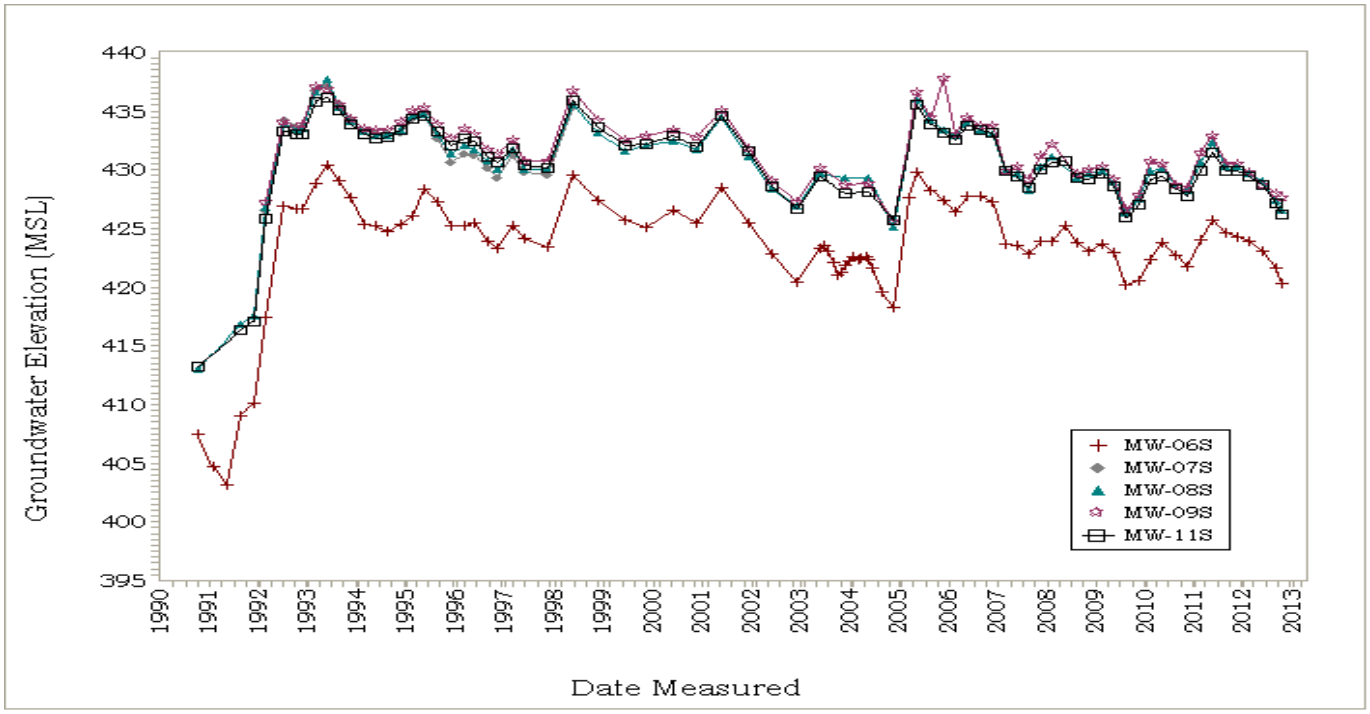
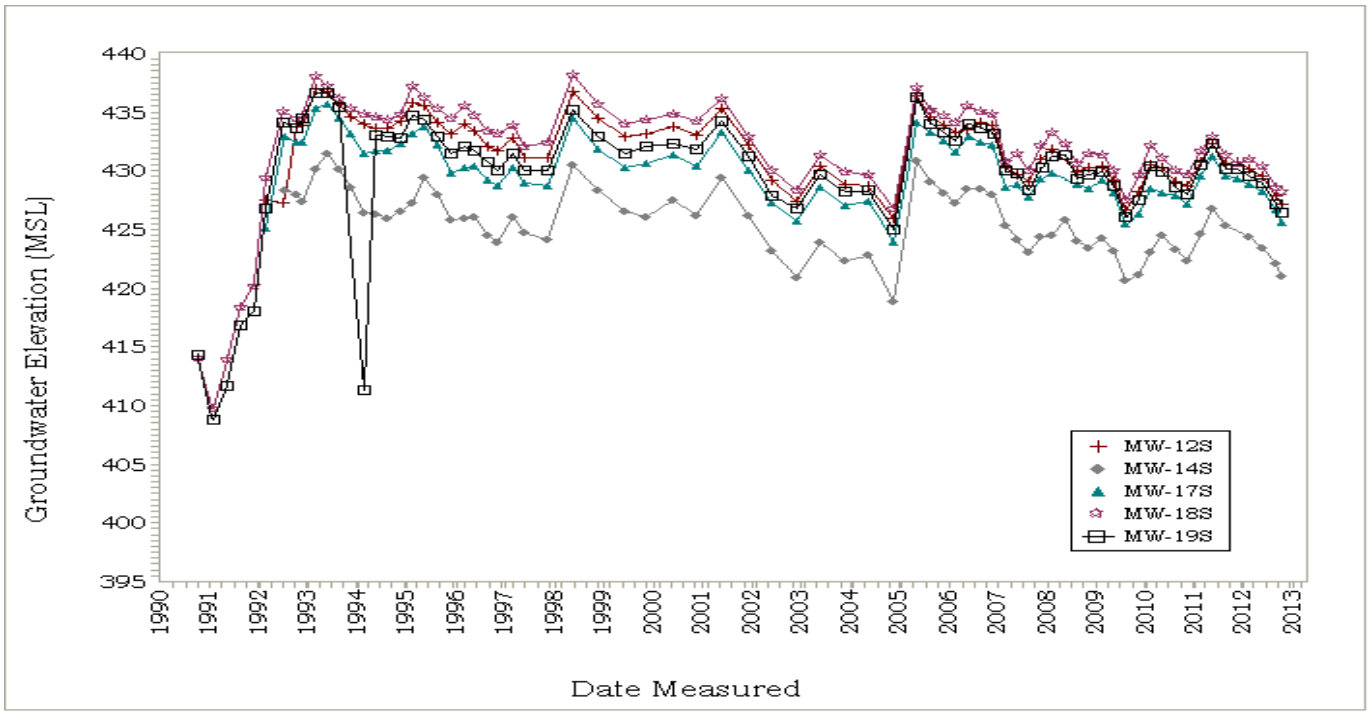


Figure 4a. Historical Hydrographs
for Fillmore Pacific Coast Pipeline Site



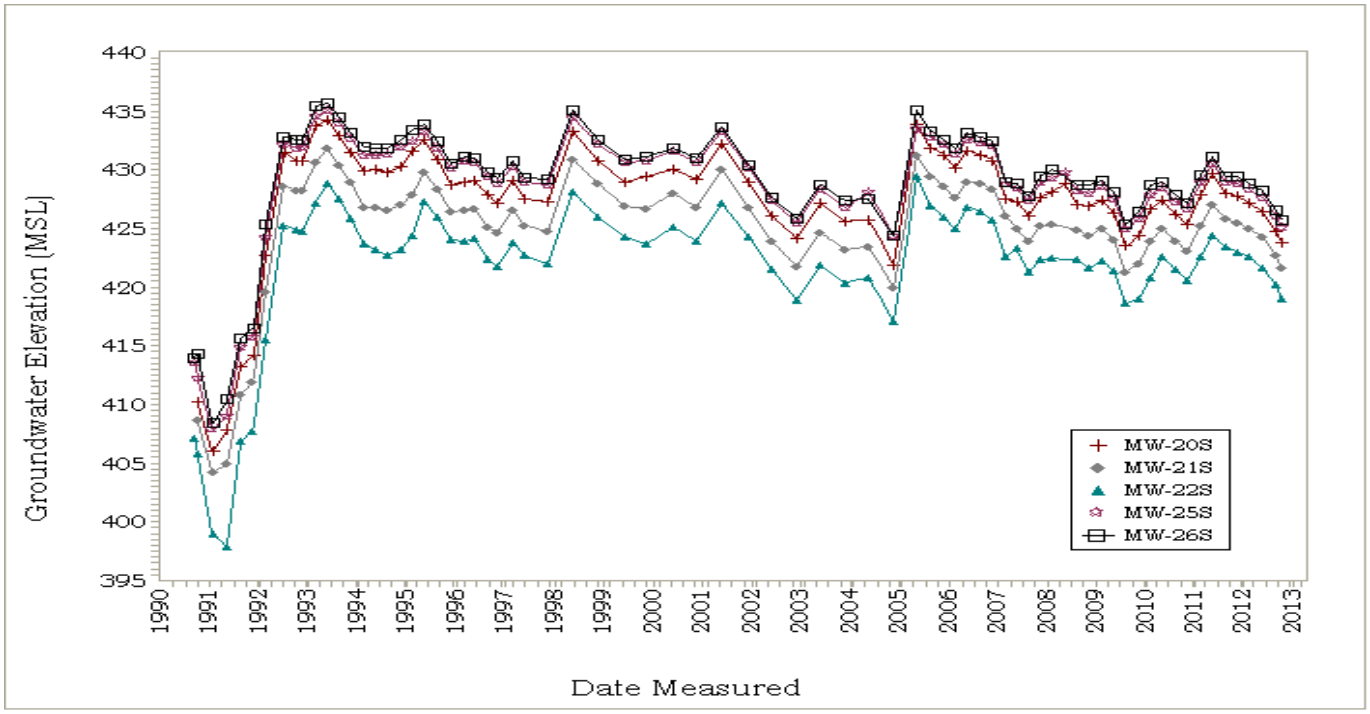
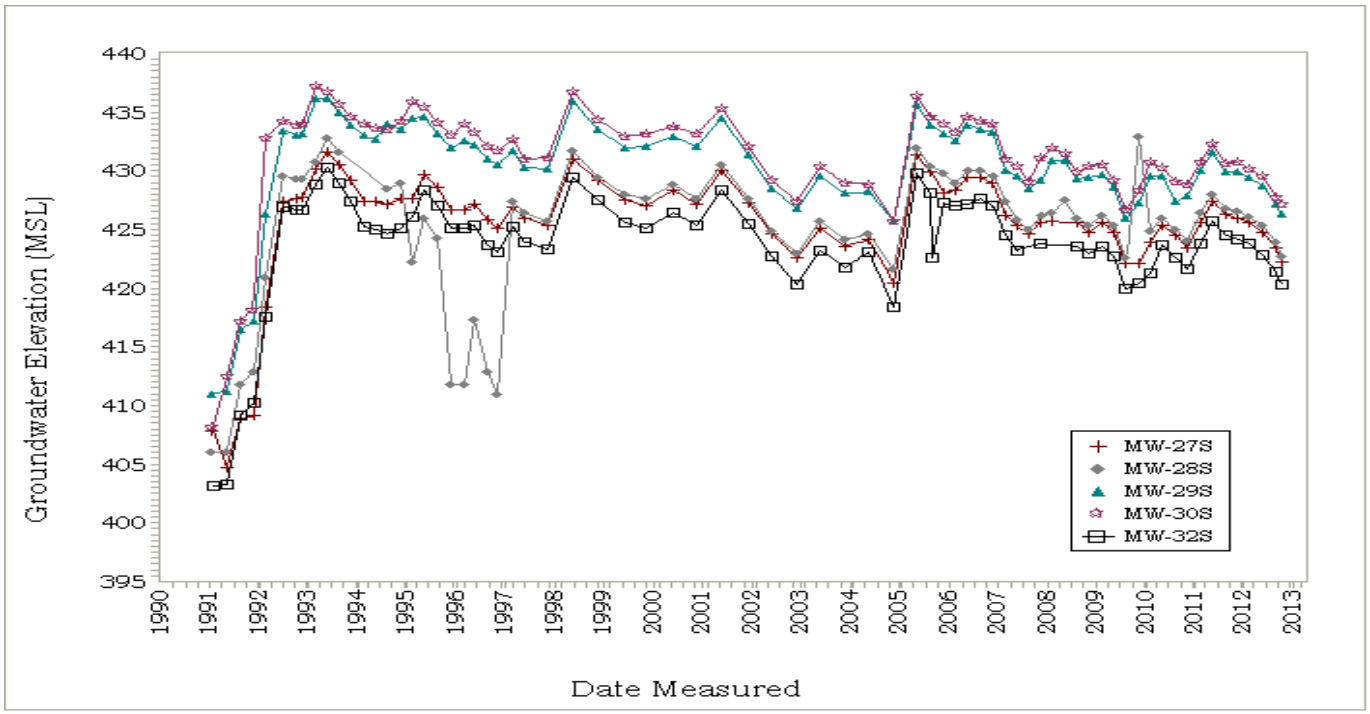


Figure 4b. Historical Hydrographs
for Fillmore Pacific Coast Pipeline Site



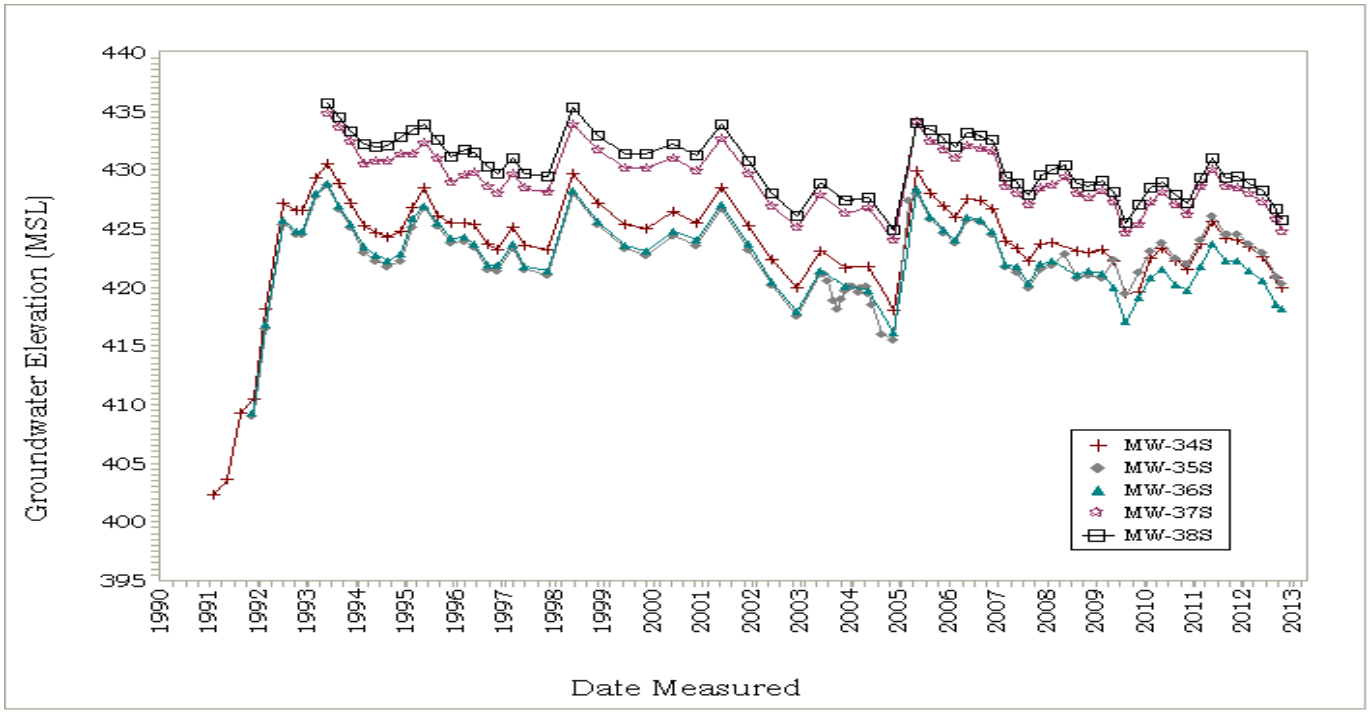
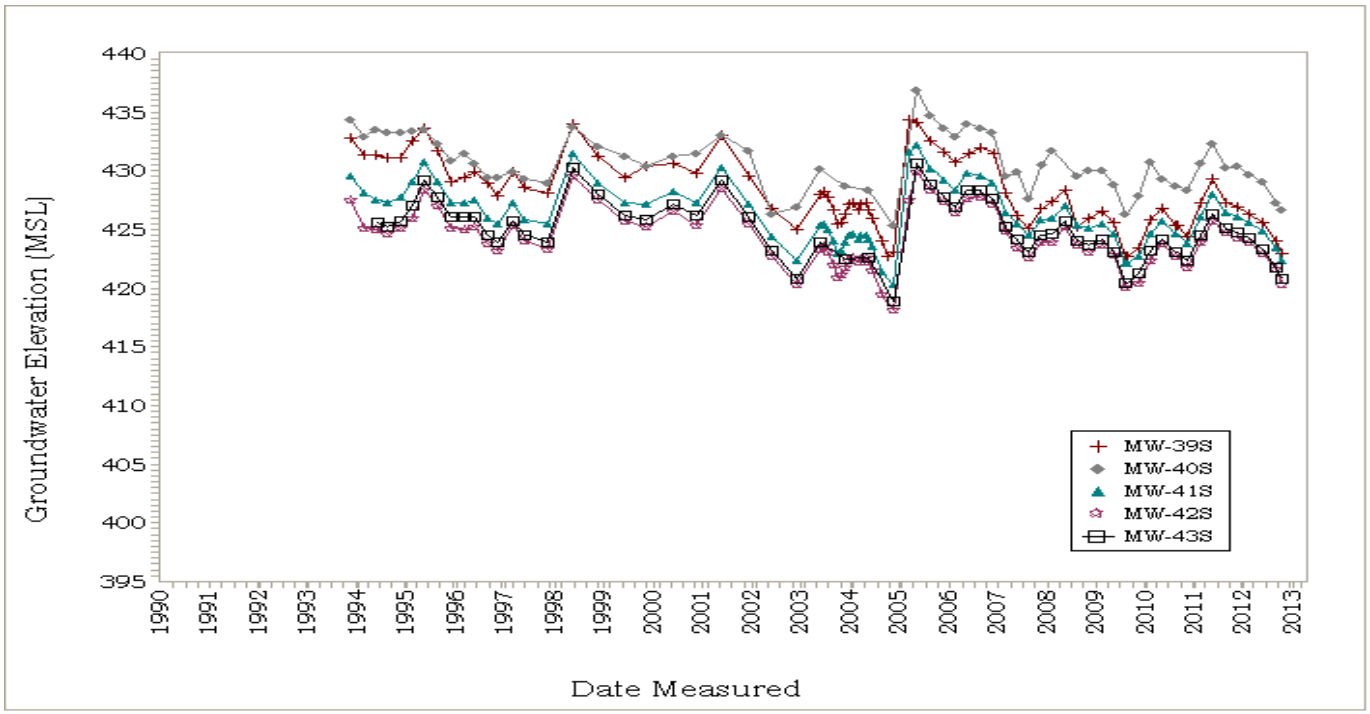


Figure 4c. Historical Hydrographs
for Fillmore Pacific Coast Pipeline Site



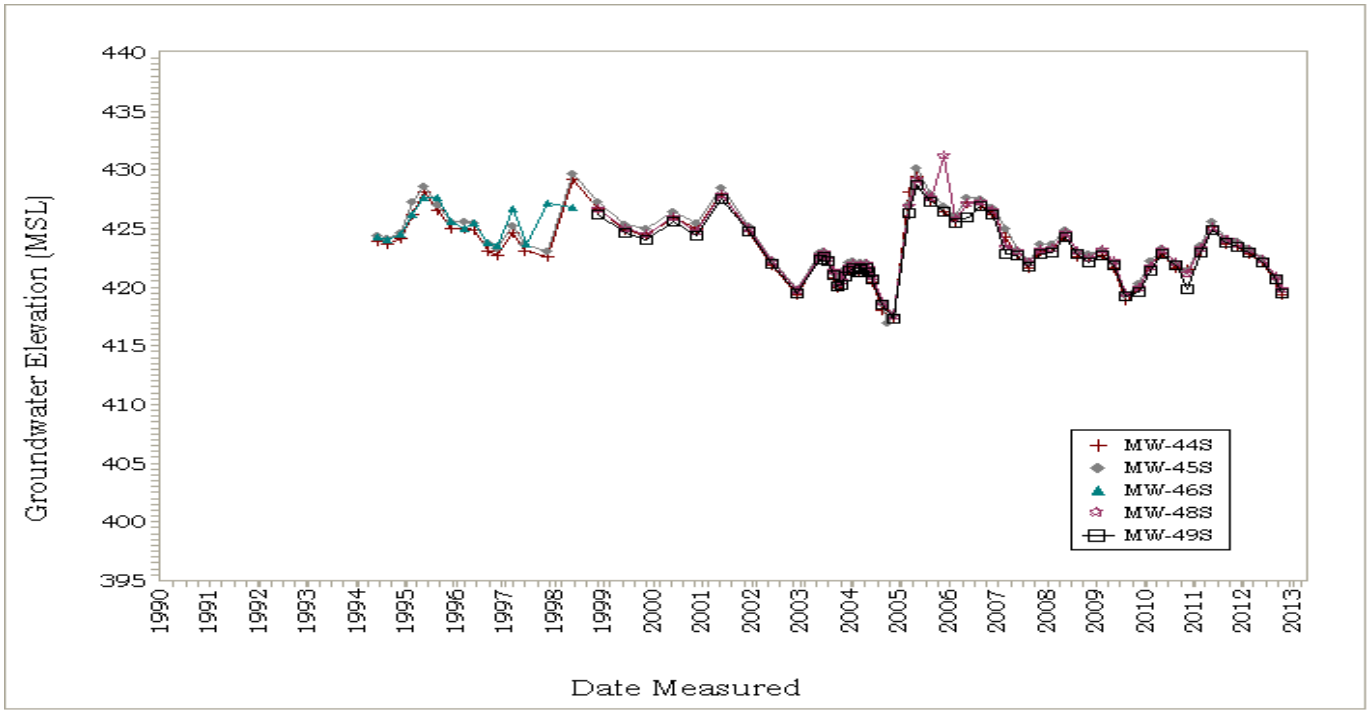
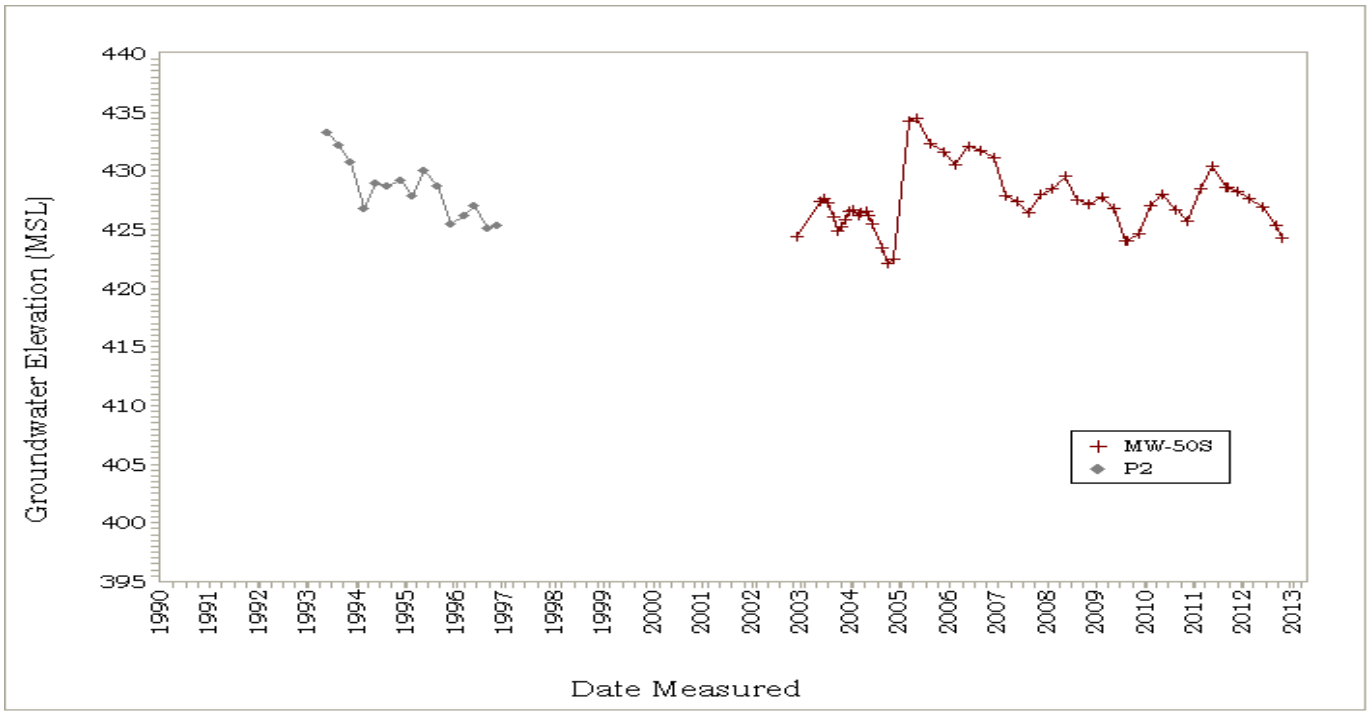


Figure 4d. Historical Hydrographs
for Fillmore Pacific Coast Pipeline Site



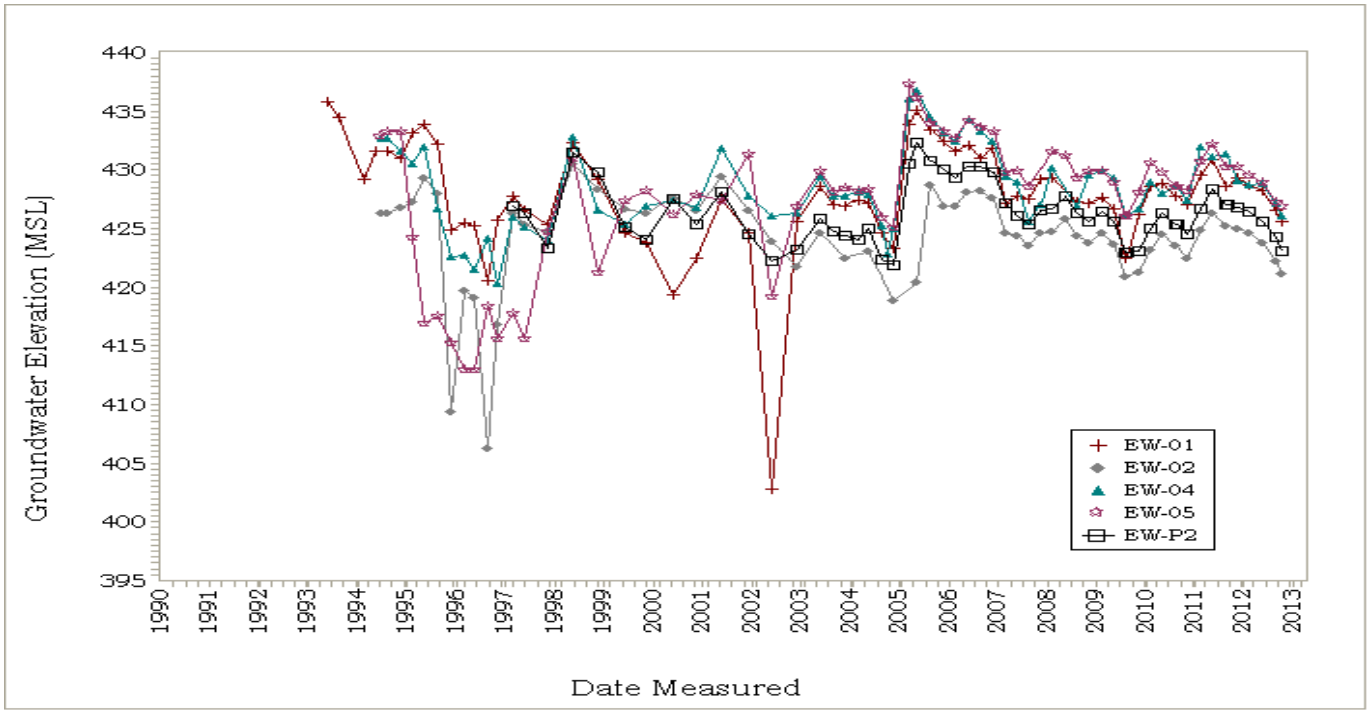
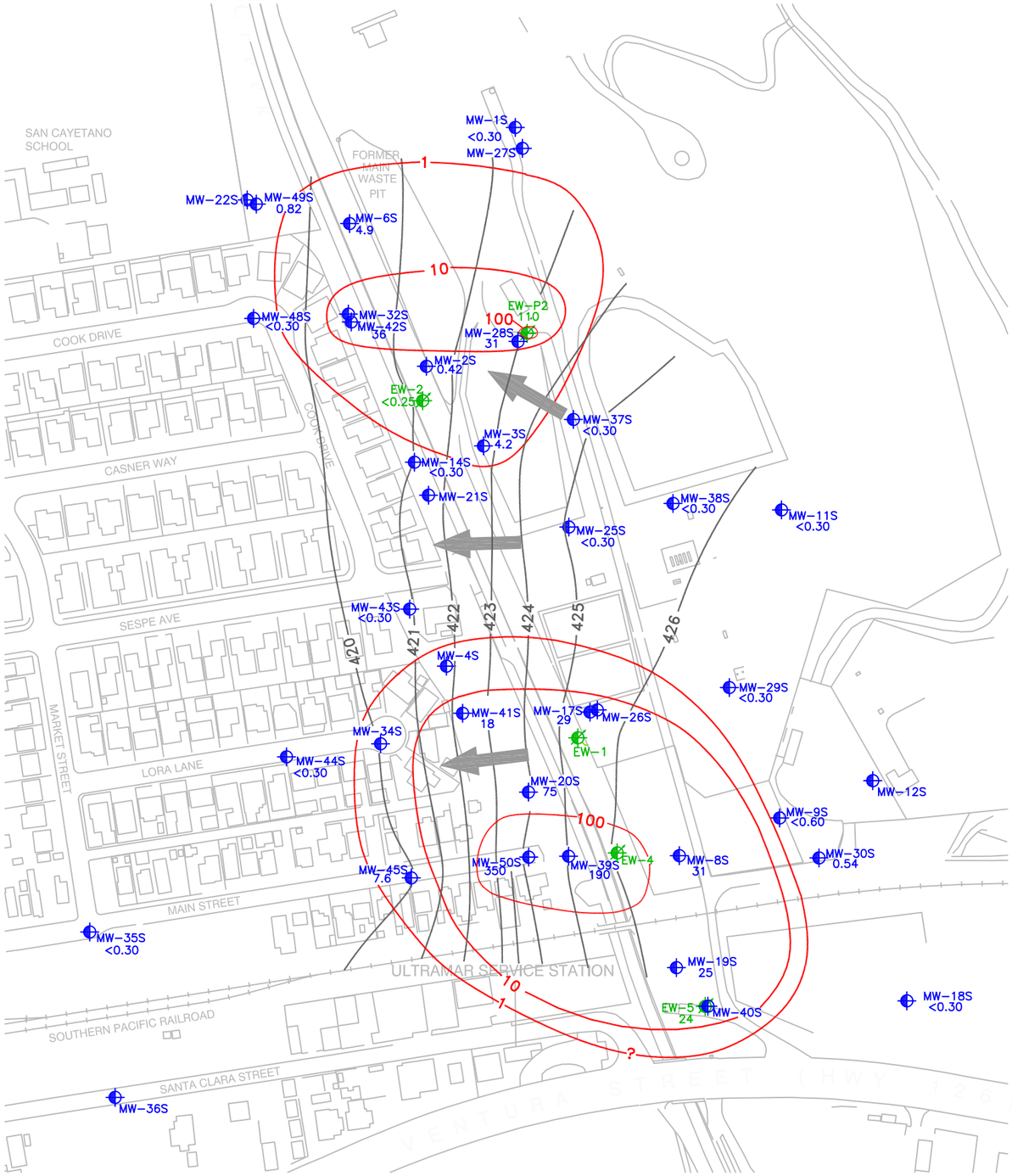


Figure 4e. Historical Hydrographs
for Fillmore Pacific Coast Pipeline Site



LEGEND:

MW-11S	EXISTING AQUIFIER I MONITORING WELL
EW-1	EXISTING AQUIFIER & EXTRACTION/MONITORING WELL
75	BENZENE CONCENTRATION (MICROGRAMS PER LITER)
< 0.30	ANALYTE NOT DETECTED ABOVE LABORATORY REPORTING LIMIT
100 ?	BENZENE ISOCONCENTRATION CONTOUR, DASHED WHERE INFERRED, QUERIED WHERE UNCERTAIN
427	GROUNDWATER ELEVATION CONTOUR, DASHED WHERE INFERRED, QUERIED WHERE UNCERTAIN
	GROUNDWATER FLOW DIRECTION – Q4 2012 (APPROXIMATE)

N

0 125 250 500

SCALE: IN FEET

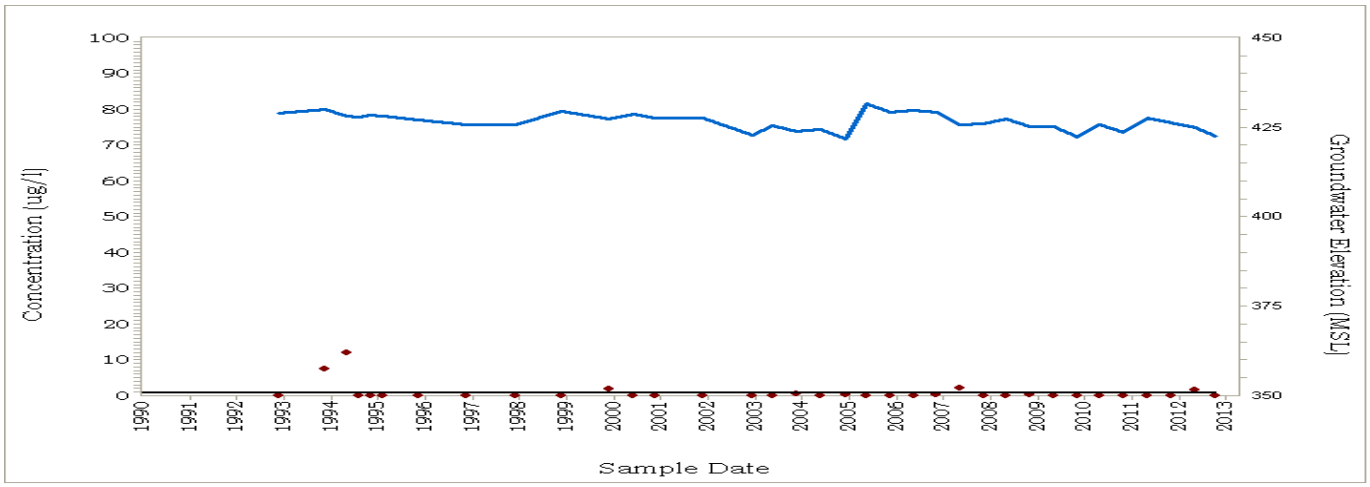
URS Corporation

BENZENE DISTRIBUTION – AQUIFER I
(FOURTH QUARTER 2012)

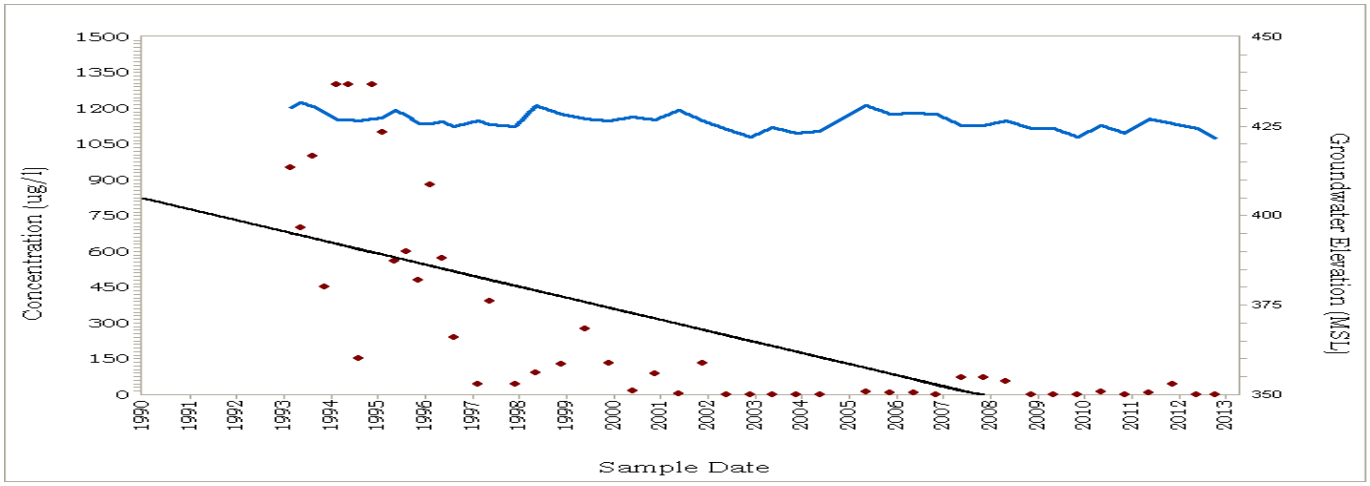
Proj. No.: 29875030		Date: JANUARY 2012	
Project: TEXACO PCPL (Fillmore, Ca)		CAD ID.: ---	
Drawn by: JV	Checked by: BP	Figure: 5	

T:\2004\Chevron PCPL (Fillmore Refinery)\Deliverables (Finals in El Seg)\Reports\Groundwater Status Reports\12 Q4\Q412 benzene.dwg

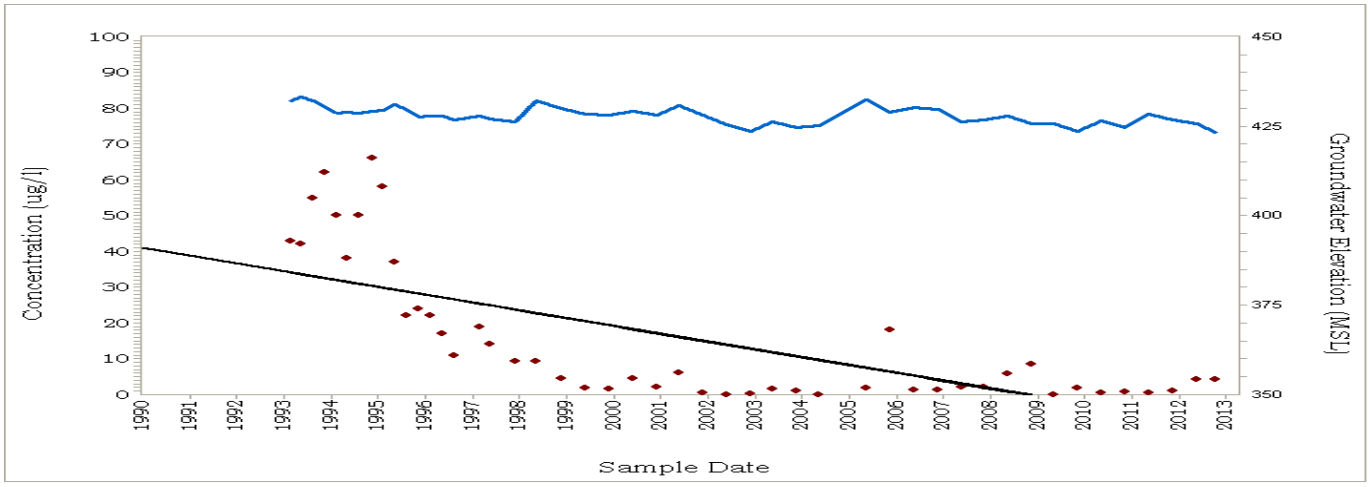
MW-01S



MW-02S



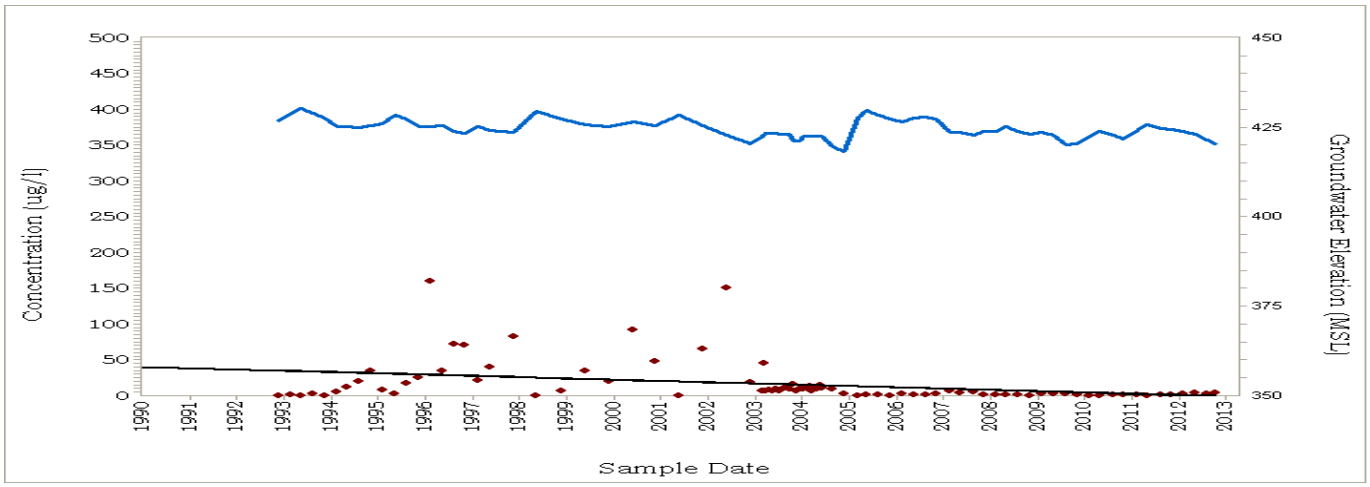
MW-03S



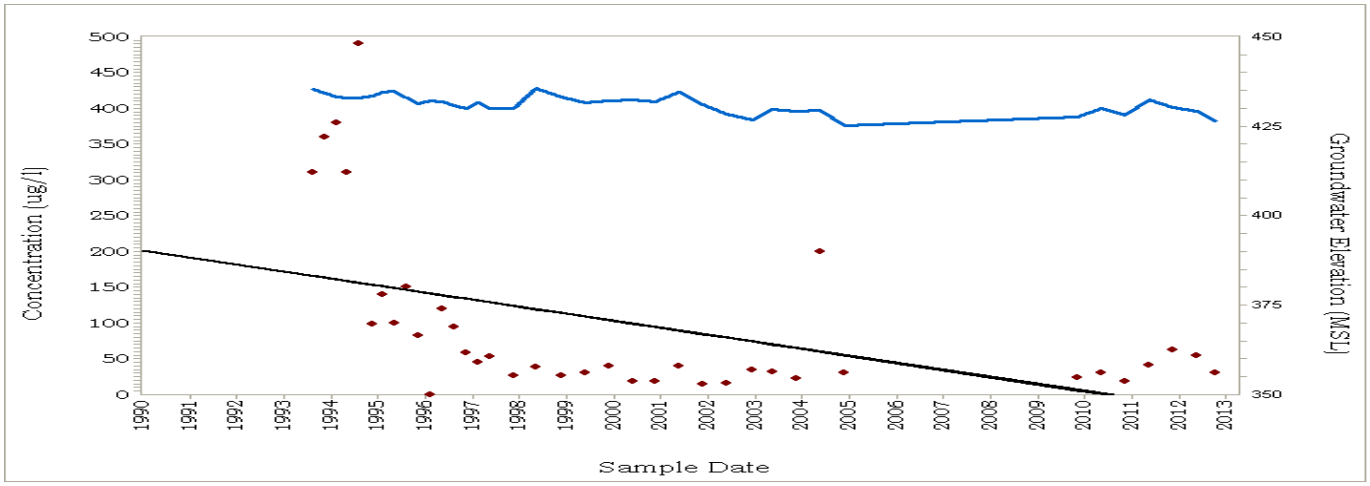
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6a. Historical Benzene Results for Fillmore Pacific Coast Pipeline Site

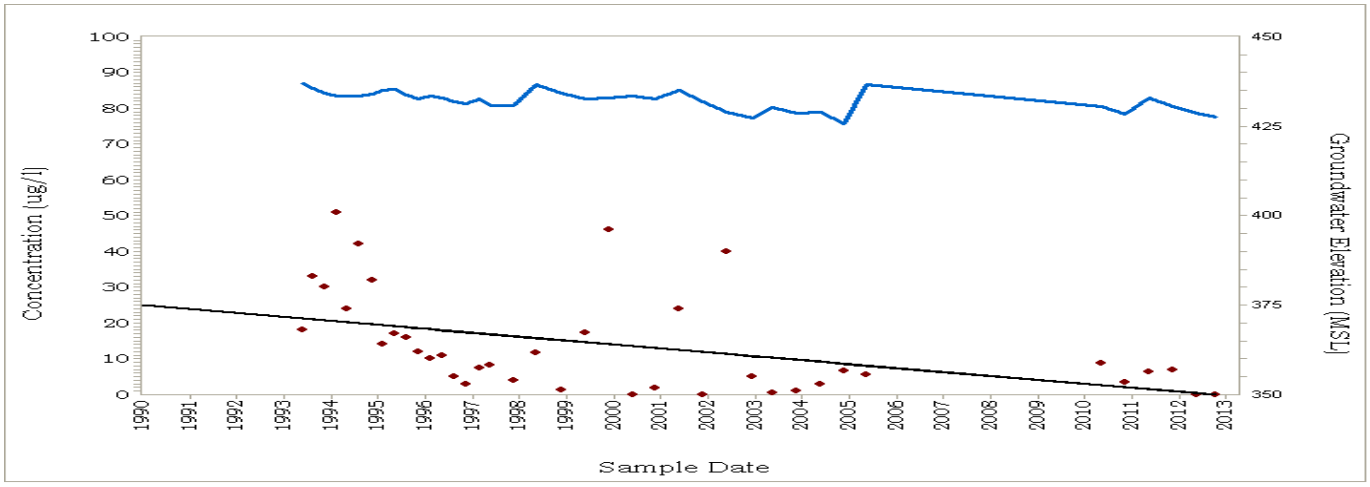
MW-06S



MW-08S



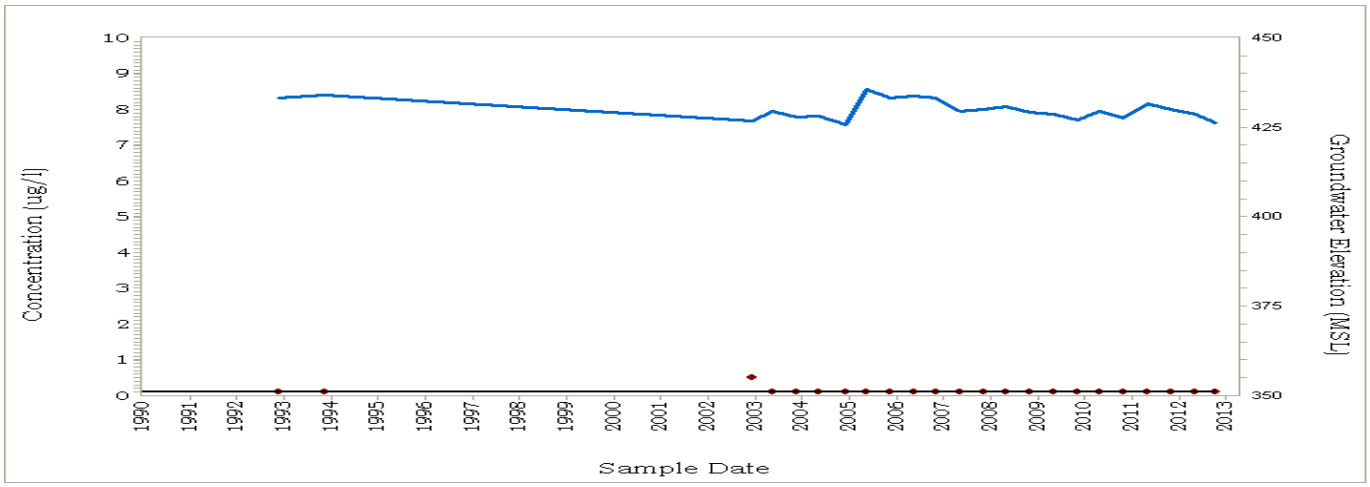
MW-09S



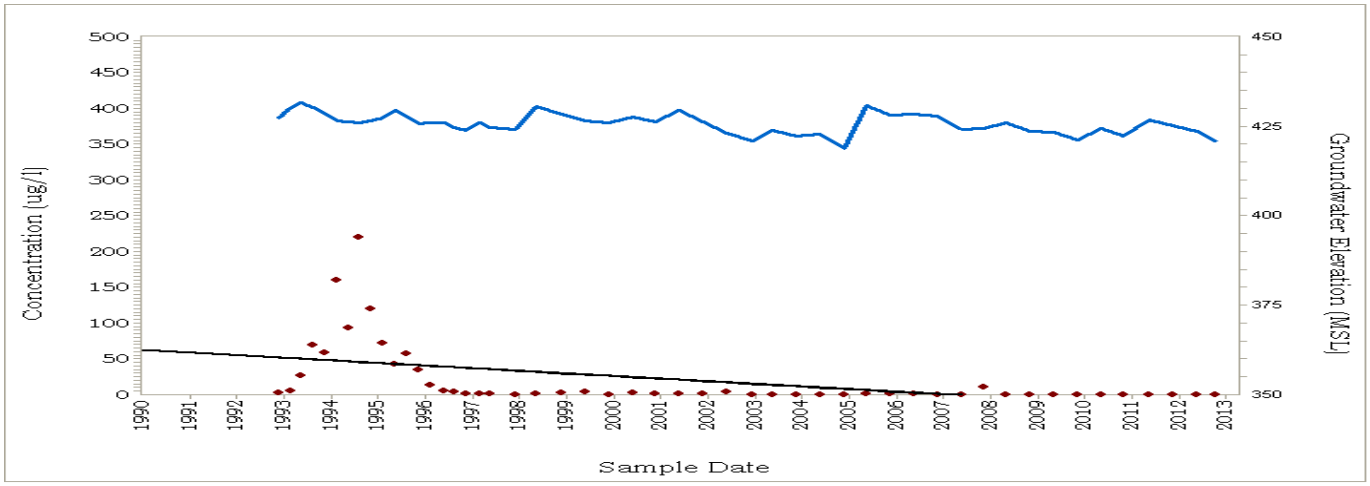
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6b. Historical Benzene Results for Fillmore Pacific Coast Pipeline Site

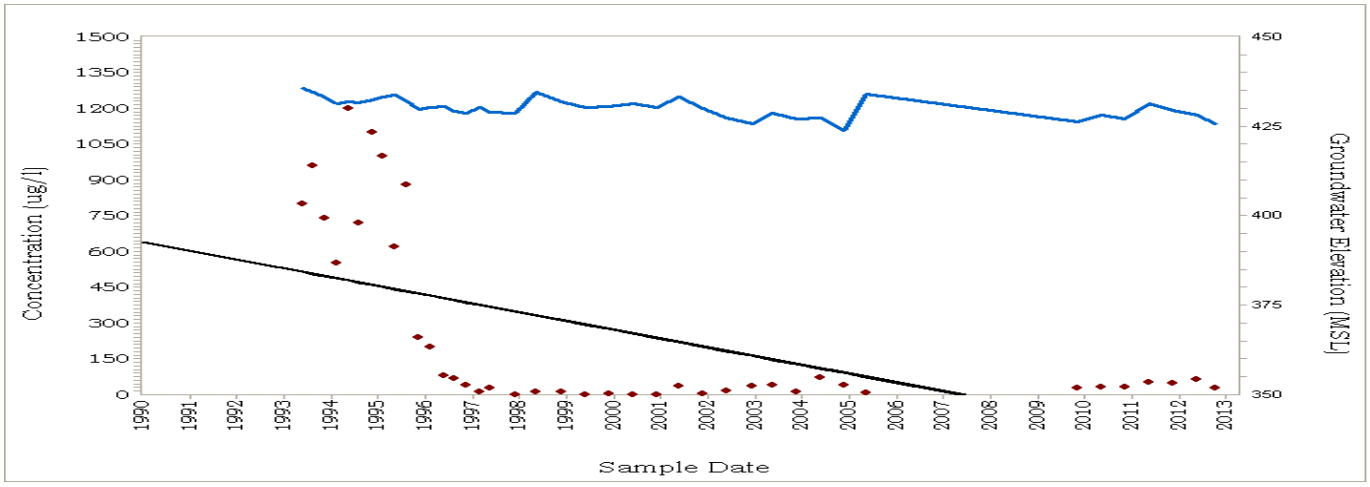
MW-11S



MW-14S



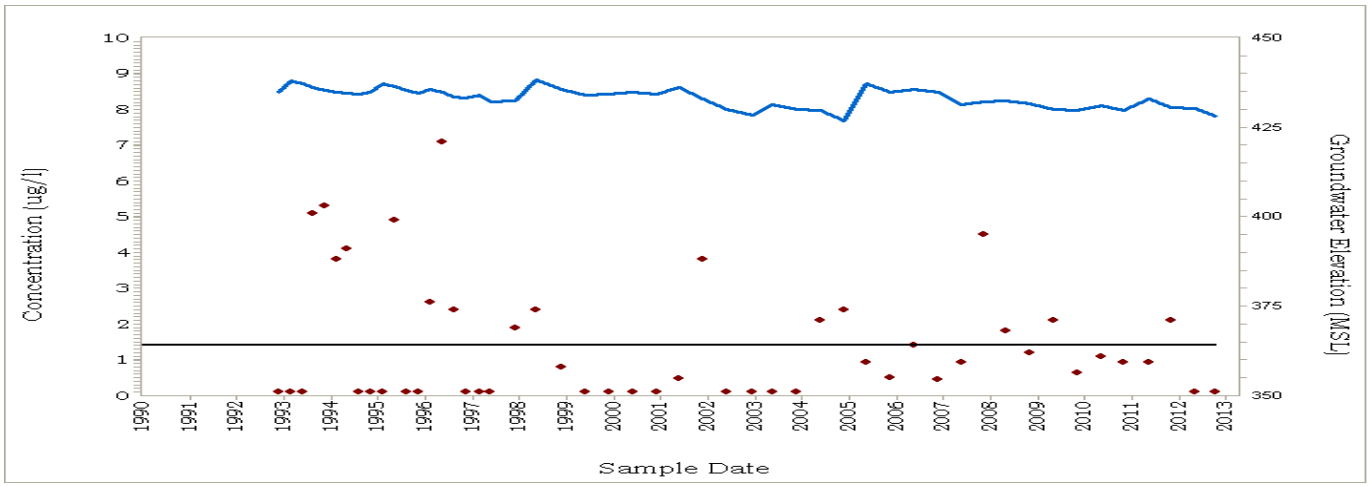
MW-17S



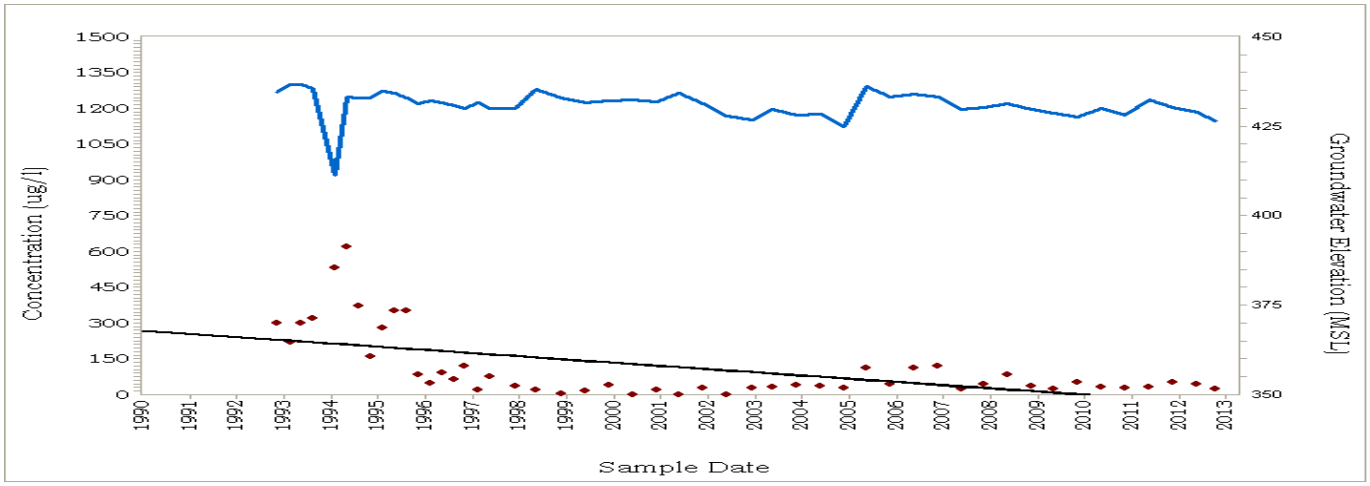
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6c. Historical Benzene Results
for Fillmore Pacific Coast Pipeline Site

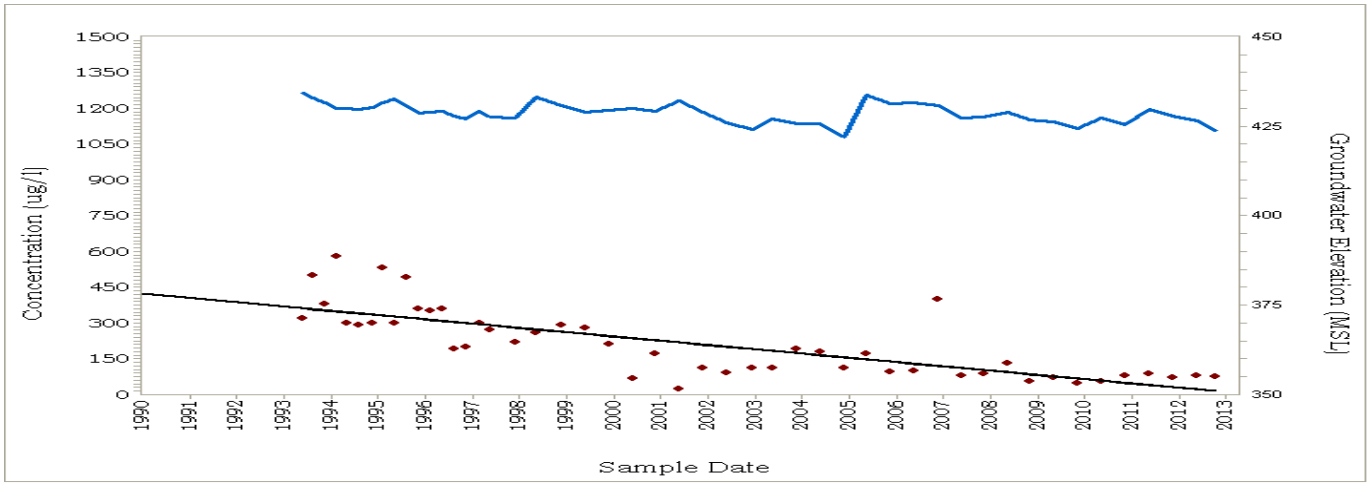
MW-18S



MW-19S



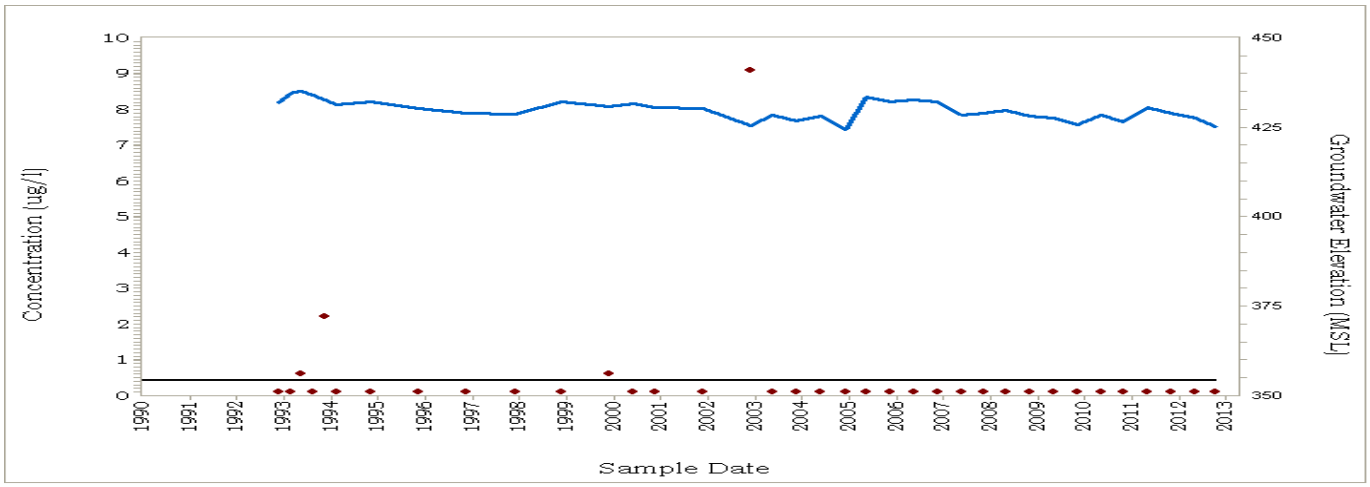
MW-20S



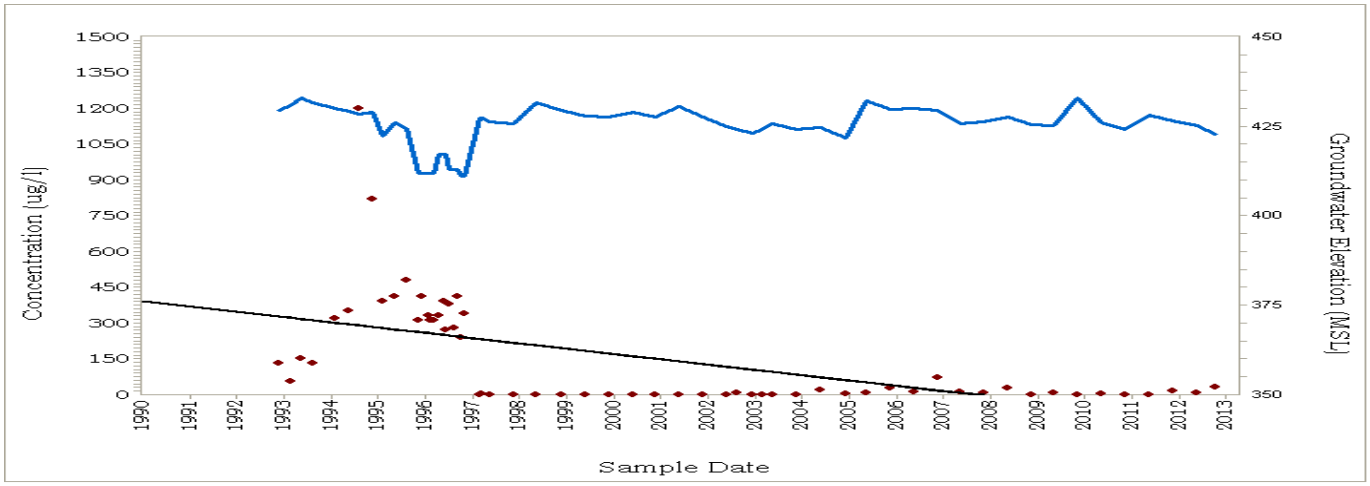
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6d. Historical Benzene Results for Fillmore Pacific Coast Pipeline Site

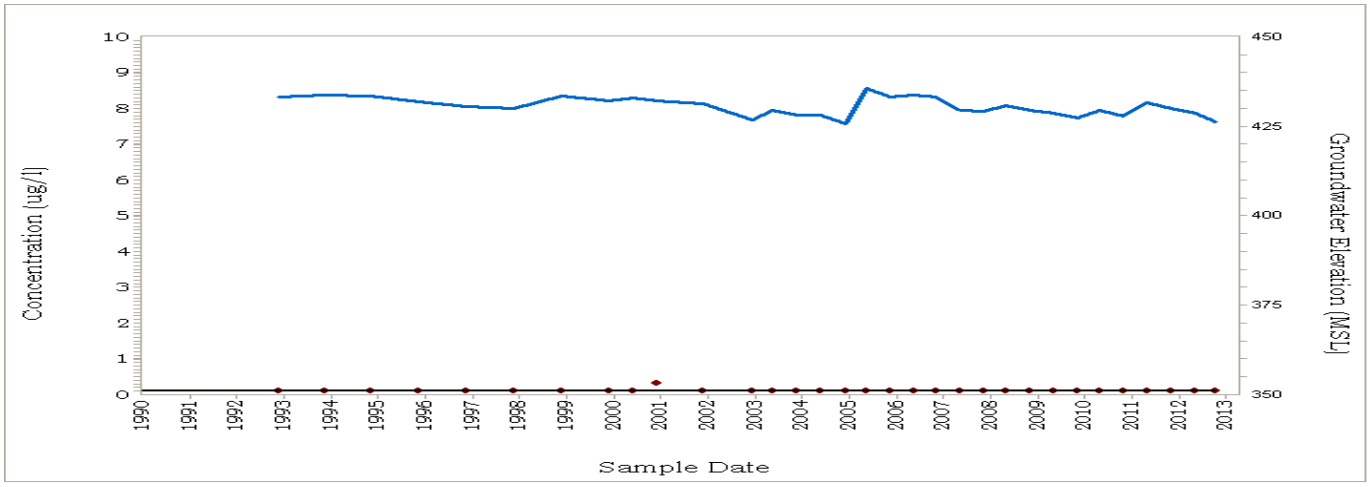
MW-25S



MW-28S



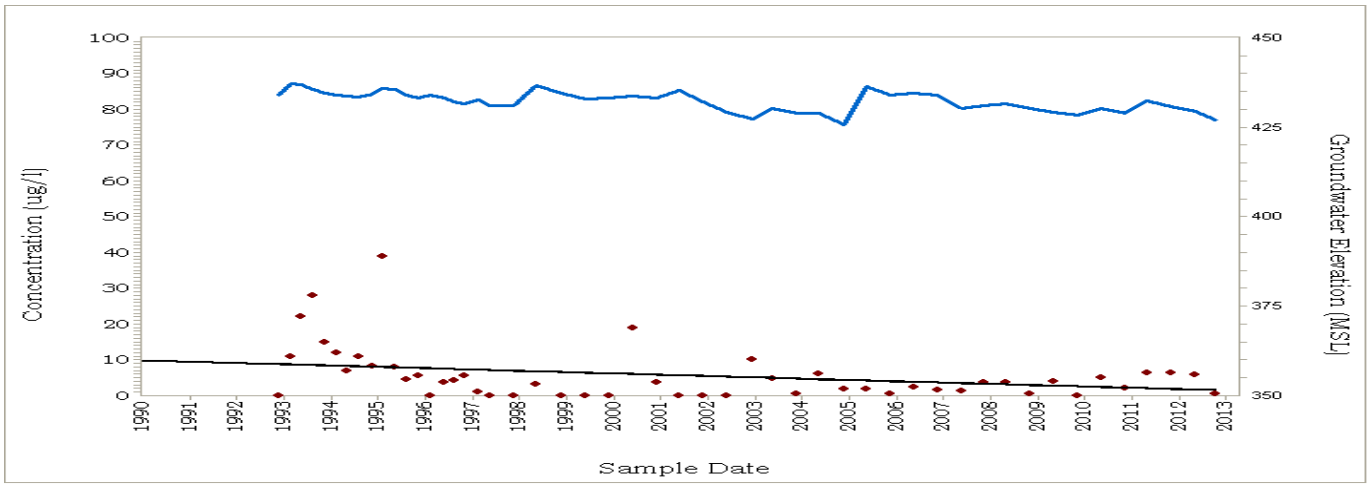
MW-29S



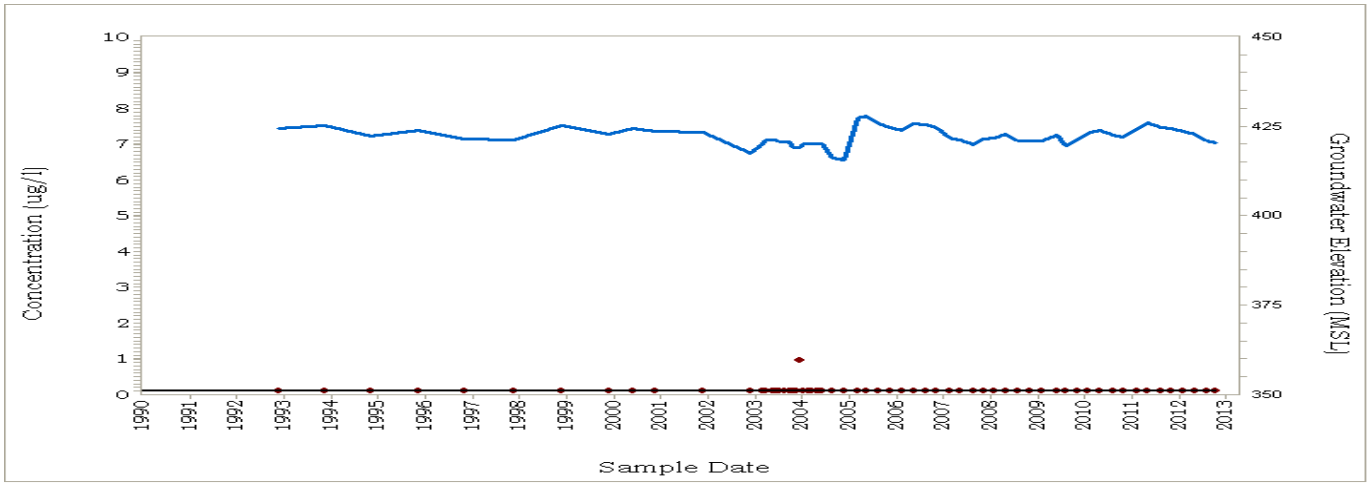
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6e. Historical Benzene Results
for Fillmore Pacific Coast Pipeline Site

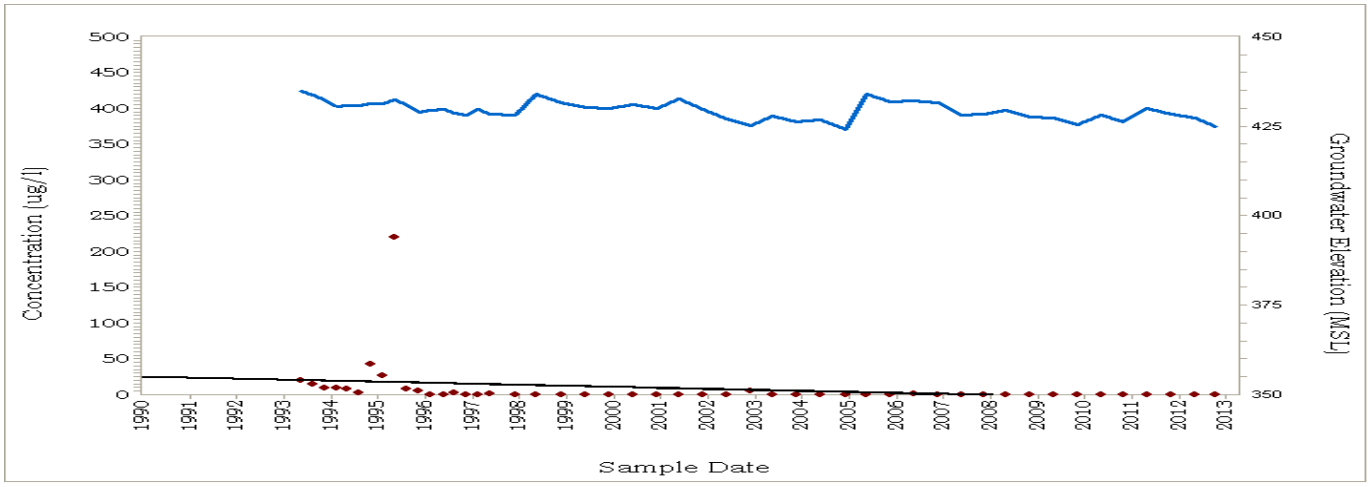
MW-30S



MW-35S



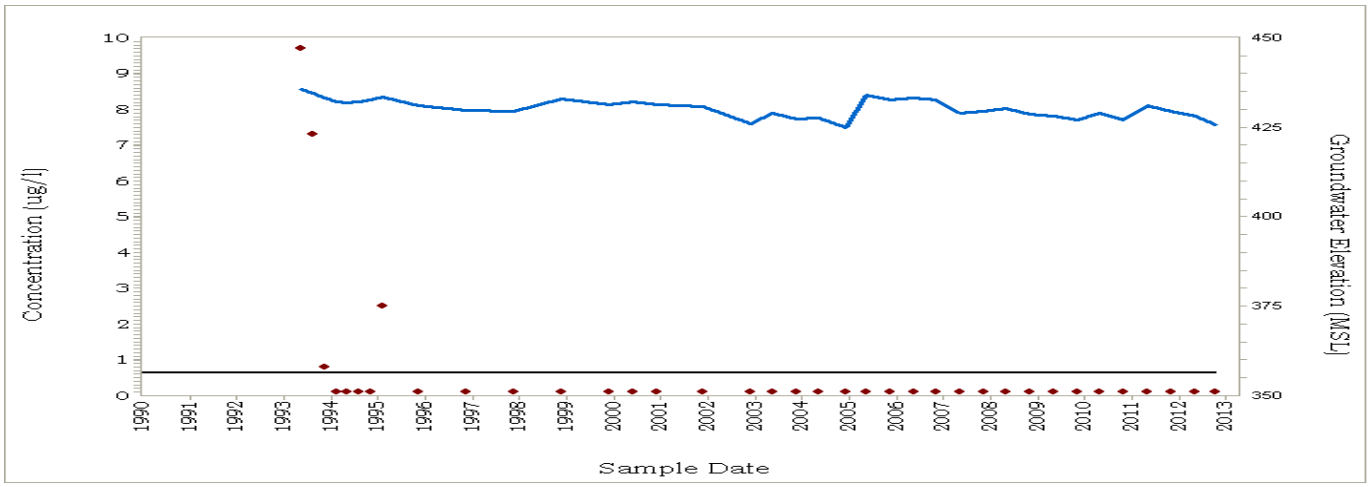
MW-37S



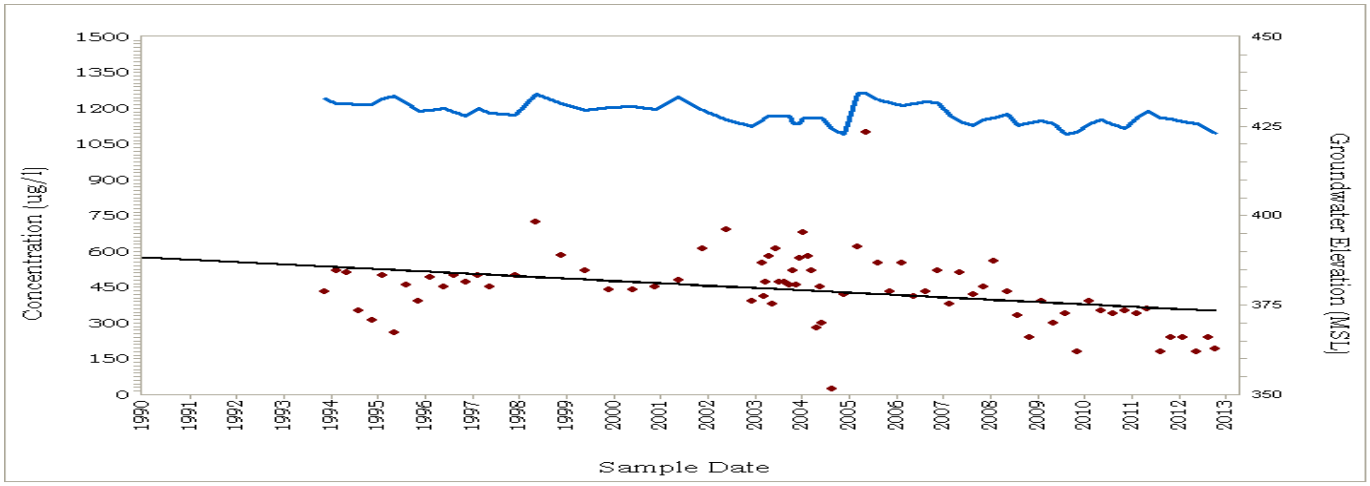
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6f. Historical Benzene Results
for Fillmore Pacific Coast Pipeline Site

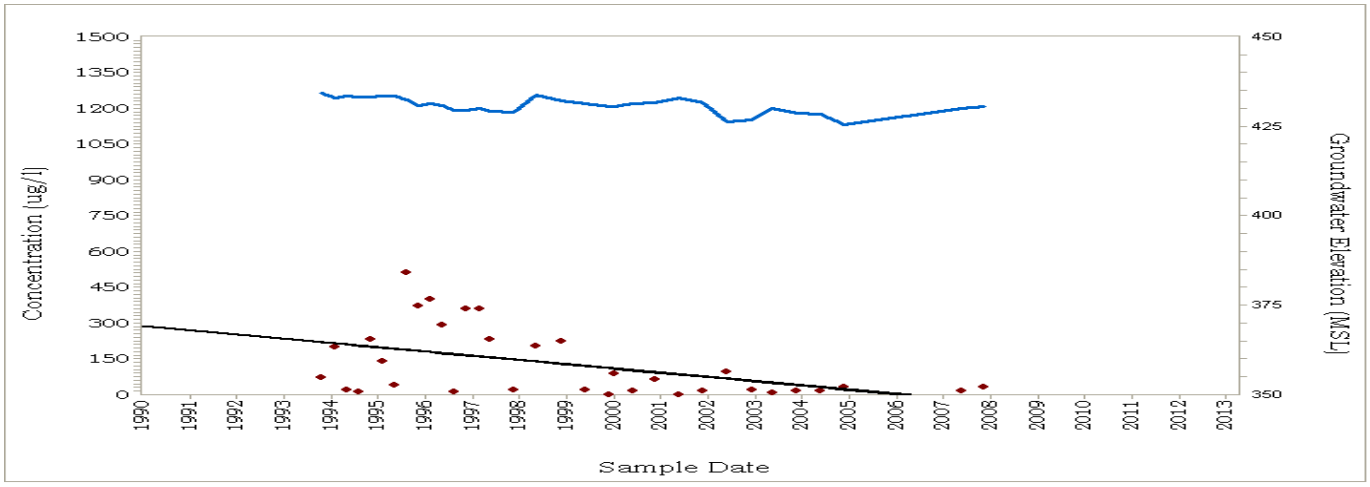
MW-38S



MW-39S



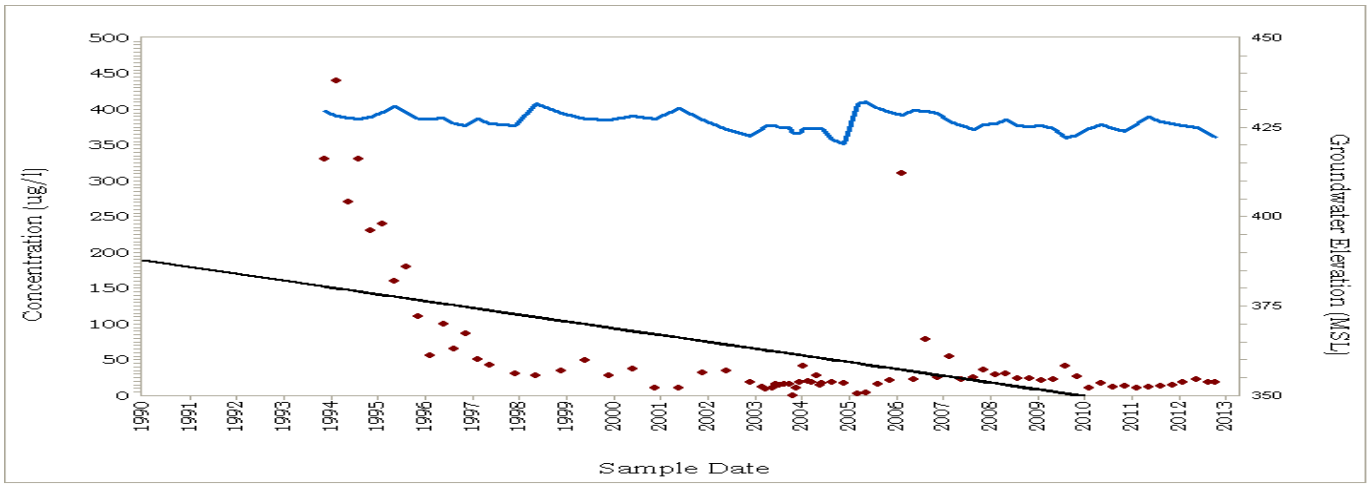
MW-40S



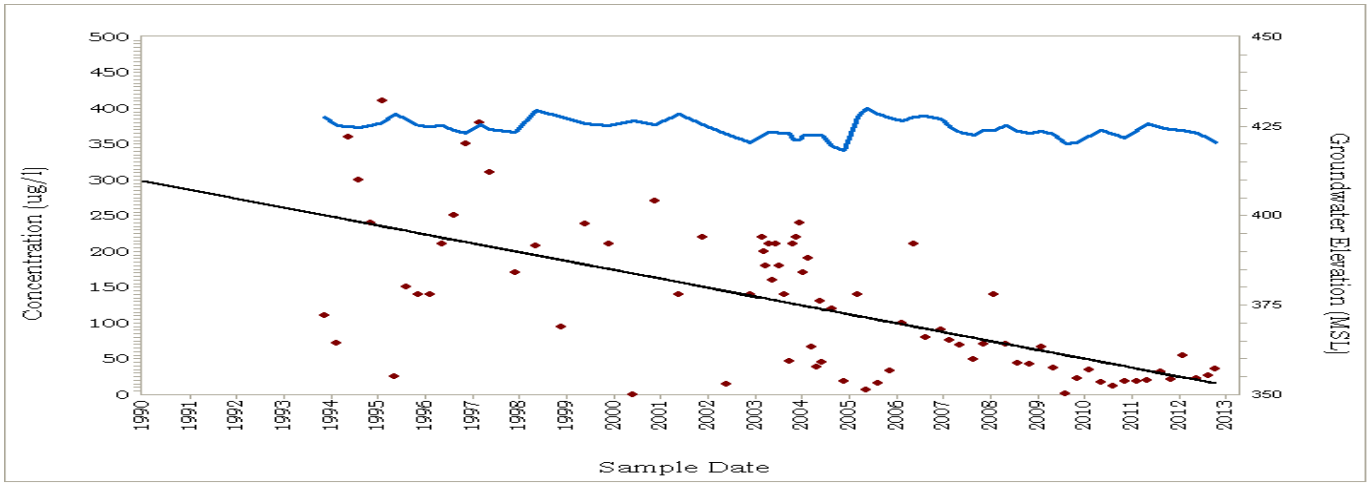
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6g. Historical Benzene Results
for Fillmore Pacific Coast Pipeline Site

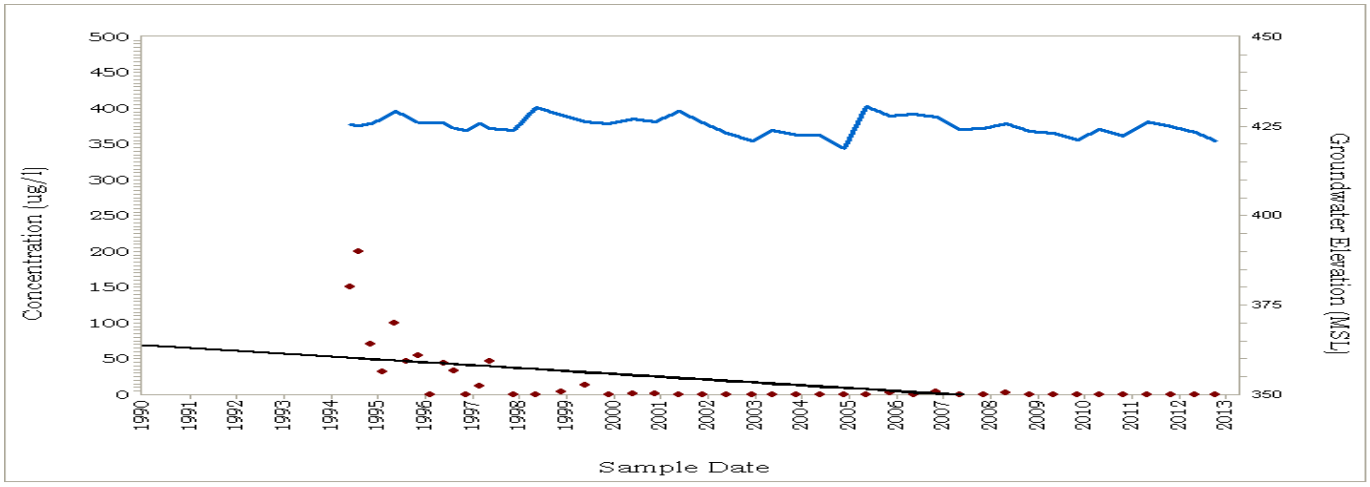
MW-41S



MW-42S



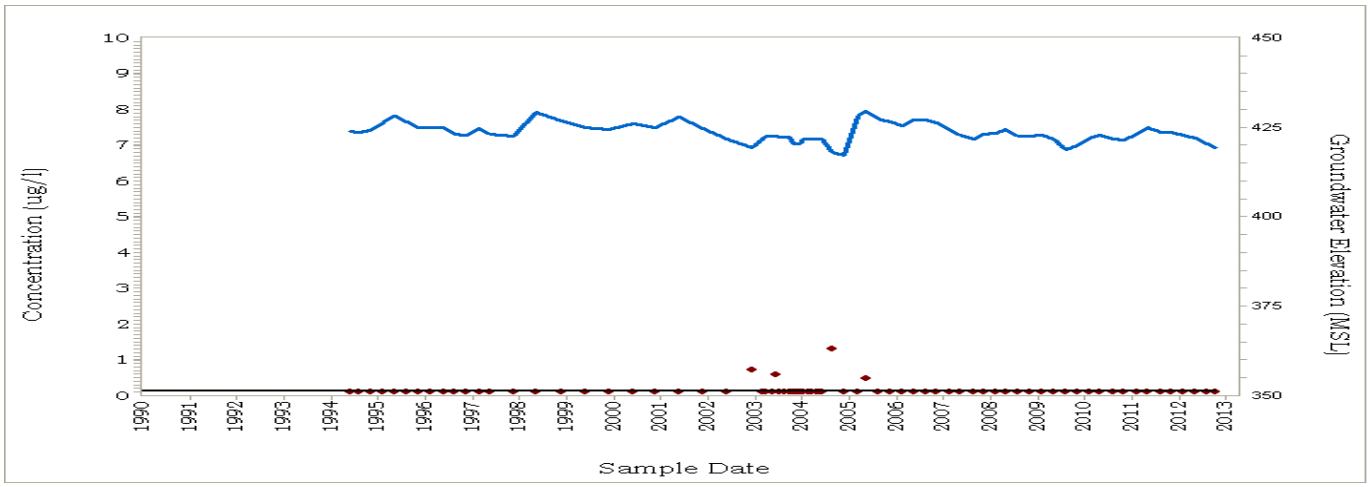
MW-43S



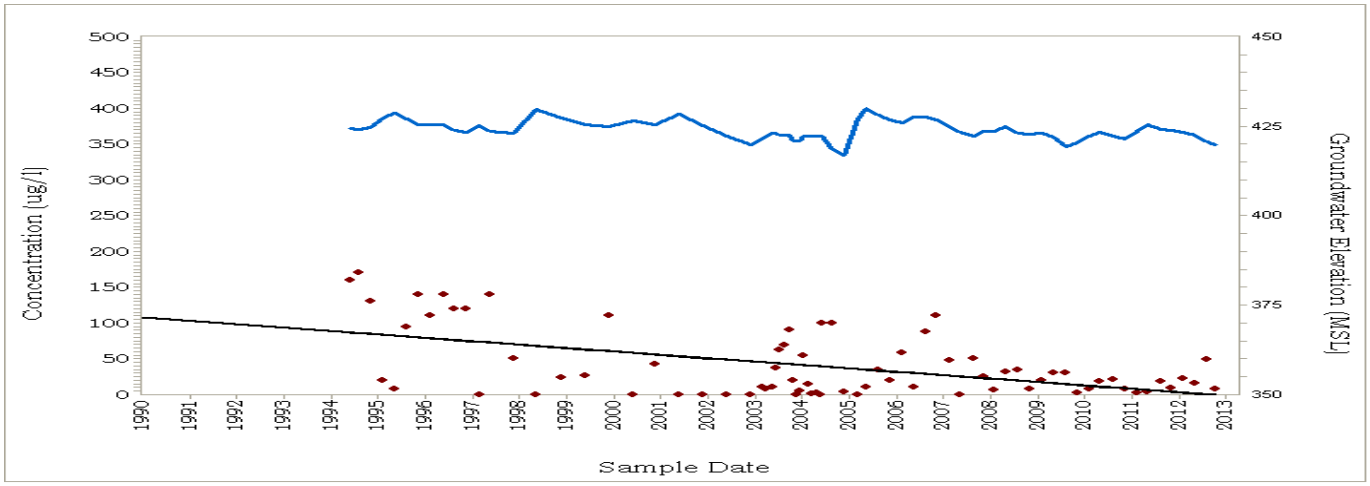
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6h. Historical Benzene Results for Fillmore Pacific Coast Pipeline Site

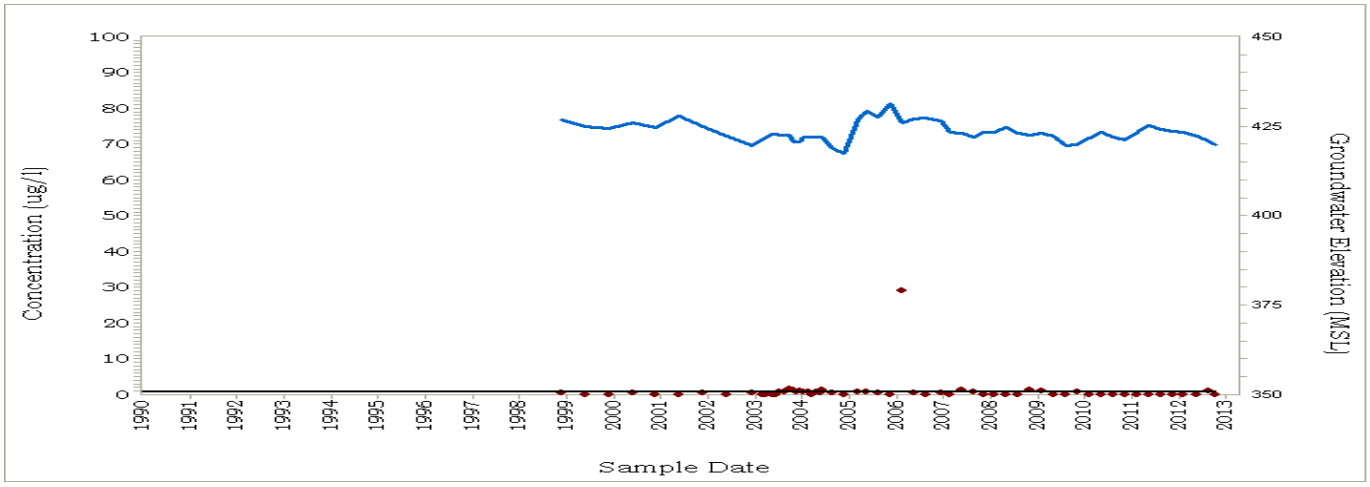
MW-44S



MW-45S



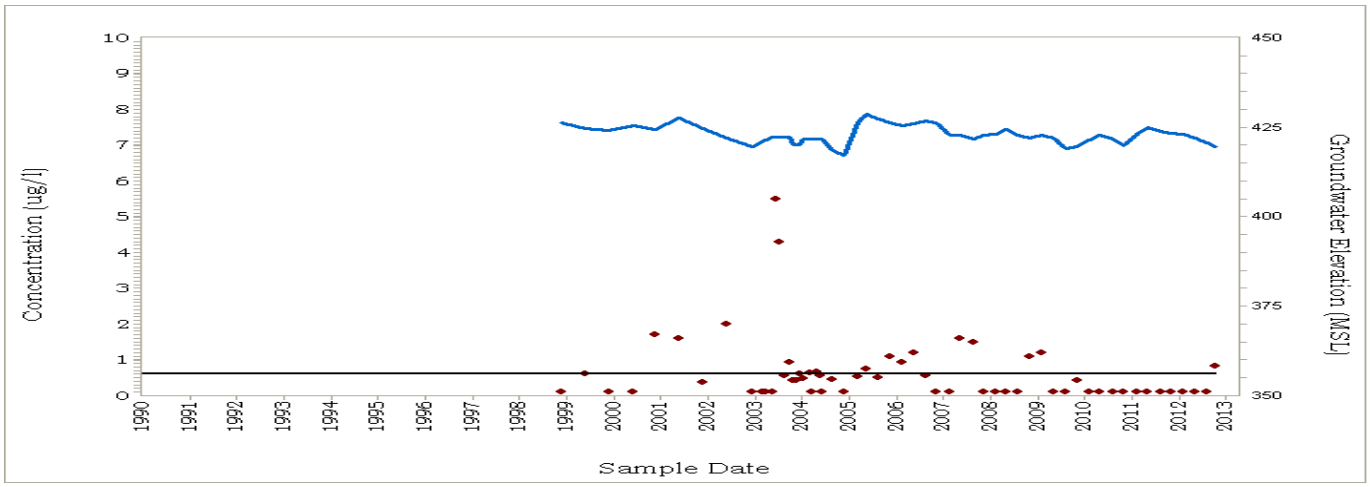
MW-48S



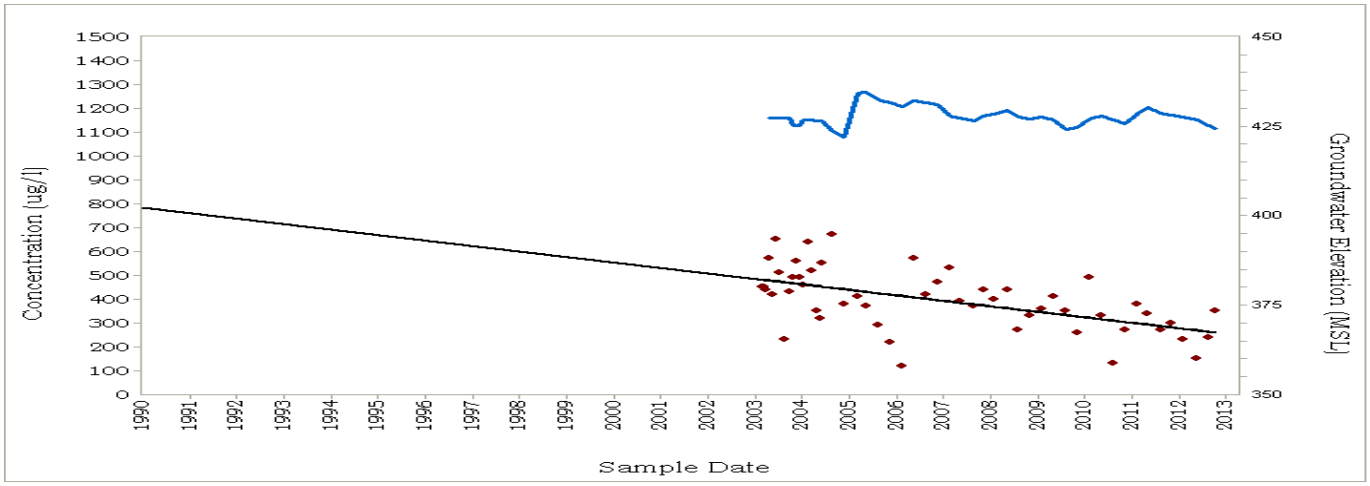
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6i. Historical Benzene Results
for Fillmore Pacific Coast Pipeline Site

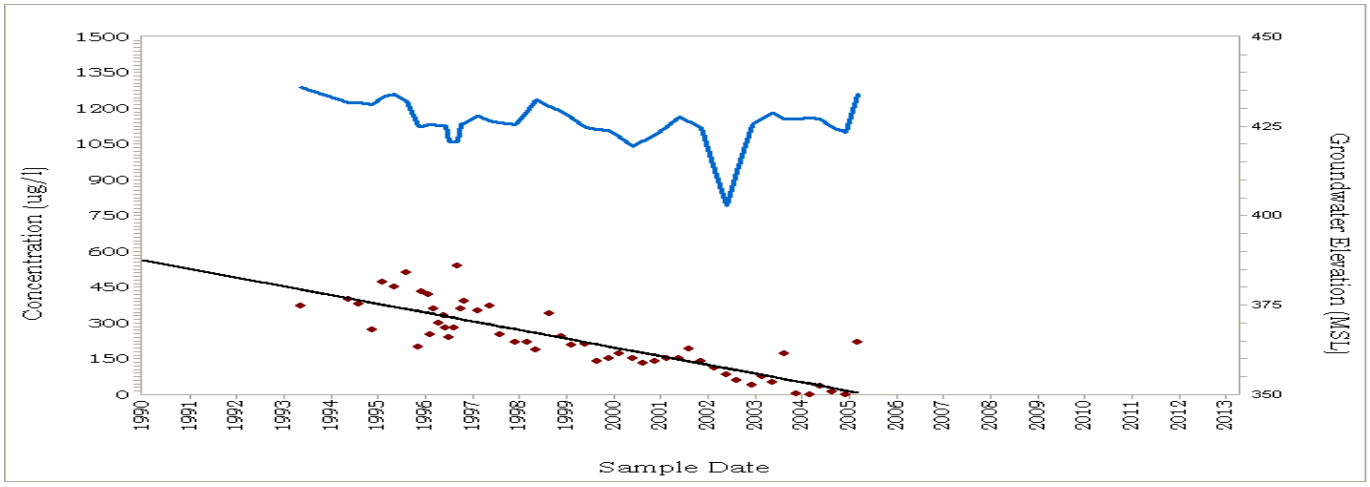
MW-49S



MW-50S



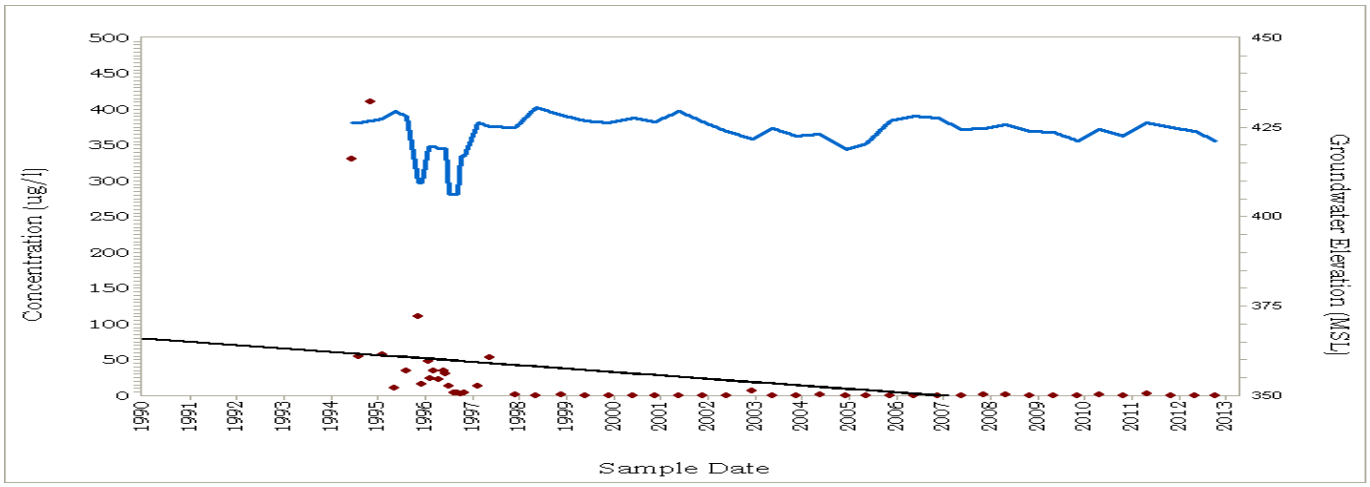
EW-01



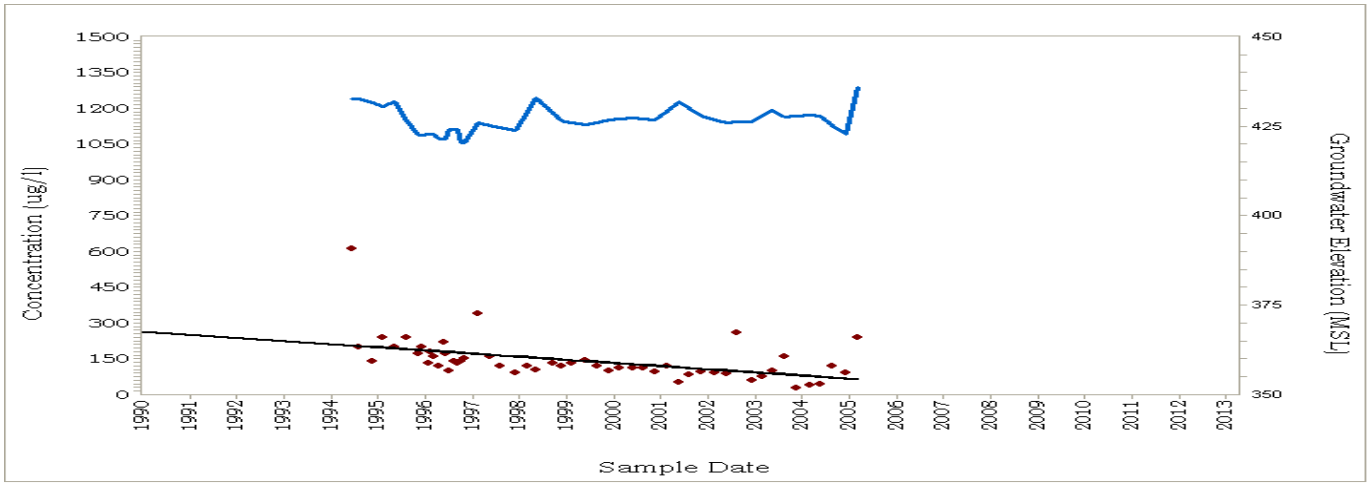
Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6j. Historical Benzene Results
for Fillmore Pacific Coast Pipeline Site

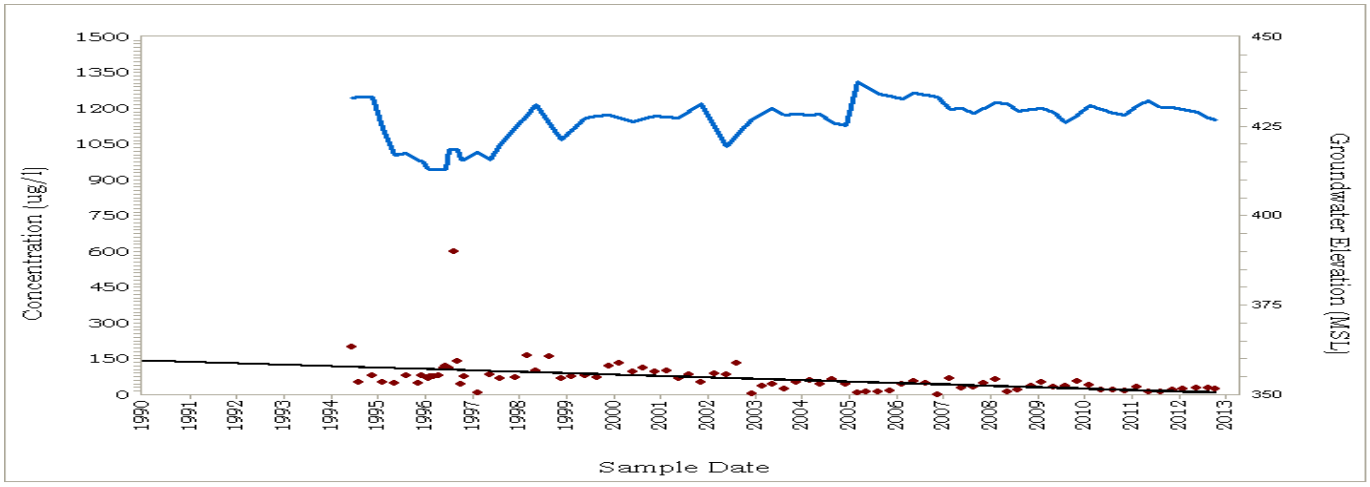
EW-02



EW-04



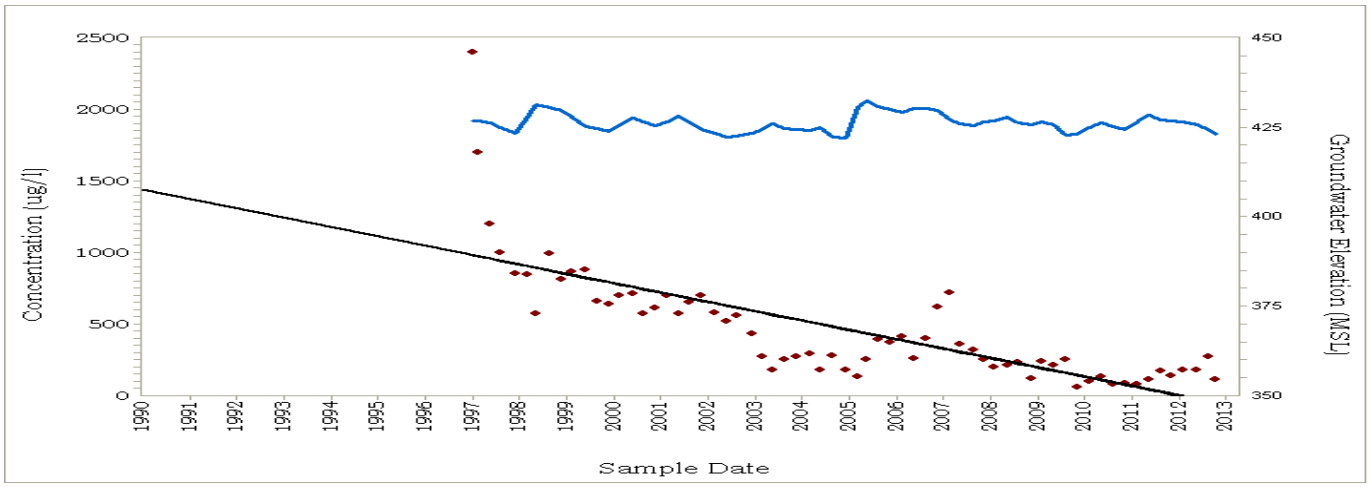
EW-05



Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

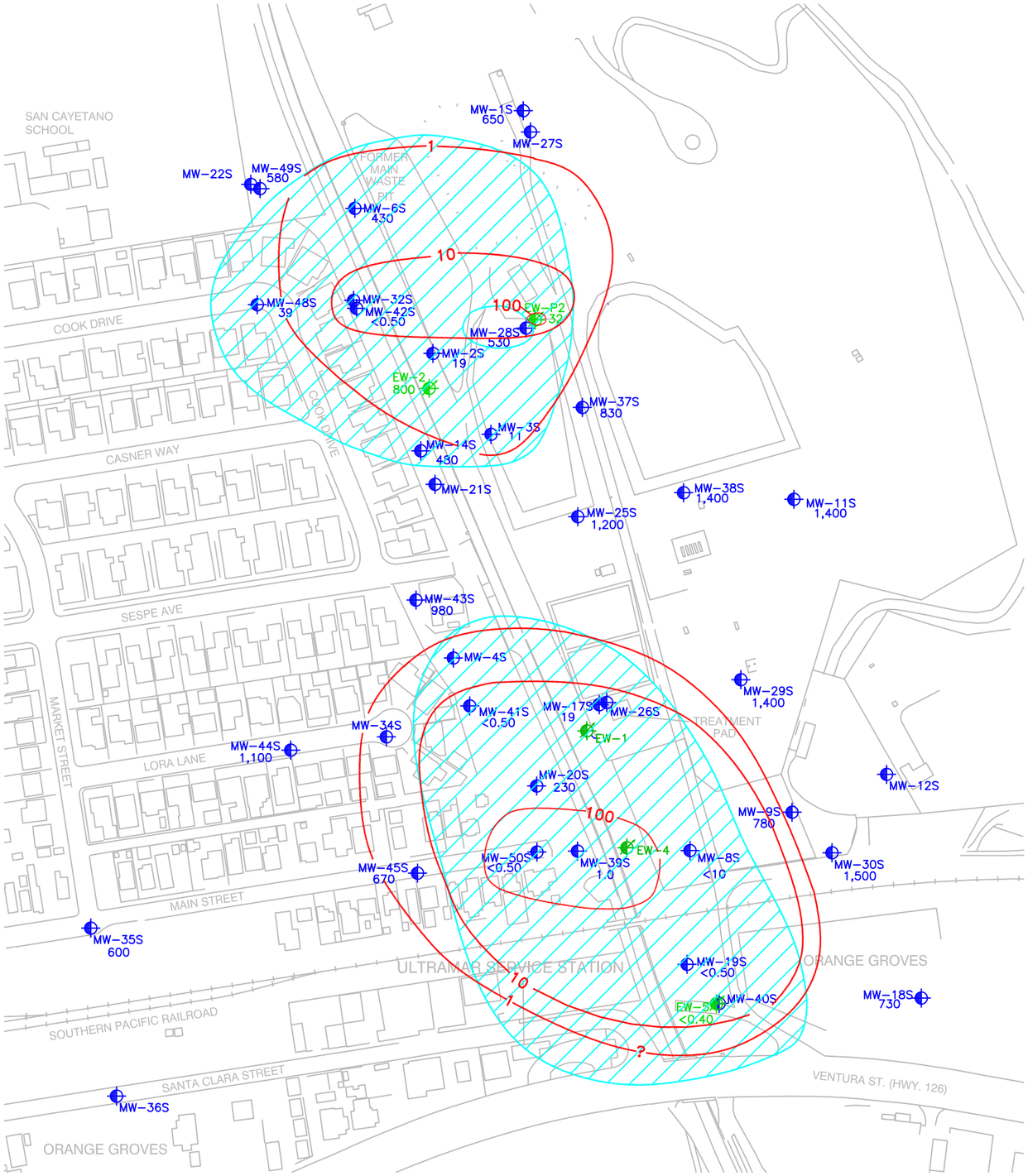
Figure 6k. Historical Benzene Results for Fillmore Pacific Coast Pipeline Site

EW-P2



Measured Groundwater Elevation (MSL)
Calculated Benzene Trend
Benzene Concentration

Figure 6l. Historical Benzene Results
for Fillmore Pacific Coast Pipeline Site



LEGEND:

MW-11S	EXISTING AQUIFIER I MONITORING WELL
EW-1	EXISTING AQUIFIER & EXTRACTION/MONITORING WELL
1,400	SULFATE CONCENTRATION (MILLIGRAMS PER LITER)
< 0.50	ANALYTE NOT DETECTED ABOVE LABORATORY REPORTING LIMIT
100 ?	BENZENE ISOCONCENTRATION CONTOUR, DASHED WHERE INFERRED, QUERIED WHERE UNCERTAIN
	SULFATE CONCENTRATION BELOW 500 MILIGRAMS PER LITER

N

0 125 250 500

SCALE: IN FEET

URS Corporation

SULFATE DISTRIBUTION – AQUIFER I
(FOURTH QUARTER 2012)

Proj. No.: 29875030		Date: JANUARY 2013	
Project: CHEVRON PCPL (Fillmore, Ca)		CAD ID.: ---	
Drawn by: JV	Checked by: BP	Figure: 7	

T:\2004\Chevron PCPL (Fillmore Refinery)\Deliverables (Finals in El Seg)\Reports\Groundwater Status Reports\12 Q4\Q412 Sulfate.dwg

Appendix A

Site History

A.0 BACKGROUND INFORMATION

The Texaco Inc. Pacific Coast Pipeline (PCPL) Superfund Site (Site) at Fillmore, California, which encompasses approximately 55 acres, was formerly an oil refinery that has since been dismantled. In 1928, Texaco acquired the existing refinery and operated it until the early 1950s, when it was shutdown and dismantled except for several tanks and buildings. An old site map also indicates that Richfield Oil Co. operated a gas separator plant on a portion of the site in the early 1950s, which also has been dismantled.

Following dismantling of the refinery in 1952, the site was operated as a crude oil pumping station until 2002 when pumping station operations were discontinued. The last remaining crude oil tank was dismantled and removed in August 2004. The remaining above ground facilities at the site include:

- A deep water well on the site and an associated water storage tank (Tank 5028) that historically have been used by the owners of the avocado groves on the hill east of the site.
- Ground water pump and treat remediation compound including granulated activated carbon (GAC) vessels and associated piping, manifolds and pre- and post-treatment machinery.
- A remedial contractor field office trailer.

A.1 REGULATORY AUTHORITY

The U.S. Environmental Protection Agency (USEPA) is the regulatory authority administering the site Consent Decree. The California EPA, Department of Toxic Substances Control (DTSC) is the state agency administering the Consent Decree for the State of California. When the site was listed on the National Priorities List (NPL), the USEPA became the lead agency for the project.

The Site Consent Decree (USEPA, 1993) lists five chemical constituents with ground water clean up goals; benzene, toluene, ethylbenzene, 1,2-dichloroethane and methylene chloride. The Site Consent Decree has no regulatory provision for soil characterization other than for protection of the underlying ground water from the five listed chemicals of concern (benzene, toluene, ethylbenzene, 1,2-dichloroethane, and methylene chloride) identified in the USEPA Record of Decision (ROD) (USEPA, 1992).

A.2 FACILITY BACKGROUND

A chronology of the site regulatory history follows:

- **1980** – Investigation requested by Regional Water Quality Control Board (RWQCB).
- **1983 to 1989** – Voluntary ground water and soil assessment conducted under the Department of Health Services (DOHS) and RWQCB.

- **1986** - Removed 38,000 tons of waste and contaminated soil from the former main waste pit and other small waste disposal areas.

- **1989 -** Site added to NPL by USEPA.

- **1990** to **1992 -** *Remedial Investigation/Feasibility Study* (RI/FS) was completed (ENSR, 1991/1992). The RI/FS concluded that there were significant levels of total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and total xylene (BTEX) in ground water and significant concentrations of TPH in the vadose zone, but very little evidence of BTEX in the **vadose** zone. The RI/FS concluded that ground water pump-and-treat coupled with limited soil vapor extraction (SVE) in the vadose zone were the appropriate remediation technologies for the site.

- **1992 -** The *Record of Decision* (ROD) was issued in March 1992 (USEPA, 1992). The selected remedy included ground water pump-and-treat and SVE for those areas that threaten to contaminate ground water at levels above site cleanup standards. The ROD listed ground water cleanup levels for benzene, toluene, ethyl benzene, methylene chloride, and 1,2-DCA. Benzene and toluene are the only compounds that currently exceed the ground water cleanup standards. Because there was little evidence of BTEX in the vadose zone, no soil cleanup standards were mandated.

- **1992** – A *Preliminary Design Work Plan* (ESI, 1992) was submitted and approved by USEPA in December 1992.

- **1993 –** The *Consent Decree* was entered in August 1993. The *Phase 1 Design Report* (ESI, 1993) was completed in September 1993. The Phase 1 remedial program included pilot testing for SVE treatment and ground water extraction and treatment with GAC and discharge to Pole Creek under a National Pollutant Discharge Elimination System (NPDES) permit. Phase 1 ground water extraction and treatment began in December 1993.

- **1994 –** Phase 1 vapor extraction began and the *Final Phase 2 Design Report* (England & Associates [E&A], 1994) was submitted and approved.

- **1995 –** The *Final Phase 2 Remedial Action Work Plan* (E&A, 1995a) was submitted and approved. Phase 2 vapor extraction began using thermal oxidation for soil vapor treatment, and the ground water treatment system (GWTS) operations were upgraded in capacity. The *Operation and Maintenance Plan* and the *Monitoring and Confirmation Sampling Plan* (E&A, 1995b and 1995c) were also submitted and approved.

- **1996** – An *Interim Remedial Action Plan Report* (E&A, 1996a) was submitted to fulfill the requirements for Construction Complete and Closeout Reporting required by the Consent Decree. System optimization measures were discussed with USEPA and documented in a letter (E&A, 1996b).

- **1997** – Permitting with local agencies was completed and system optimization measures were implemented, including the installation of a new well in an area of higher concentration. The ground water sampling program was modified as described in an approved technical memorandum (E&A, 1997).

- **1998** – Monitoring well network upgrades, including abandonment of damaged wells and wells that were no longer useful and installation of new wells, were completed (E&A, 1998a and 1998b).

- **2000 through 2002** – Texaco applied for renewal of the NPDES permit in March 2000. RWQCB indicated that processing for new permits was on hold pending finalization of the California Toxics Rule (CTR) and that the existing permit requirements would remain in effect in the interim. The CTR was finalized in May 2000 in Code of Federal Regulation (CFR) 40, Part 131. The CTR promulgate numeric criteria for priority pollutants and require the state to issue compliance for new or revised NPDES permit limits. In response, the State Water Resources Control Board (SWRCB) adopted the State Implementation Plan (SIP). As a result of the CTR and the SIP, more stringent limits were required for a new permit. Many of the CTR limits were below naturally occurring background levels. Following negotiations with RWQCB, Chevron was given permission to continue operating under the old NPDES permit limits but was required to discontinue discharge under the permit prior to May 2003 (England Geosystem, 2002b).

- **2001** – USEPA completed the *First Five-Year Review Report for Pacific Coast Pipeline Superfund Site* (USEPA, 2001). The report indicated that the treatment systems were operating as designed and the remedial action continues to be protective of human health and the environment.

- **2001 and 2002** – An early request for authorization to shut off the SVE system was submitted, as shutoff criteria were nearly met (England Geosystem, 2001b). In January 2002, the shutoff criteria were met and a technical memorandum detailing the SVE shutoff and monitoring plans was submitted (England Geosystem, 2002a and 2002c). The shutoff was approved on April 11, 2002 and the SVE system operations were discontinued on April 14, 2002. Soil gas concentrations were monitored monthly for eight months following SVE system shut-off. No rebound above the shutoff criteria was observed and soil vapor monitoring was discontinued in November 2002.

- **2002 - 2004 –** A technical memorandum for GWTS operational modifications and pilot study for enhanced bioremediation at the PCPL Superfund Site in Fillmore, California was submitted to USEPA on October 16, 2002 (England Geosystem, 2002d). On-site conventional ground water pump-and-treat technology had reached its effective limit at the PCPL site. Chevron's proposal for modifying the operation of that system and investigating the implementation of enhanced monitored natural attenuation as a replacement or supplement to that system allows additional focused remediation while ensuring protection of public health and safety. USEPA approved the modification to the operations of the GWTS at Fillmore and the pilot testing as proposed in January 2003. The oxygen release compound (ORC®) pilot-test performed in 2003-2004 at the Site demonstrated that ORC® injection was not effective in reducing dissolved-phase benzene concentrations at the site. The results from the ORC® pilot study are described in *Evaluation of the Enhanced Bioattenuation Pilot Study* (England Geosystem, 2005b). Although the pilot study for enhanced bioattenuation was not effective, calculations have shown that natural attenuation accounts for a significant amount of destruction of dissolved hydrocarbons in groundwater. Therefore, Chevron continues to evaluate monitored natural attenuation enhancement as a ground water remedial alternative at the site.

- **2004 –** Regulatory and corporate meetings to discuss forward plans including monitored natural attenuation.

- **2005 –** A work plan for Phase 1 Soil Sampling within the former tank areas was submitted (England Geosystem, 2005a) to the USEPA, and comments were received from both the USEPA and DTSC. Another work plan was also submitted to USEPA and DTSC for review: *Sampling and Analysis Plan for Natural Attenuation Characteristics and Soil Vapor Characteristics Above Dissolved Phase Benzene Plumes*.

- **2006** – A response to agency comments regarding Phase 1 Soil Sampling was sent by Chevron (Chevron, 2006b), and the work plan was subsequently approved by USEPA and DTSC in 2006. Phase 1 Soil Sampling was conducted by URS and a report was submitted to the USEPA and DTSC (URS, 2006b). The work plan, *Sampling and Analysis Plan for Natural Attenuation Characteristics and Soil Vapor Characteristics Above Dissolved Phase Benzene Plumes*, was revised based on comments received from the agencies and subsequently approved by USEPA and DTSC (URS, 2006a). Fieldwork for this investigation began in September 2006 with the collection of soil and preliminary vapor samples.

  During the third quarter of the year, the second Five-Year Review report was completed (USEPA, 2006). The review of documents, applicable or relevant and appropriate requirements (ARARs), risk assumptions, and the results of the site inspection indicate that the remedy is functioning as intended by the ROD to control further migration of the contaminated groundwater.

- **2007** – A vapor monitoring well installation report, *Continuous Multichannel Tubing Well Installation Report* (URS, 2007a), was submitted to USEPA and DTSC. A work plan for Phase 2 Soil Sampling was submitted to USEPA and DTSC for review. The work plan, *Soil Sampling Phase 2 – Historical Operations*, was revised based on comments received from the agencies and subsequently approved by USEPA and DTSC (URS, 2007b). Field work for this investigation was conducted in September and October 2007.

- **2008** – The *Soil Sampling Report for Phase 2 – Historical Operations* (URS, 2008a) and *Work Plan Phase 3 – Data Gaps for Risk Assessment* (URS, 2008b) were submitted to USEPA and DTSC. The five Continuous Multichannel Tubing (CMT) wells west of Pole Creek were destroyed (URS, 2008c). Agency comments on the Phase 3 Work Plan were received and addressed. Agency approval to proceed with the Phase 3 Work Plan was received on September 18, 2008. Phase 3 soil sampling occurred in October. Rainfall delayed collection of Phase 3 soil vapor samples until January 2009.

- **2009** – Phase 3 soil vapor samples were collected in mid-January. Chevron submitted to USEPA a memorandum titled *Evidence for Monitored Natural Attenuation with Institutional Controls for Final Groundwater Remedy* (Chevron, January 30, 2009). The *Phase 3 – Shallow Soil Investigation Data Gap Sampling and Human Health Risk Assessment* (URS, 2009) was submitted on May 11, 2009. USEPA transmitted to Chevron a draft statement of work (SOW) for a friendly Unilateral Administrative Order (UAO), which outlines the schedule for completion of the RI/FS. Chevron responded with comments on the SOW that were generally acceptable to the Agency. USEPA transmitted comments on the *Phase 3 – Shallow Soil Investigation Data Gap Sampling and Human Health Risk Assessment* (URS, 2009) on September 15, 2009. Chevron

submitted to USEPA the *Remedial Action Objectives* (*RAO) Technical Memorandum* and the *Reuse Assessment* on September 15, 2009. USEPA issued the UAO, effective September 28, 2009. On November 24, 2009, Chevron submitted a *Draft Remedial Investigation/Focused Feasibility Study (RI/FS)* to USEPA. On December 16, 2009, USEPA transmitted comments on the RAO memorandum.

- **2010** – Chevron submitted a revised HHRA along with additional soil characterization in *Soil Lead Speciation and Bioavailability at the Pacific Coast Pipelines Site, Fillmore, California* (Geomega, Inc., April 14, 2010). The documents demonstrated that lead samples did not contain alkylated lead and concluded that organic lead was not a chemical of concern for the Site. At a meeting in USEPA's San Francisco office on April 22, 2010, USEPA concurred and agreed that development of remediation alternatives for lead in shallow soil would focus on inorganic lead impacts. In a letter dated April 27, 2010, USEPA conveyed comments on the Draft RI/FS. On June 11, Chevron submitted the *Final Remedial Investigation/Focused Feasibility Study (RI/FS)* to USEPA. Chevron submitted a response to comments letter to USEPA and DTSC (dated August 27, 2010) indicating how and where agency comments were addressed in the Final RI/FS. On December 16, 2010, Chevron submitted the *Work Plan to Remove Remaining Infrastructure*.

- **2011** – Chevron incorporated additional Agency comments and submitted a Final RI/FS dated January 14, 2011. Chevron incorporated USEPA comments into the *Work Plan to Remove Remaining Infrastructure* (URS, March 7, 2011a), which was approved by USEPA in a letter dated March 24, 2011. Infrastructure removal began on June 1, 2011. On June 2, 2011, USEPA released its Proposed Plan for remediation of the Site. USEPA held a public meeting in Fillmore on June 16, 2011, to explain the Proposed Plan to members of the community and gather comments. In September 2011, USEPA completed the ROD Amendment, which describes the remediation selection process and presents the alternative selected to clean up impacts in the shallow soil and groundwater. In September, the pipeline and infrastructure removal activities were completed for the year. *Soil Delineation Sampling and Infrastructure Removal Report* (URS Corporation, December 16, 2011b) was submitted to USEPA. The report incorporated additional delineation sampling results (post-RI/FS) and documentation of 2011 infrastructure removal activities. Also in December, *Work Plan to Remove Remaining Infrastructure (Phase 2)* (URS Corporation, December 16, 2011c) was submitted to USEPA for approval. The *Remedial Design/Remedial Action Work Plan for Groundwater* (URS Corporation, December 19, 2011d), which outlined implementation of the phased groundwater remediation, was also submitted and subsequently withdrawn.

- **2012** – Chevron submitted the *Preliminary Soil Remedial Design and Remedial Action Work Plan* (URS, February 29, 2012a) to USEPA. On March 13, 2012, USEPA transmitted comments on the Work Plan to Remove Remaining Infrastructure (Phase 2). The comments were incorporated and the revised work plan was submitted on March 30, 2012 and approved by USEPA on June 5, 2012. The draft *Sampling and Analysis Plan (Field Sampling Plan and Quality Assurance Project Plan)* (URS, April 4, 2012) was submitted to USEPA for review and comment. On June 15, two deliverables were submitted to USEPA: *Performance Groundwater Monitoring Plan (URS, 2012b)* and *Groundwater Project Work Plan* (URS, 2012c). The *Final Quality Assurance Project Plan (Field Sampling Plan and Sampling and Analysis Plan)* (URS, July 2, 2012d) (retitled April 4th submittal) (QAPP), was submitted, incorporating USEPA comments dated 23 May 2012. The QAPP was approved by USEPA on August 9, 2012. On

October 30, 2012, EPA transmitted comments on the Performance Groundwater Monitoring Plan and the Groundwater Project Work Plan drafts. On December 6, 2012, Chevron re-submitted these documents with comments incorporated. On December 18, 2012, EPA and DTSC comments on the Preliminary Soil Remedial Design and Remedial Action Work Plan were transmitted to Chevron.

- **2013** – EPA approved the Performance Groundwater Monitoring Plan and the Groundwater Project Work Plans on January 3, 2013.

The site lies along the northern boundary of the Santa Clara Trough, which contains sedimentary deposits over 40,000 feet thick ranging from Cretaceous to Recent in age. In the Fillmore area, the Santa Clara Trough is bordered on the north by the San Cayetano Fault and on the south by the Oakridge Fault. The San Cayetano Fault passes beneath the PCPL site approximately parallel to the eastern property boundary. Fracturing of bedrock along the fault has resulted in extensive land sliding. This fractured rock has also provided a conduit for naturally occurring hydrocarbons to reach the Earth's surface. Crude oil seeps and tar sands are common features in the site vicinity.

The site is located within the Fillmore Ground Water Basin. In the eastern portion of the basin where the site is located, the alluvial deposits and the underlying San Pedro Formation are the major water-bearing units. Ground water flow is to the west following the Santa Clara River. The maximum recorded long-term fluctuation in ground water levels is 50 feet, measured in a Ventura County Watershed Protection District well located near the site.

A.2.1 Regional Petroleum Occurrence and Geology

The site lies within the eastern portion of the Ventura Basin petroleum province. Oil fields located within the site vicinity include the Fillmore, Shiells Canyon, and Bardsdale fields. In addition to the oil fields, several surface oil and tar sand accumulations or seeps have been mapped near the site. These occur in the fractured sands and shale of the Monterey Formation north of the site along Pole Creek and in recent landslide debris directly adjacent to the site. It is likely that the observed oil seeps resulted from the migration of hydrocarbons along fractures in the Monterey Formation associated with the San Cayetano Fault. Some of the seep material was analyzed and found to contain benzene.

A.2.2 Local Geology and Hydrogeology

The near-surface geology of the site can be characterized as consisting of laterally discontinuous interlayers of unconsolidated, fine- to coarse-grained detritus deposited in stream channel, alluvial fan, and mass wasting depositional environments. The extreme heterogeneity of the subsurface strata has created a complex hydrogeologic environment. The primary zone of concern is denoted as Aquifer I which is an unconfined to semi-confined aquifer. Historical ground water monitoring results indicate that flow occurs in a northwest direction across the site and then turns to the west after passing under Pole Creek. The average gradient across the site in aquifer I is approximately 0.006 ft/ft to the west-northwest; hydraulic conductivity ranges from 0.5 to 27 feet/day when considering all aquifer testing data associated with the site (constant rate and slug test results). When slug-testing data is not considered, the hydraulic conductivity ranges from 8 to 14 feet/day (England Geosystem, 2002e). The average calculated seepage velocity is 120 feet/year. The depth to water increases from the south, northerly across the site.

A.2.3 Contaminant Distribution – Ground Water

Ground water contamination at the site is the result of activities at a former refinery that ceased operation in 1951 and naturally occurring hydrocarbons in soils and the underlying strata. The ROD identified sources of ground water contamination as a series of nine unlined waste pits where liquid wastes generated during refining activities were stored. Remediation activities at these waste pits in 1986 removed the contaminant sources from all nine waste pits. Because the pits more or less continuously contained liquid waste while they were in service, there was a recharge source that provided a transport mechanism for the hydrocarbon contamination into the subsurface. Once the recharge source was removed, downward migration of waste materials would have been severely curtailed or eliminated. However, due to an almost 30 foot increase in ground water levels in the early 1990s and an overall 50 foot increase in regional water levels since the 1920s, hydrocarbon contamination present in the unsaturated zone in the form of residual, light non-aqueous phase liquids (LNAPL) has been submerged and now provides a hydrocarbon contaminant source for the ground water. There are two dissolved-phase benzene plumes found in the general site vicinity designated using current nomenclature as the northern and southern plumes

The ROD (1992) identified clean up goals for five chemicals of concern in the groundwater beneath the site as follows:

Chemical	Groundwater Cleanup Level in ug/L
Benzene	1
Toluene	100
Ethyl Benzene	680
1,2-Dichloroethane	0.5
Methylene Chloride	5

Dissolved-phase ethylbenzene concentrations measured since 1990 have never exceeded the ROD stated cleanup goal. Methylene chloride and 1,2-dichloroethane (1,2-DCA) have never been chemicals of significant concern in the ground water beneath the site. Low concentrations of both constituents were measured extremely infrequently in ground water early in the monitoring program (1991). The presence of 1,2-DCA occurred in ground water samples collected from MW-19S, MW-26S, and three Ultramar service station wells (Figure 2). Since intervening wells completed in the same water-bearing zone between MW-19S and MW-26S did not exhibit concentrations of 1,2-DCA, there is no continuous on-site 1,2-DCA plume. Methylene chloride was only detected three times (all at or below the ROD clean up goal) during sampling events; all in 1991. Two of the detections were off-site and cross gradient from the site in Ultramar service station wells. The detection limits for both of these constituents have varied during the sampling events due to laboratory dilution requirements. However, as the concentrations of benzene have decreased over time, the detection limits have been declining. As the detection limits for 1,2-DCA and methylene chloride have declined for the site, there has been no evidence to suggest that there is a significant problem with either of the two constituents mentioned. In 2011, following analysis of split samples by the USEPA laboratory, USEPA concluded that 1,2-DCA is not considered a contaminant of concern for the Site.

Dissolved-phase toluene is significantly less abundant in ground water beneath the site than benzene. Moreover, the locations where the concentrations of dissolved-phase toluene are higher than the ROD (1992) clean up goal are approximately coincident with the locations with concentrations of benzene above the ROD (1992) clean up goal. Therefore, of the five ROD identified chemicals of concern, dissolved-phase benzene is the current chemical of primary concern in ground water.

Concern about naphthalene has increased in recent years, and in 2006, USEPA recommended in the *Second Five Year Review Report* (USEPA, 2006) that Chevron conduct a two-year monitoring program because naphthalene had been detected in groundwater (maximum concentration of 100 µg/L in 1994). From 2007 to 2008, Chevron conducted quarterly sampling and analysis for naphthalene in groundwater; only a few, intermittent low-level concentrations were detected above the reporting limit, and no groundwater results exceeded a notification level of 17 µg/L established by the State of California Office of Environmental Health Hazard Assessment (OEHHA) (CDPH, 2007). (OEHHA notification levels are typically precursors to MCLs.) Therefore, naphthalene is not a chemical of concern in groundwater at the Site.

A.2.4 Contamination Distribution – Subsurface Soils

The ROD (USEPA, 1992) indicates that TPH contamination of soils was found "throughout the site". However, volatile organic constituents (VOCs), primarily BTEX were found in less then 10% of the soil samples analyzed. The benzene concentrations ranged from "below 11 ppb with a maximum concentration of 38 ppb" (USEPA, 1992). The primary SVOCs detected included 2-Methylnaphthalene and Naphthalene. 2-Methylnaphthalene was detected in 34 of the 154 samples with reported results ranging from 10 ppb to 160 ppb. Naphthalene was detected in 60 samples at concentrations ranging from 10 to 160 ppb.

The distribution of soil contamination beneath the site was coincident with the historical operation of nine on-site unlined waste pits. In 1986, all of the identified pits were remediated by excavation that included the disposal of 38,000 tons of contaminated soils. The ROD concluded that:

The lateral and vertical distribution of VOCs and the range of VOC concentrations detected in subsurface soils do not indicate the presence of a principal threat in soil. However, the low levels of VOCs (specifically benzene) in the vadose zone or capillary fringe may result in ongoing contamination of ground water.

A.2.5 Contamination Distribution – Shallow Soils

A three-phased soil sampling program was conducted at the Site from 2006 through 2009. The first phase of the investigation documented subsurface conditions generally located at the former tank areas (URS, 2006b). The second phase of the investigation was to characterize subsurface conditions beneath areas of known historical operations at the Site (URS, 2008a). The third phase (URS, 2009) was intended to be the final data gathering effort, which focused on filling information gaps derived from the previous two investigation phases, and collecting soil-vapor data necessary to complete a human health risk assessment for shallow soils at the Site. In addition, a qualitative ecological scoping assessment was conducted to determine the need for a quantitative screening evaluation. Through each phase of this shallow soil

investigation, a seven-step data quality objective (DQO) process was followed to ensure that appropriate data quality objectives were defined and met.

The objective of the shallow soil investigation was to assess whether detectable concentrations present within soils beneath the former process areas (to depths of 10 feet below ground surface) might pose a health risk to future industrial or construction/excavation workers. Future land use options for the Site do not include residential use, and a deed restriction is intended to enforce this decision.

The Site was divided into 14 areas of concern (AOCs) based on similar historical uses and/or impacts from chemical constituents. Quantitative human health and ecological risk assessments were completed as part of a remedial investigation and focused feasibility study. The constituents of concern (COCs) in shallow soil that will be mitigated are inorganic lead and PAHs. Shallow soil gas results do not pose unacceptable risk for vapor intrusion to indoor air with the exception of one AOC for benzene and ethylbenzene. These concerns will also be mitigated.

A.2.6 ROD Amendment

The ROD Amendment was issued by the U.S. USEPA in September 2011 (USEPA, 2011b), and presents the selected remedies from among the alternatives presented in the RI/FS (URS, 2011a). The ROD Amendment identifies clean up goals for two chemicals of concern in the groundwater beneath the site and for shallow soil as follows:

CHEMICAL OF CONCERN	CLEANUP LEVEL
GROUNDWATER:	**µg/L**
Benzene	1
Toluene	150
SOIL – Metals:	**mg/kg**
Lead (site-wide)	320
Lead (AOC1 for ecological receptors)	26 surface soil (top 6 inches) 56 subsurface soil (down to 6 feet)
SOIL – PAHs:	**mg/kg**
Benzo(a)anthracene	1.2
Benzo(a)pyrene	0.12
Benzo(b)fluoranthene	1.2
Benzo(k)fluoranthene	1.2
Chrysene	12
Dibenz(a,h)anthracene	0.35
Indeno(1,2,3-cd)pyrene	1.2
Naphthalene	13
SOIL GAS:	**µg/L**
Benzene	0.62
Ethylbenzene	7.8
Naphthalene	0.65

Descriptions of the final soil and groundwater remedies for the PCPL site are presented below.

- **Remedial Action for Shallow Subsurface Soils to 10 feet Below Ground Surface:** U.S. USEPA selected a green and sustainable remedy for soil: excavation with onsite consolidation and an engineered cap to prevent infiltration of water. Excavated soil from impacted areas throughout the PCPL site will be consolidated near the former main waste pit location.
- **Remedial Action for Southern Groundwater Plume:** The remedial action for the southern groundwater plume is the sequential implementation of air sparging (up to 6 years), circulation with existing sulfate-rich groundwater (up to 9 years), and monitored natural attenuation (MNA) (10 years or more).
- **Remedial Action for Northern Groundwater Plume:** The remedial action for the northern groundwater plume is MNA. MNA is preferred because the groundwater plume geometry is well characterized and much smaller than the southern plume. In addition, LNAPL is not detected in the northern plume and there are multiple lines of evidence that natural attenuation will achieve the remedial action objectives in a reasonable timeframe.

A.3 REFERENCES

California Department of Public Health (CDPH), 2007. *Drinking Water Notification Levels and Response Levels: An Overview*.

Chevron, 2009. *Evidence for Monitored Natural Attenuation with Institutional Controls for Final Groundwater Remedy.* Memorandum to USEPA, January 30, 2009.

England & Associates (E&A), 1994. *Final Phase 2 Design Report, Pacific Coast Pipeline (PCPL) Superfund Site, Fillmore, California*, December 16, 1994.

_____, 1995a. *Final Phase 2 Remedial Action Work Plan*, (This report includes the *Health and Safety Plan* in Appendix A) May 2, 1995.

_____, 1995b. *Operations and Maintenance Plan,* July 31, 1995.

_____, 1995c. *Monitoring and Confirmation Sampling Plan,* September 18, 1995.

_____, 1996a. *Interim Remedial Action Report*, August 30, 1996.

_____, 1996b. *Documentation of Optimization Measures Discussed in the Conference Call of November 13, 1996,* November 22, 1996.

_____, 1997. *Technical Memorandum - Recommended Modifications to the Ground Water Sampling Program,* May 13, 1997.

_____, 1998a. *Revised Technical Memorandum – Well Abandonment and Installation Request*, August 6, 1998.

_____, 1998b. *Monitoring Well Upgrade Completion Notification*, October 1, 1998.

England Geosystem, Inc., 2001. *Technical Memorandum Request for Authorization to Discontinue Soil Vapor Extraction Operation*, May 21, 2001.

_____, 2002a. *Technical Memorandum SVE Shutoff and Monitoring Plans*, March 28, 2002.

_____, 2002b. *Notice of Intent to Discontinue Use of NPDES Permit*, May 15, 2002.

_____, 2002c. *Response to EPA Letter and Call Associated with SVE Shutoff and Monitoring Plans*, May 24, 2002.

_____, 2002d. T*echnical Memorandum Proposal for Ground Water Treatment System Operational Modifications and Pilot Study for Enhanced Bioremediation,* October 16, 2002.

_____, 2002e. *Addendum to Work Plan for Implementation of Enhanced Bioattenuation Pilot Study PCPL Superfund Site Fillmore, California*. Submitted December 4, 2002.

_____, 2005a. *Work Plan for Soil Sampling PCPL Superfund Site Phase I – Former Tank Areas,* March 31, 2005.

_____, 2005b. *Evaluation of the Enhanced Bioattenuation Pilot Study*, May 26, 2005.

_____, 2005c. *Evaluation of the Enhanced Bioattenuation Pilot Study*, May 26, 2005.

ENSR, 1991. *Final Remedial Investigation Report.* June 1991.

_____, 1992 *Final Texaco Fillmore Site Feasibility Study Report*. February 1992.

Environmental Solutions, Inc. (ESI), 1992. *Preliminary Design Work Plan*, December 1992.

_____, 1993. *Final (100%) Phase 1 Design Report, Pacific Coast Pipeline Site*, June 1993.

Geomega, Inc., 2010. *Soil Lead Speciation and Bioavailability at the Pacific Coast Pipeline Site, Fillmore, California,* April 14, 2010.

URS Corporation, 2006a. *Sampling and Analysis Plan for Natural Attenuation Characteristics and Soil Vapor Characteristics Above Dissolved Phase Benzene Plumes*, August 4, 2006.

_____, 2006b. *Soil Sampling Report Phase 1 – Former Tank Areas Pacific Coast Pipeline (PCPL) Superfund Site Fillmore, California*, Revised September 8, 2006

_____, 2007a. *Continuous Multichannel Tubing Well Installation Report*, Pacific Coast Pipeline (PCPL) Superfund Site, Fillmore, California. May 11, 2007.

_____, 2007b. *Work Plan for Soil Sampling Phase 2 – Historical Operations Pacific Coast Pipeline (PCPL) Superfund Site Fillmore, California*, Revised July 30, 2007.

_____, 2008a. *Soil Sampling Report for Phase 2 – Historical Operations Pacific Coast Pipeline (PCPL) Superfund Site Fillmore, California*, April 15, 2008.

_____, 2008b. *Work Plan Phase 3 Soil Sampling – Data Gaps for Risk Assessment Pacific Coast Pipeline (PCPL) Superfund Site Fillmore, California*, April 15, 2008.

_____, 2008c. Continuous Multichannel Tubing (*CMT) Well Destruction Report,* July 24, 2008.

_____, 2009. *Phase 3 – Shallow Soil Investigation Data Gap Sampling and Human Health Risk Assessment,* May 11, 2009.

_____, 2011a. *Final Remedial Investigation/Focused Feasibility Study (RI/FS) PCPL Superfund Site, Fillmore, California,* January 14, 2011.

_____, 2011b. *Work Plan to Remove Remaining Infrastructure,* March 7, 2011.

_____, 2011b. *Soil Delineation Sampling and Infrastructure Removal Report,* December 16, 2011.

_____, 2011c. *Work Plan to Remove Remaining Infrastructure (Phase 2)*, December 16, 2011.

_____, 2012a. *Preliminary Soil Remedial Design and Remedial Action Work Plan,* February 29, 2012.

_____, 2012b. *Work Plan to Remove Remaining Infrastructure (Phase 2)*, Revised March 30, 2012.

_____, 2012c. *Groundwater Project Work Plan*, December 6, 2012.

_____, 2012d. *Performance Groundwater Monitoring Plan*, December 6, 2012.

_____, 2012e. *Quality Assurance Project Plan (Field Sampling Plan and Sampling and Analysis Plan)*, July 2, 2012.

U.S. Environmental Protection Agency (USEPA) 1992. *Record of Decision (ROD) - Pacific Coast Pipeline, Texaco Fillmore Facility*, April 2, 1992.

_____, 1993. *Consent Decree - Pacific Coast Pipeline Site*. February 1993, entered August 1993.

_____, 2001. *First Five-Year Review Report for Pacific Coast Pipeline Superfund Site*, September 2001.

_____, 2006. *Second Five-Year Review Report for Pacific Coast Pipeline Superfund Site*, September 2006.

_____, 2011a. *Proposed Plan,* June 2011.

_____, 2011b. *Record of Decision Amendment, Pacific Coast Pipeline USEPA ID: CAD980636781; Fillmore, CA.* September 2011.

Appendix B

Historical LNAPL Removal Volumes

Table B
Summary of Historical LNAPL Removal in Gallons

Year	Quarter	Groundwater Extraction Wells			Groundwater Monitoring Wells					LNAPL Condensate from Vapor Extraction Wells	Totals
		EW-1	EW-4	EW-P2	MW-9S	MW-17S	MW-20S	MW-40S	Perched Wells		
1994	1st	none	-	-	None	none	none	none	none	25.00	25.00
	2nd	2.99	none	-	0.36	0.06	0.06	none	none	none	3.47
	3rd	0.11	1.00	-	0.21	none	none	none	none	none	1.32
	4th	none	none	-	0.06	0.03	0.03	none	0.6	2.00	2.72
1995	1st	none	19.40	-	0.13	0.08	0.03	none	0.36	10.40	30.40
	2nd	none	15.40	-	0.70	0.37	0.11	none	0.22	none	16.80
	3rd	none	2.00	-	0.05	0.05	none	0.06	0.04	none	2.20
	4th	2.8	none	-	0.27	none	none	none	none	none	3.07
1996	1st	3.5	none	-	0.38	0.05	none	none	0.11	17.00	21.04
	2nd	9.5	0.03	-	0.11	0.05	none	none	none	0.50	10.19
	3rd	2.75	none	-	0.16	none	none	none	none	none	2.91
	4th	1.72	none	-	None	none	none	none	none	8.00	9.72
1997	1st	22.94	6.44	none	none	none	none	none	none	29.00	58.38
	2nd	27.40	11.31	none	0.27	none	none	none	none	1.00	39.98
	3rd	7.96	none	none	0.11	none	none	none	none	none	8.07
	4th	5.15	none	none	0.11	none	none	none	none	none	5.26
1998	1st	29.81	2.10	none	0.22	none	none	none	none	94.00	126.13
	2nd	27.00	21.40	none	0.27	none	none	none	none	9.50	58.17
	3rd	16.00	3.25	8.00	0.11	none	none	none	none	none	27.36
	4th	10.6	13.25	10.75	0.05	none	none	none	none	none	34.65
1999	1st	8.45	8.75	5.80	0.16	none	none	none	none	8.00	31.16
	2nd	6.60	6.80	5.70	0.22	none	none	none	none	9.00	28.32
	3rd	4.30	3.90	3.00	none	none	none	none	none	2.00	13.20
	4th	3.80	4.00	2.50	0.32	none	none	none	none	none	10.62
2000	1st	3.50	3.00	1.50	0.05	none	none	none	none	none	8.05
	2nd	2.65	3.70	2.00	0.11	none	none	none	none	none	8.46
	3rd	2.00	2.20	1.70	0.05	none	none	none	none	none	5.95
	4th	3.45	4.00	2.85	0.05	none	none	none	none	none	10.35
2001	1st	1.80	1.50	1.40	0.16	none	none	none	none	none	4.86
	2nd	4.00	4.00	2.50	0.11	none	none	none	none	none	10.61
	3rd	18.50	20.00	12.50	0.16	none	none	none	none	none	51.16
	4th	9.30	8.20	7.40	0.16	none	none	none	none	none	25.06
2002	1st	8.40	7.10	6.30	0.11	none	none	none	none	none	21.91
	2nd	6.50	5.45	4.80	0.05	none	none	none	none	none	16.80
	3rd	0.80	0.90	0.80	0.16	none	none	none	none	none	2.36
	4th	0.70	0.70	0.40	None	none	none	none	none	none	1.80
2003	1st	none	none	none	none	none	none	none	none	none	0.00
	2nd	5.00	6.00	none	none	none	none	none	none	none	11.00
	3rd	7.00	11.00	none	none	none	none	none	none	none	18.00
	4th	3.00	2.00	none	0.22	none	none	none	none	none	5.22

Table B (Continued)

Year	Quarter	Groundwater Extraction Wells			Groundwater Monitoring Wells					LNAPL Condensate from Vapor Extraction Wells	Totals
		EW-1	EW-4	EW-P2	MW-9S	MW-17S	MW-20S	MW-40S	Perched Wells		
2004	1st	**1.25**	**1.25**	none	none	none	none	none	none	none	**2.50**
	2nd	**1.50**	**1.50**	none	none	none	none	none	none	none	**3.02**
	3rd	**2.00**	**1.50**	none	none	none	none	none	none	none	**3.50**
	4th	**1.25**	**1.00**	none	none	none	none	none	none	none	**2.25**
2005	1st	**55.00**	**51.50**	none	none	none	none	none	none	none	**106.50**
	2nd	**21.00**	**75.00**	none	none	**2.00**	none	none	none	none	**98.00**
	3rd	**11.00**	**45.00**	none	none	**0.75**	none	none	none	none	**56.75**
	4th	**1.00**	**7.00**	none	none	**2.50**	none	none	none	none	**10.50**
2006	1st	none	**6.00**	none	none	**0.75**	none	**5.50**	none	none	**12.25**
	2nd	**1.00**	**11.00**	none	none	**0.75**	none	none	none	none	**12.75**
	3rd	**5.00**	**8.00**	none	none	none	none	none	none	none	**13.00**
	4th	none	**20.00**	none	none	none	none	none	none	none	**20.00**
2007	1st	none	**3.00**	none	none	none	none	none	none	none	**3.00**
	2nd	none	**5.00**	none	none	none	none	none	none	none	**5.00**
	3rd	none	**3.00**	none	none	none	none	none	none	none	**3.00**
	4th	none	none	none	none	none	none	none	none	none	**0.00**
2008	1st	none	**22.00**	none	none	none	none	none	none	none	**22.00**
	2nd	none	**65.00**	none	none	none	none	none	none	none	**65.00**
	3rd	none	**5.00**	none	none	none	none	none	none	none	**5.00**
	4th	none	**2.00**	none	none	none	none	none	none	none	**2.00**
2009	1st	none	none	none	none	none	none	none	none	none	**0.00**
	2nd	**2.50**	**5.50**	none	none	none	none	none	none	none	**8.00**
	3rd	**11.5**	**4.5**	none	none	none	none	none	none	none	**16.00**
	4th	**1.00**	none	none	none	none	none	none	none	none	**1.00**
2010	1st	**1.00**	**12.00**	none	none	none	none	none	none	none	**13.00**
	2nd	**1.00**	**36.00**	none	none	none	none	none	none	none	**37.00**
	3rd	**1.00**	**13.00**	none	none	none	none	none	none	none	**14.00**
	4th	none	**2.00**	none	none	none	none	none	none	none	**2.00**
2011	1st	none	**13.00**	none	none	none	none	none	none	none	**13.00**
	2nd	**2.0**	**20.00**	none	none	none	none	none	none	none	**22.00**
	3rd	none	**16.00**	none	none	none	none	none	none	none	**16.00**
	4th	none	**4.00**	none	none	none	none	none	none	none	**4.00**
2012	1st	none	**1.00**	none	none	none	none	none	none	none	**1.00**
	2nd	none	**1.00**	none	none	none	none	none	none	none	**1.00**
	3rd	none	**1.50**	none	none	none	none	none	none	none	**1.50**
	4th	none	none	none	none	none	none	none	none	none	**0.00**
Totals		**389.98**	**661.03**	**80.90**	**5.66**	**7.44**	**0.23**	**5.56**	**1.33**	**216.40**	**1367.03**
		1131.91 (extraction wells)			**19.72** (monitoring wells)						
		1,111.63 (total removed from monitoring/extraction wells)									

Note: Groundwater extraction was discontinued in November 2002

Appendix C

Analytical / Bioattenuation Results

Table C-1

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well EW-02

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	UJ
	Ethylbenzene	ug/l	<0.30	0.30	UJ
	Toluene	ug/l	<0.30	0.30	UJ
	Xylenes (Total)	ug/l	<0.60	0.60	UJ
8015BV	Volatile Fuel Hydrocarbons	ug/l	77	50	
300.0	Sulfate	mg/l	800	25	
FIELD	Specific Conductivity	us/cm	2457		
	Dissolved Oxygen	mg/l	0.60		
	Oxidation Reduction Potential	mv	-185.8		
	pH	units	7.13		
	Temperature	deg c	21.1		
	Turbidity	ntu	1.43		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-2

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well EW-05

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	24	3.0	
	Ethylbenzene	ug/l	3.7	3.0	
	Toluene	ug/l	28	3.0	
	Xylenes (Total)	ug/l	18	6.0	
8015BV	Volatile Fuel Hydrocarbons	ug/l	2600	1000	J
300.0	Sulfate	mg/l	<0.50	0.50	
FIELD	Specific Conductivity	us/cm	1584		
	Dissolved Oxygen	mg/l	8.10		
	Oxidation Reduction Potential	mv	-137.0		
	pH	units	6.79		
	Temperature	deg c	21.69		
	Turbidity	ntu	0.53		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-3

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well EW-P2

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	110	3.0	
	Ethylbenzene	ug/l	24	3.0	
	Toluene	ug/l	120	3.0	
	Xylenes (Total)	ug/l	160	6.0	
8015BV	Volatile Fuel Hydrocarbons	ug/l	7400	1000	J
300.0	Sulfate	mg/l	32	0.50	
FIELD	Specific Conductivity	us/cm	1542		
	Dissolved Oxygen	mg/l	0.17		
	Oxidation Reduction Potential	mv	-153.8		
	pH	units	7.14		
	Temperature	deg c	22.89		
	Turbidity	ntu	1.72		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-4

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-01S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	<50	50	
300.0	Sulfate	mg/l	650	25	
FIELD	Specific Conductivity	us/cm	1489		
	Dissolved Oxygen	mg/l	33.00		
	Oxidation Reduction Potential	mv	-194.2		
	pH	units	7.40		
	Temperature	deg c	25.8		
	Turbidity	ntu	2.66		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-5

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-02S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	0.42	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	2.6	0.60	
	m,p-Xylenes	ug/l	1.7	0.60	
	o-Xylene	ug/l	0.85	0.30	
8015BV	Volatile Fuel Hydrocarbons	ug/l	96	50	
300.0	Sulfate	mg/l	19	10	
FIELD	Specific Conductivity	us/cm	1723		
	Dissolved Oxygen	mg/l	10.30		
	Oxidation Reduction Potential	mv	-118.2		
	pH	units	7.09		
	Temperature	deg c	26.77		
	Turbidity	ntu	4.41		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-6

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-03S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	4.2	0.30	
	Ethylbenzene	ug/l	2.0	0.30	
	Toluene	ug/l	6.8	0.30	
	Xylenes (Total)	ug/l	8.2	0.60	
	m,p-Xylenes	ug/l	6.9	0.60	
	o-Xylene	ug/l	1.3	0.30	
8015BV	Volatile Fuel Hydrocarbons	ug/l	390	50	J
300.0	Sulfate	mg/l	11	10	
FIELD	Specific Conductivity	us/cm	1842		
	Dissolved Oxygen	mg/l	10.00		
	Oxidation Reduction Potential	mv	-130.9		
	pH	units	6.89		
	Temperature	deg c	31.71		
	Turbidity	ntu	2.55		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-7

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-06S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	3.9	0.30	
	Ethylbenzene	ug/l	6.0	0.30	
	Toluene	ug/l	6.9	0.30	
	Xylenes (Total)	ug/l	6.2	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	300	50	
8260B	Benzene	ug/l	4.9	0.50	
	Ethylbenzene	ug/l	<0.50	0.50	
	Toluene	ug/l	2.0	0.50	
	Xylenes (Total)	ug/l	<1.0	1.0	
	m,p-Xylenes	ug/l	<1.0	1.0	
	o-Xylene	ug/l	<0.50	0.50	
	1,2-Dichloroethane	ug/l	<0.50	0.50	
	Methylene Chloride	ug/l	<1.0	1.0	
300.0	Sulfate	mg/l	430	25	
FIELD	Specific Conductivity	us/cm	1933		
	Dissolved Oxygen	mg/l	0.60		
	Oxidation Reduction Potential	mv	-175.1		
	pH	units	7.30		
	Temperature	deg c	21.2		
	Turbidity	ntu	0.75		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-8

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-08S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	31	3.0	
	Ethylbenzene	ug/l	<3.0	3.0	
	Toluene	ug/l	60	3.0	
	Xylenes (Total)	ug/l	17	6.0	
	m,p-Xylenes	ug/l	17	6.0	
	o-Xylene	ug/l	<3.0	3.0	
8015BV	Volatile Fuel Hydrocarbons	ug/l	3100	2500	
300.0	Sulfate	mg/l	<10	10	
FIELD	Specific Conductivity	us/cm	1258		
	Dissolved Oxygen	mg/l	23.50		
	Oxidation Reduction Potential	mv	-144.2		
	pH	units	6.93		
	Temperature	deg c	21.48		
	Turbidity	ntu	1.39		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-9

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-09S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.60	0.60	UJ
	Ethylbenzene	ug/l	1.9	0.60	J
	Toluene	ug/l	1.2	0.60	J
	Xylenes (Total)	ug/l	<1.2	1.2	UJ
8015BV	Volatile Fuel Hydrocarbons	ug/l	2100	500	J
300.0	Sulfate	mg/l	780	25	
FIELD	Specific Conductivity	us/cm	2535		
	Dissolved Oxygen	mg/l	5.40		
	Oxidation Reduction Potential	mv	-142.0		
	pH	units	6.85		
	Temperature	deg c	23.52		
	Turbidity	ntu	5.05		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-10

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-11S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	<50	50	
300.0	Sulfate	mg/l	1400	25	
FIELD	Specific Conductivity	us/cm	3029		
	Dissolved Oxygen	mg/l	61.90		
	Oxidation Reduction Potential	mv	5.0		
	pH	units	6.92		
	Temperature	deg c	20.7		
	Turbidity	ntu	2.12		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-11

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-14S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	82	50	
300.0	Sulfate	mg/l	480	25	
FIELD	Specific Conductivity	us/cm	2119		
	Dissolved Oxygen	mg/l	2.10		
	Oxidation Reduction Potential	mv	-145.2		
	pH	units	7.85		
	Temperature	deg c	22.5		
	Turbidity	ntu	0.47		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-12

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-17S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	29	3.0	
	Ethylbenzene	ug/l	3.3	3.0	
	Toluene	ug/l	42	3.0	
	Xylenes (Total)	ug/l	28	6.0	
8015BV	Volatile Fuel Hydrocarbons	ug/l	2000	500	J
300.0	Sulfate	mg/l	19	10	
FIELD	Specific Conductivity	us/cm	1510		
	Dissolved Oxygen	mg/l	4.20		
	Oxidation Reduction Potential	mv	-125.2		
	pH	units	6.84		
	Temperature	deg c	22.39		
	Turbidity	ntu	4.23		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-13

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-18S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	310	100	
300.0	Sulfate	mg/l	730	25	
FIELD	Specific Conductivity	us/cm	2546		
	Dissolved Oxygen	mg/l	0.50		
	Oxidation Reduction Potential	mv	-178.2		
	pH	units	7.16		
	Temperature	deg c	20.4		
	Turbidity	ntu	0.97		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-14

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-19S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	25	3.0	
	Ethylbenzene	ug/l	<3.0	3.0	
	Toluene	ug/l	29	3.0	
	Xylenes (Total)	ug/l	7.0	6.0	
8015BV	Volatile Fuel Hydrocarbons	ug/l	2400	500	J
300.0	Sulfate	mg/l	<0.50	0.50	
FIELD	Specific Conductivity	us/cm	1310		
	Dissolved Oxygen	mg/l	1.80		
	Oxidation Reduction Potential	mv	-133.5		
	pH	units	6.97		
	Temperature	deg c	21.63		
	Turbidity	ntu	0.84		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-15

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-20S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	75	6.0	
	Ethylbenzene	ug/l	9.2	6.0	
	Toluene	ug/l	34	6.0	
	Xylenes (Total)	ug/l	32	12	
8015BV	Volatile Fuel Hydrocarbons	ug/l	5200	5000	
300.0	Sulfate	mg/l	230	10	
FIELD	Specific Conductivity	us/cm	1637		
	Dissolved Oxygen	mg/l	1.60		
	Oxidation Reduction Potential	mv	-172.3		
	pH	units	6.44		
	Temperature	deg c	20.83		
	Turbidity	ntu	0.82		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-16

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-25S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	UJ
	Ethylbenzene	ug/l	<0.30	0.30	UJ
	Toluene	ug/l	<0.30	0.30	UJ
	Xylenes (Total)	ug/l	<0.60	0.60	UJ
8015BV	Volatile Fuel Hydrocarbons	ug/l	69	50	
300.0	Sulfate	mg/l	1200	25	
FIELD	Specific Conductivity	us/cm	2794		
	Dissolved Oxygen	mg/l	0.80		
	Oxidation Reduction Potential	mv	-153.5		
	pH	units	7.12		
	Temperature	deg c	20.9		
	Turbidity	ntu	0.38		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-17

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-28S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	31	3.0	
	Ethylbenzene	ug/l	<3.0	3.0	
	Toluene	ug/l	13	3.0	
	Xylenes (Total)	ug/l	25	6.0	
8015BV	Volatile Fuel Hydrocarbons	ug/l	1000	500	
300.0	Sulfate	mg/l	530	10	
FIELD	Specific Conductivity	us/cm	1830		
	Dissolved Oxygen	mg/l	1.10		
	Oxidation Reduction Potential	mv	-134.8		
	pH	units	7.14		
	Temperature	deg c	22.63		
	Turbidity	ntu	1.47		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-18

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-29S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	<50	50	
300.0	Sulfate	mg/l	1400	50	
FIELD	Specific Conductivity	us/cm	3205		
	Dissolved Oxygen	mg/l	2.10		
	Oxidation Reduction Potential	mv	-89.2		
	pH	units	6.83		
	Temperature	deg c	20.3		
	Turbidity	ntu	60.5		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-19

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-30S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	0.54	0.30	J
	Ethylbenzene	ug/l	1.5	0.30	J
	Toluene	ug/l	0.35	0.30	J
	Xylenes (Total)	ug/l	2.6	0.60	J
8015BV	Volatile Fuel Hydrocarbons	ug/l	630	50	
300.0	Sulfate	mg/l	1500	25	
FIELD	Specific Conductivity	us/cm	3267		
	Dissolved Oxygen	mg/l	0.50		
	Oxidation Reduction Potential	mv	-96.5		
	pH	units	6.95		
	Temperature	deg c	20.1		
	Turbidity	ntu	0.87		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-20

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-35S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	<50	50	
300.0	Sulfate	mg/l	600	25	
FIELD	Specific Conductivity	us/cm	2130		
	Dissolved Oxygen	mg/l	0.14		
	Oxidation Reduction Potential	mv	116.0		
	pH	units	6.82		
	Temperature	deg c	21.4		
	Turbidity	ntu	0.73		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-21

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-37S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	UJ
	Ethylbenzene	ug/l	<0.30	0.30	UJ
	Toluene	ug/l	<0.30	0.30	UJ
	Xylenes (Total)	ug/l	<0.60	0.60	UJ
8015BV	Volatile Fuel Hydrocarbons	ug/l	360	50	
300.0	Sulfate	mg/l	830	25	
FIELD	Specific Conductivity	us/cm	2547		
	Dissolved Oxygen	mg/l	0.06		
	Oxidation Reduction Potential	mv	-167.3		
	pH	units	7.20		
	Temperature	deg c	21.2		
	Turbidity	ntu	3.13		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-22

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-38S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	<50	50	
300.0	Sulfate	mg/l	1400	50	
FIELD	Specific Conductivity	us/cm	2996		
	Dissolved Oxygen	mg/l	2.90		
	Oxidation Reduction Potential	mv	18.4		
	pH	units	7.05		
	Temperature	deg c	20.9		
	Turbidity	ntu	1.24		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-23

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-39S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	190	6.0	
	Ethylbenzene	ug/l	12	6.0	
	Toluene	ug/l	100	6.0	
	Xylenes (Total)	ug/l	50	12	
8015BV	Volatile Fuel Hydrocarbons	ug/l	5000	500	J
8260B	Benzene	ug/l	190	0.50	
	Ethylbenzene	ug/l	7.5	0.50	
	Toluene	ug/l	80	0.50	
	Xylenes (Total)	ug/l	50	1.0	
	m,p-Xylenes	ug/l	39	1.0	
	o-Xylene	ug/l	11	0.50	
	1,2-Dichloroethane	ug/l	<0.50	0.50	
	Methylene Chloride	ug/l	<1.0	1.0	
300.0	Sulfate	mg/l	1.0	0.50	
FIELD	Specific Conductivity	us/cm	1437		
	Dissolved Oxygen	mg/l	1.20		
	Oxidation Reduction Potential	mv	-123.8		
	pH	units	6.94		
	Temperature	deg c	22.69		
	Turbidity	ntu	6.51		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-24

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-41S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	18	3.0	J
	Ethylbenzene	ug/l	7.0	3.0	J
	Toluene	ug/l	4.4	3.0	J
	Xylenes (Total)	ug/l	20	6.0	J
8015BV	Volatile Fuel Hydrocarbons	ug/l	3000	1000	
300.0	Sulfate	mg/l	<0.50	0.50	
FIELD	Specific Conductivity	us/cm	1663		
	Dissolved Oxygen	mg/l	0.09		
	Oxidation Reduction Potential	mv	-230.1		
	pH	units	7.16		
	Temperature	deg c	28.42		
	Turbidity	ntu	1.74		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-25

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-42S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	36	3.0	
	Ethylbenzene	ug/l	15	3.0	
	Toluene	ug/l	34	3.0	
	Xylenes (Total)	ug/l	37	6.0	
8015BV	Volatile Fuel Hydrocarbons	ug/l	1600	50	
8260B	Benzene	ug/l	20	0.50	
	Ethylbenzene	ug/l	2.2	0.50	
	Toluene	ug/l	22	0.50	
	Xylenes (Total)	ug/l	15	1.0	
	1,2-Dichloroethane	ug/l	<0.50	0.50	
	Methylene Chloride	ug/l	<1.0	1.0	
300.0	Sulfate	mg/l	<0.50	0.50	
FIELD	Specific Conductivity	us/cm	1561		
	Dissolved Oxygen	mg/l	0.90		
	Oxidation Reduction Potential	mv	-142.2		
	pH	units	7.62		
	Temperature	deg c	27.5		
	Turbidity	ntu	3.56		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-26

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-43S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	<50	50	
300.0	Sulfate	mg/l	980	25	
FIELD	Specific Conductivity	us/cm	2601		
	Dissolved Oxygen	mg/l	2.40		
	Oxidation Reduction Potential	mv	-68.3		
	pH	units	6.93		
	Temperature	deg c	20.8		
	Turbidity	ntu	7.57		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-27

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-44S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	<50	50	
300.0	Sulfate	mg/l	1100	25	
FIELD	Specific Conductivity	us/cm	2812		
	Dissolved Oxygen	mg/l	1.50		
	Oxidation Reduction Potential	mv	-45.0		
	pH	units	7.22		
	Temperature	deg c	20.5		
	Turbidity	ntu	1.42		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-28

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-45S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	7.6	0.60	
	Ethylbenzene	ug/l	1.0	0.60	
	Toluene	ug/l	2.3	0.60	
	Xylenes (Total)	ug/l	5.6	1.2	
8015BV	Volatile Fuel Hydrocarbons	ug/l	860	250	J
8260B	Benzene	ug/l	6.1	0.50	
	Ethylbenzene	ug/l	0.57	0.50	
	Toluene	ug/l	3.3	0.50	
	Xylenes (Total)	ug/l	2.8	1.0	
	m,p-Xylenes	ug/l	2.8	1.0	
	o-Xylene	ug/l	<0.50	0.50	
	1,2-Dichloroethane	ug/l	<0.50	0.50	
	Methylene Chloride	ug/l	<1.0	1.0	
300.0	Sulfate	mg/l	670	25	
FIELD	Specific Conductivity	us/cm	2421		
	Dissolved Oxygen	mg/l	0.11		
	Oxidation Reduction Potential	mv	-117.2		
	pH	units	7.04		
	Temperature	deg c	21.0		
	Turbidity	ntu	2.55		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-29

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-48S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	<0.30	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	<0.60	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	130	50	
300.0	Sulfate	mg/l	39	25	
FIELD	Specific Conductivity	us/cm	1415		
	Dissolved Oxygen	mg/l	2.40		
	Oxidation Reduction Potential	mv	-171.8		
	pH	units	7.48		
	Temperature	deg c	22.4		
	Turbidity	ntu	1.59		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-30

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-49S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	0.82	0.30	
	Ethylbenzene	ug/l	<0.30	0.30	
	Toluene	ug/l	<0.30	0.30	
	Xylenes (Total)	ug/l	3.0	0.60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	61	50	
300.0	Sulfate	mg/l	580	25	
FIELD	Specific Conductivity	us/cm	1928		
	Dissolved Oxygen	mg/l	1.50		
	Oxidation Reduction Potential	mv	-153.5		
	pH	units	7.20		
	Temperature	deg c	22.3		
	Turbidity	ntu	7.10		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table C-31

Analytical and Bioattenuation Monitoring Results
Fillmore Pacific Coast Pipeline, Fourth Quarter 2012

Well MW-50S

Method	Parameter	Units	Value	Reporting Limit	Data Flag
8021B	Benzene	ug/l	350	30	
	Ethylbenzene	ug/l	<30	30	
	Toluene	ug/l	83	30	
	Xylenes (Total)	ug/l	<60	60	
8015BV	Volatile Fuel Hydrocarbons	ug/l	6000	5000	
8260B	Benzene	ug/l	230	2.5	
	Ethylbenzene	ug/l	11	0.50	
	Toluene	ug/l	110	2.5	
	Xylenes (Total)	ug/l	51	1.0	
	m,p-Xylenes	ug/l	39	1.0	
	o-Xylene	ug/l	12	0.50	
	1,2-Dichloroethane	ug/l	<0.50	0.50	
	Methylene Chloride	ug/l	<1.0	1.0	
300.0	Sulfate	mg/l	<0.50	0.50	
FIELD	Specific Conductivity	us/cm	1370		
	Dissolved Oxygen	mg/l	1.10		
	Oxidation Reduction Potential	mv	-156.7		
	pH	units	6.21		
	Temperature	deg c	21.27		
	Turbidity	ntu	9.53		

NA - Not Applicable
J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Appendix D

Data Quality Assessment

URS

Data Validation Memorandum
2020 East First Street
Santa Ana, CA 92705
Telephone - (714) 835-69886

TO: David Brod **FILE:** 29875030.40000

FROM: Lily Bayati, Analytical Services Group **SITE:** Chevron- PCPL Fillmore 4th Q 2012 GWMP

DATE: December 28, 2012

SUBJECT: Summary of Limited Data Validation for TestAmerica Reports: 440-26010-1, 440-26209-1, 440-26343-1, 440-26511-1, 440-26676-1, 440-26805-1, 440-26945-1, 440-27116-1, and 440-27237-1

Introduction

This report summarizes the findings of the limited data validation (completeness check) of 76 water samples (including nine field duplicates), nine trip blanks and two equipment blanks. These samples were collected October 9-19, 2012 as part of the Chevron Pacific Coast Pipeline (PCPL) Fillmore Fourth Quarter (4th Q) 2012 Groundwater Monitoring Program (GWMP). TestAmerica in Irvine, California analyzed all the samples. The samples are listed in Table 1 included at the end of this document. The data were reviewed in accordance with URS Standard Operating Procedures and the principles presented in *USEPA National Functional Guidelines for Laboratory Data Review, Organics* (EPA, 2008) and *USEPA National Functional Guidelines for Laboratory Data Review, Inorganics* (EPA, 2010).

Executive Summary

All samples were analyzed as requested and all holding times were met. The results for nine samples for gasoline range organics (GRO), and three samples for benzene, toluene, ethylbenzene and xylenes (BTEX) were qualified as estimated (J) due to surrogate recoveries that were outside control criteria. Due to matrix interference, the results for BTEX for five samples were qualified as estimated (UJ/J). In addition, due to field duplicate imprecision, the results for toluene for one field duplicate pair were qualified as estimated (J). No other data were qualified. Overall, based on this data validation covering the QC parameters listed below, the data as qualified are useable for their intended purpose.

1.0 Data Validation Methodology

The analytical data were reviewed in order to evaluate the usability of the data for meeting project objectives. The data review process performed involved evaluating the following parameters: holding times, laboratory blank results, laboratory control sample results, surrogate recoveries, matrix spike/matrix spike duplicate results. In addition, the results obtained for the following field quality control samples were evaluated: field duplicate samples, trip blanks, and equipment blanks. After evaluating each data package for these parameters, an overall assessment with respect to the quantitative and qualitative data quality assurance parameters of accuracy, precision, completeness, comparability, and representativeness was formulated.

The data review narratives provide discussions of any quality assurance/quality control (QA/QC) results outside of acceptance limits, an explanation of all data qualification assigned and any professional judgment used by the reviewer, and an overall assessment of the data.

The subsections below describe how each QA/QC parameter was evaluated and what data qualification was assigned for the various conditions in which results did not meet acceptance criteria.

1.1 Holding Times, Sample Receipt and Preservation

The objective is to ascertain the validity of the analytical results based on sample condition (e.g., preservation, temperature) and the holding time of the sample from time of collection to the time of analysis.

Holding times are calculated by computing the difference between the sample collection date found on the chain-of-custody (COC) form and the sample analysis date found in the laboratory report. The holding times are compared to the acceptance limits specified in the analytical methods. Results for analyses not performed within holding times limits are qualified either as estimated "J/UJ" or unusable "R".

The COC and sample receipt documentation are reviewed to evaluate whether the samples were received intact, under acceptable custody procedures, and at the proper temperature. Additionally, the paperwork is reviewed to evaluate whether any transcription errors were made during sample login procedures. Any problems found are noted in the data review narratives.

1.2 Blanks

The results for preparation blanks and field QC blanks are reviewed to determine the existence and magnitude of contamination resulting from laboratory, field, or sample transport activities. Field QC blanks include trip blanks and equipment blanks. Sample results for analytes detected in an associated blank are qualified in accordance to the principles presented in *National Functional Guidelines.* For results qualified as non-detect "U" when the reported value was less than the reporting limit, the standard reporting limit for that analyte becomes the effective reporting limit. For results qualified as non-detect at a value above the reporting limit, the reported value becomes the effective reporting limit.

1.3 Laboratory Control Sample Results

Laboratory control samples (LCSs) are "clean," well-characterized samples used to monitor the laboratory's day-to-day performance or routine analytical methods. LCSs are prepared by spiking samples of a "clean" matrix with known amounts of target analytes and then processing the sample in the same fashion as all other samples. The percent recoveries obtained for the spike analytes are used to assess the accuracy of the analyses on clean sample matrices. When a LCS is prepared in duplicate (LCSD), the relative percent difference (RPD) between the results can be used to assess the precision of the analysis on "clean" sample matrices.

The percent recoveries of the spiked analytes are compared to laboratory's statistically determined acceptance ranges. If the recovery of a spiked analyte in an LCS exceeded the upper limit of the acceptance range, suggesting a potential high bias in sample results, positive results for that analyte in associated samples are qualified as estimated "J"; whereas, non-detect results for that analyte are considered to be acceptable without qualification. If the recovery of a spiked analyte in an LCS was below the lower limit of the acceptance range, suggesting a potential low bias in results, both positive and non-detect results for that analyte in all associated samples are qualified as estimated "J" or "UJ". In addition, results associated with unacceptably low LCS results can be qualified as unusable "R".

If the RPD between duplicate LCS results was greater than the laboratory's statistically determined limit, results for that analyte in all associated samples were qualified as estimated "J" or "UJ".

1.4 Surrogate Spike Compound Recovery

With regard to organic analyses, laboratory performance on individual samples is established by means of spiking activities. All samples are spiked with surrogate compounds just prior to analysis. Although the

evaluation of the results of these surrogate compounds is not necessarily straightforward, the surrogate spike recoveries can be used to infer the accuracy of the analysis on the individual sample matrices.
The percent recoveries of the surrogate compounds are compared to the laboratory's statistically determined acceptance ranges. If the recovery of a surrogate compound exceeded the upper limit of the acceptance range, suggesting a potential high bias in sample results, positive results for that analyte in that sample are qualified as estimated "J"; whereas, non-detect results for that analyte are considered to be acceptable without qualification. If the recovery of a surrogate compound was below the lower limit of the acceptance range, suggesting a potential low bias in results, positive and non-detect results for that analyte the sample are qualified as estimated "J" or "UJ" or can be qualified as unusable "R". It is important to note that professional judgment is used in assigning data qualification especially for methods in which more than one surrogate compound was used or for analyses that required high dilution.

1.5 Matrix Spike/Matrix Spike Duplicate Sample Analysis

In order to provide measures of accuracy and precision of the analysis on the environmental sample matrices, the laboratory prepared a matrix spike (MS) sample and a matrix spike duplicate (MSD) sample per each batch of samples of a similar matrix. The analyte recoveries obtained for MS and MSD analyses were compared to the laboratory's statistically determined acceptance ranges. It is important to note that this evaluation criterion is only considered valid for cases in which the native sample concentration is less than four times the spike concentration (as specified in the Functional Guidelines), and the native sample is a project sample. Thus, when a sample concentration of an analyte is greater than four times the spiking concentration, the results are considered to be inappropriate for assessing accuracy. Additionally, the RPD between the MS and MSD results were compared to the laboratory's statistically determined acceptance limit.

In general, data associated with matrix spike and/or matrix spike recoveries outside the acceptance range are qualified in accordance with Functional Guidelines.

The data reviewer may exercise professional judgment in assigning data qualifier depending on the number of spike recoveries out (1 or 2) and the magnitude of the spike recovery (ies) out. For instance, if a MS recovery was slightly out but the corresponding MSD recovery was within limits, no qualification may have been assigned if the average recovery was within the acceptance range and the RPD between the MS and the MSD results satisfied the precision evaluation criterion.

1.6 Field Duplicate Results

Results for field duplicate samples analyses are compared to the following concentration-dependent evaluation criteria. For analytes in which both the sample and the field duplicate results are greater than the reporting limit (RL), the RPD between the results is compared to a criterion of <50% for water samples, and <100% for soil and soil gas samples. For analytes in which either the sample or field duplicate concentration is <RL, the RL is used for calculation purposes. Results associated with a field duplicate pair exhibiting poor agreement may have been qualified as estimated "J" or "UJ".

2.0 Data Review Narratives

Seventy-six (76) water samples, nine trip blanks and two equipment blanks were collectively analyzed for benzene, toluene, ethylbenzene, total xylenes (BTEX; EPA method 8021B), GRO (C4-C12; EPA method 8015B), volatile organic compounds (EPA method 8260B), and sulfate (EPA method 300.0). The laboratory data were reviewed to evaluate compliance with these methods and the quality of the data reported. This data review process did not include result recalculation or transcription error checking from the raw data. The following summarizes the results of this review.

The areas of review are listed below. A check mark (✓) indicates an area of review in which all data were acceptable. A crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Data Completeness
- ✓ Holding Times and Preservation
- ⊗ Blanks
- ⊗ System Monitoring Compounds (Surrogates)
- ✓ Laboratory Control Samples (LCS)
- ⊗ Matrix Spike/Matrix Spike Duplicate Samples (MS/MSD)
- ⊗ Field Duplicates
- ✓ Analyte Identification and Quantitation

2.1 Overall Assessment

The data reported in this package, as qualified, are considered to be usable for meeting project objectives. All results are considered to be valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for the project is 100%. Additionally, because all samples in this data set were collected and analyzed under similar prescribed conditions, the data within this set are considered to be comparable.

2.2 Data Completeness

All analyses were performed as requested on the COCs. The laboratory reported all requested analyses and the deliverable data reports were complete.

2.3 Holding Times and Preservation

All analyses were performed within the method-specified holding times. In addition, all samples were collected and preserved appropriately.

2.4 Blanks

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed. Target analytes were not detected in the associated method blanks. In addition, target analytes were not detected in trip blanks or equipment blanks with the following exception.

Method	Blank	Analyte	Concentration (ug/L)	Qualified Samples	Qualifier
EPA 8021B	**F12-09-088** (Equipment Blank)	Toluene	0.35	None	NA

Note: EB = Equipment Blank
1- Data qualification was not considered necessary since the results for project samples were greater than the blank contamination.

2.5 System Monitoring Compounds (Surrogates)

Appropriate numbers of surrogate compounds were spiked into each sample for the EPA 8015B, 8260B and 8021B analyses. All surrogate compound recoveries were within the laboratory's statistically determined acceptance ranges with the following exceptions.

Method	Sample	Surrogate	% Recovery	Qualified Parameters	Qualifier
EPA 8015B	**F12-09-011**	4-BFB (FID)	52	**GRO (C4-C12)**	**J**
	F12-09-060	4-BFB (FID)	235		
	F12-09-071	4-BFB (FID)	181		
	F12-09-073	4-BFB (FID)	46		
	F12-09-027	4-BFB (FID)	225		
	F12-09-067	4-BFB (FID)	62		
	F12-09-069	4-BFB (FID)	39		
	F12-09-033	4-BFB (FID)	42		
	F12-09-065	4-BFB (FID)	54		
	F12-09-048	4-BFB (PID)	58	**BTEX**	
	F12-09-052	4-BFB (PID)	59		
	F12-09-033	4-BFB (PID)	224		
Note: Recovery Acceptance Range: 4-BFB (PID) = 65-135% , 4-BFB (FID) = 65-140%					

2.6 Laboratory Control Samples (LCS)

LCSs were prepared and analyzed at the proper frequency for each analysis. All LCS recoveries reported were within the laboratory's statistically determined acceptance ranges. These LCS results indicate that the level of accuracy demonstrated by the analytical method with respect to a clean sample matrix is acceptable.

2.7 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Appropriate numbers of project samples were utilized for the MS/MSD analyses. All average MS/MSD recoveries reported and the RPDs between the results were either within the laboratory's statistically determined acceptance ranges or did not require data qualification with the following exceptions.

Method	Sample	Analyte	Average Recovery	RPD	Qualified Samples	Qualifier
EPA 8021B	**F12-09-035**	Benzene	58.5%*	8	**F12-09-025, F12-09-029 F12-09-031, F12-09-035 F12-09-037**	**J/UJ**
		Ethylbenzene	61%*	14		
		Toluene	55%*	15		
		o-Xylene	62%*	12		
		m,p-Xylenes	53.5%*	13		
Note: * = Outlier						

2.8 Field Duplicates

The following project samples were submitted to the laboratory as blind field duplicate pairs.

Primary Sample	Field Duplicate
F12-09-035	**F12-09-037**
F12-09-036	**F12-0-038**
F12-09-050	**F12-09-052**
F12-09-051	**F12-09-053**
F12-09-054	**F12-09-057**
F12-09-055	**F12-09-058**
F12-09-056	**F12-09-059**
F12-09-067	**F12-09-069**
F12-09-068	**F12-09-070**

Acceptable field and analytical precision was demonstrated for all parameters for the field duplicate pairs with the following exception.

Duplicate Pair	Analysis	Parameter	RPD	Qualifier
F12-09-035 / F12-09-0.37	EPA 8015B	Toluene	68	**J**

2.9 Analyte Identification and Quantitation

All analytes reported and the detection limits obtained comply with project specifications. All dilutions were appropriate.

Table I
TestAmerica

Sample	SDG	Sample Number	Date Sampled	Analyses Performed
F23-09-077 (Trip Blank)	440-26010	440-26010-1	10/09/12	EPA 8015B, 8021B
F23-09-001	440-26010	440-26010-2	10/09/12	EPA 8015B, 8021B
F23-09-002	440-26010	440-26010-3	10/09/12	EPA 300.0
F23-09-003	440-26010	440-26010-4	10/09/12	EPA 8015B, 8021B
F23-09-004	440-26010	440-26010-5	10/09/12	EPA 300.0
F23-09-005	440-26010	440-26010-6	10/09/12	EPA 8015B, 8021B
F23-09-006	440-26010	440-26010-7	10/09/12	EPA 300.0
F12-09-007	440-26209	440-26209-1	10/09/12	EPA 8015B, 8021B
F12-09-008	440-26209	440-26209-2	10/09/12	EPA 300.0
F12-09-078 (Trip Blank)	440-26209	440-26209-3	10/10/12	EPA 8015B, 8021B
F12-09-009	440-26209	440-26209-4	10/10/12	EPA 8015B, 8021B
F12-09-010	440-26209	440-26209-5	10/10/12	EPA 300.0
F12-09-011	440-26209	440-26209-6	10/10/12	EPA 8015B, 8021B
F12-09-012	440-26209	440-26209-7	10/10/12	EPA 300.0
F12-09-013	440-26209	440-26209-8	10/10/12	EPA 8260B
F12-09-014	440-26209	440-26209-9	10/10/12	EPA 8015B, 8021B
F12-09-015	440-26209	440-26209-10	10/10/12	EPA 300.0
F12-09-016	440-26209	440-26209-11	10/10/12	EPA 8015B, 8021B
F12-09-017	440-26209	440-26209-12	10/10/12	EPA 300.0
F12-09-020	440-26209	440-26209-13	10/10/12	EPA 8015B, 8021B
F12-09-021	440-26209	440-26209-14	10/10/12	EPA 300.0
F12-09-022	440-26209	440-26209-15	10/10/12	EPA 8260B
F12-09-079 (Trip Blank)	440-26343	440-26343-1	10/11/12	EPA 8015B, 8021B
F12-09-018	440-26343	440-26343-2	10/11/12	EPA 8015B, 8021B
F12-09-019	440-26343	440-26343-3	10/11/12	EPA 300.0
F12-09-080 (Trip Blank)	440-26511	440-26511-1	10/12/12	EPA 8015B, 8021B
F12-09-025	440-26511	440-26511-2	10/12/12	EPA 8015B, 8021B
F12-09-026	440-26511	440-26511-3	10/12/12	EPA 300.0
F12-09-029	440-26511	440-26511-4	10/12/12	EPA 8015B, 8021B
F12-09-030	440-26511	440-26511-5	10/12/12	EPA 300.0
F12-09-031	440-26511	440-26511-6	10/12/12	EPA 8015B, 8021B
F12-09-032	440-26511	440-26511-7	10/12/12	EPA 300.0
F12-09-035	440-26511	440-26511-8	10/12/12	EPA 8015B, 8021B

Table I
TestAmerica

Sample	SDG	Sample Number	Date Sampled	Analyses Performed
F12-09-036	440-26511	440-26511-9	10/12/12	EPA 300.0
F12-09-037 (Field duplicate of F12-09-035)	440-26511	440-26511-10	10/12/12	EPA 8015B, 8021B
F12-09-038 (Field duplicate of F12-09-036)	440-26511	440-26511-11	10/12/12	EPA 300.0
F12-09-039	440-26511	440-26511-12	10/12/12	EPA 8015B, 8021B
F12-09-040	440-26511	440-26511-13	10/12/12	EPA 300.0
F12-09-081 (Trip Blank)	440-26676	440-26676-1	10/15/12	EPA 8015B, 8021B
F12-09-041	440-26676	440-26676-2	10/15/12	EPA 8015B, 8021B
F12-09-042	440-26676	440-26676-3	10/15/12	EPA 300.0
F12-09-043	440-26676	440-26676-4	10/15/12	EPA 8015B, 8021B
F12-09-044	440-26676	440-26676-5	10/15/12	EPA 300.0
F12-09-045	440-26676	440-26676-6	10/15/12	EPA 8015B, 8021B
F12-09-046	440-26676	440-26676-7	10/15/12	EPA 300.0
F12-09-047	440-26676	440-26676-8	10/15/12	EPA 8260B
F12-09-082 (Trip Blank)	440-26805	440-26805-1	10/16/12	EPA 8015B, 8021B
F12-09-048	440-26805	440-26805-2	10/16/12	EPA 8015B, 8021B
F12-09-049	440-26805	440-26805-3	10/16/12	EPA 300.0
F12-09-050	440-26805	440-26805-4	10/16/12	EPA 8015B, 8021B
F12-09-051	440-26805	440-26805-5	10/16/12	EPA 300.0
F12-09-052 (Field duplicate of F12-09-050)	440-26805	440-26805-6	10/16/12	EPA 8015B, 8021B
F12-09-053 (Field duplicate of F12-09-051)	440-26805	440-26805-7	10/16/12	EPA 300.0
F12-09-054	440-26805	440-26805-8	10/16/12	EPA 8015B, 8021B
F12-09-055	440-26805	440-26805-9	10/16/12	EPA 300.0
F12-09-056	440-26805	440-26805-10	10/16/12	EPA 8260B
F12-09-057 (Field duplicate of F12-09-054)	440-26805	440-26805-11	10/16/12	EPA 8015B, 8021B
F12-09-058 (Field duplicate of F12-09-055)	440-26805	440-26805-12	10/16/12	EPA 300.0
F12-09-059 (Field duplicate of F12-09-056)	440-26805	440-26805-13	10/16/12	EPA 8260B
F12-09-083 (Trip Blank)	440-26945	440-26945-1	10/17/12	EPA 8015B, 8021B
F12-09-060	440-26945	440-26945-2	10/17/12	EPA 8015B, 8021B
F12-09-061	440-26945	440-26945-3	10/17/12	EPA 300.0

Table I
TestAmerica

Sample	SDG	Sample Number	Date Sampled	Analyses Performed
F12-09-062	440-26945	440-26945-4	10/17/12	EPA 8260B
F12-09-063	440-26945	440-26945-5	10/17/12	EPA 8015B, 8021B
F12-09-064	440-26945	440-26945-6	10/17/12	EPA 300.0
F12-09-071	440-26945	440-26945-7	10/17/12	EPA 8015B, 8021B
F12-09-072	440-26945	440-26945-8	10/17/12	EPA 300.0
F12-09-073	440-26945	440-26945-9	10/17/12	EPA 8015B, 8021B
F12-09-074	440-26945	440-26945-10	10/17/12	EPA 300.0
F12-09-084 (Trip Blank)	440-27116	440-27116-1	10/18/12	EPA 8015B, 8021B
F12-09-075	440-27116	440-27116-2	10/18/12	EPA 8015B, 8021B
F12-09-076	440-27116	440-27116-3	10/18/12	EPA 300.0
F12-09-023	440-27116	440-27116-4	10/18/12	EPA 8015B, 8021B
F12-09-024	440-27116	440-27116-5	10/18/12	EPA 300.0
F12-09-087 (Equipment Blank)	440-27116	440-27116-6	10/18/12	EPA 8015B, 8021B
F12-09-027	440-27116	440-27116-7	10/18/12	EPA 8015B, 8021B
F12-09-028	440-27116	440-27116-8	10/18/12	EPA 300.0
F12-09-085 (Trip Blank)	440-27237	440-27237-1	10/19/12	EPA 8015B, 8021B
F12-09-067	440-27237	440-27237-2	10/19/12	EPA 8015B, 8021B
F12-09-068	440-27237	440-27237-3	10/19/12	EPA 300.0
F12-09-069 (Field duplicate of F12-09-067)	440-27237	440-27237-4	10/19/12	EPA 8015B, 8021B
F12-09-070 (Field duplicate of F12-09-068)	440-27237	440-27237-5	10/19/12	EPA 300.0
F12-09-088 (Equipment Blank)	440-27237	440-27237-6	10/19/12	EPA 8015B, 8021B
F12-09-033	440-27237	440-27237-7	10/19/12	EPA 8015B, 8021B
F12-09-034	440-27237	440-27237-8	10/19/12	EPA 300.0
F12-09-065	440-27237	440-27237-9	10/19/12	EPA 8015B, 8021B
F12-09-066	440-27237	440-27237-10	10/19/12	EPA 300.0

Notes:
SDG: Sample Delivery Group
EPA 8015B: Gasoline Range Organics (GRO; C4-C12)
EPA 8021B: Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)
EPA 8260B: BTEX, 1,2-Dichloroethane, Methylene Chloride
EPA 300.0: Sulfate

ATTACHMENT A
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by URS Data Review Team

DATA QUALIFIER DEFINITIONS FOR ORGANIC ANALYES

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

DATA QUALIFIER DEFINITIONS FOR INORGANIC ANALYSES

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

J+ The result is an estimated quantity, but the result may be biased high.

J- The result is an estimated quantity, but the result may be biased low.

UJ The analyte was analyzed for, but was not detected. The reported sample quantitation limit is approximate and may be inaccurate or imprecise.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control (QC) criteria. The analyte may or may not be present in the sample.

URS DATA QUALIFIER DEFINITIONS — REASON CODE DEFINITIONS

a Analytical sequence deficiency or omission.
b Gross compound breakdown (4,4'-DDT/Endrin).
c Calibration failure; poor or unstable response.
d Laboratory duplicate imprecision.
e Laboratory duplicate control sample imprecision.
f Field duplicate imprecision.
g Poor chromatography.
h Holding time violation.
i Internal standard failure.
j Poor mass spectrographic performance.
k Serial dilution imprecision.
l Laboratory control sample recovery failure.
m Matrix spike/matrix spike duplicate recovery failure.
n Interference check sample recovery failure.
o Calibration blank contamination (metals/inorganics only).
p Preparation blank contamination (metals/inorganics only).
q Quantitation outside linear range.
r Linearity failure in initial calibration.
s Surrogate spike recovery failure (GC organics and GC/MS organics only).
t Instrument tuning failure.
u No valid confirmation column (GC Organics only).
v Value is estimated below the MDA (Rads only).
w Retention time (RT) outside of RT window.
x Field blank contamination.
y Trip blank contamination.
z Method blank contamination.

INTERPRETATION KEY

The following example shows how an analytical result which includes qualifiers assigned by both the URS data review team and the analytical laboratory could be displayed in the data tables:

<5.20 Uz | JB

The qualifier assigned by the URS data review team precedes the "|"; the qualifier assigned by the laboratory follows it. In this example, the result is qualified as a non-detection data to the bias introduced by contamination of the associated method blank. Presence of the analyte in the method blank is indicated by the laboratory qualifier (B). The qualifier assigned by the URS data review team (Uz) indicates that the analyte concentration is considered to be below the adjusted detection limit (quantitation limit) based on the level of contamination in the method blank.

Sample Control Key

Task	Matrix	Sample Number	QC Code	Location	Sample Date
FILLMORE	GW	F12-09-001		MW-01S	10/9/2012
FILLMORE	GW	F12-09-002		MW-01S	10/9/2012
FILLMORE	GW	F12-09-003		MW-11S	10/9/2012
FILLMORE	GW	F12-09-004		MW-11S	10/9/2012
FILLMORE	GW	F12-09-005		MW-38S	10/9/2012
FILLMORE	GW	F12-09-006		MW-38S	10/9/2012
FILLMORE	GW	F12-09-007		MW-29S	10/9/2012
FILLMORE	GW	F12-09-008		MW-29S	10/9/2012
FILLMORE	GW	F12-09-009		MW-35S	10/10/2012
FILLMORE	GW	F12-09-010		MW-35S	10/10/2012
FILLMORE	GW	F12-09-011		MW-45S	10/10/2012
FILLMORE	GW	F12-09-012		MW-45S	10/10/2012
FILLMORE	GW	F12-09-013		MW-45S	10/10/2012
FILLMORE	GW	F12-09-014		MW-44S	10/10/2012
FILLMORE	GW	F12-09-015		MW-44S	10/10/2012
FILLMORE	GW	F12-09-016		MW-43S	10/10/2012
FILLMORE	GW	F12-09-017		MW-43S	10/10/2012
FILLMORE	GW	F12-09-018		MW-49S	10/11/2012
FILLMORE	GW	F12-09-019		MW-49S	10/11/2012
FILLMORE	GW	F12-09-020		MW-06S	10/10/2012
FILLMORE	GW	F12-09-021		MW-06S	10/10/2012
FILLMORE	GW	F12-09-022		MW-06S	10/10/2012
FILLMORE	GW	F12-09-023		MW-02S	10/18/2012
FILLMORE	GW	F12-09-024		MW-02S	10/18/2012
FILLMORE	GW	F12-09-025		EW-02	10/12/2012
FILLMORE	GW	F12-09-026		EW-02	10/12/2012
FILLMORE	GW	F12-09-027		MW-03S	10/18/2012
FILLMORE	GW	F12-09-028		MW-03S	10/18/2012
FILLMORE	GW	F12-09-029		MW-37S	10/12/2012
FILLMORE	GW	F12-09-030		MW-37S	10/12/2012
FILLMORE	GW	F12-09-031		MW-25S	10/12/2012
FILLMORE	GW	F12-09-032		MW-25S	10/12/2012
FILLMORE	GW	F12-09-033		MW-09S	10/19/2012
FILLMORE	GW	F12-09-034		MW-09S	10/19/2012
FILLMORE	GW	F12-09-035	F1	MW-30S	10/12/2012
FILLMORE	GW	F12-09-036	F1	MW-30S	10/12/2012
FILLMORE	GW	F12-09-037	F2	MW-30S	10/12/2012
FILLMORE	GW	F12-09-038	F2	MW-30S	10/12/2012
FILLMORE	GW	F12-09-039		MW-18S	10/12/2012
FILLMORE	GW	F12-09-040		MW-18S	10/12/2012
FILLMORE	GW	F12-09-041		MW-48S	10/15/2012
FILLMORE	GW	F12-09-042		MW-48S	10/15/2012
FILLMORE	GW	F12-09-043		MW-14S	10/15/2012
FILLMORE	GW	F12-09-044		MW-14S	10/15/2012
FILLMORE	GW	F12-09-045		MW-42S	10/15/2012
FILLMORE	GW	F12-09-046		MW-42S	10/15/2012
FILLMORE	GW	F12-09-047		MW-42S	10/15/2012
FILLMORE	GW	F12-09-048		MW-41S	10/16/2012
FILLMORE	GW	F12-09-049		MW-41S	10/16/2012
FILLMORE	GW	F12-09-050	F1	MW-20S	10/16/2012

Sample Control Key

Task	Matrix	Sample Number	QC Code	Location	Sample Date
FILLMORE	GW	F12-09-051	F1	MW-20S	10/16/2012
FILLMORE	GW	F12-09-052	F2	MW-20S	10/16/2012
FILLMORE	GW	F12-09-053	F2	MW-20S	10/16/2012
FILLMORE	GW	F12-09-054	F1	MW-50S	10/16/2012
FILLMORE	GW	F12-09-055	F1	MW-50S	10/16/2012
FILLMORE	GW	F12-09-056	F1	MW-50S	10/16/2012
FILLMORE	GW	F12-09-057	F2	MW-50S	10/16/2012
FILLMORE	GW	F12-09-058	F2	MW-50S	10/16/2012
FILLMORE	GW	F12-09-059	F2	MW-50S	10/16/2012
FILLMORE	GW	F12-09-060		MW-39S	10/17/2012
FILLMORE	GW	F12-09-061		MW-39S	10/17/2012
FILLMORE	GW	F12-09-062		MW-39S	10/17/2012
FILLMORE	GW	F12-09-063		MW-28S	10/17/2012
FILLMORE	GW	F12-09-064		MW-28S	10/17/2012
FILLMORE	GW	F12-09-065		EW-P2	10/19/2012
FILLMORE	GW	F12-09-066		EW-P2	10/19/2012
FILLMORE	GW	F12-09-067	F1	EW-05	10/19/2012
FILLMORE	GW	F12-09-068	F1	EW-05	10/19/2012
FILLMORE	GW	F12-09-069	F2	EW-05	10/19/2012
FILLMORE	GW	F12-09-070	F2	EW-05	10/19/2012
FILLMORE	GW	F12-09-071		MW-19S	10/17/2012
FILLMORE	GW	F12-09-072		MW-19S	10/17/2012
FILLMORE	GW	F12-09-073		MW-17S	10/17/2012
FILLMORE	GW	F12-09-074		MW-17S	10/17/2012
FILLMORE	GW	F12-09-075		MW-08S	10/18/2012
FILLMORE	GW	F12-09-076		MW-08S	10/18/2012

Appendix E

Analytical Laboratory Reports
(CD-ROM)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-26010-1
TestAmerica Sample Delivery Group: 29875030.20000
Client Project/Site: PCPL Fillmore
Revision: 1

For:
URS Corporation
310 Golden Shore, Suite 100
Long Beach, California 90802

Attn: David Brod

Authorized for release by:
11/6/2012 8:49:07 AM

Sushmitha Reddy
Project Manager I
sushmitha.reddy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 7
QC Sample Results 9
QC Association 12
Definitions 13
Certification Summary 14
Chain of Custody 15
Receipt Checklists 16

Sample Summary

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-26010-1	F12-09-077	Water	10/09/12 08:00	10/09/12 18:50
440-26010-2	F12-09-001	Water	10/09/12 10:52	10/09/12 18:50
440-26010-3	F12-09-002	Water	10/09/12 10:52	10/09/12 18:50
440-26010-4	F12-09-003	Water	10/09/12 11:27	10/09/12 18:50
440-26010-5	F12-09-004	Water	10/09/12 11:27	10/09/12 18:50
440-26010-6	F12-09-005	Water	10/09/12 12:59	10/09/12 18:50
440-26010-7	F12-09-006	Water	10/09/12 12:59	10/09/12 18:50

Case Narrative

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

Job ID: 440-26010-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-26010-1

Comments
The report is reissued without MTBE and speciated xylene resuls to be consistent with project requirements.

Receipt
The samples were received on 10/9/2012 6:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

HPLC
Method(s) 300.0: Due to the high concentration of chloride and sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for batch 58100 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

GC VOA
Method(s) 8015B: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample(s): W-5 (440-26328-2 MS), W-5 (440-26328-2 MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported. BFB coeluting with TPH standard. Data not impacted.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

Client Sample ID: F12-09-077

Lab Sample ID: 440-26010-1
Date Collected: 10/09/12 08:00
Matrix: Water
Date Received: 10/09/12 18:50

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 03:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*65 - 140*		*10/17/12 03:53*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/11/12 20:51	1
Ethylbenzene	ND		0.30		ug/L			10/11/12 20:51	1
Toluene	ND		0.30		ug/L			10/11/12 20:51	1
Xylenes, Total	ND		0.60		ug/L			10/11/12 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*65 - 135*		*10/11/12 20:51*	*1*

Client Sample ID: F12-09-001

Lab Sample ID: 440-26010-2
Date Collected: 10/09/12 10:52
Matrix: Water
Date Received: 10/09/12 18:50

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 04:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*65 - 140*		*10/17/12 04:20*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/11/12 21:17	1
Ethylbenzene	ND		0.30		ug/L			10/11/12 21:17	1
Toluene	ND		0.30		ug/L			10/11/12 21:17	1
Xylenes, Total	ND		0.60		ug/L			10/11/12 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*65 - 135*		*10/11/12 21:17*	*1*

Client Sample ID: F12-09-002

Lab Sample ID: 440-26010-3
Date Collected: 10/09/12 10:52
Matrix: Water
Date Received: 10/09/12 18:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**650**		25		mg/L			10/10/12 16:02	50

Client Sample ID: F12-09-003

Lab Sample ID: 440-26010-4
Date Collected: 10/09/12 11:27
Matrix: Water
Date Received: 10/09/12 18:50

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 04:47	1

Client Sample Results

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

Client Sample ID: F12-09-003 — Lab Sample ID: 440-26010-4

Date Collected: 10/09/12 11:27 — **Matrix: Water**
Date Received: 10/09/12 18:50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*65 - 140*		*10/17/12 04:47*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/11/12 21:44	1
Ethylbenzene	ND		0.30		ug/L			10/11/12 21:44	1
Toluene	ND		0.30		ug/L			10/11/12 21:44	1
Xylenes, Total	ND		0.60		ug/L			10/11/12 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*65 - 135*		*10/11/12 21:44*	*1*

Client Sample ID: F12-09-004 — Lab Sample ID: 440-26010-5

Date Collected: 10/09/12 11:27 — **Matrix: Water**
Date Received: 10/09/12 18:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1400**		25		mg/L			10/10/12 16:18	50

Client Sample ID: F12-09-005 — Lab Sample ID: 440-26010-6

Date Collected: 10/09/12 12:59 — **Matrix: Water**
Date Received: 10/09/12 18:50

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*65 - 140*		*10/17/12 05:13*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/11/12 22:11	1
Ethylbenzene	ND		0.30		ug/L			10/11/12 22:11	1
Toluene	ND		0.30		ug/L			10/11/12 22:11	1
Xylenes, Total	ND		0.60		ug/L			10/11/12 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*65 - 135*		*10/11/12 22:11*	*1*

Client Sample ID: F12-09-006 — Lab Sample ID: 440-26010-7

Date Collected: 10/09/12 12:59 — **Matrix: Water**
Date Received: 10/09/12 18:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1400**		50		mg/L			10/10/12 16:34	100

Lab Chronicle

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

Client Sample ID: F12-09-077 — Lab Sample ID: 440-26010-1

Date Collected: 10/09/12 08:00
Date Received: 10/09/12 18:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	58456	10/11/12 20:51	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59411	10/17/12 03:53	SC	TAL IRV

Client Sample ID: F12-09-001 — Lab Sample ID: 440-26010-2

Date Collected: 10/09/12 10:52
Date Received: 10/09/12 18:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	58456	10/11/12 21:17	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59411	10/17/12 04:20	SC	TAL IRV

Client Sample ID: F12-09-002 — Lab Sample ID: 440-26010-3

Date Collected: 10/09/12 10:52
Date Received: 10/09/12 18:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	58100	10/10/12 16:02	NN	TAL IRV

Client Sample ID: F12-09-003 — Lab Sample ID: 440-26010-4

Date Collected: 10/09/12 11:27
Date Received: 10/09/12 18:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	58456	10/11/12 21:44	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59411	10/17/12 04:47	SC	TAL IRV

Client Sample ID: F12-09-004 — Lab Sample ID: 440-26010-5

Date Collected: 10/09/12 11:27
Date Received: 10/09/12 18:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	58100	10/10/12 16:18	NN	TAL IRV

Client Sample ID: F12-09-005 — Lab Sample ID: 440-26010-6

Date Collected: 10/09/12 12:59
Date Received: 10/09/12 18:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	58456	10/11/12 22:11	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59411	10/17/12 05:13	SC	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

Client Sample ID: F12-09-006
Date Collected: 10/09/12 12:59
Date Received: 10/09/12 18:50

Lab Sample ID: 440-26010-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100	1 mL	1.0 mL	58100	10/10/12 16:34	NN	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Sample Results

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-59411/56 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59411

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/16/12 23:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*65 - 140*		*10/16/12 23:24*	*1*

Lab Sample ID: LCS 440-59411/55 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59411

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	800	711		ug/L		89	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*65 - 140*

Lab Sample ID: 440-26328-A-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59411

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	360		800	1010		ug/L		81	65 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*151*	*X*	*65 - 140*

Lab Sample ID: 440-26328-A-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59411

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	360		800	988		ug/L		79	65 - 140	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*144*	*X*	*65 - 140*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 440-58456/8 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58456

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/11/12 16:11	1
Ethylbenzene	ND		0.30		ug/L			10/11/12 16:11	1
Toluene	ND		0.30		ug/L			10/11/12 16:11	1
Xylenes, Total	ND		0.60		ug/L			10/11/12 16:11	1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 440-58456/8 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58456

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		65 - 135		10/11/12 16:11	1

Lab Sample ID: LCS 440-58456/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58456

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	19.7		ug/L		99	85 - 115
Ethylbenzene	20.0	20.2		ug/L		101	85 - 115
m-Xylene & p-Xylene	40.0	38.6		ug/L		97	85 - 115
o-Xylene	20.0	18.7		ug/L		93	85 - 115
Toluene	20.0	19.3		ug/L		96	85 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		65 - 135

Lab Sample ID: 440-25651-A-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58456

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2300		10000	11300		ug/L		90	60 - 130
Ethylbenzene	240		10000	8800		ug/L		86	70 - 130
m-Xylene & p-Xylene	410		20000	16800		ug/L		82	65 - 125
o-Xylene	250		10000	8300		ug/L		80	65 - 125
Toluene	1300		10000	9570		ug/L		83	65 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		65 - 135

Lab Sample ID: 440-25651-A-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58456

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	2300		10000	11200		ug/L		89	60 - 130	1	20
Ethylbenzene	240		10000	8730		ug/L		85	70 - 130	1	20
m-Xylene & p-Xylene	410		20000	16100		ug/L		78	65 - 125	4	25
o-Xylene	250		10000	8050		ug/L		78	65 - 125	3	20
Toluene	1300		10000	9560		ug/L		83	65 - 125	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		65 - 135

QC Sample Results

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-58100/4
Matrix: Water
Analysis Batch: 58100

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/10/12 09:47	1

Lab Sample ID: LCS 440-58100/7
Matrix: Water
Analysis Batch: 58100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	9.89		mg/L		99	90 - 110		

QC Association Summary

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

GC VOA

Analysis Batch: 58456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-25651-A-1 MS	Matrix Spike	Total/NA	Water	8021B	
440-25651-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
440-26010-1	F12-09-077	Total/NA	Water	8021B	
440-26010-2	F12-09-001	Total/NA	Water	8021B	
440-26010-4	F12-09-003	Total/NA	Water	8021B	
440-26010-6	F12-09-005	Total/NA	Water	8021B	
LCS 440-58456/7	Lab Control Sample	Total/NA	Water	8021B	
MB 440-58456/8	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 59411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26010-1	F12-09-077	Total/NA	Water	8015B	
440-26010-2	F12-09-001	Total/NA	Water	8015B	
440-26010-4	F12-09-003	Total/NA	Water	8015B	
440-26010-6	F12-09-005	Total/NA	Water	8015B	
440-26328-A-2 MS	Matrix Spike	Total/NA	Water	8015B	
440-26328-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-59411/55	Lab Control Sample	Total/NA	Water	8015B	
MB 440-59411/56	Method Blank	Total/NA	Water	8015B	

HPLC/IC

Analysis Batch: 58100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26010-3	F12-09-002	Total/NA	Water	300.0	
440-26010-5	F12-09-004	Total/NA	Water	300.0	
440-26010-7	F12-09-006	Total/NA	Water	300.0	
LCS 440-58100/7	Lab Control Sample	Total/NA	Water	300.0	
MB 440-58100/4	Method Blank	Total/NA	Water	300.0	

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
RER	Relative error ratio
DER	Duplicate error ratio (normalized absolute difference)
DLC	Decision level concentration
RL	Reporting Limit or Requested Limit (Radiochemistry only)

Certification Summary

Client: URS Corporation
Project/Site: PCPL Fillmore

TestAmerica Job ID: 440-26010-1
SDG: 29875030.20000

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-13

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10/9/12

Page 1 of 1

440-26010

☐ Data Requested in GISKey Format

Lab Name: TEST AMERICA
URS Project/PO Number: 29875030.20000
Client Name/Project Name/Location: Chevron PCPL Fillmore
~~Geo Tracker Information:~~ SO# 15061215
URS Project Manager: DAVID BROD
~~EDF Reporting: Yes No~~ Global ID: WBS FNWENV-SFD00056-9903
Sampler Name and Signature: Roger Hardesty
COELT Log Number:

Requested Analyses: 8015M/8015 GRO/BTEX/MTBE 8260B; 300.0 Sulfate

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/8015 GRO/BTEX/MTBE 8260B	300.0 Sulfate	HOLD	Special Instructions:
1	F12-09-077	10-9-12	0800	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X			
2	F12-09-001		1052	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X			
3	F12-09-002		1052	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X		
4	F12-09-003		1127	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X			
5	F12-09-004		1127	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X		
6	F12-09-005		1259	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X			
7	F12-09-006		1259	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X		
8				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA					
9				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA					
10				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA					

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardesty	10-9-12/1440	Matt Amos	10-9-12 14:40
Matt Amos	10-9-12 18:50		
		Amos	10/09/12 1850

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: ____
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

3.5°C

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-26010-1
SDG Number: 29875030.20000

Login Number: 26010
List Number: 1
Creator: Escalante, Maria

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-26209-1
TestAmerica Sample Delivery Group: 29875030.20000
Client Project/Site: Chevron PCPL Filmore

For:
URS Corporation
310 Golden Shore, Suite 100
Long Beach, California 90802

Attn: David Brod

Authorized for release by:
10/24/2012 5:50:34 PM

Sushmitha Reddy
Project Manager I
sushmitha.reddy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 10
QC Sample Results 13
QC Association 19
Definitions 21
Certification Summary 22
Chain of Custody 23
Receipt Checklists 25

Sample Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-26209-1	F12-09-007	Water	10/09/12 15:00	10/10/12 18:40
440-26209-2	F12-09-008	Water	10/09/12 15:00	10/10/12 18:40
440-26209-3	F12-09-078	Water	10/10/12 07:30	10/10/12 18:40
440-26209-4	F12-09-009	Water	10/10/12 09:24	10/10/12 18:40
440-26209-5	F12-09-010	Water	10/10/12 09:24	10/10/12 18:40
440-26209-6	F12-09-011	Water	10/10/12 10:34	10/10/12 18:40
440-26209-7	F12-09-012	Water	10/10/12 10:34	10/10/12 18:40
440-26209-8	F12-09-013	Water	10/10/12 10:34	10/10/12 18:40
440-26209-9	F12-09-014	Water	10/10/12 12:09	10/10/12 18:40
440-26209-10	F12-09-015	Water	10/10/12 12:09	10/10/12 18:40
440-26209-11	F12-09-016	Water	10/10/12 13:20	10/10/12 18:40
440-26209-12	F12-09-017	Water	10/10/12 13:20	10/10/12 18:40
440-26209-13	F12-09-020	Water	10/10/12 14:12	10/10/12 18:40
440-26209-14	F12-09-021	Water	10/10/12 14:12	10/10/12 18:40
440-26209-15	F12-09-022	Water	10/10/12 14:12	10/10/12 18:40

Job ID: 440-26209-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-26209-1

Comments
No additional comments.

Receipt
The samples were received on 10/10/2012 6:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5º C.

GC/MS VOA
No analytical or quality issues were noted.

HPLC
No analytical or quality issues were noted.

GC VOA
Method(s) 8015B: Surrogate recovery for the following sample(s) was outside control limits: F12-09-011 (440-26209-6). Re-analysis was performed with concurring results. The re-analysis has been reported.

Method(s) 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 59471 were outside control limits. Matrix interference is suspected. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 60075 were outside control limits due to matrix interference. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Client Sample ID: F12-09-007

Lab Sample ID: 440-26209-1
Date Collected: 10/09/12 15:00
Matrix: Water
Date Received: 10/10/12 18:40

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*65 - 140*		*10/17/12 12:34*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 15:31	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 15:31	1
Toluene	ND		0.30		ug/L			10/16/12 15:31	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*65 - 135*		*10/16/12 15:31*	*1*

Client Sample ID: F12-09-008

Lab Sample ID: 440-26209-2
Date Collected: 10/09/12 15:00
Matrix: Water
Date Received: 10/10/12 18:40

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1400**		50		mg/L			10/11/12 21:18	100

Client Sample ID: F12-09-078

Lab Sample ID: 440-26209-3
Date Collected: 10/10/12 07:30
Matrix: Water
Date Received: 10/10/12 18:40

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*65 - 140*		*10/17/12 13:59*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 16:24	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 16:24	1
Toluene	ND		0.30		ug/L			10/16/12 16:24	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*65 - 135*		*10/16/12 16:24*	*1*

Client Sample ID: F12-09-009

Lab Sample ID: 440-26209-4
Date Collected: 10/10/12 09:24
Matrix: Water
Date Received: 10/10/12 18:40

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 14:27	1

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Client Sample ID: F12-09-009

Lab Sample ID: 440-26209-4

Date Collected: 10/10/12 09:24
Matrix: Water
Date Received: 10/10/12 18:40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*65 - 140*		*10/17/12 14:27*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 16:51	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 16:51	1
Toluene	ND		0.30		ug/L			10/16/12 16:51	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*65 - 135*		*10/16/12 16:51*	*1*

Client Sample ID: F12-09-010

Lab Sample ID: 440-26209-5

Date Collected: 10/10/12 09:24
Matrix: Water
Date Received: 10/10/12 18:40

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**600**		25		mg/L			10/11/12 22:16	50

Client Sample ID: F12-09-011

Lab Sample ID: 440-26209-6

Date Collected: 10/10/12 10:34
Matrix: Water
Date Received: 10/10/12 18:40

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**860**		250		ug/L			10/18/12 14:22	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*52*	*X*	*65 - 140*		*10/18/12 14:22*	*5*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**7.6**		0.60		ug/L			10/18/12 19:30	2
Ethylbenzene	**1.0**		0.60		ug/L			10/18/12 19:30	2
Toluene	**2.3**		0.60		ug/L			10/18/12 19:30	2
Xylenes, Total	**5.6**		1.2		ug/L			10/18/12 19:30	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*65 - 135*		*10/18/12 19:30*	*2*

Client Sample ID: F12-09-012

Lab Sample ID: 440-26209-7

Date Collected: 10/10/12 10:34
Matrix: Water
Date Received: 10/10/12 18:40

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**670**		25		mg/L			10/11/12 22:31	50

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Client Sample ID: F12-09-013

Lab Sample ID: 440-26209-8

Date Collected: 10/10/12 10:34
Matrix: Water
Date Received: 10/10/12 18:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**6.1**		0.50		ug/L			10/20/12 00:07	1
1,2-Dichloroethane	ND		0.50		ug/L			10/20/12 00:07	1
Ethylbenzene	**0.57**		0.50		ug/L			10/20/12 00:07	1
m,p-Xylene	**2.8**		1.0		ug/L			10/20/12 00:07	1
o-Xylene	ND		0.50		ug/L			10/20/12 00:07	1
Toluene	**3.3**		0.50		ug/L			10/20/12 00:07	1
Xylenes, Total	**2.8**		1.0		ug/L			10/20/12 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*10/20/12 00:07*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*10/20/12 00:07*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/20/12 00:07*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0		ug/L			10/22/12 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*10/22/12 12:46*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*10/22/12 12:46*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*10/22/12 12:46*	*1*

Client Sample ID: F12-09-014

Lab Sample ID: 440-26209-9

Date Collected: 10/10/12 12:09
Matrix: Water
Date Received: 10/10/12 18:40

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*65 - 140*		*10/17/12 15:23*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 17:44	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 17:44	1
Toluene	ND		0.30		ug/L			10/16/12 17:44	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*65 - 135*		*10/16/12 17:44*	*1*

Client Sample ID: F12-09-015

Lab Sample ID: 440-26209-10

Date Collected: 10/10/12 12:09
Matrix: Water
Date Received: 10/10/12 18:40

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1100**		25		mg/L			10/11/12 22:46	50

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Client Sample ID: F12-09-016

Lab Sample ID: 440-26209-11
Date Collected: 10/10/12 13:20
Matrix: Water
Date Received: 10/10/12 18:40

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*65 - 140*		*10/17/12 15:50*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 18:11	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 18:11	1
Toluene	ND		0.30		ug/L			10/16/12 18:11	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*65 - 135*		*10/16/12 18:11*	*1*

Client Sample ID: F12-09-017

Lab Sample ID: 440-26209-12
Date Collected: 10/10/12 13:20
Matrix: Water
Date Received: 10/10/12 18:40

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**980**		25		mg/L			10/11/12 23:01	50

Client Sample ID: F12-09-020

Lab Sample ID: 440-26209-13
Date Collected: 10/10/12 14:12
Matrix: Water
Date Received: 10/10/12 18:40

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**300**		50		ug/L			10/17/12 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*67*		*65 - 140*		*10/17/12 16:18*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**3.9**		0.30		ug/L			10/16/12 18:37	1
Ethylbenzene	**6.0**		0.30		ug/L			10/16/12 18:37	1
Toluene	**6.9**		0.30		ug/L			10/16/12 18:37	1
Xylenes, Total	**6.2**		0.60		ug/L			10/16/12 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*65 - 135*		*10/16/12 18:37*	*1*

Client Sample ID: F12-09-021

Lab Sample ID: 440-26209-14
Date Collected: 10/10/12 14:12
Matrix: Water
Date Received: 10/10/12 18:40

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**430**		25		mg/L			10/11/12 23:16	50

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Client Sample ID: F12-09-022

Date Collected: 10/10/12 14:12
Date Received: 10/10/12 18:40

Lab Sample ID: 440-26209-15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.9**		0.50		ug/L			10/20/12 00:34	1
1,2-Dichloroethane	ND		0.50		ug/L			10/20/12 00:34	1
Ethylbenzene	ND		0.50		ug/L			10/20/12 00:34	1
m,p-Xylene	ND		1.0		ug/L			10/20/12 00:34	1
o-Xylene	ND		0.50		ug/L			10/20/12 00:34	1
Toluene	**2.0**		0.50		ug/L			10/20/12 00:34	1
Xylenes, Total	ND		1.0		ug/L			10/20/12 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/20/12 00:34*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*10/20/12 00:34*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*10/20/12 00:34*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0		ug/L			10/22/12 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*10/22/12 13:13*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*10/22/12 13:13*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/22/12 13:13*	*1*

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Client Sample ID: F12-09-007 — Lab Sample ID: 440-26209-1

Date Collected: 10/09/12 15:00 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 15:31	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/17/12 12:34	IM	TAL IRV

Client Sample ID: F12-09-008 — Lab Sample ID: 440-26209-2

Date Collected: 10/09/12 15:00 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100	5 mL	1.0 mL	58414	10/11/12 21:18	NN	TAL IRV

Client Sample ID: F12-09-078 — Lab Sample ID: 440-26209-3

Date Collected: 10/10/12 07:30 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 16:24	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/17/12 13:59	IM	TAL IRV

Client Sample ID: F12-09-009 — Lab Sample ID: 440-26209-4

Date Collected: 10/10/12 09:24 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 16:51	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/17/12 14:27	IM	TAL IRV

Client Sample ID: F12-09-010 — Lab Sample ID: 440-26209-5

Date Collected: 10/10/12 09:24 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	5 mL	1.0 mL	58414	10/11/12 22:16	NN	TAL IRV

Client Sample ID: F12-09-011 — Lab Sample ID: 440-26209-6

Date Collected: 10/10/12 10:34 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		5	10 mL	10 mL	60046	10/18/12 14:22	SC	TAL IRV
Total/NA	Analysis	8021B		2	10 mL	10 mL	60075	10/18/12 19:30	KS	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Client Sample ID: F12-09-012 — Lab Sample ID: 440-26209-7

Date Collected: 10/10/12 10:34 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	5 mL	1.0 mL	58414	10/11/12 22:31	NN	TAL IRV

Client Sample ID: F12-09-013 — Lab Sample ID: 440-26209-8

Date Collected: 10/10/12 10:34 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	60499	10/20/12 00:07	BD	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	60764	10/22/12 12:46	SS	TAL IRV

Client Sample ID: F12-09-014 — Lab Sample ID: 440-26209-9

Date Collected: 10/10/12 12:09 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 17:44	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/17/12 15:23	IM	TAL IRV

Client Sample ID: F12-09-015 — Lab Sample ID: 440-26209-10

Date Collected: 10/10/12 12:09 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	5 mL	1.0 mL	58414	10/11/12 22:46	NN	TAL IRV

Client Sample ID: F12-09-016 — Lab Sample ID: 440-26209-11

Date Collected: 10/10/12 13:20 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 18:11	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/17/12 15:50	IM	TAL IRV

Client Sample ID: F12-09-017 — Lab Sample ID: 440-26209-12

Date Collected: 10/10/12 13:20 — **Matrix: Water**
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	5 mL	1.0 mL	58414	10/11/12 23:01	NN	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Client Sample ID: F12-09-020

Lab Sample ID: 440-26209-13

Date Collected: 10/10/12 14:12
Matrix: Water
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 18:37	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/17/12 16:18	IM	TAL IRV

Client Sample ID: F12-09-021

Lab Sample ID: 440-26209-14

Date Collected: 10/10/12 14:12
Matrix: Water
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	5 mL	1.0 mL	58414	10/11/12 23:16	NN	TAL IRV

Client Sample ID: F12-09-022

Lab Sample ID: 440-26209-15

Date Collected: 10/10/12 14:12
Matrix: Water
Date Received: 10/10/12 18:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	60499	10/20/12 00:34	BD	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	60764	10/22/12 13:13	SS	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-60499/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60499

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/19/12 18:43	1
1,2-Dichloroethane	ND		0.50		ug/L			10/19/12 18:43	1
Ethylbenzene	ND		0.50		ug/L			10/19/12 18:43	1
Methylene Chloride	ND		1.0		ug/L			10/19/12 18:43	1
m,p-Xylene	ND		1.0		ug/L			10/19/12 18:43	1
o-Xylene	ND		0.50		ug/L			10/19/12 18:43	1
Toluene	ND		0.50		ug/L			10/19/12 18:43	1
Xylenes, Total	ND		1.0		ug/L			10/19/12 18:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*10/19/12 18:43*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*10/19/12 18:43*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*10/19/12 18:43*	*1*

Lab Sample ID: LCS 440-60499/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60499

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	23.9		ug/L		96	70 - 120
1,2-Dichloroethane	25.0	22.9		ug/L		92	60 - 140
Ethylbenzene	25.0	24.2		ug/L		97	75 - 125
Methylene Chloride	25.0	23.0		ug/L		92	55 - 130
m,p-Xylene	50.0	48.8		ug/L		98	75 - 125
o-Xylene	25.0	24.5		ug/L		98	75 - 125
Toluene	25.0	23.1		ug/L		93	70 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-26302-D-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60499

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	23.9		ug/L		96	65 - 125
1,2-Dichloroethane	ND		25.0	23.3		ug/L		92	60 - 140
Ethylbenzene	ND		25.0	24.1		ug/L		96	65 - 130
Methylene Chloride	1.2		25.0	22.9		ug/L		87	50 - 135
m,p-Xylene	ND		50.0	47.4		ug/L		95	65 - 130
o-Xylene	ND		25.0	23.8		ug/L		95	65 - 125
Toluene	ND		25.0	22.7		ug/L		91	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-26302-D-2 MS
Matrix: Water
Analysis Batch: 60499

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: 440-26302-D-2 MSD
Matrix: Water
Analysis Batch: 60499

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	24.3		ug/L		97	65 - 125	2	20
1,2-Dichloroethane	ND		25.0	24.0		ug/L		94	60 - 140	3	20
Ethylbenzene	ND		25.0	24.3		ug/L		97	65 - 130	1	20
Methylene Chloride	1.2		25.0	23.9		ug/L		91	50 - 135	4	20
m,p-Xylene	ND		50.0	48.8		ug/L		98	65 - 130	3	25
o-Xylene	ND		25.0	23.9		ug/L		95	65 - 125	0	20
Toluene	ND		25.0	23.7		ug/L		95	70 - 125	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	105		80 - 120
Toluene-d8 (Surr)	104		80 - 120

Lab Sample ID: MB 440-60764/3
Matrix: Water
Analysis Batch: 60764

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0		ug/L			10/22/12 08:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		10/22/12 08:16	1
Dibromofluoromethane (Surr)	111		80 - 120		10/22/12 08:16	1
Toluene-d8 (Surr)	103		80 - 120		10/22/12 08:16	1

Lab Sample ID: LCS 440-60764/4
Matrix: Water
Analysis Batch: 60764

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	24.7		ug/L		99	55 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	114		80 - 120
Toluene-d8 (Surr)	106		80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-26692-D-12 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60764

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	ND		25.0	26.4		ug/L		106	50 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*118*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-26692-D-12 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60764

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride	ND		25.0	25.2		ug/L		101	50 - 135	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*113*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-59724/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 11:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*65 - 140*		*10/17/12 11:58*	*1*

Lab Sample ID: LCS 440-59724/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)			800	759		ug/L		95	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*74*		*65 - 140*

Lab Sample ID: 440-26209-1 MS — **Client Sample ID: F12-09-007**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59724

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	ND		800	683		ug/L		85	65 - 140

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-26209-1 MS — **Client Sample ID: F12-09-007**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59724

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		65 - 140

Lab Sample ID: 440-26209-1 MSD — **Client Sample ID: F12-09-007**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59724

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	738		ug/L		92	65 - 140	8	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	76		65 - 140

Lab Sample ID: MB 440-60046/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/18/12 13:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		65 - 140		10/18/12 13:54	1

Lab Sample ID: LCS 440-60046/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	721		ug/L		90	80 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		65 - 140

Lab Sample ID: 440-26511-A-8 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	630		800	1390		ug/L		94	65 - 140	8	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		65 - 140

Lab Sample ID: 440-26511-B-8 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	630		800	1280		ug/L		81	65 - 140		

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-26511-B-8 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		65 - 140

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 440-59471/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 12:30	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 12:30	1
Toluene	ND		0.30		ug/L			10/16/12 12:30	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 12:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		65 - 135		10/16/12 12:30	1

Lab Sample ID: LCS 440-59471/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.5		ug/L		102	85 - 115
Ethylbenzene	20.0	19.8		ug/L		99	85 - 115
Toluene	20.0	18.6		ug/L		93	85 - 115
o-Xylene	20.0	18.1		ug/L		91	85 - 115
m,p-Xylene	40.0	37.5		ug/L		94	85 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		65 - 135

Lab Sample ID: 440-26511-A-8 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.54		20.0	12.8		ug/L		61	60 - 130
Ethylbenzene	1.5		20.0	14.7	F	ug/L		66	70 - 130
Toluene	0.35		20.0	12.1	F	ug/L		59	65 - 125
o-Xylene	0.98		20.0	14.2		ug/L		66	65 - 125
m,p-Xylene	1.6		40.0	24.5	F	ug/L		57	65 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	75		65 - 135

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 440-26511-A-8 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.54		20.0	11.8	F	ug/L		56	60 - 130	8	20
Ethylbenzene	1.5		20.0	12.8	F	ug/L		56	70 - 130	14	20
Toluene	0.35		20.0	10.5	F	ug/L		51	65 - 125	15	20
o-Xylene	0.98		20.0	12.5	F	ug/L		58	65 - 125	12	20
m,p-Xylene	1.6		40.0	21.5	F	ug/L		50	65 - 125	13	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*66*		*65 - 135*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-58414/33 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58414

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/11/12 20:16	1

Lab Sample ID: LCS 440-58414/36 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58414

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.48		mg/L		95	90 - 110

Lab Sample ID: 440-26209-2 MS — **Client Sample ID: F12-09-008**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58414

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1400		200	1520	4	mg/L		48	80 - 120

Lab Sample ID: 440-26209-2 MSD — **Client Sample ID: F12-09-008**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 58414

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1400		200	1430	4	mg/L		2	80 - 120	6	20

QC Association Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

GC/MS VOA

Analysis Batch: 60499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26209-8	F12-09-013	Total/NA	Water	8260B	
440-26209-15	F12-09-022	Total/NA	Water	8260B	
440-26302-D-2 MS	Matrix Spike	Total/NA	Water	8260B	
440-26302-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-60499/4	Lab Control Sample	Total/NA	Water	8260B	
MB 440-60499/3	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 60764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26209-8 - RA	F12-09-013	Total/NA	Water	8260B	
440-26209-15 - RA	F12-09-022	Total/NA	Water	8260B	
440-26692-D-12 MS	Matrix Spike	Total/NA	Water	8260B	
440-26692-D-12 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-60764/4	Lab Control Sample	Total/NA	Water	8260B	
MB 440-60764/3	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 59471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26209-1	F12-09-007	Total/NA	Water	8021B	
440-26209-3	F12-09-078	Total/NA	Water	8021B	
440-26209-4	F12-09-009	Total/NA	Water	8021B	
440-26209-9	F12-09-014	Total/NA	Water	8021B	
440-26209-11	F12-09-016	Total/NA	Water	8021B	
440-26209-13	F12-09-020	Total/NA	Water	8021B	
440-26511-A-8 MS	Matrix Spike	Total/NA	Water	8021B	
440-26511-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
LCS 440-59471/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-59471/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 59724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26209-1	F12-09-007	Total/NA	Water	8015B	
440-26209-1 MS	F12-09-007	Total/NA	Water	8015B	
440-26209-1 MSD	F12-09-007	Total/NA	Water	8015B	
440-26209-3	F12-09-078	Total/NA	Water	8015B	
440-26209-4	F12-09-009	Total/NA	Water	8015B	
440-26209-9	F12-09-014	Total/NA	Water	8015B	
440-26209-11	F12-09-016	Total/NA	Water	8015B	
440-26209-13	F12-09-020	Total/NA	Water	8015B	
LCS 440-59724/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-59724/3	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 60046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26209-6	F12-09-011	Total/NA	Water	8015B	
440-26511-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
440-26511-B-8 MS	Matrix Spike	Total/NA	Water	8015B	
LCS 440-60046/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-60046/3	Method Blank	Total/NA	Water	8015B	

GC VOA (Continued)

Analysis Batch: 60075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26209-6	F12-09-011	Total/NA	Water	8021B	

HPLC/IC

Analysis Batch: 58414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26209-2	F12-09-008	Total/NA	Water	300.0	
440-26209-2 MS	F12-09-008	Total/NA	Water	300.0	
440-26209-2 MSD	F12-09-008	Total/NA	Water	300.0	
440-26209-5	F12-09-010	Total/NA	Water	300.0	
440-26209-7	F12-09-012	Total/NA	Water	300.0	
440-26209-10	F12-09-015	Total/NA	Water	300.0	
440-26209-12	F12-09-017	Total/NA	Water	300.0	
440-26209-14	F12-09-021	Total/NA	Water	300.0	
LCS 440-58414/36	Lab Control Sample	Total/NA	Water	300.0	
MB 440-58414/33	Method Blank	Total/NA	Water	300.0	

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F	MS or MSD exceeds the control limits

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26209-1
SDG: 29875030.20000

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-13

440-26209

URS CORPORATION

2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10/10/12

Page 1 of 2

☐ Data Requested in GISKey Format

Lab Name: TEST America

URS Project/PO Number: 29875030.20000

Client Name/Project Name/Location: Chevron PCPL Fillmore

~~Geo Tracker Information:~~ SO # 15061215

URS Project Manager: DAVID BROD

~~EDF Reporting: Y N Global ID:~~ WBS # NWENV-SFD00056-9403

Sampler Name and Signature: Roger Hardesty

COELT Log Number:

Requested Analyses: 8015M/8021B BTEX/TPH Gasoline; 300.0 SulfAte; 8260B BTEX/Methylmethacrylate/1,2DCA; HOLD

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/8021B BTEX/TPH Gasoline	300.0 SulfAte	8260B BTEX/Methylmethacrylate/1,2DCA	HOLD	Special Instructions:
1	F12-09-007	10-9-12	1500	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
2	F12-09-008	↓	1500	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
3	F12-09-078	10-10-12	0730	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
4	F12-09-009		0924	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
5	F12-09-010		0924	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
6	F12-09-011		1034	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
7	F12-09-012		1034	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
8	F12-09-013		1034	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3			X		
9	F12-09-014		1209	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
10	F12-09-015	↓	1209	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardesty	10-10-12/1425	[signature]	10-10-12 14:25
[signature]	10-10-12	[signature] 18:40	10-10-12 1840

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: 3.7 °C
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10/10/12

☐ Data Requested in GISKey Format

Lab Name: TEST AMERICA
URS Project/PO Number: 29875030.20000
Client Name/Project Name/Location: Chevron PCPL Fillmore
~~Geo Tracker Information:~~ SO# 15061215
URS Project Manager: DAVID Bead
~~EDF Reporting: T N Global ID:~~ WBS# NWENV-SFD00056-9403
Sampler Name and Signature: Roger Hardesty
COELT Log Number:

Requested Analyses: 8015M/5021B BTEX/TPH Gasoline; 300.0 Sulfate; 8260B BTEX/Methylene Chloride/1,2-DCA; HOLD; Special Instructions:

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/5021B BTEX/TPH Gasoline	300.0 Sulfate	8260B BTEX/Methylene Chloride/1,2-DCA	HOLD	Special Instructions:
1	F12-09-016	10-10-12	1320	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
2	F12-09-017	↓	1320	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
3	F12-09-020		1412	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
4	F12-09-021		1412	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
5	F12-09-022	↓	1412	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3			X		
6				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
7				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
8				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
9				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
10				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardesty	10-10-12/1425	Mark Cruse	10-10-12 14:25
Mark Cruse	10-10-12 18:40	Randall King	10-10-12 1840

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: 3.7 °C
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy In Final Report, Yellow to File, Pink to URS at Dropoff

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-26209-1
SDG Number: 29875030.20000

Login Number: 26209
List Number: 1
Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Roger Handester
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-26343-1
TestAmerica Sample Delivery Group: 29875030.20000
Client Project/Site: Chevron PCPL Filmore

For:
URS Corporation
310 Golden Shore, Suite 100
Long Beach, California 90802

Attn: David Brod

Authorized for release by:
10/28/2012 3:33:40 PM

Sushmitha Reddy
Project Manager I
sushmitha.reddy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 6
QC Sample Results 7
QC Association 10
Definitions 11
Certification Summary 12
Chain of Custody 13
Receipt Checklists 14

Sample Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26343-1
SDG: 29875030.20000

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-26343-1	F12-09-079	Water	10/11/12 10:35	10/11/12 17:35
440-26343-2	F12-09-018	Water	10/11/12 12:16	10/11/12 17:35
440-26343-3	F12-09-019	Water	10/11/12 12:16	10/11/12 17:35

Case Narrative

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26343-1
SDG: 29875030.20000

Job ID: 440-26343-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-26343-1

Comments
No additional comments.

Receipt
The samples were received on 10/11/2012 5:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

HPLC
Method(s) 300.0: Due to the high concentration of sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for batch 58728 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

GC VOA
Method(s) 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 59471 were outside control limits. Matrix interference is suspected. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26343-1
SDG: 29875030.20000

Client Sample ID: F12-09-079

Lab Sample ID: 440-26343-1

Date Collected: 10/11/12 10:35
Matrix: Water
Date Received: 10/11/12 17:35

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*65 - 140*		*10/17/12 20:12*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 19:04	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 19:04	1
Toluene	ND		0.30		ug/L			10/16/12 19:04	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*65 - 135*		*10/16/12 19:04*	*1*

Client Sample ID: F12-09-018

Lab Sample ID: 440-26343-2

Date Collected: 10/11/12 12:16
Matrix: Water
Date Received: 10/11/12 17:35

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**61**		50		ug/L			10/17/12 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*65 - 140*		*10/17/12 20:39*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.82**		0.30		ug/L			10/16/12 19:30	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 19:30	1
Toluene	ND		0.30		ug/L			10/16/12 19:30	1
Xylenes, Total	**3.0**		0.60		ug/L			10/16/12 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*65 - 135*		*10/16/12 19:30*	*1*

Client Sample ID: F12-09-019

Lab Sample ID: 440-26343-3

Date Collected: 10/11/12 12:16
Matrix: Water
Date Received: 10/11/12 17:35

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**580**		25		mg/L			10/12/12 18:59	50

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26343-1
SDG: 29875030.20000

Client Sample ID: F12-09-079

Lab Sample ID: 440-26343-1

Date Collected: 10/11/12 10:35
Matrix: Water
Date Received: 10/11/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 19:04	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59801	10/17/12 20:12	SC	TAL IRV

Client Sample ID: F12-09-018

Lab Sample ID: 440-26343-2

Date Collected: 10/11/12 12:16
Matrix: Water
Date Received: 10/11/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 19:30	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	59801	10/17/12 20:39	SC	TAL IRV

Client Sample ID: F12-09-019

Lab Sample ID: 440-26343-3

Date Collected: 10/11/12 12:16
Matrix: Water
Date Received: 10/11/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	58728	10/12/12 18:59	NN	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26343-1
SDG: 29875030.20000

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-59801/14 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59801

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/17/12 19:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*65 - 140*		*10/17/12 19:12*	*1*

Lab Sample ID: LCS 440-59801/15 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59801

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	800	718		ug/L		90	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*65 - 140*

Lab Sample ID: 440-26343-2 MS — **Client Sample ID: F12-09-018**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59801

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	61		800	699		ug/L		80	65 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*65 - 140*

Lab Sample ID: 440-26343-2 MSD — **Client Sample ID: F12-09-018**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59801

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	61		800	730		ug/L		84	65 - 140	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*65 - 140*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 440-59471/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 12:30	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 12:30	1
Toluene	ND		0.30		ug/L			10/16/12 12:30	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 12:30	1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 440-59471/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		65 - 135		10/16/12 12:30	1

Lab Sample ID: LCS 440-59471/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.5		ug/L		102	85 - 115
Ethylbenzene	20.0	19.8		ug/L		99	85 - 115
Toluene	20.0	18.6		ug/L		93	85 - 115
o-Xylene	20.0	18.1		ug/L		91	85 - 115
m,p-Xylene	40.0	37.5		ug/L		94	85 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		65 - 135

Lab Sample ID: 440-26511-A-8 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.54		20.0	12.8		ug/L		61	60 - 130
Ethylbenzene	1.5		20.0	14.7	F	ug/L		66	70 - 130
Toluene	0.35		20.0	12.1	F	ug/L		59	65 - 125
o-Xylene	0.98		20.0	14.2		ug/L		66	65 - 125
m,p-Xylene	1.6		40.0	24.5	F	ug/L		57	65 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	75		65 - 135

Lab Sample ID: 440-26511-A-8 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.54		20.0	11.8	F	ug/L		56	60 - 130	8	20
Ethylbenzene	1.5		20.0	12.8	F	ug/L		56	70 - 130	14	20
Toluene	0.35		20.0	10.5	F	ug/L		51	65 - 125	15	20
o-Xylene	0.98		20.0	12.5	F	ug/L		58	65 - 125	12	20
m,p-Xylene	1.6		40.0	21.5	F	ug/L		50	65 - 125	13	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	66		65 - 135

QC Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26343-1
SDG: 29875030.20000

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-58728/4
Matrix: Water
Analysis Batch: 58728

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/12/12 09:44	1

Lab Sample ID: LCS 440-58728/2
Matrix: Water
Analysis Batch: 58728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	9.27		mg/L		93	90 - 110		

QC Association Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26343-1
SDG: 29875030.20000

GC VOA

Analysis Batch: 59471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26343-1	F12-09-079	Total/NA	Water	8021B	
440-26343-2	F12-09-018	Total/NA	Water	8021B	
440-26511-A-8 MS	Matrix Spike	Total/NA	Water	8021B	
440-26511-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
LCS 440-59471/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-59471/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 59801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26343-1	F12-09-079	Total/NA	Water	8015B	
440-26343-2	F12-09-018	Total/NA	Water	8015B	
440-26343-2 MS	F12-09-018	Total/NA	Water	8015B	
440-26343-2 MSD	F12-09-018	Total/NA	Water	8015B	
LCS 440-59801/15	Lab Control Sample	Total/NA	Water	8015B	
MB 440-59801/14	Method Blank	Total/NA	Water	8015B	

HPLC/IC

Analysis Batch: 58728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26343-3	F12-09-019	Total/NA	Water	300.0	
LCS 440-58728/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-58728/4	Method Blank	Total/NA	Water	300.0	

Definitions/Glossary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26343-1
SDG: 29875030.20000

Qualifiers

GC VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26343-1
SDG: 29875030.20000

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14

440-26343

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10 / 11 / 12

Page 1 of 1

☐ Data Requested in GISKey Format

Lab Name: TEST America.
URS Project/PO Number: 29875030.20000
Client Name/Project Name/Location: Chevron RCPL Fillmore
~~Site Tracking Information~~ SO# 15061215
URS Project Manager: DAVID Bead
~~EDF Reporting~~ WBS# NWENV-SFD00056-9403
Sampler Name and Signature: Roger Hardester
COELT Log Number:

Requested Analyses: 8015M/8021B BTEX/TPH-gas; 300.0 sulfate; 8260B BTEX/methylene chloride/1,2-DCA; HOLD

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/8021B BTEX/TPH-gas	300.0 sulfate	8260B BTEX/methylene chloride/1,2-DCA	HOLD	Special Instructions:
1	F12-09-079	10-11-12	1035	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
2	F12-09-018	↓	1216	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
3	F12-09-019	↓	1216	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
4				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
5				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
6				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
7				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
8				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
9				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
10				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardester	10-11-12 / 1345	Matt Omar	10-11-12 13:45
Matt Omar	10-11-12 17:35	[illegible]	10/11/12 1735

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: 1.9
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-26343-1
SDG Number: 29875030.20000

Login Number: 26343
List Number: 1
Creator: Robb, Kathleen

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Roger Hardester
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-26511-1
TestAmerica Sample Delivery Group: 29875030.20000
Client Project/Site: Chevron PCPL Filmore

For:
URS Corporation
310 Golden Shore, Suite 100
Long Beach, California 90802

Attn: David Brod

Authorized for release by:
10/28/2012 4:42:34 PM

Sushmitha Reddy
Project Manager I
sushmitha.reddy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 9
QC Sample Results 12
QC Association 17
Definitions 19
Certification Summary 20
Chain of Custody 21
Receipt Checklists 23

Sample Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-26511-1	F12-09-080	Water	10/12/12 07:30	10/12/12 17:10
440-26511-2	F12-09-025	Water	10/12/12 09:20	10/12/12 17:10
440-26511-3	F12-09-026	Water	10/12/12 09:20	10/12/12 17:10
440-26511-4	F12-09-029	Water	10/12/12 10:01	10/12/12 17:10
440-26511-5	F12-09-030	Water	10/12/12 10:01	10/12/12 17:10
440-26511-6	F12-09-031	Water	10/12/12 11:27	10/12/12 17:10
440-26511-7	F12-09-032	Water	10/12/12 11:27	10/12/12 17:10
440-26511-8	F12-09-035	Water	10/12/12 12:23	10/12/12 17:10
440-26511-9	F12-09-036	Water	10/12/12 12:23	10/12/12 17:10
440-26511-10	F12-09-037	Water	10/12/12 12:33	10/12/12 17:10
440-26511-11	F12-09-038	Water	10/12/12 12:33	10/12/12 17:10
440-26511-12	F12-09-039	Water	10/12/12 13:48	10/12/12 17:10
440-26511-13	F12-09-040	Water	10/12/12 13:48	10/12/12 17:10

Job ID: 440-26511-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-26511-1

Comments
No additional comments.

Receipt
The samples were received on 10/12/2012 5:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.4º C.

HPLC
No analytical or quality issues were noted.

GC VOA
Method(s) 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 59471 were outside control limits. Matrix interference is suspected. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 60075 were outside control limits due to matrix interference. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Client Sample ID: F12-09-080

Lab Sample ID: 440-26511-1
Date Collected: 10/12/12 07:30
Matrix: Water
Date Received: 10/12/12 17:10

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/18/12 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*65 - 140*		*10/18/12 16:15*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 22:10	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 22:10	1
Toluene	ND		0.30		ug/L			10/16/12 22:10	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*65 - 135*		*10/16/12 22:10*	*1*

Client Sample ID: F12-09-025

Lab Sample ID: 440-26511-2
Date Collected: 10/12/12 09:20
Matrix: Water
Date Received: 10/12/12 17:10

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**77**		50		ug/L			10/18/12 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*65 - 140*		*10/18/12 16:42*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 19:57	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 19:57	1
Toluene	ND		0.30		ug/L			10/16/12 19:57	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*65 - 135*		*10/16/12 19:57*	*1*

Client Sample ID: F12-09-026

Lab Sample ID: 440-26511-3
Date Collected: 10/12/12 09:20
Matrix: Water
Date Received: 10/12/12 17:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**800**		25		mg/L			10/15/12 17:39	50

Client Sample ID: F12-09-029

Lab Sample ID: 440-26511-4
Date Collected: 10/12/12 10:01
Matrix: Water
Date Received: 10/12/12 17:10

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**360**		50		ug/L			10/18/12 17:10	1

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Client Sample ID: F12-09-029

Lab Sample ID: 440-26511-4

Date Collected: 10/12/12 10:01
Matrix: Water
Date Received: 10/12/12 17:10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*65 - 140*		*10/18/12 17:10*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 20:24	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 20:24	1
Toluene	ND		0.30		ug/L			10/16/12 20:24	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*65 - 135*		*10/16/12 20:24*	*1*

Client Sample ID: F12-09-030

Lab Sample ID: 440-26511-5

Date Collected: 10/12/12 10:01
Matrix: Water
Date Received: 10/12/12 17:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**830**		25		mg/L			10/15/12 17:55	50

Client Sample ID: F12-09-031

Lab Sample ID: 440-26511-6

Date Collected: 10/12/12 11:27
Matrix: Water
Date Received: 10/12/12 17:10

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**69**		50		ug/L			10/18/12 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*65 - 140*		*10/18/12 17:38*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 20:50	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 20:50	1
Toluene	ND		0.30		ug/L			10/16/12 20:50	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*65 - 135*		*10/16/12 20:50*	*1*

Client Sample ID: F12-09-032

Lab Sample ID: 440-26511-7

Date Collected: 10/12/12 11:27
Matrix: Water
Date Received: 10/12/12 17:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1200**		25		mg/L			10/15/12 18:11	50

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Client Sample ID: F12-09-035

Lab Sample ID: 440-26511-8
Date Collected: 10/12/12 12:23
Matrix: Water
Date Received: 10/12/12 17:10

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	630		50		ug/L			10/18/12 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*65 - 140*		*10/18/12 14:50*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.54		0.30		ug/L			10/16/12 14:11	1
Ethylbenzene	1.5		0.30		ug/L			10/16/12 14:11	1
Toluene	0.35		0.30		ug/L			10/16/12 14:11	1
Xylenes, Total	2.6		0.60		ug/L			10/16/12 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*		*65 - 135*		*10/16/12 14:11*	*1*

Client Sample ID: F12-09-036

Lab Sample ID: 440-26511-9
Date Collected: 10/12/12 12:23
Matrix: Water
Date Received: 10/12/12 17:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1500		25		mg/L			10/15/12 16:50	50

Client Sample ID: F12-09-037

Lab Sample ID: 440-26511-10
Date Collected: 10/12/12 12:33
Matrix: Water
Date Received: 10/12/12 17:10

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	640		50		ug/L			10/18/12 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*65 - 140*		*10/18/12 19:01*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.56		0.30		ug/L			10/16/12 21:17	1
Ethylbenzene	2.3		0.30		ug/L			10/16/12 21:17	1
Toluene	0.71		0.30		ug/L			10/16/12 21:17	1
Xylenes, Total	4.2		0.60		ug/L			10/16/12 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*		*65 - 135*		*10/16/12 21:17*	*1*

Client Sample ID: F12-09-038

Lab Sample ID: 440-26511-11
Date Collected: 10/12/12 12:33
Matrix: Water
Date Received: 10/12/12 17:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1300		50		mg/L			10/15/12 18:28	100

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Client Sample ID: F12-09-039

Lab Sample ID: 440-26511-12

Date Collected: 10/12/12 13:48
Matrix: Water
Date Received: 10/12/12 17:10

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	310		100		ug/L			10/21/12 02:56	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*65 - 140*		*10/21/12 02:56*	*2*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/18/12 13:28	1
Ethylbenzene	ND		0.30		ug/L			10/18/12 13:28	1
Toluene	ND		0.30		ug/L			10/18/12 13:28	1
Xylenes, Total	ND		0.60		ug/L			10/18/12 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*65 - 135*		*10/18/12 13:28*	*1*

Client Sample ID: F12-09-040

Lab Sample ID: 440-26511-13

Date Collected: 10/12/12 13:48
Matrix: Water
Date Received: 10/12/12 17:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	730		25		mg/L			10/15/12 18:44	50

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Client Sample ID: F12-09-080 — Lab Sample ID: 440-26511-1

Date Collected: 10/12/12 07:30 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 22:10	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	60046	10/18/12 16:15	SC	TAL IRV

Client Sample ID: F12-09-025 — Lab Sample ID: 440-26511-2

Date Collected: 10/12/12 09:20 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 19:57	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	60046	10/18/12 16:42	SC	TAL IRV

Client Sample ID: F12-09-026 — Lab Sample ID: 440-26511-3

Date Collected: 10/12/12 09:20 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	59148	10/15/12 17:39	CC	TAL IRV

Client Sample ID: F12-09-029 — Lab Sample ID: 440-26511-4

Date Collected: 10/12/12 10:01 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 20:24	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	60046	10/18/12 17:10	SC	TAL IRV

Client Sample ID: F12-09-030 — Lab Sample ID: 440-26511-5

Date Collected: 10/12/12 10:01 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	59148	10/15/12 17:55	CC	TAL IRV

Client Sample ID: F12-09-031 — Lab Sample ID: 440-26511-6

Date Collected: 10/12/12 11:27 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 20:50	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	60046	10/18/12 17:38	SC	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Client Sample ID: F12-09-032 — Lab Sample ID: 440-26511-7

Date Collected: 10/12/12 11:27 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	59148	10/15/12 18:11	CC	TAL IRV

Client Sample ID: F12-09-035 — Lab Sample ID: 440-26511-8

Date Collected: 10/12/12 12:23 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 14:11	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	60046	10/18/12 14:50	SC	TAL IRV

Client Sample ID: F12-09-036 — Lab Sample ID: 440-26511-9

Date Collected: 10/12/12 12:23 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	59148	10/15/12 16:50	CC	TAL IRV

Client Sample ID: F12-09-037 — Lab Sample ID: 440-26511-10

Date Collected: 10/12/12 12:33 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	59471	10/16/12 21:17	KS	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	60046	10/18/12 19:01	SC	TAL IRV

Client Sample ID: F12-09-038 — Lab Sample ID: 440-26511-11

Date Collected: 10/12/12 12:33 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100	1 mL	1.0 mL	59148	10/15/12 18:28	CC	TAL IRV

Client Sample ID: F12-09-039 — Lab Sample ID: 440-26511-12

Date Collected: 10/12/12 13:48 — **Matrix: Water**
Date Received: 10/12/12 17:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	60075	10/18/12 13:28	KS	TAL IRV
Total/NA	Analysis	8015B		2	10 mL	10 mL	60652	10/21/12 02:56	TL	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Client Sample ID: F12-09-040

Date Collected: 10/12/12 13:48
Date Received: 10/12/12 17:10

Lab Sample ID: 440-26511-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	59148	10/15/12 18:44	CC	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-60046/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/18/12 13:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*65 - 140*		*10/18/12 13:54*	*1*

Lab Sample ID: LCS 440-60046/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	721		ug/L		90	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*65 - 140*

Lab Sample ID: 440-26511-8 MS — **Client Sample ID: F12-09-035**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	630		800	1280		ug/L		81	65 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*65 - 140*

Lab Sample ID: 440-26511-8 MSD — **Client Sample ID: F12-09-035**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	630		800	1390		ug/L		94	65 - 140	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*65 - 140*

Lab Sample ID: MB 440-60652/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/20/12 15:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*65 - 140*		*10/20/12 15:27*	*1*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 440-60652/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	800	755		ug/L		94	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*128*		*65 - 140*

Lab Sample ID: 440-26839-B-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	ND		800	623		ug/L		74	65 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*132*		*65 - 140*

Lab Sample ID: 440-26839-B-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	619		ug/L		74	65 - 140	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*127*		*65 - 140*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 440-59471/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/16/12 12:30	1
Ethylbenzene	ND		0.30		ug/L			10/16/12 12:30	1
Toluene	ND		0.30		ug/L			10/16/12 12:30	1
Xylenes, Total	ND		0.60		ug/L			10/16/12 12:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*65 - 135*		*10/16/12 12:30*	*1*

Lab Sample ID: LCS 440-59471/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.5		ug/L		102	85 - 115
Ethylbenzene	20.0	19.8		ug/L		99	85 - 115
Toluene	20.0	18.6		ug/L		93	85 - 115

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 440-59471/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	20.0	18.1		ug/L		91	85 - 115
m,p-Xylene	40.0	37.5		ug/L		94	85 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*65 - 135*

Lab Sample ID: 440-26511-8 MS — **Client Sample ID: F12-09-035**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.54		20.0	12.8		ug/L		61	60 - 130
Ethylbenzene	1.5		20.0	14.7	F	ug/L		66	70 - 130
Toluene	0.35		20.0	12.1	F	ug/L		59	65 - 125
o-Xylene	0.98		20.0	14.2		ug/L		66	65 - 125
m,p-Xylene	1.6		40.0	24.5	F	ug/L		57	65 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*75*		*65 - 135*

Lab Sample ID: 440-26511-8 MSD — **Client Sample ID: F12-09-035**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59471

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.54		20.0	11.8	F	ug/L		56	60 - 130	8	20
Ethylbenzene	1.5		20.0	12.8	F	ug/L		56	70 - 130	14	20
Toluene	0.35		20.0	10.5	F	ug/L		51	65 - 125	15	20
o-Xylene	0.98		20.0	12.5	F	ug/L		58	65 - 125	12	20
m,p-Xylene	1.6		40.0	21.5	F	ug/L		50	65 - 125	13	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*66*		*65 - 135*

Lab Sample ID: MB 440-60075/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/18/12 12:25	1
Ethylbenzene	ND		0.30		ug/L			10/18/12 12:25	1
Toluene	ND		0.30		ug/L			10/18/12 12:25	1
Xylenes, Total	ND		0.60		ug/L			10/18/12 12:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*65 - 135*		*10/18/12 12:25*	*1*

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 440-60075/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	18.8		ug/L		94	85 - 115
Ethylbenzene	20.0	18.7		ug/L		94	85 - 115
Toluene	20.0	17.0		ug/L		85	85 - 115
o-Xylene	20.0	17.1		ug/L		85	85 - 115
m,p-Xylene	40.0	35.1		ug/L		88	85 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*65 - 135*

Lab Sample ID: 440-26805-A-4 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60075

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	75		400	346		ug/L		68	60 - 130
Ethylbenzene	9.2		400	282	F	ug/L		68	70 - 130
Toluene	34		400	276	F	ug/L		61	65 - 125
o-Xylene	8.9		400	262	F	ug/L		63	65 - 125
m,p-Xylene	23		800	540		ug/L		65	65 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*77*		*65 - 135*

Lab Sample ID: 440-26805-A-4 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60075

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	75		400	350		ug/L		69	60 - 130	1	20
Ethylbenzene	9.2		400	290		ug/L		70	70 - 130	3	20
Toluene	34		400	283	F	ug/L		62	65 - 125	3	20
o-Xylene	8.9		400	278		ug/L		67	65 - 125	6	20
m,p-Xylene	23		800	557		ug/L		67	65 - 125	3	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*65 - 135*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-59148/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/15/12 16:01	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 440-59148/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59148

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	9.69		mg/L		97	90 - 110		

Lab Sample ID: 440-26511-9 MS — **Client Sample ID: F12-09-036**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	1500		100	1560	4	mg/L		105	80 - 120		

Lab Sample ID: 440-26511-9 MSD — **Client Sample ID: F12-09-036**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1500		100	1410	4	mg/L		-40	80 - 120	10	20

QC Association Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

GC VOA

Analysis Batch: 59471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26511-1	F12-09-080	Total/NA	Water	8021B	
440-26511-2	F12-09-025	Total/NA	Water	8021B	
440-26511-4	F12-09-029	Total/NA	Water	8021B	
440-26511-6	F12-09-031	Total/NA	Water	8021B	
440-26511-8	F12-09-035	Total/NA	Water	8021B	
440-26511-8 MS	F12-09-035	Total/NA	Water	8021B	
440-26511-8 MSD	F12-09-035	Total/NA	Water	8021B	
440-26511-10	F12-09-037	Total/NA	Water	8021B	
LCS 440-59471/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-59471/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 60046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26511-1	F12-09-080	Total/NA	Water	8015B	
440-26511-2	F12-09-025	Total/NA	Water	8015B	
440-26511-4	F12-09-029	Total/NA	Water	8015B	
440-26511-6	F12-09-031	Total/NA	Water	8015B	
440-26511-8	F12-09-035	Total/NA	Water	8015B	
440-26511-8 MS	F12-09-035	Total/NA	Water	8015B	
440-26511-8 MSD	F12-09-035	Total/NA	Water	8015B	
440-26511-10	F12-09-037	Total/NA	Water	8015B	
LCS 440-60046/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-60046/3	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 60075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26511-12	F12-09-039	Total/NA	Water	8021B	
440-26805-A-4 MS	Matrix Spike	Total/NA	Water	8021B	
440-26805-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
LCS 440-60075/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-60075/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 60652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26511-12	F12-09-039	Total/NA	Water	8015B	
440-26839-B-1 MS	Matrix Spike	Total/NA	Water	8015B	
440-26839-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-60652/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-60652/3	Method Blank	Total/NA	Water	8015B	

HPLC/IC

Analysis Batch: 59148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26511-3	F12-09-026	Total/NA	Water	300.0	
440-26511-5	F12-09-030	Total/NA	Water	300.0	
440-26511-7	F12-09-032	Total/NA	Water	300.0	
440-26511-9	F12-09-036	Total/NA	Water	300.0	
440-26511-9 MS	F12-09-036	Total/NA	Water	300.0	
440-26511-9 MSD	F12-09-036	Total/NA	Water	300.0	
440-26511-11	F12-09-038	Total/NA	Water	300.0	
440-26511-13	F12-09-040	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 59148 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-59148/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-59148/4	Method Blank	Total/NA	Water	300.0	

Qualifiers

GC VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26511-1
SDG: 29875030.20000

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-13

440-26511

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10/12/12

Page 1 of 2

☐ Data Requested in GISKey Format

Lab Name: TEST America
URS Project/PO Number: 29875030.20000
Client Name/Project Name/Location: Chevron PCPL Fillmore
~~Geo Tracker Information:~~ SO# 15061215
URS Project Manager: DAVID Brad
~~EDF Reporting: Y N Global ID:~~ WBS# NWENV-SFD00056-9403
Sampler Name and Signature: Roger Hardgate
COELT Log Number:

Requested Analyses: 8015M/8021B GTEX/TPH G,MS/MS; 3000.0 Solids; 8260B BTEX methylene chloride; 5 Oxy; HOLD

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/8021B GTEX/TPH G,MS/MS	3000.0 Solids	8260B BTEX methylene chloride 5 Oxy	HOLD	Special Instructions:
1	F12-09-080	10-12-12	0730	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
2	F12-09-025		0920	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
3	F12-09-026		0920	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
4	F12-09-029		1001	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
5	F12-09-030		1001	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
6	F12-09-031		1127	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
7	F12-09-032		1127	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
8	F12-09-035		1223	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	5	X				MS/MSD
9	F12-09-036		1223	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			MS/MSD
10	F12-09-037		1233	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				

Relinquished By:	Date:	Received By:	Date/Time:
[signature]	10/12/12 1400	[signature]	10/12/12 1400
[signature]	10/12/12 2:45pm	[signature]	10-12-12 14:45
[signature]	10-12-12 17:10	[signature]	10-12-12 1710

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: ____
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

5 to

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10/12/12

Page 2 of 2

☐ Data Requested in GISKey Format

Lab Name: TEST AMERICA
Client Name/Project Name/Location: Chevron PCPL Fillmore
URS Project Manager: DAVID Beal
Sampler Name and Signature: Roger Hardesty

URS Project/PO Number: 29875030.20000
Geo Tracker Information: SO# 15061215
EDF Reporting: Yes N GlobalID:
WBS # WEHV-SFD00056-9403
COELT Log Number:

Requested Analyses: 8015M 8021B Grp/Phenol 3020 silica gel Feed to Grp/Phenol

Special Instructions:

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M 8021B Grp/Phenol	3020 silica gel	Feed to Grp/Phenol	HOLD	Special Instructions:
1	F12-09-038	10-12-12	1233	Y (N)	S (L) G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
	F12-09-039	↓	1348	(Y) N	S (L) G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
	F12-09-040	↓	1348	(Y) N	S (L) G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
4				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
5				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
6				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
7				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
8				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
9				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
10				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardesty	10-12-12/1400	[illegible]	10/12/12 1400
[illegible]	10/12/12 2:45pm	[illegible]	10-12-12 14:45
[illegible]	10-12-12 ~~14:10~~ 14:10	[illegible]	10-12-12 1710

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: ____
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

10/28/2012

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-26511-1
SDG Number: 29875030.20000

Login Number: 26511
List Number: 1
Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Roger Hardester
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-26676-1
TestAmerica Sample Delivery Group: 29875030.20000
Client Project/Site: Chevron PCPL Filmore
Revision: 1

For:
URS Corporation
310 Golden Shore, Suite 100
Long Beach, California 90802

Attn: David Brod

Authorized for release by:
11/6/2012 8:50:58 AM

Sushmitha Reddy
Project Manager I
sushmitha.reddy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 8
QC Sample Results 10
QC Association 15
Definitions 16
Certification Summary 17
Chain of Custody 18
Receipt Checklists 20

Sample Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26676-1
SDG: 29875030.20000

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-26676-1	F12-09-81	Water	10/15/12 07:30	10/15/12 18:05
440-26676-2	F12-09-41	Water	10/15/12 09:06	10/15/12 18:05
440-26676-3	F12-09-42	Water	10/15/12 09:06	10/15/12 18:05
440-26676-4	F12-09-43	Water	10/15/12 10:07	10/15/12 18:05
440-26676-5	F12-09-44	Water	10/15/12 10:07	10/15/12 18:05
440-26676-6	F12-09-45	Water	10/15/12 12:12	10/15/12 18:05
440-26676-7	F12-09-46	Water	10/15/12 12:12	10/15/12 18:05
440-26676-8	F12-09-47	Water	10/15/12 12:12	10/15/12 18:05

Job ID: 440-26676-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-26676-1

Comments
The report is reissued without MTBE and speciated xylene results to be consistent with project requirements

Receipt
The samples were received on 10/15/2012 6:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4º C.

Except:

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): F12-09-47 (440-26676-8). The container label lists the sample id for sample #8 as "F12-09-047". The COC lists the sample id as "F12-09-046", which is the same id as sample #7. Per client's request, the ID on the label was used.

GC/MS VOA
No analytical or quality issues were noted.

HPLC
Method(s) 300.0: Due to the high concentration of sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for batch 59408 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

GC VOA
Method(s) 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 60636 were outside control limits. Matrix interference is suspected. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8021B: Results confirmed by GCMS #9 on 10/23/12 2nd shift. All results ND. F12-09-41 (440-26676-2), F12-09-43 (440-26676-4)

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26676-1
SDG: 29875030.20000

Client Sample ID: F12-09-81

Lab Sample ID: 440-26676-1
Date Collected: 10/15/12 07:30
Matrix: Water
Date Received: 10/15/12 18:05

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/18/12 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*65 - 140*		*10/18/12 02:30*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/20/12 22:49	1
Ethylbenzene	ND		0.30		ug/L			10/20/12 22:49	1
Toluene	ND		0.30		ug/L			10/20/12 22:49	1
Xylenes, Total	ND		0.60		ug/L			10/20/12 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*65 - 135*		*10/20/12 22:49*	*1*

Client Sample ID: F12-09-41

Lab Sample ID: 440-26676-2
Date Collected: 10/15/12 09:06
Matrix: Water
Date Received: 10/15/12 18:05

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**130**		50		ug/L			10/18/12 06:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*65 - 140*		*10/18/12 06:13*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/20/12 23:16	1
Ethylbenzene	ND		0.30		ug/L			10/20/12 23:16	1
Toluene	ND		0.30		ug/L			10/20/12 23:16	1
Xylenes, Total	ND		0.60		ug/L			10/20/12 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*65 - 135*		*10/20/12 23:16*	*1*

Client Sample ID: F12-09-42

Lab Sample ID: 440-26676-3
Date Collected: 10/15/12 09:06
Matrix: Water
Date Received: 10/15/12 18:05

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**39**		25		mg/L			10/16/12 16:42	50

Client Sample ID: F12-09-43

Lab Sample ID: 440-26676-4
Date Collected: 10/15/12 10:07
Matrix: Water
Date Received: 10/15/12 18:05

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**82**		50		ug/L			10/18/12 06:41	1

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26676-1
SDG: 29875030.20000

Client Sample ID: F12-09-43

Lab Sample ID: 440-26676-4

Date Collected: 10/15/12 10:07
Matrix: Water
Date Received: 10/15/12 18:05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*65 - 140*		*10/18/12 06:41*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/20/12 23:42	1
Ethylbenzene	ND		0.30		ug/L			10/20/12 23:42	1
Toluene	ND		0.30		ug/L			10/20/12 23:42	1
Xylenes, Total	ND		0.60		ug/L			10/20/12 23:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*65 - 135*		*10/20/12 23:42*	*1*

Client Sample ID: F12-09-44

Lab Sample ID: 440-26676-5

Date Collected: 10/15/12 10:07
Matrix: Water
Date Received: 10/15/12 18:05

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**480**		25		mg/L			10/16/12 16:58	50

Client Sample ID: F12-09-45

Lab Sample ID: 440-26676-6

Date Collected: 10/15/12 12:12
Matrix: Water
Date Received: 10/15/12 18:05

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**1600**		50		ug/L			10/18/12 08:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*65 - 140*		*10/18/12 08:06*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**36**		3.0		ug/L			10/23/12 11:54	10
Ethylbenzene	**15**		3.0		ug/L			10/23/12 11:54	10
Toluene	**34**		3.0		ug/L			10/23/12 11:54	10
Xylenes, Total	**37**		6.0		ug/L			10/23/12 11:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*65 - 135*		*10/23/12 11:54*	*10*

Client Sample ID: F12-09-46

Lab Sample ID: 440-26676-7

Date Collected: 10/15/12 12:12
Matrix: Water
Date Received: 10/15/12 18:05

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/16/12 19:30	1

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26676-1
SDG: 29875030.20000

Client Sample ID: F12-09-47

Lab Sample ID: 440-26676-8

Date Collected: 10/15/12 12:12
Matrix: Water
Date Received: 10/15/12 18:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**20**		0.50		ug/L			10/25/12 05:46	1
1,2-Dichloroethane	ND		0.50		ug/L			10/25/12 05:46	1
Ethylbenzene	**2.2**		0.50		ug/L			10/25/12 05:46	1
Methylene Chloride	ND		1.0		ug/L			10/25/12 05:46	1
Toluene	**22**		0.50		ug/L			10/25/12 05:46	1
Xylenes, Total	**15**		1.0		ug/L			10/25/12 05:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*10/25/12 05:46*	*1*
Dibromofluoromethane (Surr)	*116*		*80 - 120*		*10/25/12 05:46*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*10/25/12 05:46*	*1*

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26676-1
SDG: 29875030.20000

Client Sample ID: F12-09-81 — Lab Sample ID: 440-26676-1

Date Collected: 10/15/12 07:30 — **Matrix: Water**
Date Received: 10/15/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/18/12 02:30	IM	TAL IRV
Total/NA	Analysis	8021B		1	10 mL	10 mL	60636	10/20/12 22:49	KS	TAL IRV

Client Sample ID: F12-09-41 — Lab Sample ID: 440-26676-2

Date Collected: 10/15/12 09:06 — **Matrix: Water**
Date Received: 10/15/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/18/12 06:13	IM	TAL IRV
Total/NA	Analysis	8021B		1	10 mL	10 mL	60636	10/20/12 23:16	KS	TAL IRV

Client Sample ID: F12-09-42 — Lab Sample ID: 440-26676-3

Date Collected: 10/15/12 09:06 — **Matrix: Water**
Date Received: 10/15/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	59408	10/16/12 16:42	NN	TAL IRV

Client Sample ID: F12-09-43 — Lab Sample ID: 440-26676-4

Date Collected: 10/15/12 10:07 — **Matrix: Water**
Date Received: 10/15/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/18/12 06:41	IM	TAL IRV
Total/NA	Analysis	8021B		1	10 mL	10 mL	60636	10/20/12 23:42	KS	TAL IRV

Client Sample ID: F12-09-44 — Lab Sample ID: 440-26676-5

Date Collected: 10/15/12 10:07 — **Matrix: Water**
Date Received: 10/15/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	59408	10/16/12 16:58	NN	TAL IRV

Client Sample ID: F12-09-45 — Lab Sample ID: 440-26676-6

Date Collected: 10/15/12 12:12 — **Matrix: Water**
Date Received: 10/15/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	10 mL	10 mL	59724	10/18/12 08:06	IM	TAL IRV
Total/NA	Analysis	8021B		10	10 mL	10 mL	61108	10/23/12 11:54	TL	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26676-1
SDG: 29875030.20000

Client Sample ID: F12-09-46

Lab Sample ID: 440-26676-7

Date Collected: 10/15/12 12:12
Matrix: Water
Date Received: 10/15/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1 mL	1.0 mL	59408	10/16/12 19:30	NN	TAL IRV

Client Sample ID: F12-09-47

Lab Sample ID: 440-26676-8

Date Collected: 10/15/12 12:12
Matrix: Water
Date Received: 10/15/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	61559	10/25/12 05:46	YK	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-61559/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/24/12 21:41	1
1,2-Dichloroethane	ND		0.50		ug/L			10/24/12 21:41	1
Ethylbenzene	ND		0.50		ug/L			10/24/12 21:41	1
Methylene Chloride	ND		1.0		ug/L			10/24/12 21:41	1
Toluene	ND		0.50		ug/L			10/24/12 21:41	1
Xylenes, Total	ND		1.0		ug/L			10/24/12 21:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*10/24/12 21:41*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*10/24/12 21:41*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/24/12 21:41*	*1*

Lab Sample ID: LCS 440-61559/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	26.2		ug/L		105	70 - 120
1,2-Dichloroethane	25.0	26.4		ug/L		106	60 - 140
Ethylbenzene	25.0	23.7		ug/L		95	75 - 125
Methylene Chloride	25.0	23.3		ug/L		93	55 - 130
m,p-Xylene	50.0	48.0		ug/L		96	75 - 125
o-Xylene	25.0	23.9		ug/L		96	75 - 125
Toluene	25.0	26.2		ug/L		105	70 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-27218-B-22 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61559

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	25.3		ug/L		101	65 - 125
1,2-Dichloroethane	ND		25.0	25.2		ug/L		101	60 - 140
Ethylbenzene	ND		25.0	23.9		ug/L		95	65 - 130
Methylene Chloride	ND		25.0	22.5		ug/L		90	50 - 135
m,p-Xylene	ND		50.0	48.8		ug/L		98	65 - 130
o-Xylene	ND		25.0	24.3		ug/L		97	65 - 125
Toluene	ND		25.0	25.7		ug/L		103	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-27218-B-22 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61559

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	23.9		ug/L		95	65 - 125	6	20
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	60 - 140	5	20
Ethylbenzene	ND		25.0	22.8		ug/L		91	65 - 130	5	20
Methylene Chloride	ND		25.0	21.1		ug/L		84	50 - 135	6	20
m,p-Xylene	ND		50.0	46.1		ug/L		92	65 - 130	6	25
o-Xylene	ND		25.0	23.3		ug/L		93	65 - 125	4	20
Toluene	ND		25.0	24.1		ug/L		97	70 - 125	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-59724/33 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/18/12 02:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*65 - 140*		*10/18/12 02:03*	*1*

Lab Sample ID: LCS 440-59724/32 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	749		ug/L		94	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*65 - 140*

Lab Sample ID: 440-26437-A-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59724

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	ND		800	666		ug/L		83	65 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*65 - 140*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-26437-A-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59724

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	658		ug/L		82	65 - 140	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*65 - 140*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 440-60636/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/20/12 15:17	1
Ethylbenzene	ND		0.30		ug/L			10/20/12 15:17	1
Toluene	ND		0.30		ug/L			10/20/12 15:17	1
Xylenes, Total	ND		0.60		ug/L			10/20/12 15:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*65 - 135*		*10/20/12 15:17*	*1*

Lab Sample ID: LCS 440-60636/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.9		ug/L		105	85 - 115
Ethylbenzene	20.0	20.5		ug/L		103	85 - 115
m-Xylene & p-Xylene	40.0	39.2		ug/L		98	85 - 115
o-Xylene	20.0	19.1		ug/L		96	85 - 115
Toluene	20.0	19.3		ug/L		97	85 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*65 - 135*

Lab Sample ID: LCSD 440-60636/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	20.0	20.3		ug/L		101	85 - 115	3	20
Ethylbenzene	20.0	19.2		ug/L		96	85 - 115	6	20
m-Xylene & p-Xylene	40.0	38.5		ug/L		96	85 - 115	2	20
o-Xylene	20.0	19.4		ug/L		97	85 - 115	1	20
Toluene	20.0	19.7		ug/L		98	85 - 115	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*65 - 135*

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 440-26805-B-8 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	350		2000	1810		ug/L		73	60 - 130
Ethylbenzene	ND		2000	1370	F	ug/L		68	70 - 130
m-Xylene & p-Xylene	ND		4000	2760		ug/L		68	65 - 125
o-Xylene	ND		2000	1350		ug/L		68	65 - 125
Toluene	83		2000	1440		ug/L		68	65 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*71*		*65 - 135*

Lab Sample ID: 440-26805-B-8 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	350		2000	1850		ug/L		75	60 - 130	2	20
Ethylbenzene	ND		2000	1540		ug/L		76	70 - 130	12	20
m-Xylene & p-Xylene	ND		4000	2990		ug/L		73	65 - 125	8	25
o-Xylene	ND		2000	1480		ug/L		74	65 - 125	9	20
Toluene	83		2000	1530		ug/L		72	65 - 125	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*65 - 135*

Lab Sample ID: MB 440-61108/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/23/12 11:27	1
Ethylbenzene	ND		0.30		ug/L			10/23/12 11:27	1
Toluene	ND		0.30		ug/L			10/23/12 11:27	1
Xylenes, Total	ND		0.60		ug/L			10/23/12 11:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*65 - 135*		*10/23/12 11:27*	*1*

Lab Sample ID: LCS 440-61108/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.4		ug/L		102	85 - 115
Ethylbenzene	20.0	19.8		ug/L		99	85 - 115
m-Xylene & p-Xylene	40.0	37.4		ug/L		94	85 - 115
o-Xylene	20.0	18.3		ug/L		91	85 - 115
Toluene	20.0	18.6		ug/L		93	85 - 115

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 440-61108/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		65 - 135

Lab Sample ID: 440-26676-6 MS — **Client Sample ID: F12-09-45**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	36		200	185		ug/L		75	60 - 130
Ethylbenzene	15		200	169		ug/L		77	70 - 130
m-Xylene & p-Xylene	31		400	317		ug/L		72	65 - 125
o-Xylene	6.1		200	157		ug/L		76	65 - 125
Toluene	34		200	175		ug/L		70	65 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		65 - 135

Lab Sample ID: 440-26676-6 MSD — **Client Sample ID: F12-09-45**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	36		200	199		ug/L		81	60 - 130	7	20
Ethylbenzene	15		200	180		ug/L		83	70 - 130	6	20
m-Xylene & p-Xylene	31		400	335		ug/L		76	65 - 125	5	25
o-Xylene	6.1		200	166		ug/L		80	65 - 125	5	20
Toluene	34		200	187		ug/L		76	65 - 125	7	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		65 - 135

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-59408/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59408

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/16/12 09:39	1

Lab Sample ID: LCS 440-59408/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59408

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.35		mg/L		93	90 - 110

QC Association Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26676-1
SDG: 29875030.20000

GC/MS VOA

Analysis Batch: 61559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26676-8	F12-09-47	Total/NA	Water	8260B	
440-27218-B-22 MS	Matrix Spike	Total/NA	Water	8260B	
440-27218-B-22 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-61559/4	Lab Control Sample	Total/NA	Water	8260B	
MB 440-61559/3	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 59724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26437-A-1 MS	Matrix Spike	Total/NA	Water	8015B	
440-26437-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
440-26676-1	F12-09-81	Total/NA	Water	8015B	
440-26676-2	F12-09-41	Total/NA	Water	8015B	
440-26676-4	F12-09-43	Total/NA	Water	8015B	
440-26676-6	F12-09-45	Total/NA	Water	8015B	
LCS 440-59724/32	Lab Control Sample	Total/NA	Water	8015B	
MB 440-59724/33	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 60636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26676-1	F12-09-81	Total/NA	Water	8021B	
440-26676-2	F12-09-41	Total/NA	Water	8021B	
440-26676-4	F12-09-43	Total/NA	Water	8021B	
440-26805-B-8 MS	Matrix Spike	Total/NA	Water	8021B	
440-26805-B-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
LCS 440-60636/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 440-60636/4	Lab Control Sample Dup	Total/NA	Water	8021B	
MB 440-60636/5	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 61108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26676-6	F12-09-45	Total/NA	Water	8021B	
440-26676-6 MS	F12-09-45	Total/NA	Water	8021B	
440-26676-6 MSD	F12-09-45	Total/NA	Water	8021B	
LCS 440-61108/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-61108/3	Method Blank	Total/NA	Water	8021B	

HPLC/IC

Analysis Batch: 59408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26676-3	F12-09-42	Total/NA	Water	300.0	
440-26676-5	F12-09-44	Total/NA	Water	300.0	
440-26676-7	F12-09-46	Total/NA	Water	300.0	
LCS 440-59408/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-59408/4	Method Blank	Total/NA	Water	300.0	

Qualifiers

GC VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
RER	Relative error ratio
DER	Duplicate error ratio (normalized absolute difference)
DLC	Decision level concentration
RL	Reporting Limit or Requested Limit (Radiochemistry only)

Certification Summary

Client: URS Corporation
Project/Site: Chevron PCPL Filmore

TestAmerica Job ID: 440-26676-1
SDG: 29875030.20000

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-13

440-26676

Date: 10/15/12

Page 1 of 1

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

☐ Data Requested in GISKey Format

Lab Name: TEST America
URS Project/PO Number: 28875030.20000
Client Name/Project Name/Location: Chevron PCPL Fillmore
Geo Tracker Information: SO# 15061215
URS Project Manager: DAVID Brod
EDF Reporting: Y N Global ID: WBS# NWENV-SFD00056-9403
Sampler Name and Signature: Roger Hardester
COELT Log Number:

Requested Analyses: 8015M/8021B BTEX/TPH Gasoline; 300.0 SO4/Nitrate; 8260B BTEX/Methylene Chloride 1,2-DCA; HOLD; Special Instructions:

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/8021B BTEX/TPH Gasoline	300.0 SO4/Nitrate	8260B BTEX/Methylene Chloride 1,2-DCA	HOLD	Special Instructions:
1	F12-09-081	10-15-12	0736	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
2	F12-09-041		0906	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
3	F12-09-042		0906	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
4	F12-09-043		1007	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
5	F12-09-044		1007	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
6	F12-09-045		1212	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
7	F12-09-046		1212	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
8	F12-09-046		1212	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3			X		
9				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						
10				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA						

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardester	10-15-12 1414	[illegible]	10-15-12 14:14
[illegible]	10-15-12 18:05	[illegible]	10-15-12 1805

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: 4.6
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

Reddy, Sushmitha

From: Hardester, Roger [roger.hardester@urs.com]
Sent: Tuesday, October 16, 2012 5:54 PM
To: Reddy, Sushmitha
Subject: F12-09-047

Sushmitha,
Sorry I missed your call. Yes, the last entry on the 10/15 COC should be F12-09-047.

Thanks,

Roger Hardester, CISEC
Senior Environmental Technician
URS Corporation
1518 Mill Rock Way Suite #102
Bakersfield, CA 93311
roger.hardester@urs.com
Ph: 661-398-9912
cell: 661-865-7946

This e-mail and any attachments contain URS Corporation confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any attachments or copies.

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-26676-1
SDG Number: 29875030.20000

Login Number: 26676
List Number: 1
Creator: Freitag, Kevin R

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Roger Hardester
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-26805-1
TestAmerica Sample Delivery Group: 29875030.20000
Client Project/Site: Chevron PCPL Fillmore

For:
URS Corporation
310 Golden Shore, Suite 100
Long Beach, California 90802

Attn: David Brod

Authorized for release by:
10/30/2012 2:46:49 PM

Sushmitha Reddy
Project Manager I
sushmitha.reddy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 9
QC Sample Results 12
QC Association 20
Definitions 22
Certification Summary 23
Chain of Custody 24
Receipt Checklists 26

Sample Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-26805-1	F-12-09-082	Water	10/16/12 08:30	10/16/12 18:15
440-26805-2	F-12-09-048	Water	10/16/12 11:19	10/16/12 18:15
440-26805-3	F-12-09-049	Water	10/16/12 11:19	10/16/12 18:15
440-26805-4	F-12-09-050	Water	10/16/12 12:20	10/16/12 18:15
440-26805-5	F-12-09-051	Water	10/16/12 12:20	10/16/12 18:15
440-26805-6	F-12-09-052	Water	10/16/12 12:40	10/16/12 18:15
440-26805-7	F-12-09-053	Water	10/16/12 12:40	10/16/12 18:15
440-26805-8	F-12-09-054	Water	10/16/12 13:38	10/16/12 18:15
440-26805-9	F-12-09-055	Water	10/16/12 13:38	10/16/12 18:15
440-26805-10	F-12-09-056	Water	10/16/12 13:38	10/16/12 18:15
440-26805-11	F-12-09-057	Water	10/16/12 13:48	10/16/12 18:15
440-26805-12	F-12-09-058	Water	10/16/12 13:48	10/16/12 18:15
440-26805-13	F-12-09-059	Water	10/16/12 13:48	10/16/12 18:15

Job ID: 440-26805-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-26805-1

Comments
No additional comments.

Receipt
The samples were received on 10/16/2012 6:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4º C.

GC/MS VOA
No analytical or quality issues were noted.

HPLC
No analytical or quality issues were noted.

GC VOA
Method(s) 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 60075 were outside control limits due to matrix interference. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8021B: Surrogate recovery for the following sample(s) was outside control limits: F-12-09-048 (440-26805-2), F-12-09-052 (440-26805-6). Re-extraction and/or re-analysis was performed with concurring results. The re-analysis has been reported.

Method(s) 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 60636 were outside control limits. Matrix interference is suspected. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

Client Sample ID: F-12-09-082

Lab Sample ID: 440-26805-1
Date Collected: 10/16/12 08:30
Matrix: Water
Date Received: 10/16/12 18:15

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/18/12 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*65 - 140*		*10/18/12 19:58*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/18/12 15:41	1
Ethylbenzene	ND		0.30		ug/L			10/18/12 15:41	1
Toluene	ND		0.30		ug/L			10/18/12 15:41	1
Xylenes, Total	ND		0.60		ug/L			10/18/12 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*65 - 135*		*10/18/12 15:41*	*1*

Client Sample ID: F-12-09-048

Lab Sample ID: 440-26805-2
Date Collected: 10/16/12 11:19
Matrix: Water
Date Received: 10/16/12 18:15

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**3000**		1000		ug/L			10/20/12 21:32	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*		*65 - 140*		*10/20/12 21:32*	*20*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**18**		3.0		ug/L			10/20/12 15:51	10
Ethylbenzene	**7.0**		3.0		ug/L			10/20/12 15:51	10
Toluene	**4.4**		3.0		ug/L			10/20/12 15:51	10
Xylenes, Total	**20**		6.0		ug/L			10/20/12 15:51	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*58*	*X*	*65 - 135*		*10/20/12 15:51*	*10*

Client Sample ID: F-12-09-049

Lab Sample ID: 440-26805-3
Date Collected: 10/16/12 11:19
Matrix: Water
Date Received: 10/16/12 18:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/18/12 01:28	1

Client Sample ID: F-12-09-050

Lab Sample ID: 440-26805-4
Date Collected: 10/16/12 12:20
Matrix: Water
Date Received: 10/16/12 18:15

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**5200**		5000		ug/L			10/18/12 20:54	100

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

Client Sample ID: F-12-09-050

Lab Sample ID: 440-26805-4

Date Collected: 10/16/12 12:20
Matrix: Water
Date Received: 10/16/12 18:15

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		65 - 140		10/18/12 20:54	100

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	75		6.0		ug/L			10/18/12 17:51	20
Ethylbenzene	9.2		6.0		ug/L			10/18/12 17:51	20
Toluene	34		6.0		ug/L			10/18/12 17:51	20
Xylenes, Total	32		12		ug/L			10/18/12 17:51	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	66		65 - 135		10/18/12 17:51	20

Client Sample ID: F-12-09-051

Lab Sample ID: 440-26805-5

Date Collected: 10/16/12 12:20
Matrix: Water
Date Received: 10/16/12 18:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	230		10		mg/L			10/18/12 00:42	20

Client Sample ID: F-12-09-052

Lab Sample ID: 440-26805-6

Date Collected: 10/16/12 12:40
Matrix: Water
Date Received: 10/16/12 18:15

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	6300		5000		ug/L			10/19/12 00:12	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		65 - 140		10/19/12 00:12	100

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	74		3.0		ug/L			10/20/12 16:18	10
Ethylbenzene	8.6		3.0		ug/L			10/20/12 16:18	10
Toluene	29		3.0		ug/L			10/20/12 16:18	10
Xylenes, Total	27		6.0		ug/L			10/20/12 16:18	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	59	X	65 - 135		10/20/12 16:18	10

Client Sample ID: F-12-09-053

Lab Sample ID: 440-26805-7

Date Collected: 10/16/12 12:40
Matrix: Water
Date Received: 10/16/12 18:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	220		10		mg/L			10/18/12 01:43	20

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

Client Sample ID: F-12-09-054

Lab Sample ID: 440-26805-8
Date Collected: 10/16/12 13:38
Matrix: Water
Date Received: 10/16/12 18:15

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	6000		5000		ug/L			10/19/12 00:39	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*65 - 140*		*10/19/12 00:39*	*100*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	350		30		ug/L			10/20/12 17:38	100
Ethylbenzene	ND		30		ug/L			10/20/12 17:38	100
Toluene	83		30		ug/L			10/20/12 17:38	100
Xylenes, Total	ND		60		ug/L			10/20/12 17:38	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*65 - 135*		*10/20/12 17:38*	*100*

Client Sample ID: F-12-09-055

Lab Sample ID: 440-26805-9
Date Collected: 10/16/12 13:38
Matrix: Water
Date Received: 10/16/12 18:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/18/12 16:18	1

Client Sample ID: F-12-09-056

Lab Sample ID: 440-26805-10
Date Collected: 10/16/12 13:38
Matrix: Water
Date Received: 10/16/12 18:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.50		ug/L			10/24/12 10:10	1
Ethylbenzene	11		0.50		ug/L			10/24/12 10:10	1
Methylene Chloride	ND		1.0		ug/L			10/24/12 10:10	1
m,p-Xylene	39		1.0		ug/L			10/24/12 10:10	1
o-Xylene	12		0.50		ug/L			10/24/12 10:10	1
Xylenes, Total	51		1.0		ug/L			10/24/12 10:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*10/24/12 10:10*	*1*
Dibromofluoromethane (Surr)	*88*		*80 - 120*		*10/24/12 10:10*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*10/24/12 10:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	230		2.5		ug/L			10/24/12 10:40	5
Toluene	110		2.5		ug/L			10/24/12 10:40	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/24/12 10:40*	*5*
Dibromofluoromethane (Surr)	*88*		*80 - 120*		*10/24/12 10:40*	*5*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/24/12 10:40*	*5*

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

Client Sample ID: F-12-09-057

Lab Sample ID: 440-26805-11
Date Collected: 10/16/12 13:48
Matrix: Water
Date Received: 10/16/12 18:15

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	7400		5000		ug/L			10/19/12 02:03	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*65 - 140*		*10/19/12 02:03*	*100*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	330		30		ug/L			10/20/12 19:08	100
Ethylbenzene	ND		30		ug/L			10/20/12 19:08	100
Toluene	76		30		ug/L			10/20/12 19:08	100
Xylenes, Total	ND		60		ug/L			10/20/12 19:08	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*65 - 135*		*10/20/12 19:08*	*100*

Client Sample ID: F-12-09-058

Lab Sample ID: 440-26805-12
Date Collected: 10/16/12 13:48
Matrix: Water
Date Received: 10/16/12 18:15

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/18/12 17:07	1

Client Sample ID: F-12-09-059

Lab Sample ID: 440-26805-13
Date Collected: 10/16/12 13:48
Matrix: Water
Date Received: 10/16/12 18:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.50		ug/L			10/24/12 12:11	1
Ethylbenzene	11		0.50		ug/L			10/24/12 12:11	1
Methylene Chloride	ND		1.0		ug/L			10/24/12 12:11	1
m,p-Xylene	39		1.0		ug/L			10/24/12 12:11	1
o-Xylene	12		0.50		ug/L			10/24/12 12:11	1
Xylenes, Total	51		1.0		ug/L			10/24/12 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/24/12 12:11*	*1*
Dibromofluoromethane (Surr)	*86*		*80 - 120*		*10/24/12 12:11*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*10/24/12 12:11*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	240		2.5		ug/L			10/24/12 12:42	5
Toluene	120		2.5		ug/L			10/24/12 12:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/24/12 12:42*	*5*
Dibromofluoromethane (Surr)	*90*		*80 - 120*		*10/24/12 12:42*	*5*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/24/12 12:42*	*5*

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

Client Sample ID: F-12-09-082 — Lab Sample ID: 440-26805-1

Date Collected: 10/16/12 08:30 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	10 mL	10 mL	60046	10/18/12 19:58	SC	TAL IRV
Total/NA	Analysis	8021B		1	10 mL	10 mL	60075	10/18/12 15:41	KS	TAL IRV

Client Sample ID: F-12-09-048 — Lab Sample ID: 440-26805-2

Date Collected: 10/16/12 11:19 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	10 mL	10 mL	60636	10/20/12 15:51	KS	TAL IRV
Total/NA	Analysis	8015B		20	10 mL	10 mL	60652	10/20/12 21:32	TL	TAL IRV

Client Sample ID: F-12-09-049 — Lab Sample ID: 440-26805-3

Date Collected: 10/16/12 11:19 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1 mL	1.0 mL	59703	10/18/12 01:28	NN	TAL IRV

Client Sample ID: F-12-09-050 — Lab Sample ID: 440-26805-4

Date Collected: 10/16/12 12:20 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		100	10 mL	10 mL	60046	10/18/12 20:54	SC	TAL IRV
Total/NA	Analysis	8021B		20	10 mL	10 mL	60075	10/18/12 17:51	KS	TAL IRV

Client Sample ID: F-12-09-051 — Lab Sample ID: 440-26805-5

Date Collected: 10/16/12 12:20 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	1 mL	1.0 mL	59703	10/18/12 00:42	NN	TAL IRV

Client Sample ID: F-12-09-052 — Lab Sample ID: 440-26805-6

Date Collected: 10/16/12 12:40 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		100	10 mL	10 mL	60046	10/19/12 00:12	SC	TAL IRV
Total/NA	Analysis	8021B		10	10 mL	10 mL	60636	10/20/12 16:18	KS	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

Client Sample ID: F-12-09-053 — Lab Sample ID: 440-26805-7

Date Collected: 10/16/12 12:40 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	1 mL	1.0 mL	59703	10/18/12 01:43	NN	TAL IRV

Client Sample ID: F-12-09-054 — Lab Sample ID: 440-26805-8

Date Collected: 10/16/12 13:38 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		100	10 mL	10 mL	60046	10/19/12 00:39	SC	TAL IRV
Total/NA	Analysis	8021B		100	10 mL	10 mL	60636	10/20/12 17:38	KS	TAL IRV

Client Sample ID: F-12-09-055 — Lab Sample ID: 440-26805-9

Date Collected: 10/16/12 13:38 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1 mL	1.0 mL	60053	10/18/12 16:18	CC	TAL IRV

Client Sample ID: F-12-09-056 — Lab Sample ID: 440-26805-10

Date Collected: 10/16/12 13:38 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	61309	10/24/12 10:10	WC	TAL IRV
Total/NA	Analysis	8260B	DL	5	10 mL	10 mL	61309	10/24/12 10:40	WC	TAL IRV

Client Sample ID: F-12-09-057 — Lab Sample ID: 440-26805-11

Date Collected: 10/16/12 13:48 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		100	10 mL	10 mL	60046	10/19/12 02:03	SC	TAL IRV
Total/NA	Analysis	8021B		100	10 mL	10 mL	60636	10/20/12 19:08	KS	TAL IRV

Client Sample ID: F-12-09-058 — Lab Sample ID: 440-26805-12

Date Collected: 10/16/12 13:48 — **Matrix: Water**
Date Received: 10/16/12 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1 mL	1.0 mL	60053	10/18/12 17:07	CC	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

Client Sample ID: F-12-09-059

Date Collected: 10/16/12 13:48
Date Received: 10/16/12 18:15

Lab Sample ID: 440-26805-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	61309	10/24/12 12:11	WC	TAL IRV
Total/NA	Analysis	8260B	DL	5	10 mL	10 mL	61309	10/24/12 12:42	WC	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-61309/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61309

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/24/12 08:39	1
1,2-Dichloroethane	ND		0.50		ug/L			10/24/12 08:39	1
Ethylbenzene	ND		0.50		ug/L			10/24/12 08:39	1
Methylene Chloride	ND		1.0		ug/L			10/24/12 08:39	1
m,p-Xylene	ND		1.0		ug/L			10/24/12 08:39	1
o-Xylene	ND		0.50		ug/L			10/24/12 08:39	1
Toluene	ND		0.50		ug/L			10/24/12 08:39	1
Xylenes, Total	ND		1.0		ug/L			10/24/12 08:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*10/24/12 08:39*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*10/24/12 08:39*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*10/24/12 08:39*	*1*

Lab Sample ID: LCS 440-61309/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61309

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	22.5		ug/L		90	70 - 120
1,2-Dichloroethane	25.0	24.9		ug/L		99	60 - 140
Ethylbenzene	25.0	22.8		ug/L		91	75 - 125
Methylene Chloride	25.0	18.7		ug/L		75	55 - 130
m,p-Xylene	50.0	43.4		ug/L		87	75 - 125
o-Xylene	25.0	21.7		ug/L		87	75 - 125
Toluene	25.0	24.9		ug/L		100	70 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-26805-10 MS — **Client Sample ID: F-12-09-056**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61309

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	230		125	339		ug/L		91	65 - 125
1,2-Dichloroethane	ND		125	112		ug/L		90	60 - 140
Ethylbenzene	11		125	133		ug/L		97	65 - 130
Methylene Chloride	ND		125	88.8		ug/L		71	50 - 135
m,p-Xylene	38		250	274		ug/L		95	65 - 130
o-Xylene	10		125	126		ug/L		92	65 - 125
Toluene	110		125	237		ug/L		98	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*
Dibromofluoromethane (Surr)	*88*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-26805-10 MS — **Client Sample ID: F-12-09-056**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61309

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: 440-26805-10 MSD — **Client Sample ID: F-12-09-056**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61309

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	230		125	337		ug/L		89	65 - 125	1	20
1,2-Dichloroethane	ND		125	118		ug/L		95	60 - 140	5	20
Ethylbenzene	11		125	136		ug/L		100	65 - 130	2	20
Methylene Chloride	ND		125	96.2		ug/L		77	50 - 135	8	20
m,p-Xylene	38		250	283		ug/L		98	65 - 130	3	25
o-Xylene	10		125	133		ug/L		98	65 - 125	6	20
Toluene	110		125	240		ug/L		101	70 - 125	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		80 - 120
Dibromofluoromethane (Surr)	92		80 - 120
Toluene-d8 (Surr)	105		80 - 120

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-60046/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/18/12 13:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		65 - 140		10/18/12 13:54	1

Lab Sample ID: LCS 440-60046/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	800	721		ug/L		90	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		65 - 140

Lab Sample ID: 440-26805-4 MS — **Client Sample ID: F-12-09-050**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	5200		80000	74900		ug/L		87	65 - 140

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-26805-4 MS — **Client Sample ID: F-12-09-050**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*65 - 140*

Lab Sample ID: 440-26805-4 MSD — **Client Sample ID: F-12-09-050**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	5200		80000	72200		ug/L		84	65 - 140	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*65 - 140*

Lab Sample ID: 440-26805-8 MS — **Client Sample ID: F-12-09-054**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	6000		80000	67600		ug/L		77	65 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*80*		*65 - 140*

Lab Sample ID: 440-26805-8 MSD — **Client Sample ID: F-12-09-054**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60046

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	6000		80000	73100		ug/L		84	65 - 140	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*65 - 140*

Lab Sample ID: MB 440-60652/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/20/12 15:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*65 - 140*		*10/20/12 15:27*	*1*

Lab Sample ID: LCS 440-60652/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60652

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	755		ug/L		94	80 - 120		

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 440-60652/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60652

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		65 - 140

Lab Sample ID: 440-26839-B-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	ND		800	623		ug/L		74	65 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	132		65 - 140

Lab Sample ID: 440-26839-B-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	619		ug/L		74	65 - 140	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		65 - 140

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 440-60075/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/18/12 12:25	1
Ethylbenzene	ND		0.30		ug/L			10/18/12 12:25	1
Toluene	ND		0.30		ug/L			10/18/12 12:25	1
Xylenes, Total	ND		0.60		ug/L			10/18/12 12:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		65 - 135		10/18/12 12:25	1

Lab Sample ID: LCS 440-60075/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	18.8		ug/L		94	85 - 115
Ethylbenzene	20.0	18.7		ug/L		94	85 - 115
Toluene	20.0	17.0		ug/L		85	85 - 115
o-Xylene	20.0	17.1		ug/L		85	85 - 115
m,p-Xylene	40.0	35.1		ug/L		88	85 - 115

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 440-60075/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60075

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		65 - 135

Lab Sample ID: 440-26805-4 MS — **Client Sample ID: F-12-09-050**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60075

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	75		400	346		ug/L		68	60 - 130
Ethylbenzene	9.2		400	282	F	ug/L		68	70 - 130
Toluene	34		400	276	F	ug/L		61	65 - 125
o-Xylene	8.9		400	262	F	ug/L		63	65 - 125
m,p-Xylene	23		800	540		ug/L		65	65 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		65 - 135

Lab Sample ID: 440-26805-4 MSD — **Client Sample ID: F-12-09-050**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60075

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	75		400	350		ug/L		69	60 - 130	1	20
Ethylbenzene	9.2		400	290		ug/L		70	70 - 130	3	20
Toluene	34		400	283	F	ug/L		62	65 - 125	3	20
o-Xylene	8.9		400	278		ug/L		67	65 - 125	6	20
m,p-Xylene	23		800	557		ug/L		67	65 - 125	3	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		65 - 135

Lab Sample ID: MB 440-60636/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/20/12 15:17	1
Ethylbenzene	ND		0.30		ug/L			10/20/12 15:17	1
Toluene	ND		0.30		ug/L			10/20/12 15:17	1
Xylenes, Total	ND		0.60		ug/L			10/20/12 15:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		65 - 135		10/20/12 15:17	1

Lab Sample ID: LCS 440-60636/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.9		ug/L		105	85 - 115

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 440-60636/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	20.0	20.5		ug/L		103	85 - 115
Toluene	20.0	19.3		ug/L		97	85 - 115
o-Xylene	20.0	19.1		ug/L		96	85 - 115
m,p-Xylene	40.0	39.2		ug/L		98	85 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*65 - 135*

Lab Sample ID: LCSD 440-60636/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	20.0	20.3		ug/L		101	85 - 115	3	20
Ethylbenzene	20.0	19.2		ug/L		96	85 - 115	6	20
Toluene	20.0	19.7		ug/L		98	85 - 115	2	20
o-Xylene	20.0	19.4		ug/L		97	85 - 115	1	20
m,p-Xylene	40.0	38.5		ug/L		96	85 - 115	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*65 - 135*

Lab Sample ID: 440-26805-8 MS — **Client Sample ID: F-12-09-054**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	350		2000	1810		ug/L		73	60 - 130
Ethylbenzene	ND		2000	1370	F	ug/L		68	70 - 130
Toluene	83		2000	1440		ug/L		68	65 - 125
o-Xylene	ND		2000	1350		ug/L		68	65 - 125
m,p-Xylene	ND		4000	2760		ug/L		68	65 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*71*		*65 - 135*

Lab Sample ID: 440-26805-8 MSD — **Client Sample ID: F-12-09-054**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	350		2000	1850		ug/L		75	60 - 130	2	20
Ethylbenzene	ND		2000	1540		ug/L		76	70 - 130	12	20
Toluene	83		2000	1530		ug/L		72	65 - 125	6	20
o-Xylene	ND		2000	1480		ug/L		74	65 - 125	9	20
m,p-Xylene	ND		4000	2990		ug/L		73	65 - 125	8	25

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 440-26805-8 MSD — **Client Sample ID: F-12-09-054**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60636

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		65 - 135

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-59703/50 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59703

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/18/12 00:09	1

Lab Sample ID: LCS 440-59703/51 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59703

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.51		mg/L		95	90 - 110

Lab Sample ID: 440-26805-5 MS — **Client Sample ID: F-12-09-051**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59703

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	230		100	317		mg/L		91	80 - 120

Lab Sample ID: 440-26805-5 MSD — **Client Sample ID: F-12-09-051**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 59703

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	230		100	316		mg/L		91	80 - 120	0	20

Lab Sample ID: MB 440-60053/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/18/12 12:58	1

Lab Sample ID: LCS 440-60053/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.45		mg/L		95	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-26805-9 MS — **Client Sample ID: F-12-09-055**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	ND		10.0	9.66		mg/L		97	80 - 120		

Lab Sample ID: 440-26805-9 MSD — **Client Sample ID: F-12-09-055**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	ND		10.0	9.18		mg/L		92	80 - 120	5	20

QC Association Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

GC/MS VOA

Analysis Batch: 61309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26805-10	F-12-09-056	Total/NA	Water	8260B	
440-26805-10 - DL	F-12-09-056	Total/NA	Water	8260B	
440-26805-10 MS	F-12-09-056	Total/NA	Water	8260B	
440-26805-10 MSD	F-12-09-056	Total/NA	Water	8260B	
440-26805-13	F-12-09-059	Total/NA	Water	8260B	
440-26805-13 - DL	F-12-09-059	Total/NA	Water	8260B	
LCS 440-61309/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-61309/4	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 60046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26805-1	F-12-09-082	Total/NA	Water	8015B	
440-26805-4	F-12-09-050	Total/NA	Water	8015B	
440-26805-4 MS	F-12-09-050	Total/NA	Water	8015B	
440-26805-4 MSD	F-12-09-050	Total/NA	Water	8015B	
440-26805-6	F-12-09-052	Total/NA	Water	8015B	
440-26805-8	F-12-09-054	Total/NA	Water	8015B	
440-26805-8 MS	F-12-09-054	Total/NA	Water	8015B	
440-26805-8 MSD	F-12-09-054	Total/NA	Water	8015B	
440-26805-11	F-12-09-057	Total/NA	Water	8015B	
LCS 440-60046/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-60046/3	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 60075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26805-1	F-12-09-082	Total/NA	Water	8021B	
440-26805-4	F-12-09-050	Total/NA	Water	8021B	
440-26805-4 MS	F-12-09-050	Total/NA	Water	8021B	
440-26805-4 MSD	F-12-09-050	Total/NA	Water	8021B	
LCS 440-60075/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-60075/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 60636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26805-2	F-12-09-048	Total/NA	Water	8021B	
440-26805-6	F-12-09-052	Total/NA	Water	8021B	
440-26805-8	F-12-09-054	Total/NA	Water	8021B	
440-26805-8 MS	F-12-09-054	Total/NA	Water	8021B	
440-26805-8 MSD	F-12-09-054	Total/NA	Water	8021B	
440-26805-11	F-12-09-057	Total/NA	Water	8021B	
LCS 440-60636/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 440-60636/4	Lab Control Sample Dup	Total/NA	Water	8021B	
MB 440-60636/5	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 60652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26805-2	F-12-09-048	Total/NA	Water	8015B	
440-26839-B-1 MS	Matrix Spike	Total/NA	Water	8015B	
440-26839-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-60652/2	Lab Control Sample	Total/NA	Water	8015B	

GC VOA (Continued)

Analysis Batch: 60652 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-60652/3	Method Blank	Total/NA	Water	8015B	

HPLC/IC

Analysis Batch: 59703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26805-3	F-12-09-049	Total/NA	Water	300.0	
440-26805-5	F-12-09-051	Total/NA	Water	300.0	
440-26805-5 MS	F-12-09-051	Total/NA	Water	300.0	
440-26805-5 MSD	F-12-09-051	Total/NA	Water	300.0	
440-26805-7	F-12-09-053	Total/NA	Water	300.0	
LCS 440-59703/51	Lab Control Sample	Total/NA	Water	300.0	
MB 440-59703/50	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 60053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26805-9	F-12-09-055	Total/NA	Water	300.0	
440-26805-9 MS	F-12-09-055	Total/NA	Water	300.0	
440-26805-9 MSD	F-12-09-055	Total/NA	Water	300.0	
440-26805-12	F-12-09-058	Total/NA	Water	300.0	
LCS 440-60053/7	Lab Control Sample	Total/NA	Water	300.0	
MB 440-60053/9	Method Blank	Total/NA	Water	300.0	

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F	MS or MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26805-1
SDG: 29875030.20000

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-13

440-26805

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10 / 16 / 12

Page 1 of 2

☐ Data Requested in GISKey Format

Lab Name: TEST AMERICA

Client Name/Project Name/Location: CHEVRON PCPL FILLMORE

URS Project Manager: DAVID BROD

Sampler Name and Signature: Roger Hardester

URS Project/PO Number: 29875030.20000

~~Geo Tracker Information:~~ SO# 15061215

~~EDF Reporting T N Global ID:~~ WBS# NWENV-SFD00056-9403

COELT Log Number:

Requested Analyses: 8015M/8021B BTEX/TPH Gas; 300.0 Sulfate; 8260B BTEX/Methylene Chloride/1,2-DCA

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/8021B BTEX/TPH Gas	300.0 Sulfate	8260B BTEX/Methylene Chloride/1,2-DCA	HOLD	Special Instructions:
1	F12-09-082	10-16-12	0830	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
2	F12-09-048		1119	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
3	F12-09-049		1119	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
4	F12-09-050		1220	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	5	X				MS/MSD
5	F12-09-051		1220	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			MS/MSD
6	F12-09-052		1240	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
7	F12-09-053		1240	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
8	F12-09-054		1338	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	5	X				MS/MSD
9	F12-09-055		1338	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			MS/MSD
10	F12-09-056	✓	1338	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	5			X		MS/MSD

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardester	10-16-12 1420	[illegible]	10-16-12 14:2[illegible]
[illegible]	10-16-12 18:15	[illegible]	10-16-12 1815

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: ____
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

4.6

440-26805

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10/16/12

Page 2 of 2

☐ Data Requested in GISKey Format

Lab Name: TEST America
URS Project/PO Number: 29875030.20000
Client Name/Project Name/Location: Chevron PCPL Fillmore
Geo Tracker Information: 50# 15061215
URS Project Manager: DAVID BROOK
EDF Reporting: Y N Global ID: WBS# NWENV-SFD00056-9403
Sampler Name and Signature: Roger Hardester
COELT Log Number:

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/8021B BTEX/TPH Gasoline	300.0 SO4 Nitrate	8260B BTEX, methylene chloride, 1,2 DCA										HOLD	Special Instructions:
1	F12-09-057	10-16-12	1348	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X													
2	F12-09-058	↓	1348	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X												
3	F12-09-059	↓	1348	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3			X											
4				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA															
5				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA															
6				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA															
7				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA															
8				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA															
9				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA															
10				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA															

Requested Analyses:

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardester	10-16-12 1420	[illegible]	10-16-12 14:20
[illegible]	10-16-12 18:15	[illegible]	10-16-12 1815

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: ____
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

4.6

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-26805-1
SDG Number: 29875030.20000

Login Number: 26805
List Number: 1
Creator: Freitag, Kevin R

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-26945-1
TestAmerica Sample Delivery Group: 29875030.20000
Client Project/Site: Chevron PCPL Fillmore

For:
URS Corporation
310 Golden Shore, Suite 100
Long Beach, California 90802

Attn: David Brod

Authorized for release by:
10/31/2012 5:20:18 PM

Sushmitha Reddy
Project Manager I
sushmitha.reddy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 8
QC Sample Results 10
QC Association 17
Definitions 19
Certification Summary 20
Chain of Custody 21
Receipt Checklists 22

Sample Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26945-1
SDG: 29875030.20000

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-26945-1	F12-09-083	Water	10/17/12 07:30	10/17/12 17:35
440-26945-2	F12-09-060	Water	10/17/12 09:48	10/17/12 17:35
440-26945-3	F12-09-061	Water	10/17/12 09:48	10/17/12 17:35
440-26945-4	F12-09-062	Water	10/17/12 09:48	10/17/12 17:35
440-26945-5	F12-09-063	Water	10/17/12 11:09	10/17/12 17:35
440-26945-6	F12-09-064	Water	10/17/12 11:09	10/17/12 17:35
440-26945-7	F12-09-071	Water	10/17/12 12:10	10/17/12 17:35
440-26945-8	F12-09-072	Water	10/17/12 12:10	10/17/12 17:35
440-26945-9	F12-09-073	Water	10/17/12 13:05	10/17/12 17:35
440-26945-10	F12-09-074	Water	10/17/12 13:05	10/17/12 17:35

Job ID: 440-26945-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-26945-1

Comments
No additional comments.

Receipt
The samples were received on 10/17/2012 5:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
No analytical or quality issues were noted.

HPLC
Method(s) 300.0: Due to the high concentration of sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for batch 60351 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

GC VOA
Method(s) 8015B: Surrogate recovery for the following sample(s) was outside control limits: F12-09-060 (440-26945-2), F12-09-071 (440-26945-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8015B: Surrogate recovery was outside control limits for the following sample: (440-27388-1 MS), (440-27388-1 MSD). The BFB surrogate coeluted with the LCS standard. Data not impacted.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26945-1
SDG: 29875030.20000

Client Sample ID: F12-09-083

Lab Sample ID: 440-26945-1
Date Collected: 10/17/12 07:30
Matrix: Water
Date Received: 10/17/12 17:35

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/24/12 00:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*65 - 140*		*10/24/12 00:29*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/23/12 19:21	1
Ethylbenzene	ND		0.30		ug/L			10/23/12 19:21	1
Toluene	ND		0.30		ug/L			10/23/12 19:21	1
Xylenes, Total	ND		0.60		ug/L			10/23/12 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*65 - 135*		*10/23/12 19:21*	*1*

Client Sample ID: F12-09-060

Lab Sample ID: 440-26945-2
Date Collected: 10/17/12 09:48
Matrix: Water
Date Received: 10/17/12 17:35

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**5000**		500		ug/L			10/24/12 07:01	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*235*	*X*	*65 - 140*		*10/24/12 07:01*	*10*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**190**		6.0		ug/L			10/24/12 14:09	20
Ethylbenzene	**12**		6.0		ug/L			10/24/12 14:09	20
Toluene	**100**		6.0		ug/L			10/24/12 14:09	20
Xylenes, Total	**50**		12		ug/L			10/24/12 14:09	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*65 - 135*		*10/24/12 14:09*	*20*

Client Sample ID: F12-09-061

Lab Sample ID: 440-26945-3
Date Collected: 10/17/12 09:48
Matrix: Water
Date Received: 10/17/12 17:35

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1.0**		0.50		mg/L			10/19/12 19:53	1

Client Sample ID: F12-09-062

Lab Sample ID: 440-26945-4
Date Collected: 10/17/12 09:48
Matrix: Water
Date Received: 10/17/12 17:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**190**		0.50		ug/L			10/27/12 19:15	1
1,2-Dichloroethane	ND		0.50		ug/L			10/27/12 19:15	1
Ethylbenzene	**7.5**		0.50		ug/L			10/27/12 19:15	1

Client Sample ID: F12-09-062

Lab Sample ID: 440-26945-4

Date Collected: 10/17/12 09:48
Matrix: Water
Date Received: 10/17/12 17:35

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0		ug/L			10/27/12 19:15	1
m,p-Xylene	**39**		1.0		ug/L			10/27/12 19:15	1
o-Xylene	**11**		0.50		ug/L			10/27/12 19:15	1
Toluene	**80**		0.50		ug/L			10/27/12 19:15	1
Xylenes, Total	**50**		1.0		ug/L			10/27/12 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*10/27/12 19:15*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*10/27/12 19:15*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*10/27/12 19:15*	*1*

Client Sample ID: F12-09-063

Lab Sample ID: 440-26945-5

Date Collected: 10/17/12 11:09
Matrix: Water
Date Received: 10/17/12 17:35

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**1000**		500		ug/L			10/25/12 03:08	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*65 - 140*		*10/25/12 03:08*	*10*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**31**		3.0		ug/L			10/24/12 16:58	10
Ethylbenzene	ND		3.0		ug/L			10/24/12 16:58	10
Toluene	**13**		3.0		ug/L			10/24/12 16:58	10
Xylenes, Total	**25**		6.0		ug/L			10/24/12 16:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*65 - 135*		*10/24/12 16:58*	*10*

Client Sample ID: F12-09-064

Lab Sample ID: 440-26945-6

Date Collected: 10/17/12 11:09
Matrix: Water
Date Received: 10/17/12 17:35

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**530**		10		mg/L			10/18/12 23:42	20

Client Sample ID: F12-09-071

Lab Sample ID: 440-26945-7

Date Collected: 10/17/12 12:10
Matrix: Water
Date Received: 10/17/12 17:35

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**2400**		500		ug/L			10/24/12 07:57	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*181*	*X*	*65 - 140*		*10/24/12 07:57*	*10*

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26945-1
SDG: 29875030.20000

Client Sample ID: F12-09-071

Lab Sample ID: 440-26945-7
Date Collected: 10/17/12 12:10
Matrix: Water
Date Received: 10/17/12 17:35

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	25		3.0		ug/L			10/24/12 17:26	10
Ethylbenzene	ND		3.0		ug/L			10/24/12 17:26	10
Toluene	29		3.0		ug/L			10/24/12 17:26	10
Xylenes, Total	7.0		6.0		ug/L			10/24/12 17:26	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*65 - 135*		*10/24/12 17:26*	*10*

Client Sample ID: F12-09-072

Lab Sample ID: 440-26945-8
Date Collected: 10/17/12 12:10
Matrix: Water
Date Received: 10/17/12 17:35

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/19/12 20:08	1

Client Sample ID: F12-09-073

Lab Sample ID: 440-26945-9
Date Collected: 10/17/12 13:05
Matrix: Water
Date Received: 10/17/12 17:35

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	2000		500		ug/L			10/25/12 04:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*46*	*X*	*65 - 140*		*10/25/12 04:32*	*10*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	29		3.0		ug/L			10/24/12 17:54	10
Ethylbenzene	3.3		3.0		ug/L			10/24/12 17:54	10
Toluene	42		3.0		ug/L			10/24/12 17:54	10
Xylenes, Total	28		6.0		ug/L			10/24/12 17:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*65 - 135*		*10/24/12 17:54*	*10*

Client Sample ID: F12-09-074

Lab Sample ID: 440-26945-10
Date Collected: 10/17/12 13:05
Matrix: Water
Date Received: 10/17/12 17:35

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	19		10		mg/L			10/19/12 00:15	20

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26945-1
SDG: 29875030.20000

Client Sample ID: F12-09-083 — Lab Sample ID: 440-26945-1

Date Collected: 10/17/12 07:30 — **Matrix: Water**
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	61108	10/23/12 19:21	TL	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	61274	10/24/12 00:29	PH	TAL IRV

Client Sample ID: F12-09-060 — Lab Sample ID: 440-26945-2

Date Collected: 10/17/12 09:48 — **Matrix: Water**
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		10	10 mL	10 mL	61274	10/24/12 07:01	PH	TAL IRV
Total/NA	Analysis	8021B		20	10 mL	10 mL	61420	10/24/12 14:09	KS	TAL IRV

Client Sample ID: F12-09-061 — Lab Sample ID: 440-26945-3

Date Collected: 10/17/12 09:48 — **Matrix: Water**
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1 mL	1.0 mL	60351	10/19/12 19:53	NN	TAL IRV

Client Sample ID: F12-09-062 — Lab Sample ID: 440-26945-4

Date Collected: 10/17/12 09:48 — **Matrix: Water**
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	62257	10/27/12 19:15	TN	TAL IRV

Client Sample ID: F12-09-063 — Lab Sample ID: 440-26945-5

Date Collected: 10/17/12 11:09 — **Matrix: Water**
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	10 mL	10 mL	61420	10/24/12 16:58	KS	TAL IRV
Total/NA	Analysis	8015B		10	10 mL	10 mL	61488	10/25/12 03:08	SC	TAL IRV

Client Sample ID: F12-09-064 — Lab Sample ID: 440-26945-6

Date Collected: 10/17/12 11:09 — **Matrix: Water**
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	1 mL	1.0 mL	60053	10/18/12 23:42	CC	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26945-1
SDG: 29875030.20000

Client Sample ID: F12-09-071

Lab Sample ID: 440-26945-7

Date Collected: 10/17/12 12:10
Matrix: Water
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		10	10 mL	10 mL	61274	10/24/12 07:57	PH	TAL IRV
Total/NA	Analysis	8021B		10	10 mL	10 mL	61420	10/24/12 17:26	KS	TAL IRV

Client Sample ID: F12-09-072

Lab Sample ID: 440-26945-8

Date Collected: 10/17/12 12:10
Matrix: Water
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1 mL	1.0 mL	60351	10/19/12 20:08	NN	TAL IRV

Client Sample ID: F12-09-073

Lab Sample ID: 440-26945-9

Date Collected: 10/17/12 13:05
Matrix: Water
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	10 mL	10 mL	61420	10/24/12 17:54	KS	TAL IRV
Total/NA	Analysis	8015B		10	10 mL	10 mL	61488	10/25/12 04:32	SC	TAL IRV

Client Sample ID: F12-09-074

Lab Sample ID: 440-26945-10

Date Collected: 10/17/12 13:05
Matrix: Water
Date Received: 10/17/12 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	1 mL	1.0 mL	60053	10/19/12 00:15	CC	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-62257/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			10/27/12 09:44	1
1,2-Dichloroethane	ND		0.50		ug/L			10/27/12 09:44	1
Ethylbenzene	ND		0.50		ug/L			10/27/12 09:44	1
Methylene Chloride	ND		1.0		ug/L			10/27/12 09:44	1
m,p-Xylene	ND		1.0		ug/L			10/27/12 09:44	1
o-Xylene	ND		0.50		ug/L			10/27/12 09:44	1
Toluene	ND		0.50		ug/L			10/27/12 09:44	1
Xylenes, Total	ND		1.0		ug/L			10/27/12 09:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*10/27/12 09:44*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*10/27/12 09:44*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/27/12 09:44*	*1*

Lab Sample ID: LCS 440-62257/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	23.4		ug/L		93	70 - 120
1,2-Dichloroethane	25.0	24.0		ug/L		96	60 - 140
Ethylbenzene	25.0	24.7		ug/L		99	75 - 125
Methylene Chloride	25.0	21.4		ug/L		86	55 - 130
m,p-Xylene	50.0	54.3		ug/L		109	75 - 125
o-Xylene	25.0	27.2		ug/L		109	75 - 125
Toluene	25.0	25.2		ug/L		101	70 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-27162-A-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62257

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	25.9		ug/L		104	65 - 125
1,2-Dichloroethane	ND		25.0	29.0		ug/L		115	60 - 140
Ethylbenzene	ND		25.0	27.5		ug/L		110	65 - 130
Methylene Chloride	ND		25.0	24.2		ug/L		97	50 - 135
m,p-Xylene	ND		50.0	60.2		ug/L		120	65 - 130
o-Xylene	ND		25.0	30.2		ug/L		121	65 - 125
Toluene	ND		25.0	27.6		ug/L		110	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-27162-A-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62257

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: 440-27162-A-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62257

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	25.0		ug/L		100	65 - 125	4	20
1,2-Dichloroethane	ND		25.0	26.4		ug/L		104	60 - 140	9	20
Ethylbenzene	ND		25.0	26.3		ug/L		105	65 - 130	5	20
Methylene Chloride	ND		25.0	23.4		ug/L		94	50 - 135	3	20
m,p-Xylene	ND		50.0	57.7		ug/L		115	65 - 130	4	25
o-Xylene	ND		25.0	29.0		ug/L		116	65 - 125	4	20
Toluene	ND		25.0	26.5		ug/L		106	70 - 125	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	103		80 - 120

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-61274/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61274

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/23/12 23:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		65 - 140		10/23/12 23:33	1

Lab Sample ID: LCS 440-61274/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61274

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	800	672		ug/L		84	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		65 - 140

Lab Sample ID: 440-27100-B-3 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61274

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	ND		800	679		ug/L		80	65 - 140

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-27100-B-3 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61274

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	138		65 - 140

Lab Sample ID: 440-27100-B-3 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61274

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	648		ug/L		76	65 - 140	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	134		65 - 140

Lab Sample ID: MB 440-61488/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61488

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/24/12 15:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		65 - 140		10/24/12 15:54	1

Lab Sample ID: LCS 440-61488/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61488

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	706		ug/L		88	80 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	139		65 - 140

Lab Sample ID: 440-27388-A-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61488

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	ND		800	644		ug/L		76	65 - 140		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	147	X	65 - 140

Lab Sample ID: 440-27388-A-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61488

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	648		ug/L		76	65 - 140	1	20

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-27388-A-1 MSD
Matrix: Water
Analysis Batch: 61488

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	149	X	65 - 140

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 440-61108/3
Matrix: Water
Analysis Batch: 61108

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/23/12 11:27	1
Ethylbenzene	ND		0.30		ug/L			10/23/12 11:27	1
Toluene	ND		0.30		ug/L			10/23/12 11:27	1
Xylenes, Total	ND		0.60		ug/L			10/23/12 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		65 - 135		10/23/12 11:27	1

Lab Sample ID: LCS 440-61108/2
Matrix: Water
Analysis Batch: 61108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.4		ug/L		102	85 - 115
Ethylbenzene	20.0	19.8		ug/L		99	85 - 115
Toluene	20.0	18.6		ug/L		93	85 - 115
o-Xylene	20.0	18.3		ug/L		91	85 - 115
m,p-Xylene	40.0	37.4		ug/L		94	85 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		65 - 135

Lab Sample ID: 440-26676-C-6 MS
Matrix: Water
Analysis Batch: 61108

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	36		200	185		ug/L		75	60 - 130
Ethylbenzene	15		200	169		ug/L		77	70 - 130
Toluene	34		200	175		ug/L		70	65 - 125
o-Xylene	6.1		200	157		ug/L		76	65 - 125
m,p-Xylene	31		400	317		ug/L		72	65 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		65 - 135

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 440-26676-C-6 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	36		200	199		ug/L		81	60 - 130	7	20
Ethylbenzene	15		200	180		ug/L		83	70 - 130	6	20
Toluene	34		200	187		ug/L		76	65 - 125	7	20
o-Xylene	6.1		200	166		ug/L		80	65 - 125	5	20
m,p-Xylene	31		400	335		ug/L		76	65 - 125	5	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*65 - 135*

Lab Sample ID: MB 440-61420/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/24/12 11:50	1
Ethylbenzene	ND		0.30		ug/L			10/24/12 11:50	1
Toluene	ND		0.30		ug/L			10/24/12 11:50	1
Xylenes, Total	ND		0.60		ug/L			10/24/12 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*65 - 135*		*10/24/12 11:50*	*1*

Lab Sample ID: LCS 440-61420/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	19.0		ug/L		95	85 - 115
Ethylbenzene	20.0	18.5		ug/L		93	85 - 115
Toluene	20.0	18.8		ug/L		94	85 - 115
o-Xylene	20.0	19.5		ug/L		97	85 - 115
m,p-Xylene	40.0	37.1		ug/L		93	85 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*65 - 135*

Lab Sample ID: 440-26945-2 MS — **Client Sample ID: F12-09-060**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	190		400	482		ug/L		74	60 - 130
Ethylbenzene	12		400	309		ug/L		74	70 - 130
Toluene	100		400	400		ug/L		75	65 - 125
o-Xylene	11		400	325		ug/L		79	65 - 125
m,p-Xylene	39		800	630		ug/L		74	65 - 125

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 440-26945-2 MS — **Client Sample ID: F12-09-060**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*65 - 135*

Lab Sample ID: 440-26945-2 MSD — **Client Sample ID: F12-09-060**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	190		400	469		ug/L		70	60 - 130	3	20
Ethylbenzene	12		400	295		ug/L		71	70 - 130	5	20
Toluene	100		400	386		ug/L		71	65 - 125	4	20
o-Xylene	11		400	313		ug/L		76	65 - 125	4	20
m,p-Xylene	39		800	604		ug/L		71	65 - 125	4	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*65 - 135*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-60053/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/18/12 12:58	1

Lab Sample ID: LCS 440-60053/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60053

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	9.45		mg/L		95	90 - 110		

Lab Sample ID: 440-26905-E-12 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	280		100	377		mg/L		100	80 - 120		

Lab Sample ID: 440-26905-E-12 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	280		100	372		mg/L		96	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 440-60351/4
Matrix: Water
Analysis Batch: 60351

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/19/12 10:17	1

Lab Sample ID: LCS 440-60351/2
Matrix: Water
Analysis Batch: 60351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	9.44		mg/L		94	90 - 110		

QC Association Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26945-1
SDG: 29875030.20000

GC/MS VOA

Analysis Batch: 62257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26945-4	F12-09-062	Total/NA	Water	8260B	
440-27162-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-27162-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-62257/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-62257/4	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 61108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26676-C-6 MS	Matrix Spike	Total/NA	Water	8021B	
440-26676-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
440-26945-1	F12-09-083	Total/NA	Water	8021B	
LCS 440-61108/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-61108/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 61274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26945-1	F12-09-083	Total/NA	Water	8015B	
440-26945-2	F12-09-060	Total/NA	Water	8015B	
440-26945-7	F12-09-071	Total/NA	Water	8015B	
440-27100-B-3 MS	Matrix Spike	Total/NA	Water	8015B	
440-27100-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-61274/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-61274/3	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 61420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26945-2	F12-09-060	Total/NA	Water	8021B	
440-26945-2 MS	F12-09-060	Total/NA	Water	8021B	
440-26945-2 MSD	F12-09-060	Total/NA	Water	8021B	
440-26945-5	F12-09-063	Total/NA	Water	8021B	
440-26945-7	F12-09-071	Total/NA	Water	8021B	
440-26945-9	F12-09-073	Total/NA	Water	8021B	
LCS 440-61420/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-61420/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 61488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26945-5	F12-09-063	Total/NA	Water	8015B	
440-26945-9	F12-09-073	Total/NA	Water	8015B	
440-27388-A-1 MS	Matrix Spike	Total/NA	Water	8015B	
440-27388-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-61488/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-61488/3	Method Blank	Total/NA	Water	8015B	

HPLC/IC

Analysis Batch: 60053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26905-E-12 MS	Matrix Spike	Total/NA	Water	300.0	
440-26905-E-12 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 60053 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26945-6	F12-09-064	Total/NA	Water	300.0	
440-26945-10	F12-09-074	Total/NA	Water	300.0	
LCS 440-60053/7	Lab Control Sample	Total/NA	Water	300.0	
MB 440-60053/9	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 60351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26945-3	F12-09-061	Total/NA	Water	300.0	
440-26945-8	F12-09-072	Total/NA	Water	300.0	
LCS 440-60351/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-60351/4	Method Blank	Total/NA	Water	300.0	

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-26945-1
SDG: 29875030.20000

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-13

440-26945

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10 / 17 / 12

Page 1 of 1

☐ Data Requested in GISKey Format

Lab Name: TEST AMERICA

URS Project/PO Number: 29875030.20000

Client Name/Project Name/Location: CHEVRON PCPL Fillmore

~~Gap Tracker Information:~~ SO#15061215

URS Project Manager: DAVID BROD

~~EDF Reporting: Project N Global ID:~~ WBS #NWENV-SFD00056-9403

Sampler Name and Signature: Roger Hardesty

COELT Log Number:

Requested Analyses: 8015M/8021B BTEX/TPH Gasoline; 300.0 Sulfate; 8260B BTEX/Methylene Chloride/1,2-DCA; HOLD

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/8021B BTEX/TPH Gasoline	300.0 Sulfate	8260B BTEX/Methylene Chloride/1,2-DCA	HOLD	Special Instructions:
1	F12-09-083	10-17-12	0730	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
2	F12-09-060		0948	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
3	F12-09-061		0948	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
4	F12-09-062		0948	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3			X		
5	F12-09-063		1109	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
6	F12-09-064		1109	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
7	F12-09-071		1210	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
8	F12-09-072		1210	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			
9	F12-09-073		1305	N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X				
10	F12-09-074		1305	Y	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X			

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardesty	10-17-12/1420	Matt Crump	10-17-12 14:20
Matt Crump	10-17-12 17:35	Tim Soldatbom	10/17/12 1735

Turnaround Time: (Check)
Same Day:____ 72 Hour:____
24 Hour:____ 5 Day:____
48 Hour:____ Standard: X

Lab Use Only
Cooler Temperature*:_____
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

3.6

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-26945-1
SDG Number: 29875030.20000

Login Number: 26945
List Number: 1
Creator: Freitag, Kevin R

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Roger Hardester
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-27116-1
Client Project/Site: Chevron PCPL Fillmore

For:
URS Corporation
310 Golden Shore, Suite 100
Long Beach, California 90802

Attn: David Brod

Authorized for release by:
10/31/2012 5:39:30 PM
Philip Sanelle
Project Manager I
philip.sanelle@testamericainc.com

Designee for

Sushmitha Reddy
Project Manager I
sushmitha.reddy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 8
QC Sample Results 10
QC Association 15
Definitions 16
Certification Summary 17
Chain of Custody 18
Receipt Checklists 19

Sample Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-27116-1	F12-09-084	Water	10/18/12 07:30	10/18/12 17:25
440-27116-2	F12-09-075	Water	10/18/12 09:22	10/18/12 17:25
440-27116-3	F12-09-076	Water	10/18/12 09:22	10/18/12 17:25
440-27116-4	F12-09-023	Water	10/18/12 11:33	10/18/12 17:25
440-27116-5	F12-09-024	Water	10/18/12 11:33	10/18/12 17:25
440-27116-6	F12-09-087	Water	10/18/12 12:20	10/18/12 17:25
440-27116-7	F12-09-027	Water	10/18/12 13:22	10/18/12 17:25
440-27116-8	F12-09-028	Water	10/18/12 13:22	10/18/12 17:25

Case Narrative

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

Job ID: 440-27116-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-27116-1

Comments
No additional comments.

Receipt
The samples were received on 10/18/2012 5:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4º C.

HPLC
Method(s) 300.0: The following sample was diluted for sulfate due to the abundance of chloride: F12-09-076 (440-27116-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA
Method(s) 8015B: Surrogate recovery was outside control limits for the following sample: (440-27388-1 MS), (440-27388-1 MSD). The BFB surrogate coeluted with the LCS standard. Data not impacted.

Method(s) 8015B: Surrogate recovery for the following sample(s) was outside control limits: F12-09-027 (440-27116-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

Client Sample ID: F12-09-084

Lab Sample ID: 440-27116-1
Date Collected: 10/18/12 07:30
Matrix: Water
Date Received: 10/18/12 17:25

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/24/12 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*65 - 140*		*10/24/12 00:10*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/23/12 17:08	1
Ethylbenzene	ND		0.30		ug/L			10/23/12 17:08	1
m-Xylene & p-Xylene	ND		0.60		ug/L			10/23/12 17:08	1
o-Xylene	ND		0.30		ug/L			10/23/12 17:08	1
Toluene	ND		0.30		ug/L			10/23/12 17:08	1
Xylenes, Total	ND		0.60		ug/L			10/23/12 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*65 - 135*		*10/23/12 17:08*	*1*

Client Sample ID: F12-09-075

Lab Sample ID: 440-27116-2
Date Collected: 10/18/12 09:22
Matrix: Water
Date Received: 10/18/12 17:25

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**3100**		2500		ug/L			10/24/12 00:38	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*65 - 140*		*10/24/12 00:38*	*50*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**31**		3.0		ug/L			10/24/12 13:14	10
Ethylbenzene	ND		3.0		ug/L			10/24/12 13:14	10
m-Xylene & p-Xylene	**17**		6.0		ug/L			10/24/12 13:14	10
o-Xylene	ND		3.0		ug/L			10/24/12 13:14	10
Toluene	**60**		3.0		ug/L			10/24/12 13:14	10
Xylenes, Total	**17**		6.0		ug/L			10/24/12 13:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*		*65 - 135*		*10/24/12 13:14*	*10*

Client Sample ID: F12-09-076

Lab Sample ID: 440-27116-3
Date Collected: 10/18/12 09:22
Matrix: Water
Date Received: 10/18/12 17:25

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		10		mg/L			10/20/12 07:05	20

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

Client Sample ID: F12-09-023

Lab Sample ID: 440-27116-4
Date Collected: 10/18/12 11:33
Matrix: Water
Date Received: 10/18/12 17:25

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	96		50		ug/L			10/24/12 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*65 - 140*		*10/24/12 22:56*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.42		0.30		ug/L			10/23/12 16:15	1
Ethylbenzene	ND		0.30		ug/L			10/23/12 16:15	1
m-Xylene & p-Xylene	1.7		0.60		ug/L			10/23/12 16:15	1
o-Xylene	0.85		0.30		ug/L			10/23/12 16:15	1
Toluene	ND		0.30		ug/L			10/23/12 16:15	1
Xylenes, Total	2.6		0.60		ug/L			10/23/12 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*65 - 135*		*10/23/12 16:15*	*1*

Client Sample ID: F12-09-024

Lab Sample ID: 440-27116-5
Date Collected: 10/18/12 11:33
Matrix: Water
Date Received: 10/18/12 17:25

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	19		10		mg/L			10/20/12 07:53	20

Client Sample ID: F12-09-087

Lab Sample ID: 440-27116-6
Date Collected: 10/18/12 12:20
Matrix: Water
Date Received: 10/18/12 17:25

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/24/12 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*65 - 140*		*10/24/12 01:34*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/23/12 15:48	1
Ethylbenzene	ND		0.30		ug/L			10/23/12 15:48	1
m-Xylene & p-Xylene	ND		0.60		ug/L			10/23/12 15:48	1
o-Xylene	ND		0.30		ug/L			10/23/12 15:48	1
Toluene	ND		0.30		ug/L			10/23/12 15:48	1
Xylenes, Total	ND		0.60		ug/L			10/23/12 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*65 - 135*		*10/23/12 15:48*	*1*

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

Client Sample ID: F12-09-027

Lab Sample ID: 440-27116-7

Date Collected: 10/18/12 13:22
Matrix: Water
Date Received: 10/18/12 17:25

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	390		50		ug/L			10/24/12 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*225*	*X*	*65 - 140*		*10/24/12 23:24*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4.2		0.30		ug/L			10/23/12 15:22	1
Ethylbenzene	2.0		0.30		ug/L			10/23/12 15:22	1
m-Xylene & p-Xylene	6.9		0.60		ug/L			10/23/12 15:22	1
o-Xylene	1.3		0.30		ug/L			10/23/12 15:22	1
Toluene	6.8		0.30		ug/L			10/23/12 15:22	1
Xylenes, Total	8.2		0.60		ug/L			10/23/12 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*65 - 135*		*10/23/12 15:22*	*1*

Client Sample ID: F12-09-028

Lab Sample ID: 440-27116-8

Date Collected: 10/18/12 13:22
Matrix: Water
Date Received: 10/18/12 17:25

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	11		10		mg/L			10/20/12 08:09	20

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

Client Sample ID: F12-09-084 — Lab Sample ID: 440-27116-1

Date Collected: 10/18/12 07:30 — **Matrix: Water**
Date Received: 10/18/12 17:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	61108	10/23/12 17:08	TL	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	61211	10/24/12 00:10	PH	TAL IRV

Client Sample ID: F12-09-075 — Lab Sample ID: 440-27116-2

Date Collected: 10/18/12 09:22 — **Matrix: Water**
Date Received: 10/18/12 17:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		50	10 mL	10 mL	61211	10/24/12 00:38	PH	TAL IRV
Total/NA	Analysis	8021B		10	10 mL	10 mL	61420	10/24/12 13:14	KS	TAL IRV

Client Sample ID: F12-09-076 — Lab Sample ID: 440-27116-3

Date Collected: 10/18/12 09:22 — **Matrix: Water**
Date Received: 10/18/12 17:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	1.0 mL	60466	10/20/12 07:05	CC	TAL IRV

Client Sample ID: F12-09-023 — Lab Sample ID: 440-27116-4

Date Collected: 10/18/12 11:33 — **Matrix: Water**
Date Received: 10/18/12 17:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	61108	10/23/12 16:15	TL	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	61488	10/24/12 22:56	SC	TAL IRV

Client Sample ID: F12-09-024 — Lab Sample ID: 440-27116-5

Date Collected: 10/18/12 11:33 — **Matrix: Water**
Date Received: 10/18/12 17:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	1.0 mL	60466	10/20/12 07:53	CC	TAL IRV

Client Sample ID: F12-09-087 — Lab Sample ID: 440-27116-6

Date Collected: 10/18/12 12:20 — **Matrix: Water**
Date Received: 10/18/12 17:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	61108	10/23/12 15:48	TL	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	61211	10/24/12 01:34	PH	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

Client Sample ID: F12-09-027

Lab Sample ID: 440-27116-7

Date Collected: 10/18/12 13:22
Date Received: 10/18/12 17:25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	10 mL	10 mL	61108	10/23/12 15:22	TL	TAL IRV
Total/NA	Analysis	8015B		1	10 mL	10 mL	61488	10/24/12 23:24	SC	TAL IRV

Client Sample ID: F12-09-028

Lab Sample ID: 440-27116-8

Date Collected: 10/18/12 13:22
Date Received: 10/18/12 17:25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	1.0 mL	60466	10/20/12 08:09	CC	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-61211/26 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/23/12 17:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*65 - 140*		*10/23/12 17:15*	*1*

Lab Sample ID: LCS 440-61211/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61211

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	747		ug/L		93	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*65 - 140*

Lab Sample ID: 440-27228-B-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61211

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	1300		4000	5100		ug/L		95	65 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*74*		*65 - 140*

Lab Sample ID: 440-27228-B-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61211

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	1300		4000	5020		ug/L		93	65 - 140	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*73*		*65 - 140*

Lab Sample ID: MB 440-61488/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61488

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/24/12 15:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*65 - 140*		*10/24/12 15:54*	*1*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 440-61488/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61488

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	706		ug/L		88	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*139*		*65 - 140*

Lab Sample ID: 440-27388-A-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61488

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	ND		800	644		ug/L		76	65 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*147*	*X*	*65 - 140*

Lab Sample ID: 440-27388-A-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61488

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	648		ug/L		76	65 - 140	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*149*	*X*	*65 - 140*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 440-61108/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/23/12 11:27	1
Ethylbenzene	ND		0.30		ug/L			10/23/12 11:27	1
m-Xylene & p-Xylene	ND		0.60		ug/L			10/23/12 11:27	1
o-Xylene	ND		0.30		ug/L			10/23/12 11:27	1
Toluene	ND		0.30		ug/L			10/23/12 11:27	1
Xylenes, Total	ND		0.60		ug/L			10/23/12 11:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*65 - 135*		*10/23/12 11:27*	*1*

Lab Sample ID: LCS 440-61108/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			20.0	20.4		ug/L		102	85 - 115		

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 440-61108/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	20.0	19.8		ug/L		99	85 - 115
m-Xylene & p-Xylene	40.0	37.4		ug/L		94	85 - 115
Methyl tert-butyl ether	300	343		ug/L		114	80 - 120
o-Xylene	20.0	18.3		ug/L		91	85 - 115
Toluene	20.0	18.6		ug/L		93	85 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*65 - 135*

Lab Sample ID: 440-26676-C-6 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	36		200	185		ug/L		75	60 - 130
Ethylbenzene	15		200	169		ug/L		77	70 - 130
m-Xylene & p-Xylene	31		400	317		ug/L		72	65 - 125
Methyl tert-butyl ether	ND		3000	2500		ug/L		82	60 - 135
o-Xylene	6.1		200	157		ug/L		76	65 - 125
Toluene	34		200	175		ug/L		70	65 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*65 - 135*

Lab Sample ID: 440-26676-C-6 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61108

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	36		200	199		ug/L		81	60 - 130	7	20
Ethylbenzene	15		200	180		ug/L		83	70 - 130	6	20
m-Xylene & p-Xylene	31		400	335		ug/L		76	65 - 125	5	25
Methyl tert-butyl ether	ND		3000	2900		ug/L		95	60 - 135	15	25
o-Xylene	6.1		200	166		ug/L		80	65 - 125	5	20
Toluene	34		200	187		ug/L		76	65 - 125	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*65 - 135*

Lab Sample ID: MB 440-61420/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/24/12 11:50	1
Ethylbenzene	ND		0.30		ug/L			10/24/12 11:50	1
m-Xylene & p-Xylene	ND		0.60		ug/L			10/24/12 11:50	1
o-Xylene	ND		0.30		ug/L			10/24/12 11:50	1
Toluene	ND		0.30		ug/L			10/24/12 11:50	1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 440-61420/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.60		ug/L			10/24/12 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*65 - 135*		*10/24/12 11:50*	*1*

Lab Sample ID: LCS 440-61420/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	19.0		ug/L		95	85 - 115
Ethylbenzene	20.0	18.5		ug/L		93	85 - 115
m-Xylene & p-Xylene	40.0	37.1		ug/L		93	85 - 115
Methyl tert-butyl ether	300	247		ug/L		82	80 - 120
o-Xylene	20.0	19.5		ug/L		97	85 - 115
Toluene	20.0	18.8		ug/L		94	85 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*65 - 135*

Lab Sample ID: 440-26945-B-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	190		400	482		ug/L		74	60 - 130
Ethylbenzene	12		400	309		ug/L		74	70 - 130
m-Xylene & p-Xylene	39		800	630		ug/L		74	65 - 125
Methyl tert-butyl ether	ND		6000	4370		ug/L		71	60 - 135
o-Xylene	11		400	325		ug/L		79	65 - 125
Toluene	100		400	400		ug/L		75	65 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*65 - 135*

Lab Sample ID: 440-26945-B-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	190		400	469		ug/L		70	60 - 130	3	20
Ethylbenzene	12		400	295		ug/L		71	70 - 130	5	20
m-Xylene & p-Xylene	39		800	604		ug/L		71	65 - 125	4	25
Methyl tert-butyl ether	ND		6000	4290		ug/L		70	60 - 135	2	25
o-Xylene	11		400	313		ug/L		76	65 - 125	4	20
Toluene	100		400	386		ug/L		71	65 - 125	4	20

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 440-26945-B-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61420

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*65 - 135*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-60466/21 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60466

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/19/12 21:25	1

Lab Sample ID: LCS 440-60466/20 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60466

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	9.85		mg/L		98	90 - 110		

Lab Sample ID: 440-26948-B-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60466

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	0.87		10.0	10.5		mg/L		96	80 - 120		

Lab Sample ID: 440-26948-B-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60466

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	0.87		10.0	10.3		mg/L		95	80 - 120	1	20

QC Association Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

GC VOA

Analysis Batch: 61108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26676-C-6 MS	Matrix Spike	Total/NA	Water	8021B	
440-26676-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
440-27116-1	F12-09-084	Total/NA	Water	8021B	
440-27116-4	F12-09-023	Total/NA	Water	8021B	
440-27116-6	F12-09-087	Total/NA	Water	8021B	
440-27116-7	F12-09-027	Total/NA	Water	8021B	
LCS 440-61108/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-61108/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 61211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27116-1	F12-09-084	Total/NA	Water	8015B	
440-27116-2	F12-09-075	Total/NA	Water	8015B	
440-27116-6	F12-09-087	Total/NA	Water	8015B	
440-27228-B-1 MS	Matrix Spike	Total/NA	Water	8015B	
440-27228-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-61211/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-61211/26	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 61420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26945-B-2 MS	Matrix Spike	Total/NA	Water	8021B	
440-26945-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
440-27116-2	F12-09-075	Total/NA	Water	8021B	
LCS 440-61420/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-61420/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 61488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27116-4	F12-09-023	Total/NA	Water	8015B	
440-27116-7	F12-09-027	Total/NA	Water	8015B	
440-27388-A-1 MS	Matrix Spike	Total/NA	Water	8015B	
440-27388-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-61488/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-61488/3	Method Blank	Total/NA	Water	8015B	

HPLC/IC

Analysis Batch: 60466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-26948-B-2 MS	Matrix Spike	Total/NA	Water	300.0	
440-26948-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
440-27116-3	F12-09-076	Total/NA	Water	300.0	
440-27116-5	F12-09-024	Total/NA	Water	300.0	
440-27116-8	F12-09-028	Total/NA	Water	300.0	
LCS 440-60466/20	Lab Control Sample	Total/NA	Water	300.0	
MB 440-60466/21	Method Blank	Total/NA	Water	300.0	

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27116-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-13

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10/18/12

Page 1 of 1

440-27116

☐ Data Requested in GISKey Format

Lab Name: TEST America
URS Project/PO Number: 29875030.20000
Client Name/Project Name/Location: Chevron FCPL Fillmore
~~Geo Tracker Information:~~ 50# 15061215
URS Project Manager: David BRod
~~EDF Reporting: Y N~~ Global ID: WBS# NVWENV-SFD00056-9403
Sampler Name and Signature: Roger Hardesty
COELT Log Number:

Requested Analyses: 8015m/8021B BTEX/TPH Gas w/ Diesel; 300.0 Sol/Fuel; HOLD; Special Instructions:

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015m/8021B BTEX/TPH Gas w/ Diesel	300.0 Sol/Fuel
1	F12-09-084	10-18-12	0730	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X	
	F12-09-075		0922	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X	
	F12-09-076		0922	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X
	F12-09-023		1133	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X	
5	F12-09-024		1133	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X
6	F12-09-087		1220	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X	
7	F12-09-027		1322	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X	
8	F12-09-028		1322	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X
9				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA			
10				Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA			

Relinquished By:	Date:	Received By:	Date/Time:
[signature]	10-18-12 1420	[signature]	10-8-12 14:20
Matt [signature]	10-18-12 17:25	Tim [signature]	10/18/12 1725

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: 1.6°C
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-27116-1

Login Number: 27116

List Source: TestAmerica Irvine

List Number: 1

Creator: Chavez, Elizabeth

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Roger H.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-27237-1
TestAmerica Sample Delivery Group: 29875030.20000
Client Project/Site: Chevron PCPL Fillmore
Revision: 1

For:
URS Corporation
310 Golden Shore, Suite 100
Long Beach, California 90802

Attn: David Brod

Authorized for release by:
11/6/2012 8:51:52 AM

Sushmitha Reddy
Project Manager I
sushmitha.reddy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 8
QC Sample Results 10
QC Association 16
Definitions 18
Certification Summary 19
Chain of Custody 20
Receipt Checklists 21

Sample Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27237-1
SDG: 29875030.20000

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-27237-1	F12-09-085	Water	10/19/12 07:30	10/19/12 19:45
440-27237-2	F12-09-067	Water	10/19/12 11:15	10/19/12 19:45
440-27237-3	F12-09-068	Water	10/19/12 11:15	10/19/12 19:45
440-27237-4	F12-09-069	Water	10/19/12 11:35	10/19/12 19:45
440-27237-5	F12-09-070	Water	10/19/12 11:35	10/19/12 19:45
440-27237-6	F12-09-088	Water	10/19/12 12:03	10/19/12 19:45
440-27237-7	F12-09-033	Water	10/19/12 13:06	10/19/12 19:45
440-27237-8	F12-09-034	Water	10/19/12 13:06	10/19/12 19:45
440-27237-9	F12-09-065	Water	10/19/12 15:23	10/19/12 19:45
440-27237-10	F12-09-066	Water	10/19/12 15:23	10/19/12 19:45

Job ID: 440-27237-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-27237-1

Comments
The report is reissued without MTBE and speciated xylene results to be consistent with project requirements.

Receipt
The samples were received on 10/19/2012 7:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

HPLC
No analytical or quality issues were noted.

GC VOA
Method(s) 8015B: Surrogate recovery for the following sample(s) was outside control limits: F12-09-067 (440-27237-2), F12-09-067 (440-27237-2 MS), F12-09-067 (440-27237-2 MSD).
Re-analysis was performed with concurring results. This analysis has been reported.

Method(s) 8015B: Surrogate recovery for the following sample(s) was outside control limits: F12-09-033 (440-27237-7), F12-09-065 (440-27237-9), F12-09-069 (440-27237-4). Re-analysis was performed with concurring results. The re-analysis has been reported.

Method(s) 8021B: The following sample(s) submitted for volatiles analysis was received with insufficient preservation (pH >2): (440-28059-2 MS), (440-28059-2 MSD). pH=7

Method(s) 8021B: Surrogate recovery for the following sample(s) was outside control limits: F12-09-033 (440-27237-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27237-1
SDG: 29875030.20000

Client Sample ID: F12-09-085

Lab Sample ID: 440-27237-1

Date Collected: 10/19/12 07:30
Matrix: Water
Date Received: 10/19/12 19:45

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/29/12 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*65 - 140*		*10/29/12 23:17*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/29/12 14:06	1
Ethylbenzene	ND		0.30		ug/L			10/29/12 14:06	1
Toluene	ND		0.30		ug/L			10/29/12 14:06	1
Xylenes, Total	ND		0.60		ug/L			10/29/12 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*65 - 135*		*10/29/12 14:06*	*1*

Client Sample ID: F12-09-067

Lab Sample ID: 440-27237-2

Date Collected: 10/19/12 11:15
Matrix: Water
Date Received: 10/19/12 19:45

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**2600**		1000		ug/L			10/25/12 20:18	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*62*	*X*	*65 - 140*		*10/25/12 20:18*	*20*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**24**		3.0		ug/L			10/29/12 14:34	10
Ethylbenzene	**3.7**		3.0		ug/L			10/29/12 14:34	10
Toluene	**28**		3.0		ug/L			10/29/12 14:34	10
Xylenes, Total	**18**		6.0		ug/L			10/29/12 14:34	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*65 - 135*		*10/29/12 14:34*	*10*

Client Sample ID: F12-09-068

Lab Sample ID: 440-27237-3

Date Collected: 10/19/12 11:15
Matrix: Water
Date Received: 10/19/12 19:45

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/22/12 20:25	1

Client Sample ID: F12-09-069

Lab Sample ID: 440-27237-4

Date Collected: 10/19/12 11:35
Matrix: Water
Date Received: 10/19/12 19:45

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**2400**		500		ug/L			10/31/12 03:25	10

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27237-1
SDG: 29875030.20000

Client Sample ID: F12-09-069

Lab Sample ID: 440-27237-4
Date Collected: 10/19/12 11:35
Matrix: Water
Date Received: 10/19/12 19:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	39	X	65 - 140		10/31/12 03:25	10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	26		3.0		ug/L			10/29/12 15:58	10
Ethylbenzene	4.0		3.0		ug/L			10/29/12 15:58	10
Toluene	28		3.0		ug/L			10/29/12 15:58	10
Xylenes, Total	20		6.0		ug/L			10/29/12 15:58	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		65 - 135		10/29/12 15:58	10

Client Sample ID: F12-09-070

Lab Sample ID: 440-27237-5
Date Collected: 10/19/12 11:35
Matrix: Water
Date Received: 10/19/12 19:45

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/22/12 20:41	1

Client Sample ID: F12-09-088

Lab Sample ID: 440-27237-6
Date Collected: 10/19/12 12:03
Matrix: Water
Date Received: 10/19/12 19:45

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/30/12 00:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		65 - 140		10/30/12 00:12	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/31/12 11:06	1
Ethylbenzene	ND		0.30		ug/L			10/31/12 11:06	1
Toluene	0.35		0.30		ug/L			10/31/12 11:06	1
Xylenes, Total	ND		0.60		ug/L			10/31/12 11:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		65 - 135		10/31/12 11:06	1

Client Sample ID: F12-09-033

Lab Sample ID: 440-27237-7
Date Collected: 10/19/12 13:06
Matrix: Water
Date Received: 10/19/12 19:45

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	2100		500		ug/L			10/31/12 03:53	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	42	X	65 - 140		10/31/12 03:53	10

Client Sample Results

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27237-1
SDG: 29875030.20000

Client Sample ID: F12-09-033

Lab Sample ID: 440-27237-7
Date Collected: 10/19/12 13:06
Matrix: Water
Date Received: 10/19/12 19:45

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.60		ug/L			10/31/12 12:17	2
Ethylbenzene	**1.9**		0.60		ug/L			10/31/12 12:17	2
Toluene	**1.2**		0.60		ug/L			10/31/12 12:17	2
Xylenes, Total	ND		1.2		ug/L			10/31/12 12:17	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*224*	*X*	*65 - 135*		*10/31/12 12:17*	*2*

Client Sample ID: F12-09-034

Lab Sample ID: 440-27237-8
Date Collected: 10/19/12 13:06
Matrix: Water
Date Received: 10/19/12 19:45

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**780**		25		mg/L			10/24/12 20:30	50

Client Sample ID: F12-09-065

Lab Sample ID: 440-27237-9
Date Collected: 10/19/12 15:23
Matrix: Water
Date Received: 10/19/12 19:45

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	**7400**		1000		ug/L			10/31/12 04:21	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*54*	*X*	*65 - 140*		*10/31/12 04:21*	*20*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**110**		3.0		ug/L			10/29/12 17:22	10
Ethylbenzene	**24**		3.0		ug/L			10/29/12 17:22	10
Toluene	**120**		3.0		ug/L			10/29/12 17:22	10
Xylenes, Total	**160**		6.0		ug/L			10/29/12 17:22	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*65 - 135*		*10/29/12 17:22*	*10*

Client Sample ID: F12-09-066

Lab Sample ID: 440-27237-10
Date Collected: 10/19/12 15:23
Matrix: Water
Date Received: 10/19/12 19:45

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**32**		0.50		mg/L			10/22/12 21:13	1

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27237-1
SDG: 29875030.20000

Client Sample ID: F12-09-085 — Lab Sample ID: 440-27237-1

Date Collected: 10/19/12 07:30 — **Matrix: Water**
Date Received: 10/19/12 19:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	10 mL	10 mL	62394	10/29/12 23:17	SC	TAL IRV
Total/NA	Analysis	8021B		1	10 mL	10 mL	62518	10/29/12 14:06	TL	TAL IRV

Client Sample ID: F12-09-067 — Lab Sample ID: 440-27237-2

Date Collected: 10/19/12 11:15 — **Matrix: Water**
Date Received: 10/19/12 19:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		20	10 mL	10 mL	61709	10/25/12 20:18	TL	TAL IRV
Total/NA	Analysis	8021B		10	10 mL	10 mL	62518	10/29/12 14:34	TL	TAL IRV

Client Sample ID: F12-09-068 — Lab Sample ID: 440-27237-3

Date Collected: 10/19/12 11:15 — **Matrix: Water**
Date Received: 10/19/12 19:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1 mL	1.0 mL	60794	10/22/12 20:25	KS	TAL IRV

Client Sample ID: F12-09-069 — Lab Sample ID: 440-27237-4

Date Collected: 10/19/12 11:35 — **Matrix: Water**
Date Received: 10/19/12 19:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	10 mL	10 mL	62518	10/29/12 15:58	TL	TAL IRV
Total/NA	Analysis	8015B		10	10 mL	10 mL	62799	10/31/12 03:25	SC	TAL IRV

Client Sample ID: F12-09-070 — Lab Sample ID: 440-27237-5

Date Collected: 10/19/12 11:35 — **Matrix: Water**
Date Received: 10/19/12 19:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1 mL	1.0 mL	60794	10/22/12 20:41	KS	TAL IRV

Client Sample ID: F12-09-088 — Lab Sample ID: 440-27237-6

Date Collected: 10/19/12 12:03 — **Matrix: Water**
Date Received: 10/19/12 19:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	10 mL	10 mL	62394	10/30/12 00:12	SC	TAL IRV
Total/NA	Analysis	8021B		1	10 mL	10 mL	63128	10/31/12 11:06	KS	TAL IRV

Lab Chronicle

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27237-1
SDG: 29875030.20000

Client Sample ID: F12-09-033

Lab Sample ID: 440-27237-7

Date Collected: 10/19/12 13:06
Date Received: 10/19/12 19:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		10	10 mL	10 mL	62799	10/31/12 03:53	SC	TAL IRV
Total/NA	Analysis	8021B		2	10 mL	10 mL	63128	10/31/12 12:17	KS	TAL IRV

Client Sample ID: F12-09-034

Lab Sample ID: 440-27237-8

Date Collected: 10/19/12 13:06
Date Received: 10/19/12 19:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	1 mL	1.0 mL	61378	10/24/12 20:30	NN	TAL IRV

Client Sample ID: F12-09-065

Lab Sample ID: 440-27237-9

Date Collected: 10/19/12 15:23
Date Received: 10/19/12 19:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	10 mL	10 mL	62518	10/29/12 17:22	TL	TAL IRV
Total/NA	Analysis	8015B		20	10 mL	10 mL	62799	10/31/12 04:21	SC	TAL IRV

Client Sample ID: F12-09-066

Lab Sample ID: 440-27237-10

Date Collected: 10/19/12 15:23
Date Received: 10/19/12 19:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	1 mL	1.0 mL	60794	10/22/12 21:13	KS	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 440-61709/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61709

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/25/12 16:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*65 - 140*		*10/25/12 16:12*	*1*

Lab Sample ID: LCS 440-61709/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61709

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	800	687		ug/L		86	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*65 - 140*

Lab Sample ID: 440-27237-2 MS — **Client Sample ID: F12-09-067**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61709

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	2600		16000	17900		ug/L		95	65 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*64*	*X*	*65 - 140*

Lab Sample ID: 440-27237-2 MSD — **Client Sample ID: F12-09-067**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61709

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	2600		16000	17400		ug/L		93	65 - 140	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*60*	*X*	*65 - 140*

Lab Sample ID: MB 440-62394/23 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62394

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/29/12 20:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*65 - 140*		*10/29/12 20:12*	*1*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 440-62394/25 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62394

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	721		ug/L		90	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*65 - 140*

Lab Sample ID: 440-27946-A-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62394

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)	ND		800	676		ug/L		84	65 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*65 - 140*

Lab Sample ID: 440-27946-A-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62394

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	ND		800	674		ug/L		84	65 - 140	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*65 - 140*

Lab Sample ID: MB 440-62799/31 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			10/31/12 01:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*65 - 140*		*10/31/12 01:35*	*1*

Lab Sample ID: LCS 440-62799/30 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62799

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
GRO (C4-C12)			800	665		ug/L		83	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*65 - 140*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 440-27862-A-11 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62799

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C4-C12)	370		800	1010		ug/L		80	65 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*65 - 140*

Lab Sample ID: 440-27862-A-11 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62799

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C4-C12)	370		800	991		ug/L		78	65 - 140	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*123*		*65 - 140*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 440-62518/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62518

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/29/12 13:26	1
Ethylbenzene	ND		0.30		ug/L			10/29/12 13:26	1
Toluene	ND		0.30		ug/L			10/29/12 13:26	1
Xylenes, Total	ND		0.60		ug/L			10/29/12 13:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*65 - 135*		*10/29/12 13:26*	*1*

Lab Sample ID: LCS 440-62518/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.1		ug/L		101	85 - 115
Ethylbenzene	20.0	19.1		ug/L		96	85 - 115
m-Xylene & p-Xylene	40.0	38.7		ug/L		97	85 - 115
o-Xylene	20.0	20.2		ug/L		101	85 - 115
Toluene	20.0	19.6		ug/L		98	85 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*65 - 135*

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 440-27237-2 MS — **Client Sample ID: F12-09-067**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62518

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	24		200	184		ug/L		80	60 - 130
Ethylbenzene	3.7		200	156		ug/L		76	70 - 130
m-Xylene & p-Xylene	10		400	313		ug/L		76	65 - 125
o-Xylene	7.8		200	167		ug/L		80	65 - 125
Toluene	28		200	182		ug/L		77	65 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*132*		*65 - 135*

Lab Sample ID: 440-27237-2 MSD — **Client Sample ID: F12-09-067**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 62518

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	24		200	195		ug/L		85	60 - 130	6	20
Ethylbenzene	3.7		200	157		ug/L		77	70 - 130	1	20
m-Xylene & p-Xylene	10		400	318		ug/L		77	65 - 125	2	25
o-Xylene	7.8		200	170		ug/L		81	65 - 125	1	20
Toluene	28		200	185		ug/L		79	65 - 125	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*65 - 135*

Lab Sample ID: MB 440-63128/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 63128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.30		ug/L			10/31/12 10:25	1
Ethylbenzene	ND		0.30		ug/L			10/31/12 10:25	1
Toluene	ND		0.30		ug/L			10/31/12 10:25	1
Xylenes, Total	ND		0.60		ug/L			10/31/12 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*65 - 135*		*10/31/12 10:25*	*1*

Lab Sample ID: LCS 440-63128/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 63128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.4		ug/L		102	85 - 115
Ethylbenzene	20.0	19.5		ug/L		98	85 - 115
m-Xylene & p-Xylene	40.0	39.9		ug/L		100	85 - 115
o-Xylene	20.0	20.7		ug/L		103	85 - 115
Toluene	20.0	20.4		ug/L		102	85 - 115

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 440-63128/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 63128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*65 - 135*

Lab Sample ID: 440-28059-B-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 63128

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	270		400	664		ug/L		98	60 - 130
Ethylbenzene	29		400	412		ug/L		96	70 - 130
m-Xylene & p-Xylene	250		800	1010		ug/L		95	65 - 125
o-Xylene	150		400	533		ug/L		95	65 - 125
Toluene	440		400	821		ug/L		95	65 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*65 - 135*

Lab Sample ID: 440-28059-B-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 63128

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	270		400	700		ug/L		107	60 - 130	5	20
Ethylbenzene	29		400	436		ug/L		102	70 - 130	6	20
m-Xylene & p-Xylene	250		800	1070		ug/L		103	65 - 125	6	25
o-Xylene	150		400	565		ug/L		103	65 - 125	6	20
Toluene	440		400	865		ug/L		106	65 - 125	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*65 - 135*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-60794/8 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/22/12 12:11	1

Lab Sample ID: LCS 440-60794/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.92		mg/L		99	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-27237-3 MS — **Client Sample ID: F12-09-068**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60794

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	ND		10.0	10.8		mg/L		104	80 - 120		

Lab Sample ID: 440-27237-3 MSD — **Client Sample ID: F12-09-068**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 60794

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	ND		10.0	10.8		mg/L		104	80 - 120	0	20

Lab Sample ID: MB 440-61378/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61378

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/24/12 09:58	1

Lab Sample ID: LCS 440-61378/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61378

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	10.0		mg/L		100	90 - 110		

Lab Sample ID: 440-27441-L-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61378

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	62		100	161		mg/L		99	80 - 120		

Lab Sample ID: 440-27441-L-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 61378

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	62		100	155		mg/L		94	80 - 120	3	20

QC Association Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27237-1
SDG: 29875030.20000

GC VOA

Analysis Batch: 61709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27237-2	F12-09-067	Total/NA	Water	8015B	
440-27237-2 MS	F12-09-067	Total/NA	Water	8015B	
440-27237-2 MSD	F12-09-067	Total/NA	Water	8015B	
LCS 440-61709/2	Lab Control Sample	Total/NA	Water	8015B	
MB 440-61709/3	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 62394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27237-1	F12-09-085	Total/NA	Water	8015B	
440-27237-6	F12-09-088	Total/NA	Water	8015B	
440-27946-A-1 MS	Matrix Spike	Total/NA	Water	8015B	
440-27946-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-62394/25	Lab Control Sample	Total/NA	Water	8015B	
MB 440-62394/23	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 62518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27237-1	F12-09-085	Total/NA	Water	8021B	
440-27237-2	F12-09-067	Total/NA	Water	8021B	
440-27237-2 MS	F12-09-067	Total/NA	Water	8021B	
440-27237-2 MSD	F12-09-067	Total/NA	Water	8021B	
440-27237-4	F12-09-069	Total/NA	Water	8021B	
440-27237-9	F12-09-065	Total/NA	Water	8021B	
LCS 440-62518/3	Lab Control Sample	Total/NA	Water	8021B	
MB 440-62518/4	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 62799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27237-4	F12-09-069	Total/NA	Water	8015B	
440-27237-7	F12-09-033	Total/NA	Water	8015B	
440-27237-9	F12-09-065	Total/NA	Water	8015B	
440-27862-A-11 MS	Matrix Spike	Total/NA	Water	8015B	
440-27862-A-11 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	
LCS 440-62799/30	Lab Control Sample	Total/NA	Water	8015B	
MB 440-62799/31	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 63128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27237-6	F12-09-088	Total/NA	Water	8021B	
440-27237-7	F12-09-033	Total/NA	Water	8021B	
440-28059-B-2 MS	Matrix Spike	Total/NA	Water	8021B	
440-28059-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
LCS 440-63128/2	Lab Control Sample	Total/NA	Water	8021B	
MB 440-63128/3	Method Blank	Total/NA	Water	8021B	

HPLC/IC

Analysis Batch: 60794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27237-3	F12-09-068	Total/NA	Water	300.0	
440-27237-3 MS	F12-09-068	Total/NA	Water	300.0	
440-27237-3 MSD	F12-09-068	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 60794 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27237-5	F12-09-070	Total/NA	Water	300.0	
440-27237-10	F12-09-066	Total/NA	Water	300.0	
LCS 440-60794/7	Lab Control Sample	Total/NA	Water	300.0	
MB 440-60794/8	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 61378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-27237-8	F12-09-034	Total/NA	Water	300.0	
440-27441-L-1 MS	Matrix Spike	Total/NA	Water	300.0	
440-27441-L-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 440-61378/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-61378/3	Method Blank	Total/NA	Water	300.0	

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
RER	Relative error ratio
DER	Duplicate error ratio (normalized absolute difference)
DLC	Decision level concentration
RL	Reporting Limit or Requested Limit (Radiochemistry only)

Certification Summary

Client: URS Corporation
Project/Site: Chevron PCPL Fillmore

TestAmerica Job ID: 440-27237-1
SDG: 29875030.20000

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-13

URS CORPORATION
2020 East First Street, Suite 400
Santa Ana, CA 92705
(714) 835-6886
FAX (714) 667-7147

CHAIN OF CUSTODY RECORD

Date: 10 / 19 / 12

Page 1 of 1

440-27237

☐ Data Requested in GISKey Format

Lab Name: TEST America
URS Project/PO Number: 29875030.20000
Client Name/Project Name/Location: Chevron PCPL Fillmore
~~Geo Tracker Information:~~ SO# 15061215
URS Project Manager: DAVID BROD
~~ESDF Reporting: Y or N Global ID:~~ WBS# NWENV-SFD00056-9403
Sampler Name and Signature: Roger Hardesty
COELT Log Number:

Requested Analyses: 8015M/8021B BTEX/TPH-GRO (Lab) 3 DD. O SO (Lab)

	Sample Name	Sample Date:	Sample Time:	Preserved:	Matrix:	Container type:	# of Cont.:	8015M/8021B BTEX/TPH-GRO (Lab)	3 DD. O SO (Lab)	HOLD	Special Instructions:
1	F12-09-085	10-19-12	0730	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X			
2	F12-09-067		1115	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	5	X			MS/MSD
3	F12-09-068		1115	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X		MS/MSD
4	F12-09-069		1135	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X			
5	F12-09-070		1135	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X		
6	F12-09-088		1203	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X			
7	F12-09-033		1306	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X			
8	F12-09-034		1306	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X		
9	F12-09-065		1523	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	3	X			
10	F12-09-066		1523	Y N	S L G	Acetate SS. Brass Jar Encore ____ml Amb. Plas. Glass VOA	1		X		

Relinquished By:	Date:	Received By:	Date/Time:
Roger Hardesty	10-19-12 1535	[illegible]	10-19-12 15:35
[illegible]	10-19-12 19:45	[illegible]	10/19/12 19:45

Turnaround Time: (Check)
Same Day: ____ 72 Hour: ____
24 Hour: ____ 5 Day: ____
48 Hour: ____ Standard: X

Lab Use Only
Cooler Temperature*: 2.8°C
*Record upon arrival

URS

S=Solid L=Liquid G=Gas

White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 440-27237-1
SDG Number: 29875030.20000

Login Number: 27237
List Number: 1
Creator: Escalante, Maria

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	ROGER H.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Appendix F

Historical Analytical Results

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
EW-01	05/19/93	ug/l	370	93	13	58	EPA 8020
	05/19/93	ug/l	510	160	21	83	EPA 8240
	05/13/94	ug/l	400	93	8.5	80	EPA 8020
	08/12/94	ug/l	380	70	10	77	EPA 8020
	11/14/94	ug/l	270 J	50 J	12 J	68 J	EPA 8020
	02/09/95	ug/l	470	130	18	97	EPA 8020
	05/11/95	ug/l	450	140	<30	100	EPA 8020
	08/08/95	ug/l	510 J	160 J	22 J	120 J	EPA 8020
	11/06/95	ug/l	200 J	56 J	8.7 J	53 J	EPA 8020
	12/11/95	ug/l	430 J	70 J	<9.9	74 J	EPA 8020
	01/25/96	ug/l	420	63	<9.9	68	EPA 8020
	02/10/96	ug/l	250	61	21	67	EPA 8020
	03/05/96	ug/l	360 J	61 J	12 J	63 J	EPA 8020
	04/16/96	ug/l	300 J	63 J	13 J	70 J	EPA 8020
	05/21/96	ug/l	330	63	12	67	EPA 8020
	06/12/96	ug/l	280	80	21	54	EPA 8020
	07/11/96	ug/l	240	69	19	70	EPA 8020
	08/13/96	ug/l	280	58	36	70	EPA 8020
	09/10/96	ug/l	540	85	<30	62	EPA 8020
	10/10/96	ug/l	360	71	43	69	EPA 8020
	11/07/96	ug/l	390	49	7.9	51	EPA 8020
	02/21/97	ug/l	350 J	64 J	14 J	64 J	EPA 8020
	05/14/97	ug/l	370	100	<15	68	EPA 8020
	08/12/97	ug/l	250 J	60 J	13 J	58 J	EPA 8020
	11/28/97	ug/l	220 J	52 J	8.5 J	46 J	EPA 8020
	02/27/98	ug/l	218 J	60.8 J	13.3 J	63.2 J	EPA 8020
	05/13/98	ug/l	187	40.5	7.2	30.5	EPA 8020
	08/30/98	ug/l	341	78	<15	88	EPA 8020
	11/30/98	ug/l	245	50	8.0	53	EPA 8020
	02/17/99	ug/l	208	43	9.0	50	EPA 8021B
	06/04/99	ug/l	212	44.1	5.2	46.4	EPA 8021B
	08/23/99	ug/l	140	28	8.3	31	EPA 8021B
	11/30/99	ug/l	150	31	7.9	39	EPA 8021B
	02/18/00	ug/l	170	38	8.8	55	EPA 8021B
	06/05/00	ug/l	150 J	37 J	8.2 J	41 J	EPA 8021B
	08/23/00	ug/l	130	30	6.7	36	EPA 8021B
	11/17/00	ug/l	140	31	5.9	37	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
EW-01	02/15/01	ug/l	150	34	8.2	40	EPA 8021B
	05/28/01	ug/l	150	69	52	56	EPA 8021B
	08/12/01	ug/l	190	49	<7.5	39	EPA 8021B
	11/12/01	ug/l	140	33	9.7	51	EPA 8021B
	02/28/02	ug/l	110	32	10	41	EPA 8021B
	05/27/02	ug/l	82	20	5.0	38	EPA 8021B
	08/19/02	ug/l	60	20	7.6	27	EPA 8021B
	12/10/02	ug/l	39 J	14 J	1.9 J	12 J	EPA 8021B
	02/26/03	ug/l	77 J	36 J	<6.0	33 J	EPA 8021B
	05/24/03	ug/l	53	19	5.7	23	EPA 8021B
	08/26/03	ug/l	170	140	23	180	EPA 8021B
	11/24/03	ug/l	3.6 J	2.3 J	1.8 J	4.2 J	EPA 8021B
	02/29/04	ug/l	1.3	0.97	1.1	3.3	EPA 8021B
	05/20/04	ug/l	36 J	54 J	13 J	67 J	EPA 8021B
	08/22/04	ug/l	11 J	9.1 J	<1.5	15 J	EPA 8021B
	12/12/04	ug/l	1.2 J	0.39 J	1.3 J	2.6 J	EPA 8021B
	03/11/05	ug/l	220 J	120 J	17 J	65 J	EPA 8021B
EW-02	06/20/94	ug/l	330	100	28	<24	EPA 8020
	06/20/94	ug/l	230	17	4.9	16	EPA 8240
	08/12/94	ug/l	55	3.6	<1.5	11	EPA 8020
	11/09/94	ug/l	410 J	31 J	<6.0	38 J	EPA 8020
	02/10/95	ug/l	57 J	9.5 J	<1.5	12 J	EPA 8020
	05/12/95	ug/l	11 J	5.7 J	<1.5	9.2 J	EPA 8020
	08/08/95	ug/l	34 J	10 J	2.2 J	22 J	EPA 8020
	11/06/95	ug/l	110	17	2.8	27	EPA 8020
	11/06/95	ug/l	130	16	<10	<10	EPA 8240
	12/11/95	ug/l	16 J	2.9 J	<0.60	7.5 J	EPA 8020
	01/25/96	ug/l	48 J	6.1 J	<1.5	13 J	EPA 8020
	02/10/96	ug/l	24	3.5	<3.0	<6.0	EPA 8020
	03/05/96	ug/l	34 J	3.1 J	0.68 J	8.2 J	EPA 8020
	04/16/96	ug/l	22 J	2.1 J	<1.0	7.6 J	EPA 8020
	05/21/96	ug/l	34	4.1	1.2	7.6	EPA 8020
	06/12/96	ug/l	30 J	16 J	8.8 J	16 J	EPA 8020
	07/11/96	ug/l	13 J	2.4 J	0.40 J	4.0 J	EPA 8020
	08/13/96	ug/l	3.8	1.8	<0.30	7.0	EPA 8020
	09/10/96	ug/l	3.8	1.8	<1.5	3.1	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
EW-02	10/10/96	ug/l	2.5	2.4	2.3	7.9	EPA 8020
	11/07/96	ug/l	3.4 J	1.9 J	<0.30	3.2 J	EPA 8020
	11/07/96	ug/l	<5.0	<5.0	<5.0	<5.0	EPA 8240
	02/21/97	ug/l	13	<6.0	<6.0	<12	EPA 8020
	05/15/97	ug/l	53	19	<6.0	26	EPA 8020
	11/28/97	ug/l	0.72	<0.30	0.58	7.3	EPA 8020
	05/16/98	ug/l	0.3	<0.3	<0.3	<0.6	EPA 8020
	11/28/98	ug/l	0.8	0.4	<0.3	3.3	EPA 8020
	06/02/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	11/30/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	06/05/00	ug/l	<0.30	<0.30	<0.30	1.1	EPA 8021B
	11/16/00	ug/l	<0.30	<0.81	<0.30	<5.2	EPA 8021B
	05/27/01	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/26/01	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	05/25/02	ug/l	<0.3	1.1	0.36	3.1	EPA 8021B
	12/07/02	ug/l	6.4	44	7.7	46	EPA 8021B
	05/23/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	11/24/03	ug/l	<0.30	<0.30	<0.30	0.61	EPA 8021B
	05/22/04	ug/l	1.1 J	0.39 J	0.52 J	2.5 J	EPA 8021B
	12/12/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/18/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/16/05	ug/l	<0.30	0.57	<0.30	1.3	EPA 8021B
	05/17/06	ug/l	<0.30	0.66	<0.30	<0.60	EPA 8021B
	11/16/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/21/07	ug/l	<1.5	7.1	<1.5	3.5	EPA 8021B
	11/12/07	ug/l	0.86	3.3	0.37	5.7	EPA 8021B
	05/08/08	ug/l	1.2	<0.60	<0.60	2.2	8015B/8021
	11/06/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/07/09	ug/l	<0.30	0.71	<0.30	<0.60	8015B/8021
	11/05/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/06/10	ug/l	1.8	<0.30	<0.30	0.77	EPA 8021B
	11/04/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/06/11	ug/l	2.7	1.5	<0.30	1.7	8021B
	11/10/11	ug/l	0.32	7.1	<0.30	3.8	8021B
	05/11/12	ug/l	0.58	0.30	<0.30	1.6	8021B
	10/12/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
EW-04	06/20/94	ug/l	610	200 J	33 J	45	EPA 8020
	06/20/94	ug/l	320 J	100 J	<4.0	49 J	EPA 8240
	08/12/94	ug/l	200	72	12	26	EPA 8020
	11/15/94	ug/l	140 J	35	5.6 J	28	EPA 8020
	02/09/95	ug/l	240 J	44 J	<7.5	39 J	EPA 8020
	05/12/95	ug/l	200	50	10	32	EPA 8020
	08/11/95	ug/l	240	52	<15	33	EPA 8020
	11/06/95	ug/l	170	44	<6.0	28	EPA 8020
	12/11/95	ug/l	200	44	7.0	31	EPA 8020
	01/25/96	ug/l	130 J	33 J	7.4 J	25 J	EPA 8020
	02/10/96	ug/l	180	35	6.9	32	EPA 8020
	03/05/96	ug/l	160	34	6.3	25	EPA 8020
	04/16/96	ug/l	120 J	29 J	5.7 J	25 J	EPA 8020
	05/21/96	ug/l	220	51	17	53	EPA 8020
	06/12/96	ug/l	170	54	11	32	EPA 8020
	07/11/96	ug/l	100 J	38 J	7.1 J	30 J	EPA 8020
	08/13/96	ug/l	140	47	8.7	30	EPA 8020
	09/10/96	ug/l	130 J	47 J	11 J	42 J	EPA 8020
	10/10/96	ug/l	140	41	8.5	18	EPA 8020
	11/07/96	ug/l	150 J	31 J	5.9 J	21 J	EPA 8020
	02/21/97	ug/l	340 J	9.9 J	10 J	20	EPA 8020
	02/21/97	ug/l	190	51	5.2	20	EPA 8240
	05/14/97	ug/l	160	60	<10	39	EPA 8020
	08/12/97	ug/l	120	34	4.1	19	EPA 8020
	11/28/97	ug/l	93 J	28 J	4.1 J	20 J	EPA 8020
	02/27/98	ug/l	120	31.5	8.6	21.4	EPA 8020
	05/13/98	ug/l	103	37.7	6.9	21.6	EPA 8020
	09/25/98	ug/l	133 J	58.8 J	12.1 J	52.3 J	EPA 8020
	11/30/98	ug/l	120 J	30.7 J	5.6 J	26.8 J	EPA 8020
	02/17/99	ug/l	130	36	8.0	34	EPA 8021B
	06/04/99	ug/l	142	34.4	7.7	31	EPA 8021B
	08/23/99	ug/l	120	28	6.0	24	EPA 8021B
	11/30/99	ug/l	100	27	5.5	24	EPA 8021B
	02/18/00	ug/l	110	32	6.2	26	EPA 8021B
	06/05/00	ug/l	110 J	31 J	5.8 J	27 J	EPA 8021B
	08/23/00	ug/l	110 J	29 J	8.0 J	31 J	EPA 8021B
	11/17/00	ug/l	94	28	5.0	17 J	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
EW-04	11/18/00	ug/l	95	31	4.2	17	EPA 8260B
	02/15/01	ug/l	120 J	29 J	7.9 J	31 J	EPA 8021B
	05/28/01	ug/l	52	20	4.3	20	EPA 8021B
	08/12/01	ug/l	83	26	6.4	21	EPA 8021B
	11/12/01	ug/l	96	30	8.1	30	EPA 8021B
	02/28/02	ug/l	90	26	6.5	25	EPA 8021B
	05/27/02	ug/l	86	25	5.4	20	EPA 8021B
	08/19/02	ug/l	260	54	13	50	EPA 8021B
	12/10/02	ug/l	61	45	80	58	EPA 8021B
	02/26/03	ug/l	75 J	30 J	8.5 J	26 J	EPA 8021B
	05/24/03	ug/l	100	48	13	46	EPA 8021B
	08/25/03	ug/l	160	220	59	200	EPA 8021B
	11/24/03	ug/l	27	8.7	3.9	8.2	EPA 8021B
	02/29/04	ug/l	40 J	27 J	5.0 J	15 J	EPA 8021B
	05/20/04	ug/l	44 J	40 J	8.0 J	22 J	EPA 8021B
	08/22/04	ug/l	120 J	110 J	19 J	150 J	EPA 8021B
	10/05/04	ug/l	67	65	7.8	36.7	EPA 8260B
	12/12/04	ug/l	92 J	88 J	11 J	23 J	EPA 8021B
	03/11/05	ug/l	240 J	52 J	<6.0	52 J	EPA 8021B
EW-05	06/20/94	ug/l	200	79	13	12	EPA 8020
	06/20/94	ug/l	75	18	<2.0	15	EPA 8240
	08/12/94	ug/l	52	9.4	2.2	6.0	EPA 8020
	11/15/94	ug/l	81 J	14	<3.0	11	EPA 8020
	02/09/95	ug/l	50	6.8	<1.5	6.0	EPA 8020
	05/12/95	ug/l	46	53	12	45	EPA 8020
	08/11/95	ug/l	78	10	2.1	9.0	EPA 8020
	11/06/95	ug/l	48	9.7	<1.5	6.1	EPA 8020
	12/11/95	ug/l	81 J	12 J	2.7 J	10 J	EPA 8020
	01/25/96	ug/l	67	11	<3.0	6.5	EPA 8020
	02/10/96	ug/l	77	14	<3.0	9.3	EPA 8020
	03/05/96	ug/l	74	11	2.4	9.4	EPA 8020
	04/16/96	ug/l	80	13	2.1	9.6	EPA 8020
	05/21/96	ug/l	110	18	2.4	11	EPA 8020
	06/12/96	ug/l	120	27	8.2	17	EPA 8020
	07/11/96	ug/l	110 J	19 J	2.9 J	14 J	EPA 8020
	08/13/96	ug/l	600	760	190	980	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
EW-05	09/10/96	ug/l	140 J	22 J	4.2 J	16 J	EPA 8020
	10/10/96	ug/l	43	8.8	1.3	4.6	EPA 8020
	11/07/96	ug/l	76 J	11 J	2.1 J	9.2 J	EPA 8020
	02/21/97	ug/l	6.0	16	2.6	11	EPA 8020
	05/14/97	ug/l	84	18	3.8	12	EPA 8020
	08/12/97	ug/l	67 J	15 J	3.2 J	12 J	EPA 8020
	11/28/97	ug/l	72 J	17 J	2.3 J	11 J	EPA 8020
	02/27/98	ug/l	164 J	47.0 J	9.1 J	38.4 J	EPA 8020
	05/13/98	ug/l	100 J	26 J	3.9 J	18.8 J	EPA 8020
	08/30/98	ug/l	161	42	<8	38	EPA 8020
	11/30/98	ug/l	66.3	15.8	2.5	12.4	EPA 8020
	02/17/99	ug/l	74	20	4	18	EPA 8021B
	06/04/99	ug/l	81.1	15	2.8	18.1	EPA 8021B
	08/23/99	ug/l	73	12	4.7	16	EPA 8021B
	11/30/99	ug/l	120 J	36 J	5.9 J	26 J	EPA 8021B
	11/30/99	ug/l	150	57	5.8	31.1	EPA 8260
	02/18/00	ug/l	130 J	33 J	5.6 J	26 J	EPA 8021B
	06/05/00	ug/l	95 J	30 J	4.8 J	23 J	EPA 8021B
	08/23/00	ug/l	110 J	36 J	6.4 J	30 J	EPA 8021B
	11/16/00	ug/l	96	41	5.6	31	EPA 8021B
	02/15/01	ug/l	100 J	34 J	7.7 J	31 J	EPA 8021B
	05/28/01	ug/l	67	25	3.8	19	EPA 8021B
	08/12/01	ug/l	85	28	5.5	16	EPA 8021B
	11/12/01	ug/l	50	19	4.8	19	EPA 8021B
	02/28/02	ug/l	86	31	5.9	23	EPA 8021B
	05/27/02	ug/l	85	31	5.6	24	EPA 8021B
	08/19/02	ug/l	130	51	19	36	EPA 8021B
	12/10/02	ug/l	4.3	4	1.1	9.1	EPA 8021B
	02/26/03	ug/l	34 J	22 J	<6.0	16 J	EPA 8021B
	05/24/03	ug/l	45	22	5.4	25	EPA 8021B
	08/26/03	ug/l	23	12	<6.0	19	EPA 8021B
	11/24/03	ug/l	53 J	28 J	<6.0	17 J	EPA 8021B
	02/29/04	ug/l	61 J	30 J	6.7 J	16 J	EPA 8021B
	05/20/04	ug/l	44 J	26 J	7.5 J	18 J	EPA 8021B
	08/22/04	ug/l	64	22	<15	<30	EPA 8021B
	12/12/04	ug/l	42 J	35 J	1.6 J	7.5 J	EPA 8021B
	03/11/05	ug/l	7.8 J	7.9 J	5.9 J	21 J	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
EW-05	05/19/05	ug/l	13	22	2.1	10	EPA 8021B
	08/18/05	ug/l	11	9.2	<6.0	<12	EPA 8021B
	11/18/05	ug/l	17	6.5	2.6	10	EPA 8021B
	02/15/06	ug/l	43	17	8.3	24	EPA 8021B
	05/19/06	ug/l	57	21	8.2	18	EPA 8021B
	08/16/06	ug/l	46	14	4.6	15	EPA 8021B
	11/21/06	ug/l	<3.0	8.8	<3.0	17	EPA 8021B
	02/22/07	ug/l	67	63	<15	<30	EPA 8021B
	05/24/07	ug/l	28	18	7.9	14	EPA 8021B
	08/23/07	ug/l	30	12	3.9	20	EPA 8021B
	11/15/07	ug/l	48	57	3.4	12	EPA 8021B
	02/08/08	ug/l	62	28	3.3	14	8015B/8021
	05/13/08	ug/l	13	14	<6.0	30	8015B/8021
	08/07/08	ug/l	19	16	4.0	10	8015B/8021
	11/12/08	ug/l	36	16	5.0	22	8015B/8021
	02/09/09	ug/l	53	29	<6.0	35	8015B/8021
	05/14/09	ug/l	31	3.0	<3.0	13	8015B/8021
	08/06/09	ug/l	34	27	<3.0	14	8015B/8021
	11/10/09	ug/l	54	20	5.9	27	8015B/8021
	02/09/10	ug/l	38	35	1.6	7.0	EPA 8021B
	05/14/10	ug/l	19	36	<3.0	7.7	EPA 8021B
	08/16/10	ug/l	21	34	2.9	13	EPA 8021B
	11/12/10	ug/l	16	17	1.7	9.2	8015B/8021
	02/11/11	ug/l	33	43	3.6	23	8015B/8021
	05/17/11	ug/l	11	35	1.9	6.6	8021B
	08/19/11	ug/l	11	25	2.8	14	8021B
	11/17/11	ug/l	20	28	5.4	15	8021B
	02/02/12	ug/l	24	30	4.8	17	8021B
	05/22/12	ug/l	28	12	4.8	25	8021B
	08/17/12	ug/l	29	13	3.7	26	8021B
	10/19/12	ug/l	24	28	3.7	18	8021B
EW-P2	01/06/97	ug/l	2400	560	510	300	EPA 8020
	02/21/97	ug/l	1700 J	540 J	640 J	430 J	EPA 8020
	05/14/97	ug/l	1200	710	650	360	EPA 8020
	08/12/97	ug/l	1000 J	550 J	570 J	340 J	EPA 8020
	11/28/97	ug/l	850	520	230 J	280	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
EW-P2	11/28/97	ug/l	730	250	320	200	EPA 8240
	02/27/98	ug/l	845	274	377	255	EPA 8020
	05/13/98	ug/l	571	158	204	178	EPA 8020
	08/30/98	ug/l	993	258	349	314	EPA 8020
	11/30/98	ug/l	816	202	248	243	EPA 8020
	11/30/98	ug/l	893	267	335	216	EPA 8260
	02/17/99	ug/l	864	238	309	260	EPA 8021B
	06/04/99	ug/l	883	240	140	264	EPA 8021B
	08/23/99	ug/l	660	180	230	190	EPA 8021B
	11/30/99	ug/l	640	190	220	230	EPA 8021B
	02/18/00	ug/l	700	210	260	280	EPA 8021B
	06/05/00	ug/l	710	200	230	240	EPA 8021B
	08/23/00	ug/l	570	160	180	210	EPA 8021B
	11/17/00	ug/l	610	190	210	220	EPA 8021B
	02/15/01	ug/l	700	190	220	250	EPA 8021B
	05/28/01	ug/l	570 J	160 J	170 J	200 J	EPA 8021B
	08/12/01	ug/l	650	180	190	210	EPA 8021B
	11/12/01	ug/l	700	190	200	260	EPA 8021B
	11/12/01	ug/l	640	180	180	172	EPA 8260B
	02/28/02	ug/l	580	170	170	220	EPA 8021B
	05/27/02	ug/l	520	170	160	210	EPA 8021B
	08/19/02	ug/l	560	150	190	250	EPA 8021B
	12/10/02	ug/l	430	180	120	230	EPA 8021B
	02/26/03	ug/l	270 J	100 J	52 J	120 J	EPA 8021B
	05/24/03	ug/l	180	91	56	110	EPA 8021B
	08/25/03	ug/l	250	110	73	140	EPA 8021B
	11/22/03	ug/l	270 J	130 J	78 J	210 J	EPA 8021B
	02/29/04	ug/l	290 J	110 J	69 J	150 J	EPA 8021B
	05/20/04	ug/l	180 J	190 J	130 J	110 J	EPA 8021B
	08/22/04	ug/l	280	260	170	320	EPA 8021B
	12/12/04	ug/l	180	120	65	180	EPA 8021B
	03/11/05	ug/l	130 J	170 J	140 J	150 J	EPA 8021B
	05/13/05	ug/l	250	100	74	140	EPA 8021B
	08/17/05	ug/l	390	220	190	160	EPA 8021B
	11/18/05	ug/l	370	240	190	160	EPA 8021B
	02/15/06	ug/l	410	250	210	190	EPA 8021B
	05/19/06	ug/l	260	170	160	140	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
EW-P2	08/16/06	ug/l	400	150	130	110	EPA 8021B
	11/21/06	ug/l	620	170	150	140	EPA 8021B
	02/22/07	ug/l	720	220	130	340	EPA 8021B
	05/16/07	ug/l	360	220	120	89	EPA 8021B
	08/23/07	ug/l	320	230	170	170	EPA 8021B
	11/14/07	ug/l	250	130	71	200	EPA 8021B
	02/07/08	ug/l	200	130	70	160	8015B/8021
	05/12/08	ug/l	210	190	130	<120	8015B/8021
	08/07/08	ug/l	230	270	170	210	8015B/8021
	11/11/08	ug/l	120	89	42	140	8015B/8021
	02/09/09	ug/l	240	190	120	130	8015B/8021
	05/13/09	ug/l	210	140	64	210	8015B/8021
	08/06/09	ug/l	250	160	68	280	8015B/8021
	11/09/09	ug/l	59	41	34	35	8015B/8021
	02/08/10	ug/l	98	39	36	150	EPA 8021B
	05/12/10	ug/l	130	62	54	230	EPA 8021B
	08/16/10	ug/l	79	150	35	170	EPA 8021B
	11/10/10	ug/l	84	49	32	110	8015B/8021
	02/11/11	ug/l	80	78	30	100	8015B/8021
	05/13/11	ug/l	110	64	39	150	8021B
	08/24/11	ug/l	170	180	43	230	8021B
	11/08/11	ug/l	140	170	40	200	8021B
	02/03/12	ug/l	180	120	97	120	8021B
	05/21/12	ug/l	180	130	110	260	8021B
	08/17/12	ug/l	270	140	100	110	8021B
	10/19/12	ug/l	110	120	24	160	8021B
MW-01S	02/26/92	ug/l	5.0 J	<10	<10	<10	EPA 8240
	06/26/92	ug/l	14	<10	<10	<10	EPA 8240
	09/23/92	ug/l	4.0 J	<10	<10	<10	EPA 8240
	11/19/92	ug/l	<0.94	<0.50	<0.50	<1.0	EPA 8020
	11/12/93	ug/l	7.5	<0.30	<0.50	0.54	EPA 8020
	05/10/94	ug/l	12	1.0	0.32	<0.60	EPA 8020
	08/09/94	ug/l	<0.30	2.7	<0.30	<0.60	EPA 8020
	11/11/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/08/95	ug/l	<0.64	<0.30	<0.30	<0.60	EPA 8020
	11/12/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-01S	11/12/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/27/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/20/98	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8020
	11/24/99	ug/l	1.8	<0.3	<0.3	<0.6	EPA 8021B
	06/05/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/00	ug/l	<0.30	0.46	<0.30	<0.60	EPA 8021B
	11/29/01	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/08/02	ug/l	<0.30	<0.30	<0.30	1.2 J	EPA 8021B
	05/22/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	11/21/03	ug/l	0.46	<0.30	<0.30	<0.60	EPA 8021B
	05/18/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	12/11/04	ug/l	0.39	<0.30	<0.30	<0.60	EPA 8021B
	05/11/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/05	ug/l	<0.30	0.38	<0.30	<0.60	EPA 8021B
	05/16/06	ug/l	<0.30	0.39	<0.30	<0.60	EPA 8021B
	11/14/06	ug/l	0.36	0.34	<0.30	<0.60	EPA 8021B
	05/17/07	ug/l	2.0	<0.30	<0.30	<0.60	EPA 8021B
	11/08/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/06/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/04/08	ug/l	0.37	0.38	0.48	1.8	8015B/8021
	05/05/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/03/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/04/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/02/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/05/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/02/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	05/09/12	ug/l	1.7	<0.30	<0.30	<0.60	8021B
	10/09/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-02S	02/22/93	ug/l	950	60	24	50	EPA 8020
	05/20/93	ug/l	700 J	40 J	18 J	66 J	EPA 8020
	08/17/93	ug/l	1000 J	76 J	29 J	57 J	EPA 8020
	11/16/93	ug/l	450 J	100 J	29 J	NA	EPA 8020
	02/11/94	ug/l	1300	100	23	110	EPA 8020
	05/12/94	ug/l	1300	75	23	75	EPA 8020
	08/12/94	ug/l	150	66	<6.0	100	EPA 8020
	11/15/94	ug/l	1300 J	93	<30	94 J	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-02S	02/10/95	ug/l	1100	87	20	89	EPA 8020
	05/11/95	ug/l	560 J	61 J	12 J	65 J	EPA 8020
	08/10/95	ug/l	600 J	60 J	15 J	75 J	EPA 8020
	11/09/95	ug/l	480 J	46 J	14 J	68 J	EPA 8020
	02/10/96	ug/l	880	51	<9.9	77	EPA 8020
	05/17/96	ug/l	570	160	63	87	EPA 8020
	08/16/96	ug/l	240	42	<6.0	56	EPA 8020
	02/18/97	ug/l	45	12	9.5	33	EPA 8020
	05/15/97	ug/l	390	99	<6.0	65	EPA 8020
	11/27/97	ug/l	42 J	24 J	<0.60	18 J	EPA 8020
	05/16/98	ug/l	91.9 J	4.0 J	3.3 J	<6.0	EPA 8020
	11/20/98	ug/l	126 J	12.0 J	8.4 J	21.6 J	EPA 8020
	06/02/99	ug/l	274	57	22.7 J	66.2 J	EPA 8021B
	11/26/99	ug/l	130	8.8	11	49	EPA 8021B
	11/26/99	ug/l	160	<10	13	31	EPA 8260
	06/03/00	ug/l	15	4.5	1.0	9.7 J	EPA 8021B
	11/17/00	ug/l	87 J	40 J	9.7 J	50 J	EPA 8021B
	05/25/01	ug/l	2.8	0.9	0.35	3.8	EPA 8021B
	11/30/01	ug/l	130	53	9.3	67	EPA 8021B
	11/30/01	ug/l	150	73	10	53	EPA 8260B
	05/24/02	ug/l	<0.3	<0.3	<0.3	2	EPA 8021B
	12/06/02	ug/l	0.32 J	1.0 J	<0.30	1.5 J	EPA 8021B
	05/23/03	ug/l	1.3	<0.30	<0.30	1.1	EPA 8021B
	11/26/03	ug/l	1.2	0.39	<0.30	1.5	EPA 8021B
	05/19/04	ug/l	0.90 J	0.56 J	0.41 J	1.7 J	EPA 8021B
	05/12/05	ug/l	13	5.1	0.56	4.4	EPA 8021B
	11/16/05	ug/l	9.3	5.3	<1.5	6.2	EPA 8021B
	05/17/06	ug/l	7.7	8.4	3.3	7.3	EPA 8021B
	11/15/06	ug/l	1.4	1.1	1.1	3.3	EPA 8021B
	05/22/07	ug/l	71	27	18	40	EPA 8021B
	11/15/07	ug/l	73	2.6	3.0	18	EPA 8021B
	05/08/08	ug/l	55	4.2	4.0	12	8015B/8021
	11/12/08	ug/l	1.1	3.2	1.6	7.2	8015B/8021
	05/13/09	ug/l	<1.8	<0.94	<0.55	<3.7	8015B/8021
	11/10/09	ug/l	<0.30	0.62	<0.30	0.91	8015B/8021
	05/13/10	ug/l	12	<0.30	<0.30	12	EPA 8021B
	11/15/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-02S	05/17/11	ug/l	6.6	5.0	<0.30	5.4	8021B
	11/15/11	ug/l	43	2.3	3.2	43	8021B
	05/21/12	ug/l	1.1	4.3	4.3	10	8021B
	10/18/12	ug/l	0.42	<0.30	<0.30	2.6	8021B
MW-03S	02/22/93	ug/l	43	<3.6	1.2	<3.0	EPA 8020
	05/19/93	ug/l	42 J	4.0 J	1.0 J	2.0 J	EPA 8020
	08/17/93	ug/l	55 J	6.7 J	<0.85	<3.9	EPA 8020
	11/16/93	ug/l	62	23	18	6.6	EPA 8020
	02/10/94	ug/l	50	4.7 J	23 J	4.7	EPA 8020
	05/11/94	ug/l	38 J	5.2 J	<0.30	16 J	EPA 8020
	08/10/94	ug/l	50	7.9	<0.99	23	EPA 8020
	11/14/94	ug/l	66	11	<3.0	23	EPA 8020
	02/08/95	ug/l	58 J	12 J	<0.99	25 J	EPA 8020
	05/10/95	ug/l	37 J	13 J	<0.75	14 J	EPA 8020
	08/11/95	ug/l	22 J	11 J	<1.5	14 J	EPA 8020
	11/16/95	ug/l	24 J	15 J	<1.5	15 J	EPA 8020
	02/08/96	ug/l	22	15	<6.0	14	EPA 8020
	05/18/96	ug/l	17 J	33 J	12 J	33 J	EPA 8020
	08/15/96	ug/l	11 J	6.4 J	<0.60	14 J	EPA 8020
	02/24/97	ug/l	19 J	4.2 J	<1.5	28 J	EPA 8020
	05/15/97	ug/l	14 J	10 J	<0.60	<12	EPA 8020
	11/27/97	ug/l	9.4 J	23 J	<0.30	18 J	EPA 8020
	05/16/98	ug/l	9.2 J	3.9 J	0.5 J	1.8 J	EPA 8020
	11/20/98	ug/l	4.4	2.3	<0.3	5.6	EPA 8020
	05/30/99	ug/l	1.9	<0.3	<0.3	<0.6	EPA 8021B
	11/25/99	ug/l	1.7	1.5	0.4	3.6	EPA 8021B
	06/02/00	ug/l	4.4	2.6	0.58	9.3	EPA 8021B
	11/27/00	ug/l	2.2	2.7	1.3	6.4	EPA 8021B
	11/27/00	ug/l	1.7	1.9	<1	<2	EPA 8260B
	05/25/01	ug/l	6.0 J	5.6 J	1.3 J	12 J	EPA 8021B
	11/29/01	ug/l	0.51	0.54	<0.3	1.8	EPA 8021B
	05/24/02	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/06/02	ug/l	0.32	0.48	<0.30	<0.30	EPA 8021B
	05/23/03	ug/l	1.6	0.87	<0.30	2.3	EPA 8021B
	11/26/03	ug/l	1.1	1.2	0.77	3.2	EPA 8021B
	05/17/04	ug/l	<0.30	0.88 J	<0.30	<0.60	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-03S	05/13/05	ug/l	1.9	0.59	<0.30	2.8	EPA 8021B
	11/16/05	ug/l	18	2.9	<1.5	13	EPA 8021B
	05/17/06	ug/l	1.4	2.0	<0.30	4.9	EPA 8021B
	11/16/06	ug/l	1.3	5.2	2.8	11	EPA 8021B
	05/23/07	ug/l	2.0	9.1	<1.5	11	EPA 8021B
	11/15/07	ug/l	2.2	2.4	<0.60	4.0	EPA 8021B
	05/13/08	ug/l	5.9	9.3	0.96	5.0	8015B/8021
	11/12/08	ug/l	8.6	14	2.5	9.3	8015B/8021
	05/13/09	ug/l	<0.82	<0.59	<0.30	<3.0	8015B/8021
	11/11/09	ug/l	1.8	3.1	1.3	3.1	8015B/8021
	05/13/10	ug/l	0.56	0.38	<0.30	2.1	EPA 8021B
	11/15/10	ug/l	0.84	0.36	<0.30	4.6	8015B/8021
	05/18/11	ug/l	0.44	2.8	<0.30	2.9	8021B
	11/15/11	ug/l	0.99	0.59	<0.30	3.7	8021B
	05/21/12	ug/l	4.3	8.7	2.3	6.1	8021B
	10/18/12	ug/l	4.2	6.8	2.0	8.2	8021B
MW-04S	02/23/93	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
MW-06S	09/25/90	ug/l	20	<2.0	<1.0	<1.0	EPA 8240
	01/18/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/03/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/13/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/14/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/25/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/24/92	ug/l	<10	<10	<10	1.0 J	EPA 8240
	09/18/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/17/92	ug/l	0.61	<0.50	<0.50	<1.0	EPA 8020
	02/23/93	ug/l	0.92	<2.2	0.58	<2.0	EPA 8020
	05/18/93	ug/l	0.30	<0.30	0.30	9.0	EPA 8020
	08/17/93	ug/l	2.2	<0.48	2.2	<2.0	EPA 8020
	11/15/93	ug/l	<0.30	<0.30	<0.50	6.0	EPA 8020
	02/09/94	ug/l	4.7	0.42	<0.30	15	EPA 8020
	05/10/94	ug/l	12 J	17	8.9	0.92	EPA 8020
	08/10/94	ug/l	20	0.94	<0.30	14	EPA 8020
	11/11/94	ug/l	34	35	<0.60	19	EPA 8020
	02/08/95	ug/l	7.5	<0.79	0.39	9.1	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-06S	05/10/95	ug/l	2.7 J	<0.30	<0.30	10 J	EPA 8020
	08/08/95	ug/l	17	1.8	2.6	6.3	EPA 8020
	11/09/95	ug/l	25	2.0	<0.60	16	EPA 8020
	02/10/96	ug/l	160	9.6	<3.0	56	EPA 8020
	05/17/96	ug/l	34 J	32 J	20	8.8 J	EPA 8020
	08/16/96	ug/l	72	4.0	<0.75	26	EPA 8020
	11/08/96	ug/l	70 J	4.0 J	<0.60	14 J	EPA 8020
	02/18/97	ug/l	21	0.93	<0.30	10	EPA 8020
	05/15/97	ug/l	40	39	<0.60	8.6	EPA 8020
	11/25/97	ug/l	83	71	18	15	EPA 8020
	11/25/97	ug/l	120	8.6	<2.0	2.2	EPA 8240
	05/15/98	ug/l	0.5	<0.3	<0.3	<0.6	EPA 8020
	11/20/98	ug/l	6.5	0.7	<0.3	8.2	EPA 8020
	06/02/99	ug/l	35.1	<0.3	2.1	<0.6	EPA 8021B
	11/26/99	ug/l	20	3.4	<0.3	8.8	EPA 8021B
	06/03/00	ug/l	92	12	1.6	36	EPA 8021B
	11/17/00	ug/l	48	8.2	0.71	25 J	EPA 8021B
	05/25/01	ug/l	0.34	0.8	0.85	1.4	EPA 8021B
	11/30/01	ug/l	65	9.4	<3	29	EPA 8021B
	11/30/01	ug/l	73	12	<5	<10	EPA 8260B
	05/24/02	ug/l	150 J	28 J	<0.3	99 J	EPA 8021B
	12/06/02	ug/l	18 J	3.9 J	0.53 J	<0.30	EPA 8021B
	12/06/02	ug/l	20	4.5	<1	2.2	EPA 8260B
	03/04/03	ug/l	6.1	0.79	<0.30	<0.30	EPA 8021B
	03/19/03	ug/l	45	67	1.2	26	EPA 8021B
	04/01/03	ug/l	6.5	1.4	0.46	13	EPA 8021B
	04/22/03	ug/l	8.4	1.5	<0.30	<0.30	EPA 8021B
	05/22/03	ug/l	6.9	1.1	0.4	7.6	EPA 8021B
	06/17/03	ug/l	8.9	1.4	0.7	13	EPA 8021B
	07/12/03	ug/l	6.7	1.1	0.42	1.8	EPA 8021B
	08/26/03	ug/l	10 J	2.0 J	0.57 J	13 J	EPA 8021B
	09/26/03	ug/l	9.5 J	13 J	1.5 J	2.5 J	EPA 8021B
	10/25/03	ug/l	16	19	3.8	7.6	EPA 8021B
	11/25/03	ug/l	6.7	6.3 J	4.1 J	3.2 J	EPA 8021B
	11/25/03	ug/l	4.7	<2.0	<2.0	<4.0	EPA 8260B
	12/21/03	ug/l	9.6	9.5	2.6	6.4	EPA 8021B
	01/18/04	ug/l	9.1	10	6.3	9.7	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-06S	02/29/04	ug/l	13	1.8	3.4	5.6	EPA 8021B
	03/21/04	ug/l	6.1 J	2.9 J	0.88 J	6.1 J	EPA 8021B
	04/25/04	ug/l	9.1 J	12 J	1.9 J	3.5 J	EPA 8021B
	05/22/04	ug/l	15 J	NA	4.1 J	7.1 J	EPA 8021B
	06/13/04	ug/l	10 J	1.9 J	<0.30	7.3 J	EPA 8021B
	08/20/04	ug/l	9.2	15	5.6	9.3	EPA 8021B
	11/20/04	ug/l	2.8 J	6.7 J	6.3 J	3.1 J	EPA 8021B
	11/20/04	ug/l	3.2	<2.0	<2.0	<4.0	EPA 8260B
	03/10/05	ug/l	0.35 J	<0.30	<0.30	1.9 J	EPA 8021B
	05/12/05	ug/l	0.72	0.30	1.9	1.1	EPA 8021B
	05/12/05	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8260B
	08/16/05	ug/l	1.7	3.8	0.59	2.2	EPA 8021B
	11/16/05	ug/l	<1.5	5.5	4.4	<3.0	EPA 8021B
	11/16/05	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8260B
	02/14/06	ug/l	2.5	5.4	5.1	0.89	EPA 8021B
	05/17/06	ug/l	1.6	2.6	3.6	<0.60	EPA 8021B
	08/15/06	ug/l	1.6	3.7	3.3	0.92	EPA 8021B
	11/15/06	ug/l	2.2	4.9	3.2	1.0	EPA 8021B
	11/15/06	ug/l	2.5	<2.0	<2.0	<2.0	EPA 8260B
	02/20/07	ug/l	6.3	1.7	<0.30	5.1	EPA 8021B
	05/18/07	ug/l	3.6	7.0	0.77	1.9	EPA 8021B
	08/22/07	ug/l	5.0	12	1.5	4.3	EPA 8021B
	11/12/07	ug/l	1.3	5.3	4.7	5.5	EPA 8021B
	11/12/07	ug/l	2.6	<2.0	<2.0	<2.0	EPA 8260B
	02/08/08	ug/l	1.9	0.81	<0.30	1.3	8015B/8021
	05/07/08	ug/l	1.3	<0.60	<0.60	3.7	8015B/8021
	08/05/08	ug/l	1.8	0.80	<0.30	1.4	8015B/8021
	11/06/08	ug/l	<0.30	0.57	0.56	1.1	8015B/8021
	11/06/08	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8260B
	02/05/09	ug/l	2.0	3.9	4.6	5.8	8015B/8021
	05/07/09	ug/l	2.7	0.89	<0.30	3.1	8015B/8021
	08/05/09	ug/l	3.2	1.1	<0.30	1.4	8015B/8021
	11/05/09	ug/l	0.97	0.57	<0.30	3.3	8015B/8021
	11/05/09	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8260B
	02/03/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/06/10	ug/l	0.41	<0.30	<0.30	1.0	EPA 8021B
	08/12/10	ug/l	1.0	0.38	<0.30	1.2	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-06S	11/03/10	ug/l	1.1	0.33	<0.30	<0.60	8015B/8021
	11/03/10	ug/l	2.0	<2.0	<2.0	<2.0	8260B
	02/09/11	ug/l	1.0	0.32	<0.30	0.65	8015B/8021
	05/11/11	ug/l	0.47	<0.30	<0.30	0.75	8021B
	08/18/11	ug/l	0.73	0.36	<0.30	1.1	8021B
	11/07/11	ug/l	1.6	0.48	<0.30	2.0	8021B
	11/07/11	ug/l	1.7	0.70	<0.50	<1.0	8260B
	02/02/12	ug/l	2.5	0.60	<0.30	2.2	8021B
	05/10/12	ug/l	3.7	6.0	4.3	5.4	8021B
	08/15/12	ug/l	3.2	8.7	<0.30	6.9	8021B
	10/10/12	ug/l	3.9	6.9	6.0	6.2	8021B
	10/10/12	ug/l	4.9	2.0	<0.50	<1.0	8260B
MW-07S	02/28/92	ug/l	220	59	<50	27 J	EPA 8240
	06/29/92	ug/l	240	41	4.0 J	17 J	EPA 8240
	09/24/92	ug/l	75	14	<10	<10	EPA 8240
	11/25/92	ug/l	350	63	7.9	26	EPA 8020
	11/25/92	ug/l	250	54	5.0	20	EPA 8240
	02/24/93	ug/l	380 J	110 J	44 J	140 J	EPA 8020
	05/20/93	ug/l	380 J	80 J	9.0 J	60 J	EPA 8020
MW-08S	10/04/90	ug/l	230	74	6.0	25	EPA 8240
	08/15/91	ug/l	150	10 J	<50	7.0 J	EPA 8240
	11/15/91	ug/l	190	21	<10	3.0 J	EPA 8240
	02/28/92	ug/l	75	17	<10	16	EPA 8240
	06/30/92	ug/l	150	29	<20	14 J	EPA 8240
	09/24/92	ug/l	240	38	<20	3.0 J	EPA 8240
	08/17/93	ug/l	310 J	74 J	9.8 J	25 J	EPA 8020
	11/16/93	ug/l	360	66	28	21	EPA 8020
	02/10/94	ug/l	380	51 J	36 J	29	EPA 8020
	05/11/94	ug/l	310	46	<7.5	23	EPA 8020
	08/11/94	ug/l	490	180	45	50	EPA 8020
	11/15/94	ug/l	98 J	47 J	7.6 J	49 J	EPA 8020
	02/09/95	ug/l	140	36	14	35	EPA 8020
	05/10/95	ug/l	100	36	15	37	EPA 8020
	08/08/95	ug/l	150	56	10	48	EPA 8020
	11/16/95	ug/l	83 J	29 J	8.0 J	31 J	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-08S	05/14/96	ug/l	120	40	11	45	EPA 8020
	08/15/96	ug/l	95 J	28 J	6.8 J	21 J	EPA 8020
	11/12/96	ug/l	58	30	19	25	EPA 8020
	02/20/97	ug/l	45 J	19 J	6.2 J	15 J	EPA 8020
	05/18/97	ug/l	53 J	27 J	6.9 J	24 J	EPA 8020
	11/25/97	ug/l	27 J	12 J	5.1 J	7.7 J	EPA 8020
	05/14/98	ug/l	38.3	26.1	8.3	18.2	EPA 8020
	11/21/98	ug/l	26.0 J	16.8 J	4.8 J	15.8 J	EPA 8020
	05/30/99	ug/l	30.8 J	10 J	4.1 J	15.5 J	EPA 8021B
	11/24/99	ug/l	40	21	6.1	18	EPA 8021B
	06/03/00	ug/l	19	9.9	5.4	19	EPA 8021B
	11/17/00	ug/l	18	14	2.3	12	EPA 8021B
	05/26/01	ug/l	40 J	57 J	17 J	53 J	EPA 8021B
	11/30/01	ug/l	15	5.3	<3	7.1	EPA 8021B
	05/26/02	ug/l	16	9.0	4.2	23	EPA 8021B
	12/09/02	ug/l	34	28	4.9	28	EPA 8021B
	05/23/03	ug/l	32	23	6.9	26	EPA 8021B
	11/24/03	ug/l	22 J	15 J	4.2 J	9.9 J	EPA 8021B
	05/19/04	ug/l	200	130	68	190	EPA 8021B
	11/21/04	ug/l	31	24	4.9	14	EPA 8021B
	11/11/09	ug/l	24	11	1.8	4.5	8015B/8021
	05/13/10	ug/l	30	55	6.3	16	EPA 8021B
	11/12/10	ug/l	18	<0.30	3.6	15	8015B/8021
	05/13/11	ug/l	41	40	<30	<60	8021B
	11/15/11	ug/l	63	92	5.8	19	8021B
	05/21/12	ug/l	54	27	8.0	56	8021B
	10/18/12	ug/l	31	60	<3.0	17	8021B
MW-09S	02/25/92	ug/l	54	11	7.0 J	<10	EPA 8240
	06/29/92	ug/l	18	12	3.0 J	11	EPA 8240
	09/23/92	ug/l	17	9.0 J	2.0 J	7.0 J	EPA 8240
	05/21/93	ug/l	18 J	11 J	14 J	30 J	EPA 8020
	08/17/93	ug/l	33 J	89 J	28 J	160 J	EPA 8020
	11/17/93	ug/l	30 J	17 J	11 J	23 J	EPA 8020
	02/11/94	ug/l	51	29	14	34	EPA 8020
	05/11/94	ug/l	24 J	47	<6.0	<12	EPA 8020
	08/11/94	ug/l	42 J	15 J	9.4 J	22 J	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-09S	11/15/94	ug/l	32 J	11 J	<3.0	14 J	EPA 8020
	02/09/95	ug/l	14 J	8.0 J	8.1 J	20 J	EPA 8020
	05/12/95	ug/l	17 J	12 J	6.9 J	16 J	EPA 8020
	08/11/95	ug/l	16 J	8.7 J	6.3 J	11 J	EPA 8020
	11/16/95	ug/l	12	<1.5	11	16	EPA 8020
	02/09/96	ug/l	10	4.9	3.6	<6.0	EPA 8020
	05/18/96	ug/l	11	4.6	5.7	6.7	EPA 8020
	08/17/96	ug/l	5.0 J	1.3 J	2.1 J	4.1 J	EPA 8020
	11/12/96	ug/l	3.0	1.5	7.5	9.5	EPA 8020
	02/25/97	ug/l	7.5 J	7.6 J	3.8 J	8.1 J	EPA 8020
	05/18/97	ug/l	8.3 J	2.5 J	2.3 J	<0.60	EPA 8020
	11/25/97	ug/l	3.9	2.2	1.7	3.2	EPA 8020
	05/15/98	ug/l	11.7	8.7	7.8	14.5	EPA 8020
	11/28/98	ug/l	1.2	4.6	2.5	7.2	EPA 8020
	06/02/99	ug/l	17.3 J	3.1 J	11.4 J	33.8 J	EPA 8021B
	11/24/99	ug/l	46	21	35	44	EPA 8021B
	06/03/00	ug/l	<0.30	0.63	0.89	2.4	EPA 8021B
	11/17/00	ug/l	1.9	1.4	<0.30	0.74	EPA 8021B
	05/26/01	ug/l	24 J	84 J	13 J	30 J	EPA 8021B
	11/30/01	ug/l	<0.3	<0.3	<0.3	7.5	EPA 8021B
	05/26/02	ug/l	40	<3	29	57	EPA 8021B
	12/09/02	ug/l	5.0 J	33 J	6.0 J	33 J	EPA 8021B
	05/21/03	ug/l	0.49	<0.30	<0.30	0.93	EPA 8021B
	11/23/03	ug/l	1.0	2.2	<0.60	4.3	EPA 8021B
	05/20/04	ug/l	2.9 J	0.39 J	1.2 J	2.1 J	EPA 8021B
	11/21/04	ug/l	6.7 J	4.8 J	2.8 J	3.8 J	EPA 8021B
	05/12/05	ug/l	5.7	8.8	7.2	25	EPA 8021B
	05/14/10	ug/l	8.7	9.4	7.3	<6.0	EPA 8021B
	11/15/10	ug/l	3.4	<3.0	3.7	<6.0	8015B/8021
	05/17/11	ug/l	6.3	8.3	4.5	4.4	8021B
	11/15/11	ug/l	6.9	5.8	5.3	<6.0	8021B
	05/22/12	ug/l	<6.0	<6.0	<6.0	<12	8021B
	10/19/12	ug/l	<0.60	1.2	1.9	<1.2	8021B
MW-10P	10/03/90	ug/l	9.0	4.0	<1.0	4.0	EPA 8240
	01/17/91	ug/l	10	<2.0	<1.0	3.0	EPA 8240
	05/01/91	ug/l	19	8.0	<1.0	3.0	EPA 8240

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-10P	08/15/91	ug/l	23 J	10 J	<50	<50	EPA 8240
	11/20/91	ug/l	9.0 J	5.0 J	<10	3.0 J	EPA 8240
	02/21/92	ug/l	17 J	11 J	<50	<50	EPA 8240
	06/26/92	ug/l	24	11	1.0 J	4.0 J	EPA 8240
	09/23/92	ug/l	23	<20	<20	<20	EPA 8240
	11/23/92	ug/l	30 J	29 J	6.6 J	14 J	EPA 8020
	11/23/92	ug/l	21	8.0	<1.0	4.0 J	EPA 8240
	02/24/93	ug/l	43 J	32 J	8.4 J	25 J	EPA 8020
	05/19/93	ug/l	45 J	20 J	10 J	23 J	EPA 8020
	08/17/93	ug/l	37 J	50 J	<2.5	34 J	EPA 8020
	11/16/93	ug/l	24	11	8.8	26	EPA 8020
	11/16/93	ug/l	15	10	<2.0	<2.0	EPA 8240
	02/10/94	ug/l	24	9.2	5.5	36	EPA 8020
	11/11/94	ug/l	14 J	15 J	11 J	18 J	EPA 8020
	11/11/94	ug/l	10	7.9	<2.0	<2.0	EPA 8240
	11/12/95	ug/l	23 J	11 J	4.8 J	18 J	EPA 8020
	11/08/96	ug/l	24 J	16 J	<1.5	22 J	EPA 8020
MW-11S	10/03/90	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/15/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/14/91	ug/l	<100	<100	<100	<100	EPA 8240
	02/21/92	ug/l	<40	<40	<40	<40	EPA 8240
	06/25/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/22/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/18/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	11/11/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	12/07/02	ug/l	0.50 J	2.5 J	<0.30	1.5 J	EPA 8021B
	05/24/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	11/21/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/17/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	12/11/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/17/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/16/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/14/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/17/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/08/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-11S	05/06/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/04/08	ug/l	<0.30	0.33	0.58	1.5	8015B/8021
	05/05/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/03/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/04/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/02/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/05/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/02/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	05/09/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/09/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-12S	02/24/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/25/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/22/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/18/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	11/11/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
MW-13P	11/14/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/21/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/23/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/23/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/19/92	ug/l	<1.1	<4.4	9.9	<9.6	EPA 8020
	02/23/93	ug/l	3.3 J	<2.4	8.2	9.8	EPA 8020
	05/17/93	ug/l	12	<2.5	7.0	6.0	EPA 8020
	08/17/93	ug/l	9.0	10	26	12	EPA 8020
	11/15/93	ug/l	<0.30	0.47	2.4	1.2	EPA 8020
	02/09/94	ug/l	<0.30	<0.30	1.3	17	EPA 8020
	11/10/94	ug/l	4.6	1.9	0.81	<0.60	EPA 8020
	11/10/95	ug/l	3.6 J	0.80 J	17 J	13 J	EPA 8020
	11/08/96	ug/l	<0.30	1.7	1.1	1.0	EPA 8020
MW-14S	06/30/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/18/92	ug/l	5.0 J	2.0 J	<10	1.0 J	EPA 8240
	11/17/92	ug/l	2.8	<0.50	<0.50	<1.0	EPA 8020
	02/23/93	ug/l	4.8	<0.70	<0.50	<1.1	EPA 8020
	05/17/93	ug/l	27 J	4.0 J	<0.30	5.0 J	EPA 8020
	08/17/93	ug/l	69 J	12 J	1.3 J	10 J	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-14S	11/15/93	ug/l	59	7.3	6.8	6.4	EPA 8020
	02/10/94	ug/l	160	31 J	9.4 J	9.4	EPA 8020
	05/12/94	ug/l	93	15	<0.75	12	EPA 8020
	08/11/94	ug/l	220 J	37 J	<3.0	28 J	EPA 8020
	11/10/94	ug/l	120 J	19 J	1.5 J	18 J	EPA 8020
	02/09/95	ug/l	72 J	10 J	<3.0	8.9 J	EPA 8020
	05/11/95	ug/l	42 J	6.7 J	<0.60	5.9 J	EPA 8020
	08/10/95	ug/l	57 J	12 J	<1.5	13 J	EPA 8020
	11/11/95	ug/l	34	9.5	<3.0	6.1	EPA 8020
	02/08/96	ug/l	13	3.0	<1.0	4.0	EPA 8020
	05/23/96	ug/l	5.7 J	2.1 J	<0.30	3.2 J	EPA 8020
	08/16/96	ug/l	3.7 J	2.7 J	<0.30	3.8 J	EPA 8020
	11/14/96	ug/l	1.1 J	1.2 J	<0.30	2.8 J	EPA 8020
	02/25/97	ug/l	0.95 J	1.1 J	<0.30	3.1 J	EPA 8020
	05/16/97	ug/l	0.90 J	1.2 J	<0.60	2.9 J	EPA 8020
	11/28/97	ug/l	<0.30	0.45 J	<0.30	1.8 J	EPA 8020
	05/14/98	ug/l	1.0	<0.3	<0.3	<0.6	EPA 8020
	11/30/98	ug/l	2.7	<0.3	<0.3	3.2	EPA 8020
	06/02/99	ug/l	4.3	1.2	<0.3	1.6	EPA 8021B
	11/27/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	06/03/00	ug/l	2.7	1.0	<0.30	1.6	EPA 8021B
	11/17/00	ug/l	0.78 J	0.6	<0.30	0.93	EPA 8021B
	05/27/01	ug/l	1.4 J	<0.30	<0.30	<0.60	EPA 8021B
	11/28/01	ug/l	1.2	0.74	<0.3	2.5	EPA 8021B
	05/26/02	ug/l	3.9	<0.3	<0.3	1.9	EPA 8021B
	12/10/02	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	05/22/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	11/25/03	ug/l	<0.30	0.50	<0.30	1.2	EPA 8021B
	05/20/04	ug/l	<0.30	0.70	0.67	<0.60	EPA 8021B
	11/20/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/11/05	ug/l	1.3	<0.30	<0.30	3.1	EPA 8021B
	11/17/05	ug/l	0.87	1.6	0.59	14	EPA 8021B
	05/18/06	ug/l	0.86	0.81	0.55	6.2	EPA 8021B
	11/20/06	ug/l	<0.30	0.97	0.56	11	EPA 8021B
	05/23/07	ug/l	0.39	<0.30	<0.30	0.96	EPA 8021B
	11/14/07	ug/l	11	24	2.4	13	EPA 8021B
	05/09/08	ug/l	0.61	0.55	<0.30	1.3	8015B/8021

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-14S	11/07/08	ug/l	0.49	<0.30	<0.30	1.2	8015B/8021
	05/08/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/06/09	ug/l	<0.30	0.42	<0.30	0.91	8015B/8021
	05/11/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/04/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/12/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/14/11	ug/l	<0.30	0.37	<0.30	0.87	8021B
	05/16/12	ug/l	0.58	<0.30	<0.30	0.83	8021B
	10/15/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-16D	10/02/90	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/15/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/12/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/20/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/24/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/21/92	ug/l	<10	2.0 J	<10	1.0 J	EPA 8240
	11/17/92	ug/l	<0.50	<0.50	<0.50	1.0	EPA 8020
	11/10/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
MW-17S	02/26/92	ug/l	370	58	12 J	33 J	EPA 8240
	05/21/93	ug/l	800 J	47 J	9.8 J	20 J	EPA 8020
	08/18/93	ug/l	960 J	63 J	16 J	60 J	EPA 8020
	11/17/93	ug/l	740	41	NA	19 J	EPA 8020
	02/11/94	ug/l	550	32	<15	37	EPA 8020
	05/12/94	ug/l	1200 J	84 J	81 J	<30	EPA 8020
	08/12/94	ug/l	720 J	35 J	<15	<30	EPA 8020
	11/15/94	ug/l	1100 J	<60	<60	<120	EPA 8020
	02/10/95	ug/l	1000	54	<30	<60	EPA 8020
	05/12/95	ug/l	620	66 J	28	61 J	EPA 8020
	08/11/95	ug/l	880	71	<15	47	EPA 8020
	11/17/95	ug/l	240 J	3.3 J	13 J	<6.0	EPA 8020
	02/07/96	ug/l	200	6.6 J	11	12 J	EPA 8020
	05/23/96	ug/l	79	5.0	4.4	10	EPA 8020
	08/17/96	ug/l	66 J	8.5 J	4.3	15 J	EPA 8020
	11/14/96	ug/l	39 J	<1.5	<1.5	5.9 J	EPA 8020
	02/25/97	ug/l	13 J	1.7 J	3.9 J	4.5 J	EPA 8020
	05/18/97	ug/l	29 J	3.3 J	<0.60	6.7 J	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-17S	11/27/97	ug/l	1.6 J	0.70 J	1.5 J	3.0 J	EPA 8020
	05/16/98	ug/l	12.8	2.3	1.6	<0.6	EPA 8020
	11/29/98	ug/l	11.3	1.9	1.2	6.5	EPA 8020
	06/02/99	ug/l	<0.3	3.9	1.2	5.0	EPA 8021B
	11/25/99	ug/l	3.4	<0.3	<0.3	<0.6	EPA 8021B
	06/02/00	ug/l	0.99	<0.30	1.0	4.7	EPA 8021B
	11/27/00	ug/l	1.2	3.4	2	5.6	EPA 8021B
	05/25/01	ug/l	34	8.1	3.4	11	EPA 8021B
	11/27/01	ug/l	5.8	2.1	3.0	10	EPA 8021B
	05/27/02	ug/l	16	4.2	1.9	2.9	EPA 8021B
	12/10/02	ug/l	35 J	14 J	1.8 J	17 J	EPA 8021B
	05/24/03	ug/l	40	9.1	2.2	11	EPA 8021B
	11/25/03	ug/l	11 J	5.4 J	1.5 J	3.0 J	EPA 8021B
	05/20/04	ug/l	71	17	2.6	7.6	EPA 8021B
	11/21/04	ug/l	40 J	40 J	5.6 J	27 J	EPA 8021B
	05/19/05	ug/l	9.4	3.5	<0.30	1.0	EPA 8021B
	11/11/09	ug/l	28	11	3.3	15	8015B/8021
	05/13/10	ug/l	32	20	<3.0	6.8	EPA 8021B
	11/12/10	ug/l	33	29	1.5	16	8015B/8021
	05/13/11	ug/l	52	16	<15	<30	8021B
	11/14/11	ug/l	48	37	<1.5	8.4	8021B
	05/18/12	ug/l	64	23	2.8	15	8021B
	10/17/12	ug/l	29	42	3.3	28	8021B
MW-18S	09/26/90	ug/l	<1.0	<2.0	1.0 J	3.0	EPA 8240
	01/17/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/03/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/13/91	ug/l	<100	<100	<100	<100	EPA 8240
	11/13/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/24/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/29/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/22/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/19/92	ug/l	<0.50	<16	9.9 J	<18	EPA 8020
	02/24/93	ug/l	<0.50	<0.50	3.1 J	6.8 J	EPA 8020
	05/21/93	ug/l	<1.5	<7.8	9.8 J	<11	EPA 8020
	08/17/93	ug/l	5.1 J	12 J	16 J	18 J	EPA 8020
	11/15/93	ug/l	5.3	3.0	4.8	7.5	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-18S	02/10/94	ug/l	3.8	<0.75	1.7	8.3	EPA 8020
	05/11/94	ug/l	4.1	7.4	6.4	18	EPA 8020
	08/10/94	ug/l	<0.60	4.1	3.0	3.1	EPA 8020
	11/11/94	ug/l	<0.60	2.2	1.9	1.7	EPA 8020
	02/09/95	ug/l	<1.5	<0.30	2.0 J	3.5 J	EPA 8020
	05/10/95	ug/l	4.9 J	3.0 J	2.1 J	2.2 J	EPA 8020
	08/11/95	ug/l	<1.5	3.4 J	3.1 J	4.4 J	EPA 8020
	11/12/95	ug/l	<0.60	<0.60	<0.60	<1.2	EPA 8020
	02/09/96	ug/l	2.6	3.6	0.98	1.1	EPA 8020
	05/17/96	ug/l	7.1 J	<1.5	3.6 J	7.1 J	EPA 8020
	08/15/96	ug/l	2.4 J	2.4 J	1.7 J	5.1 J	EPA 8020
	11/09/96	ug/l	<0.60	1.7 J	14 J	23 J	EPA 8020
	02/24/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/16/97	ug/l	<0.30	3.3 J	<0.30	2.8 J	EPA 8020
	11/27/97	ug/l	1.9 J	0.80 J	0.79 J	4.4 J	EPA 8020
	05/14/98	ug/l	2.4	4.7	<0.6	5.0	EPA 8020
	11/29/98	ug/l	0.8	0.4	1.1	2.9	EPA 8020
	06/01/99	ug/l	<0.3	3.2	<0.3	2.4	EPA 8021B
	11/25/99	ug/l	<0.6	<0.6	<0.6	2.4	EPA 8021B
	06/04/00	ug/l	<0.30	<0.30	0.84	1.5	EPA 8021B
	11/27/00	ug/l	<0.30	2.1	0.69	1.4	EPA 8021B
	05/26/01	ug/l	0.49	4.2	2.6	3.9	EPA 8021B
	11/30/01	ug/l	3.8	0.62	0.9	2.9	EPA 8021B
	05/24/02	ug/l	<0.3	2.6	1.1	2.7	EPA 8021B
	12/09/02	ug/l	<0.30	<0.30	1.1 J	3.5 J	EPA 8021B
	05/20/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	11/21/03	ug/l	<0.30	0.75 J	2.3 J	5.3 J	EPA 8021B
	05/19/04	ug/l	2.1 J	0.74 J	0.64 J	3.0 J	EPA 8021B
	11/21/04	ug/l	2.4 J	3.0 J	1.4 J	3.6 J	EPA 8021B
	05/12/05	ug/l	0.92	0.48	<0.30	5.6	EPA 8021B
	11/17/05	ug/l	0.51	0.59	0.55	4.7	EPA 8021B
	05/18/06	ug/l	1.4	0.64	0.51	4.0	EPA 8021B
	11/17/06	ug/l	0.46	<0.30	0.58	3.6	EPA 8021B
	05/23/07	ug/l	0.93	0.95	1.3	4.4	EPA 8021B
	11/14/07	ug/l	4.5	4.0	<1.5	3.3	EPA 8021B
	05/09/08	ug/l	1.8	0.75	<0.60	<1.2	8015B/8021
	11/07/08	ug/l	1.2	0.85	1.4	4.9	8015B/8021

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-18S	05/08/09	ug/l	2.1	<0.60	<0.60	1.3	8015B/8021
	11/06/09	ug/l	0.64	1.2	0.41	7.2	8015B/8021
	05/10/10	ug/l	1.1	0.44	0.51	1.9	EPA 8021B
	11/04/10	ug/l	0.92	0.61	0.49	1.3	8015B/8021
	05/12/11	ug/l	0.93	0.80	<0.30	1.3	8021B
	11/11/11	ug/l	2.1	1.3	2.3	3.5	8021B
	05/15/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/12/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-19S	09/26/90	ug/l	540	80	<3.0	70	EPA 8240
	01/17/91	ug/l	320	52	6.0	30	EPA 8240
	05/01/91	ug/l	280	37	4.0	17	EPA 8240
	08/13/91	ug/l	50	7.0 J	<20	6.0 J	EPA 8240
	11/15/91	ug/l	370	36	10 J	29	EPA 8240
	02/28/92	ug/l	100	7.0 J	<10	5.0 J	EPA 8240
	06/30/92	ug/l	260	32	7.0 J	23	EPA 8240
	09/24/92	ug/l	240	30	7.0 J	19 J	EPA 8240
	11/16/92	ug/l	300 J	39 J	12 J	19 J	EPA 8020
	11/16/92	ug/l	190 J	28 J	5.0 J	21 J	EPA 8240
	02/24/93	ug/l	220 J	37 J	8.8 J	29 J	EPA 8020
	05/14/93	ug/l	300	48	14	40	EPA 8020
	08/12/93	ug/l	320 J	53 J	14 J	44 J	EPA 8020
	02/08/94	ug/l	530	81	4.0	63	EPA 8020
	05/10/94	ug/l	620	140	24	<30	EPA 8020
	08/09/94	ug/l	370	72	6.2	26	EPA 8020
	11/08/94	ug/l	160	34	<6.0	23	EPA 8020
	11/08/94	ug/l	110	31	<2.0	10	EPA 8240
	02/07/95	ug/l	280	49	9.0	34	EPA 8020
	05/09/95	ug/l	350 J	63 J	11 J	37 J	EPA 8020
	08/08/95	ug/l	350	64	<15	40	EPA 8020
	11/07/95	ug/l	82 J	38 J	7.5 J	27 J	EPA 8020
	11/07/95	ug/l	100	46	<20	<20	EPA 8240
	02/06/96	ug/l	47	24	<15	<30	EPA 8020
	05/19/96	ug/l	90	37	<6.0	18	EPA 8020
	08/15/96	ug/l	64	21	5.7	22	EPA 8020
	11/08/96	ug/l	120 J	38 J	6.5 J	20 J	EPA 8020
	11/08/96	ug/l	130	39	<10	<10	EPA 8240

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-19S	02/20/97	ug/l	20 J	16 J	NA	10 J	EPA 8020
	05/18/97	ug/l	74 J	25 J	7.4 J	18 J	EPA 8020
	11/27/97	ug/l	34 J	16 J	7.3 J	17 J	EPA 8020
	05/15/98	ug/l	19 J	11.7 J	4.9 J	7.0 J	EPA 8020
	11/20/98	ug/l	4.5	<0.3	<0.3	3.0	EPA 8020
	06/01/99	ug/l	16.8	2.6	0.8	6.4	EPA 8021B
	11/26/99	ug/l	39	13	4.4	12	EPA 8021B
	06/04/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/27/00	ug/l	20 J	10 J	3.0 J	11 J	EPA 8021B
	05/26/01	ug/l	<0.30	0.45	<0.30	1.6	EPA 8021B
	11/30/01	ug/l	29	10	2.9	10	EPA 8021B
	05/24/02	ug/l	<0.3	<0.3	<0.3	1.8	EPA 8021B
	12/09/02	ug/l	26	16	2.1	14	EPA 8021B
	05/21/03	ug/l	31 J	14 J	<1.5	<1.5	EPA 8021B
	11/21/03	ug/l	41	37	<6.0	14	EPA 8021B
	05/18/04	ug/l	36 J	16 J	<3.0	11 J	EPA 8021B
	11/21/04	ug/l	28 J	22 J	2.3 J	9.7 J	EPA 8021B
	05/16/05	ug/l	110	72	8.2	41	EPA 8021B
	11/19/05	ug/l	43	26	<6.0	12	EPA 8021B
	05/19/06	ug/l	110	71	12	42	EPA 8021B
	11/21/06	ug/l	120	24	<15	<30	EPA 8021B
	05/24/07	ug/l	22	22	7.1	19	EPA 8021B
	11/15/07	ug/l	44	35	<6.0	18	EPA 8021B
	05/13/08	ug/l	84	39	<6.0	31	8015B/8021
	11/11/08	ug/l	37	9.7	<6.0	13	8015B/8021
	05/13/09	ug/l	25	32	<2.2	8.9	8015B/8021
	11/09/09	ug/l	52	20	4.2	23	8015B/8021
	05/12/10	ug/l	30	38	3.8	23	EPA 8021B
	11/12/10	ug/l	29	38	2.4	9.8	8015B/8021
	05/13/11	ug/l	32	39	<6.0	<12	8021B
	11/15/11	ug/l	50	70	<3.0	12	8021B
	05/18/12	ug/l	42	21	6.5	34	8021B
	10/17/12	ug/l	25	29	<3.0	7.0	8021B
MW-20S	09/25/90	ug/l	5.0	4.0	3.0	1.0	EPA 8240
	01/17/91	ug/l	11	7.0	39	3.0	EPA 8240
	05/01/91	ug/l	4.0	<2.0	8.0	2.0	EPA 8240

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-20S	08/22/91	ug/l	21	10	49	16	EPA 8240
	11/13/91	ug/l	3.0 J	<10	3.0 J	<10	EPA 8240
	02/20/92	ug/l	180	36	<20	16 J	EPA 8240
	06/30/92	ug/l	270	59	12 J	24	EPA 8240
	05/21/93	ug/l	320 J	130 J	33 J	120 J	EPA 8020
	08/18/93	ug/l	500 J	120 J	27 J	58 J	EPA 8020
	11/17/93	ug/l	380	130	31	41	EPA 8020
	11/17/93	ug/l	300	91	14	45	EPA 8240
	02/11/94	ug/l	580	130	32	83	EPA 8020
	05/11/94	ug/l	300	100	8.6	55	EPA 8020
	08/11/94	ug/l	290	88	29	59	EPA 8020
	11/14/94	ug/l	300 J	79 J	38 J	60 J	EPA 8020
	02/09/95	ug/l	530	85	<30	60	EPA 8020
	05/11/95	ug/l	300 J	90	36	83 J	EPA 8020
	08/10/95	ug/l	490 J	110 J	21 J	72 J	EPA 8020
	11/11/95	ug/l	360 J	66	23 J	NA	EPA 8020
	02/10/96	ug/l	350	79	17	47	EPA 8020
	05/18/96	ug/l	360 J	92	15 J	54	EPA 8020
	08/16/96	ug/l	190	63	21	44	EPA 8020
	11/09/96	ug/l	200 J	56 J	17 J	43 J	EPA 8020
	02/25/97	ug/l	300 J	79 J	14 J	49 J	EPA 8020
	05/16/97	ug/l	270 J	81 J	20 J	58 J	EPA 8020
	11/29/97	ug/l	220 J	54 J	13 J	44 J	EPA 8020
	11/29/97	ug/l	200	70	8.5	41	EPA 8240
	05/15/98	ug/l	260	77.1	12.0	33.5	EPA 8020
	11/27/98	ug/l	291	87	16	63	EPA 8020
	11/27/98	ug/l	237	88	12	50	EPA 8260
	06/03/99	ug/l	281	81	17	57	EPA 8021B
	11/28/99	ug/l	210	57	12	33 J	EPA 8021B
	06/04/00	ug/l	67	19	3.0	15	EPA 8021B
	11/17/00	ug/l	170	56	15	48	EPA 8021B
	11/18/00	ug/l	140	54	6.8	8.6	EPA 8260B
	05/25/01	ug/l	22	11	3.0	7.4	EPA 8021B
	11/27/01	ug/l	110 J	38 J	14 J	38 J	EPA 8021B
	05/26/02	ug/l	92	34	8.7	33	EPA 8021B
	12/08/02	ug/l	110	100	19	97	EPA 8021B
	05/20/03	ug/l	110 J	40 J	7.8 J	26 J	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-20S	11/23/03	ug/l	190 J	100 J	25 J	92 J	EPA 8021B
	05/19/04	ug/l	180 J	110 J	10 J	36 J	EPA 8021B
	11/20/04	ug/l	110 J	78 J	11 J	34 J	EPA 8021B
	05/13/05	ug/l	170	64	16	44	EPA 8021B
	11/18/05	ug/l	97	56	10	40	EPA 8021B
	05/18/06	ug/l	100	64	15	43	EPA 8021B
	11/20/06	ug/l	400	69	26	64	EPA 8021B
	05/23/07	ug/l	78	44	10	33	EPA 8021B
	11/14/07	ug/l	89	110	<30	<60	EPA 8021B
	05/12/08	ug/l	130	72	<30	<60	8015B/8021
	11/10/08	ug/l	57	48	12	40	8015B/8021
	05/12/09	ug/l	71	95	11	36	8015B/8021
	11/06/09	ug/l	48	24	7.7	18	8015B/8021
	05/11/10	ug/l	57	73	8.2	31	EPA 8021B
	11/09/10	ug/l	79	110	6.5	31	8015B/8021
	05/12/11	ug/l	89	110	12	46	8021B
	11/14/11	ug/l	71	89	9.9	33	8021B
	05/17/12	ug/l	78	46	11	63	8021B
	10/16/12	ug/l	75	34	9.2	32	8021B
MW-21S	09/26/90	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	01/16/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/03/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/14/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/08/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/19/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/23/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/17/92	ug/l	<10	<10	<10	<10	EPA 8240
MW-22D	09/27/90	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	01/18/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/02/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/14/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/08/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/19/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/22/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/17/92	ug/l	<10	<10	<10	1.0 J	EPA 8240

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-22D	11/10/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	11/10/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/09/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/07/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
MW-22S	08/29/90	ug/l	<5.0	<5.0	<5.0	<5.0	EPA 8240
	09/27/90	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	01/18/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/02/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/14/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/08/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/19/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/22/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/17/92	ug/l	<10	<10	<10	<10	EPA 8240
MW-23D	08/29/90	ug/l	<5.0	<5.0	<5.0	<5.0	EPA 8240
	09/27/90	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	01/18/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/02/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/14/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/08/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/19/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/22/92	ug/l	<10	<10	<10	1.0 J	EPA 8240
	09/17/92	ug/l	<10	1.0 J	<10	<10	EPA 8240
	11/10/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
MW-24D	08/28/90	ug/l	<5.0	<5.0	<5.0	<5.0	EPA 8240
	09/25/90	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	01/16/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/02/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/12/91	ug/l	<10	23	<10	4.0 J	EPA 8240
	11/07/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/20/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/30/92	ug/l	<50	<50	<50	<50	EPA 8240
	09/18/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/23/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	02/22/93	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-24D	05/17/93	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/16/93	ug/l	<0.43	<0.30	<0.50	<0.50	EPA 8020
	11/15/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	02/08/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/10/94	ug/l	<0.30	<0.30	<0.30	95	EPA 8020
	08/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/08/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/07/95	ug/l	<0.95	<0.30	<0.30	<0.60	EPA 8020
	11/09/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/05/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
MW-25D	08/28/90	ug/l	24	7.2	25	31	EPA 8240
	09/28/90	ug/l	3.0	<2.0	3.0	1.0	EPA 8240
	01/16/91	ug/l	4.0	<2.0	<1.0	2.0	EPA 8240
	04/30/91	ug/l	11	3.0	5.0	12	EPA 8240
	08/12/91	ug/l	8.0 J	2.0 J	3.0 J	3.0 J	EPA 8240
	11/11/91	ug/l	<10	<10	<10	1.0 J	EPA 8240
	02/21/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/25/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/22/92	ug/l	<10	<10	<10	<10	EPA 8240
MW-25S	08/28/90	ug/l	<5.0	<5.0	<5.0	<5.0	EPA 8240
	09/28/90	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	01/14/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	04/30/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/12/91	ug/l	3.0 J	<10	<10	<10	EPA 8240
	11/11/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/21/92	ug/l	2.0 J	<10	<10	<10	EPA 8240
	06/26/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/22/92	ug/l	1.0 J	3.0 J	<10	4.0 J	EPA 8240
	11/18/92	ug/l	<0.50	<0.50	<0.50	9.0	EPA 8020
	02/23/93	ug/l	<0.50	<0.50	1.4	<4.8	EPA 8020
	05/18/93	ug/l	0.60 J	<0.30	1.0 J	1.5 J	EPA 8020
	08/16/93	ug/l	<0.71	<0.30	0.77 J	5.8 J	EPA 8020
	11/12/93	ug/l	2.2	<0.30	<0.50	0.75	EPA 8020
	02/10/94	ug/l	<0.30	0.44	0.89	3.0	EPA 8020
	11/11/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-25S	11/08/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/09/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/28/97	ug/l	<0.30	<0.30	<0.30	1.3	EPA 8020
	11/21/98	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8020
	11/24/99	ug/l	0.6	<0.3	0.4	<0.6	EPA 8021B
	06/02/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/30/01	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/06/02	ug/l	9.1 J	57 J	11 J	65 J	EPA 8021B
	05/22/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	11/22/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/18/04	ug/l	<0.30	<0.30	<0.30	0.60	EPA 8021B
	12/11/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/16/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/17/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/17/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/16/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/21/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/12/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/08/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/06/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/07/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/05/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/10/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/04/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/11/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/11/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	05/15/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/12/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-26S	08/28/90	ug/l	720	73	14	28	EPA 8240
	09/25/90	ug/l	21 J	110	15	49	EPA 8240
	01/16/91	ug/l	49	6.0	2.0	5.0	EPA 8240
	05/01/91	ug/l	4.0	<2.0	<1.0	<1.0	EPA 8240
	08/12/91	ug/l	3.0 J	<20	<20	<20	EPA 8240
	11/14/91	ug/l	9.0 J	<10	<10	<10	EPA 8240
	02/26/92	ug/l	4.0 J	<10	<10	<10	EPA 8240

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-26S	06/26/92	ug/l	150	10	3.0 J	4.0 J	EPA 8240
	09/24/92	ug/l	410	27 J	6.0 J	9.0 J	EPA 8240
	11/24/92	ug/l	40	3.4	5.1	3.5	EPA 8020
	11/24/92	ug/l	36	3.0	<1.0	<1.0	EPA 8240
	11/16/93	ug/l	60	11	5.1	3.3	EPA 8020
	11/16/93	ug/l	57	6.0	<2.0	<2.0	EPA 8240
MW-27S	01/14/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	04/30/91	ug/l	63	47	150	55	EPA 8240
	08/12/91	ug/l	5.0 J	2.0 J	5.0 J	2.0 J	EPA 8240
	11/14/91	ug/l	4.0 J	2.0 J	10	3.0 J	EPA 8240
	02/26/92	ug/l	36	<10	<10	<10	EPA 8240
	06/26/92	ug/l	42	<10	<10	<10	EPA 8240
	09/23/92	ug/l	47	<10	NA	<10	EPA 8240
	11/23/92	ug/l	53 J	1.6 J	NA	4.9 J	EPA 8020
	11/23/92	ug/l	55 J	<2.0	<1.0	NA	EPA 8240
	02/23/93	ug/l	21	<0.67	0.76	<1.0	EPA 8020
	05/18/93	ug/l	19	<0.30	0.5	2.0	EPA 8020
	08/16/93	ug/l	12	<1.6	1.7	<1.0	EPA 8020
	11/12/93	ug/l	23	1.3	2.1	3.5	EPA 8020
	11/12/93	ug/l	4.0	<2.0	<2.0	<2.0	EPA 8240
	02/10/94	ug/l	<0.30	2.2	2.8	1.8	EPA 8020
MW-28S	01/15/91	ug/l	110	27	16	29	EPA 8240
	05/01/91	ug/l	35	9.0	6.0	12	EPA 8240
	08/12/91	ug/l	120	27	26	43	EPA 8240
	11/14/91	ug/l	17	<10	3.0 J	3.0 J	EPA 8240
	02/26/92	ug/l	51	3.0 J	7.0 J	6.0 J	EPA 8240
	06/29/92	ug/l	53	2.0 J	5.0 J	2.0 J	EPA 8240
	09/23/92	ug/l	270	11 J	41	10 J	EPA 8240
	11/23/92	ug/l	130	4.1	15	14	EPA 8020
	11/23/92	ug/l	110	3.0	12	3.0	EPA 8240
	02/24/93	ug/l	54	<2.6	6.0	<3.4	EPA 8020
	05/19/93	ug/l	150 J	7.0 J	20 J	17 J	EPA 8020
	08/17/93	ug/l	130	9.2	25	37	EPA 8020
	02/08/94	ug/l	320	52	51	76	EPA 8020
	05/13/94	ug/l	350	54	120	130	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-28S	08/12/94	ug/l	1200	180	230	<300	EPA 8020
	11/14/94	ug/l	820 J	110	130	110	EPA 8020
	02/09/95	ug/l	390	81	120	95	EPA 8020
	05/12/95	ug/l	410 J	73 J	100 J	73 J	EPA 8020
	08/11/95	ug/l	480	84	87	78	EPA 8020
	11/06/95	ug/l	310	67	66	82	EPA 8020
	12/11/95	ug/l	410 J	88 J	75 J	92 J	EPA 8020
	01/25/96	ug/l	330	79	70	75	EPA 8020
	02/10/96	ug/l	310	72	66	81	EPA 8020
	03/05/96	ug/l	310	82	77	87	EPA 8020
	04/16/96	ug/l	330	77	64	72	EPA 8020
	05/21/96	ug/l	390	92	81	120	EPA 8020
	06/12/96	ug/l	270	140	110	61	EPA 8020
	07/11/96	ug/l	380	88	72	86	EPA 8020
	08/13/96	ug/l	280	160	120	89	EPA 8020
	09/10/96	ug/l	410	97	74	100	EPA 8020
	10/10/96	ug/l	240	130	87	70	EPA 8020
	11/07/96	ug/l	340	79	57	87	EPA 8020
	02/24/97	ug/l	<0.30	<0.30	0.33	1.7	EPA 8020
	03/11/97	ug/l	3.0 J	0.47 J	0.50 J	2.8 J	EPA 8020
	05/18/97	ug/l	<0.30	<0.30	<0.30	<0.78	EPA 8020
	11/24/97	ug/l	<0.30	<0.30	<0.30	0.67	EPA 8020
	05/15/98	ug/l	<0.3	0.5	<0.3	0.9	EPA 8020
	11/30/98	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8020
	05/30/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	11/30/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	06/05/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/00	ug/l	0.88	<0.65	0.58	<2.4	EPA 8021B
	05/27/01	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/26/01	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	05/25/02	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	08/19/02	ug/l	9.1	0.44	0.51	1.5	EPA 8021B
	12/07/02	ug/l	0.46 J	<0.30	<0.30	<0.30	EPA 8021B
	02/26/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	05/24/03	ug/l	0.65	<0.30	0.42	1.9	EPA 8021B
	11/22/03	ug/l	0.56 J	<0.30	0.59 J	1.4 J	EPA 8021B
	05/18/04	ug/l	18 J	9.1 J	1.4 J	11 J	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-28S	12/11/04	ug/l	3.0 J	1.9 J	0.67 J	2.9 J	EPA 8021B
	05/17/05	ug/l	9.9	4.1	4.1	4.2	EPA 8021B
	11/18/05	ug/l	28	18	12	10	EPA 8021B
	05/19/06	ug/l	11	13	7.3	7.0	EPA 8021B
	11/21/06	ug/l	72	23	<15	<30	EPA 8021B
	05/16/07	ug/l	13	14	4.3	7.6	EPA 8021B
	11/15/07	ug/l	7.2	6.7	<1.5	7.9	EPA 8021B
	05/12/08	ug/l	26	18	12	26	8015B/8021
	11/11/08	ug/l	1.4	<1.8	0.38	1.6	8015B/8021
	05/12/09	ug/l	9.5	7.2	2.4	17	8015B/8021
	11/09/09	ug/l	1.9	1.3	1.6	3.7	8015B/8021
	05/12/10	ug/l	2.1	1.8	<0.30	5.4	EPA 8021B
	11/10/10	ug/l	1.2	<0.30	<0.30	<0.60	8015B/8021
	05/13/11	ug/l	1.4	0.73	<0.30	2.5	8021B
	11/14/11	ug/l	15	9.0	2.3	17	8021B
	05/18/12	ug/l	8.7	5.4	4.9	11	8021B
	10/17/12	ug/l	31	13	<3.0	25	8021B
MW-29D	01/15/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	04/30/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/12/91	ug/l	5.0 J	10 J	<50	<50	EPA 8240
	11/12/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/24/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/25/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/21/92	ug/l	2.0 J	<10	<10	<10	EPA 8240
	11/17/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	02/23/93	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	05/18/93	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/12/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	11/11/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	02/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/10/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/08/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/07/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/08/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/05/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-29S	01/15/91	ug/l	2.0	<2.0	<1.0	<1.0	EPA 8240
	04/30/91	ug/l	40	4.0	<1.0	3.0	EPA 8240
	08/13/91	ug/l	<10	1.0 J	<10	<10	EPA 8240
	11/15/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/21/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/24/92	ug/l	<10	<10	<10	1.0 J	EPA 8240
	09/21/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/18/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	11/11/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	11/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/08/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/09/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/24/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/21/98	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8020
	11/24/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	06/02/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/28/00	ug/l	0.32	<0.30	1.2	7.8	EPA 8021B
	11/30/01	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/09/02	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	05/22/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	11/21/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/18/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	12/11/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/16/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/16/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/14/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/17/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/08/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/06/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/04/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/05/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/03/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/04/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/02/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/05/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-29S	11/09/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	05/09/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/09/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-30S	01/15/91	ug/l	3.0	<2.0	<1.0	<1.0	EPA 8240
	05/03/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/13/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/07/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/25/92	ug/l	5.0 J	2.0 J	<10	<10	EPA 8240
	06/25/92	ug/l	18	7.0 J	3.0 J	7.0 J	EPA 8240
	09/23/92	ug/l	10	6.0 J	2.0 J	5.0 J	EPA 8240
	11/19/92	ug/l	<11	<12	<3.1	8.8 J	EPA 8020
	02/24/93	ug/l	11 J	12 J	3.3 J	10 J	EPA 8020
	05/19/93	ug/l	22 J	18 J	26 J	36 J	EPA 8020
	08/16/93	ug/l	28 J	27 J	28 J	35 J	EPA 8020
	11/12/93	ug/l	15	8.0	6.0	11	EPA 8020
	02/10/94	ug/l	12	<0.30	3.5	7.4	EPA 8020
	05/11/94	ug/l	6.8 J	4.3 J	2.3 J	5.5 J	EPA 8020
	08/10/94	ug/l	11	4.8	3.2	6.5	EPA 8020
	11/14/94	ug/l	8.3	<3.0	<3.0	7.2	EPA 8020
	02/09/95	ug/l	39 J	8.8 J	13 J	25 J	EPA 8020
	05/10/95	ug/l	8.0 J	2.9 J	3.4 J	5.5 J	EPA 8020
	08/11/95	ug/l	4.4	4.5	2.8	5.5	EPA 8020
	11/09/95	ug/l	5.7 J	1.8 J	2.3 J	4.4 J	EPA 8020
	02/10/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/21/96	ug/l	3.8	5.7	6.2	9.6	EPA 8020
	08/15/96	ug/l	4.2 J	3.4 J	3.6 J	8.7 J	EPA 8020
	11/08/96	ug/l	5.6	2.0	2.5	4.9	EPA 8020
	02/20/97	ug/l	1.0 J	2.2 J	1.5 J	3.0 J	EPA 8020
	05/18/97	ug/l	<0.60	2.7 J	2.0 J	3.9 J	EPA 8020
	11/24/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/14/98	ug/l	3.2 J	1.8 J	1.2 J	2.4 J	EPA 8020
	11/20/98	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8020
	06/01/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	11/26/99	ug/l	<3.0	6.0	<3.0	11	EPA 8021B
	06/03/00	ug/l	19 J	10 J	8.9 J	20 J	EPA 8021B
	11/28/00	ug/l	3.7	3.0	3.6	11	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-30S	05/27/01	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/30/01	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	05/27/02	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/09/02	ug/l	10	6.3	3.4	9	EPA 8021B
	05/21/03	ug/l	4.9 J	<0.60	1.7 J	2.8 J	EPA 8021B
	11/21/03	ug/l	0.47	1.0	1.2	2.2	EPA 8021B
	05/17/04	ug/l	6.2 J	8.9 J	2.0 J	2.8 J	EPA 8021B
	11/21/04	ug/l	1.9 J	1.8 J	0.82 J	1.2 J	EPA 8021B
	05/17/05	ug/l	1.8	10	3.8	7.2	EPA 8021B
	11/17/05	ug/l	0.56	0.57	1.3	2.2	EPA 8021B
	05/18/06	ug/l	2.3	1.4	3.3	4.5	EPA 8021B
	11/16/06	ug/l	1.6	<1.5	<1.5	<3.0	EPA 8021B
	05/22/07	ug/l	1.2	1.1	1.8	4.0	EPA 8021B
	11/12/07	ug/l	3.8	2.7	2.6	4.4	EPA 8021B
	05/08/08	ug/l	3.7	2.0	2.0	2.2	8015B/8021
	11/07/08	ug/l	0.59	0.55	0.68	1.6	8015B/8021
	05/08/09	ug/l	4.0	3.9	1.3	<1.2	8015B/8021
	11/05/09	ug/l	<0.30	<0.30	0.34	0.70	8015B/8021
	05/10/10	ug/l	5.0	7.0	2.2	1.6	EPA 8021B
	11/08/10	ug/l	2.0	3.9	0.92	0.69	8015B/8021
	05/11/11	ug/l	6.5	10	4.7	4.8	8021B
	11/11/11	ug/l	6.3	9.1	2.2	1.8	8021B
	05/15/12	ug/l	5.9	4.0	9.4	18	8021B
	10/12/12	ug/l	0.54	0.35	1.5	2.6	8021B
MW-31D	01/15/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/02/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/13/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/12/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/25/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/25/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/22/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/19/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	02/22/93	ug/l	<0.50	<0.61	<0.50	<1.0	EPA 8020
	05/18/93	ug/l	2.0	<0.30	<0.30	<0.60	EPA 8020
	08/12/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	11/11/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-31D	02/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/10/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/07/95	ug/l	2.8	<0.30	<0.30	<0.60	EPA 8020
	05/09/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/09/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/09/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/10/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/15/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/13/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/07/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/18/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
MW-32S	01/16/91	ug/l	58	7.0	3.0	6.0	EPA 8240
	05/01/91	ug/l	4.0	<2.0	<1.0	<1.0	EPA 8240
	08/14/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/14/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/20/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/23/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/17/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/16/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	02/22/93	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	05/17/93	ug/l	<0.30	<0.30	<0.30	1.1	EPA 8020
	08/12/93	ug/l	<0.30	<0.30	<0.50	<1.4	EPA 8020
	11/11/93	ug/l	<0.30	0.73	2.2	0.63	EPA 8020
	02/09/94	ug/l	<0.30	<0.30	<0.30	2.2	EPA 8020
MW-33D	01/15/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/02/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/13/91	ug/l	<10	8.0 J	<10	4.0 J	EPA 8240
	11/12/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/25/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/24/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/18/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/17/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	02/22/93	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-33D	05/18/93	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/12/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	11/11/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	02/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/10/94	ug/l	0.30	0.30	<0.30	<0.60	EPA 8020
	05/10/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/09/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/09/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/10/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/15/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/13/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/07/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/18/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
MW-34S	01/16/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	05/01/91	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	08/14/91	ug/l	<10	<10	<10	<10	EPA 8240
	11/13/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/19/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/23/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/21/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/16/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	02/22/93	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	05/17/93	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/12/93	ug/l	<0.30	<0.30	<0.50	<0.53	EPA 8020
	11/11/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	02/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
MW-35S	11/11/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/18/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/23/92	ug/l	<10	1.0 J	<10	2.0 J	EPA 8240
	09/21/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/18/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	11/10/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
	11/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/11/95	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8020
	11/08/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-35S	11/24/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/27/98	ug/l	<0.3	0.4	<0.3	<0.6	EPA 8020
	11/28/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	06/05/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/17/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/27/01	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/05/02	ug/l	<0.30	0.64	<0.30	0.78	EPA 8021B
	03/03/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	04/01/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	05/20/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	06/17/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	07/11/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	08/26/03	ug/l	<0.30	0.59 J	<0.30	<0.30	EPA 8021B
	09/26/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	10/26/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/21/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	12/20/03	ug/l	0.96	3.0	0.6	2.5	EPA 8021B
	01/18/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	02/28/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	03/20/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	04/25/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/19/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	06/12/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/20/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/20/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	03/09/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/11/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/16/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	02/14/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/16/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/15/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/14/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	02/20/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/17/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/21/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/09/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-35S	02/07/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/06/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	08/05/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/05/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	02/03/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	06/05/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	08/04/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/04/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	02/02/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/04/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/11/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/03/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	02/09/11	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/05/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	08/24/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/09/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	02/01/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	05/10/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	08/14/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/10/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-36S	11/11/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/18/92	ug/l	<10	<10	<10	<10	EPA 8240
	06/23/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/21/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/18/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	11/10/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
MW-37S	05/19/93	ug/l	20 J	3.8 J	7.7 J	13 J	EPA 8020
	05/19/93	ug/l	22	4.0	7.0	8.0	EPA 8240
	08/16/93	ug/l	14	<2.2	11	17	EPA 8020
	11/12/93	ug/l	8.8	1.0	2.8	3.3	EPA 8020
	02/10/94	ug/l	9.7	5.6	3.9	8.6	EPA 8020
	05/11/94	ug/l	8.6 J	2.4 J	4.0 J	7.9 J	EPA 8020
	08/10/94	ug/l	2.9	1.5	1.6	15	EPA 8020
	11/11/94	ug/l	43	4.9	10	16	EPA 8020
	02/08/95	ug/l	27	0.81	5.1	6.4	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-37S	05/10/95	ug/l	220	<6.0	<6.0	<12	EPA 8020
	05/10/95	ug/l	170	4.0	<2.0	3.0	EPA 8240
	08/11/95	ug/l	8.0 J	6.1 J	3.7	<6.0	EPA 8020
	11/12/95	ug/l	5.7	0.68	3.8	4.6	EPA 8020
	11/12/95	ug/l	6.1	<2.0	<2.0	<2.0	EPA 8240
	02/06/96	ug/l	<1.0	<1.0	1.8	<2.0	EPA 8020
	05/23/96	ug/l	<0.30	<0.30	<0.30	3.3	EPA 8020
	08/15/96	ug/l	2.3 J	7.1 J	3.0 J	44 J	EPA 8020
	11/12/96	ug/l	<0.30	2.8 J	1.6 J	2.2 J	EPA 8020
	11/12/96	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8240
	02/20/97	ug/l	<1.5	<1.5	3.0	3.9	EPA 8020
	05/15/97	ug/l	0.94	2.7	2.1	<1.2	EPA 8020
	11/28/97	ug/l	0.49 J	1.6 J	2.0 J	5.9 J	EPA 8020
	05/16/98	ug/l	<0.3	<0.3	1.9	2.5	EPA 8020
	11/21/98	ug/l	<0.3	1.8	1.0	0.9	EPA 8020
	05/30/99	ug/l	0.3	<0.3	1.2	2.7	EPA 8021B
	11/24/99	ug/l	<0.6	<0.6	<0.6	3.9	EPA 8021B
	06/02/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/28/00	ug/l	<0.30	2.5	2.2	5.3	EPA 8021B
	05/25/01	ug/l	0.58	<0.30	3.7	6.5	EPA 8021B
	11/29/01	ug/l	<0.3	<0.3	<0.3	2.1	EPA 8021B
	05/24/02	ug/l	<0.3	2.5	1.4	1.2	EPA 8021B
	12/06/02	ug/l	5.8 J	17 J	2.4 J	13 J	EPA 8021B
	05/22/03	ug/l	<0.30	<0.30	<0.30	1.6	EPA 8021B
	11/22/03	ug/l	<0.30	1.5	1.7	6.9	EPA 8021B
	05/18/04	ug/l	<0.30	<0.30	0.60	3.1	EPA 8021B
	12/11/04	ug/l	<0.30	<0.30	1.2 J	5.1 J	EPA 8021B
	05/11/05	ug/l	0.59	0.84	0.90	3.0	EPA 8021B
	11/16/05	ug/l	<0.30	1.1	1.1	2.0	EPA 8021B
	05/17/06	ug/l	0.99	1.5	1.5	3.0	EPA 8021B
	11/16/06	ug/l	0.36	2.5	1.6	3.4	EPA 8021B
	05/21/07	ug/l	0.49	1.2	1.2	3.0	EPA 8021B
	11/12/07	ug/l	<0.30	1.2	1.3	6.1	EPA 8021B
	05/08/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/06/08	ug/l	<0.30	<0.30	<0.30	1.2	8015B/8021
	05/07/09	ug/l	<0.30	<0.30	1.1	1.8	8015B/8021
	11/05/09	ug/l	0.40	1.5	1.1	4.7	8015B/8021

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-37S	05/10/10	ug/l	<0.30	<0.30	1.1	1.5	EPA 8021B
	11/04/10	ug/l	<0.30	<0.30	1.0	1.2	8015B/8021
	05/11/11	ug/l	0.45	<0.30	2.1	3.4	8021B
	11/11/11	ug/l	0.43	1.2	1.8	3.1	8021B
	05/15/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/12/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-38S	05/19/93	ug/l	9.7	4.0	1.4	8.5	EPA 8020
	05/19/93	ug/l	14	6.0	2.0	13	EPA 8240
	08/16/93	ug/l	7.3	<0.30	1.1	<0.51	EPA 8020
	11/12/93	ug/l	0.81	2.1	0.90	0.53	EPA 8020
	02/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/10/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/08/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/07/95	ug/l	2.5	<0.30	<0.30	<0.60	EPA 8020
	11/12/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/12/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/25/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/21/98	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8020
	11/24/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	06/02/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/28/00	ug/l	<0.30	<0.30	<0.30	0.74	EPA 8021B
	11/30/01	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/06/02	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	05/22/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	11/22/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/17/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	12/11/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/10/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/16/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/14/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/17/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/08/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/06/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/04/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-38S	05/05/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/03/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/04/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/02/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/05/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/02/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	05/09/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/09/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-39S	11/15/93	ug/l	430	120	130	83	EPA 8020
	11/15/93	ug/l	270	120	110	58	EPA 8240
	02/11/94	ug/l	520	200	110	100	EPA 8020
	05/11/94	ug/l	510 J	230 J	66 J	65 J	EPA 8020
	08/11/94	ug/l	350	180	99	110	EPA 8020
	11/14/94	ug/l	310 J	130 J	84 J	74 J	EPA 8020
	11/14/94	ug/l	250	130	65	56	EPA 8240
	02/10/95	ug/l	500	150	37	89	EPA 8020
	05/11/95	ug/l	260 J	82 J	46 J	<60	EPA 8020
	08/08/95	ug/l	460	160	47	76	EPA 8020
	11/11/95	ug/l	390	130	52	68	EPA 8020
	11/11/95	ug/l	400 J	170 J	47 J	57 J	EPA 8240
	02/09/96	ug/l	490	140	31	66	EPA 8020
	05/23/96	ug/l	450	140	41	78	EPA 8020
	08/17/96	ug/l	500	150	63	84	EPA 8020
	11/13/96	ug/l	470 J	150 J	47 J	79 J	EPA 8020
	11/13/96	ug/l	420	170	39	77	EPA 8240
	02/20/97	ug/l	500	140	34	72	EPA 8020
	05/16/97	ug/l	450 J	130 J	32 J	63 J	EPA 8020
	11/28/97	ug/l	500	120	29	100	EPA 8020
	05/14/98	ug/l	724	169	33.1	65.9	EPA 8020
	11/30/98	ug/l	584	124	27	83	EPA 8020
	06/02/99	ug/l	521 J	139 J	16.3 J	98.7 J	EPA 8021B
	11/30/99	ug/l	440	96	19	67	EPA 8021B
	06/04/00	ug/l	440 J	110 J	24 J	73 J	EPA 8021B
	11/17/00	ug/l	450 J	110 J	22 J	74 J	EPA 8021B
	05/27/01	ug/l	480	83	<6.0	49 J	EPA 8021B
	11/28/01	ug/l	610	100	27	84	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-39S	05/26/02	ug/l	690	98	22	85	EPA 8021B
	12/10/02	ug/l	390 J	65 J	13 J	64 J	EPA 8021B
	12/10/02	ug/l	51	9.9	1.2	5.1	EPA 8260B
	03/04/03	ug/l	550	87	14	75	EPA 8021B
	03/19/03	ug/l	410	23	13	63	EPA 8021B
	03/31/03	ug/l	470	87	18	71	EPA 8021B
	04/22/03	ug/l	580	100	22	84	EPA 8021B
	04/22/03	ug/l	560	100	12	52	EPA 8260B
	05/20/03	ug/l	380 J	58 J	11 J	45 J	EPA 8021B
	06/17/03	ug/l	610	97	20	64	EPA 8021B
	07/11/03	ug/l	470	76	18	65	EPA 8021B
	08/25/03	ug/l	470 J	73 J	19 J	65 J	EPA 8021B
	09/27/03	ug/l	460 J	110 J	16 J	46 J	EPA 8021B
	10/26/03	ug/l	520	110	16	93	EPA 8021B
	11/25/03	ug/l	460 J	89 J	18	54	EPA 8021B
	11/25/03	ug/l	450	94	<20	45	EPA 8260B
	12/20/03	ug/l	570 J	140 J	19 J	59 J	EPA 8021B
	01/17/04	ug/l	680	120	21	65	EPA 8021B
	02/28/04	ug/l	580	140	<15	46	EPA 8021B
	03/20/04	ug/l	520	110	39	150	EPA 8021B
	04/23/04	ug/l	280 J	54 J	12 J	34 J	EPA 8021B
	05/21/04	ug/l	450 J	79 J	<15	40 J	EPA 8021B
	06/12/04	ug/l	300 J	52 J	13 J	34 J	EPA 8021B
	08/21/04	ug/l	24 J	10 J	<6.0	<12	EPA 8021B
	10/05/04	ug/l	530	110	<20	51	EPA 8260B
	11/19/04	ug/l	420	110 J	<15	46	EPA 8021B
	11/19/04	ug/l	450	98	<20	43	EPA 8260B
	03/09/05	ug/l	620 J	88 J	<15	35 J	EPA 8021B
	05/16/05	ug/l	1100	140	20	110	EPA 8021B
	05/16/05	ug/l	470	89	<10	56	EPA 8260B
	08/18/05	ug/l	550	120	17	52	EPA 8021B
	11/18/05	ug/l	430	91	<15	55	EPA 8021B
	11/18/05	ug/l	360	70	<2.0	46	EPA 8260B
	02/15/06	ug/l	550	120	31	120	EPA 8021B
	05/19/06	ug/l	410	75	18	55	EPA 8021B
	08/16/06	ug/l	430	55	<30	<60	EPA 8021B
	11/21/06	ug/l	520	53	<15	<30	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-39S	11/21/06	ug/l	400	91	<20	38	EPA 8260B
	02/21/07	ug/l	380	110	25	67	EPA 8021B
	05/16/07	ug/l	510	99	<15	110	EPA 8021B
	08/23/07	ug/l	420	69	<30	<60	EPA 8021B
	11/13/07	ug/l	450	130	20	68	EPA 8021B
	11/13/07	ug/l	490	98	<20	48	EPA 8260B
	02/07/08	ug/l	560	120	24	83	8015B/8021
	05/12/08	ug/l	430	89	<30	<60	8015B/8021
	08/07/08	ug/l	330	86	16	45	8015B/8021
	11/10/08	ug/l	240	110	12	43	8015B/8021
	11/10/08	ug/l	290	81	<10	46	EPA 8260B
	02/09/09	ug/l	390	73	<15	41	8015B/8021
	05/12/09	ug/l	300	97	11	40	8015B/8021
	08/06/09	ug/l	340	110	17	56	8015B/8021
	11/09/09	ug/l	180	36	7.8	40	8015B/8021
	11/09/09	ug/l	360	89	<10	54	EPA 8260B
	02/08/10	ug/l	390	150	11	46	EPA 8021B
	05/12/10	ug/l	350	120	18	66	EPA 8021B
	08/16/10	ug/l	340	150	9.2	46	EPA 8021B
	11/11/10	ug/l	350	150	15	59	8015B/8021
	11/11/10	ug/l	310	95	9.2	54	8260B
	02/11/11	ug/l	340	120	13	58	8015B/8021
	05/10/11	ug/l	360	160	9.5	48	8021B
	08/18/11	ug/l	180	110	<15	38	8021B
	11/08/11	ug/l	240	130	15	49	8021B
	11/08/11	ug/l	210	72	8.5	51	8260B
	02/03/12	ug/l	240	66	<6.0	33	8021B
	05/18/12	ug/l	180	49	10	56	8021B
	08/16/12	ug/l	240	69	<15	76	8021B
	10/17/12	ug/l	190	100	12	50	8021B
	10/17/12	ug/l	190	80	7.5	50	8260B
MW-40S	10/21/93	ug/l	72 J	21 J	21 J	27 J	EPA 8020
	10/21/93	ug/l	64	17	<2.0	20	EPA 8240
	10/26/93	ug/l	37	17	<2.0	15	EPA 8240
	02/08/94	ug/l	200	42	3.1	38	EPA 8020
	05/10/94	ug/l	19	11	11	<12	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-40S	08/09/94	ug/l	11 J	9.0 J	7.1 J	19 J	EPA 8020
	11/08/94	ug/l	230	46	<9.9	26	EPA 8020
	02/07/95	ug/l	140 J	26 J	12 J	30 J	EPA 8020
	05/09/95	ug/l	39 J	18 J	11 J	25 J	EPA 8020
	08/08/95	ug/l	510	67	<15	36	EPA 8020
	11/07/95	ug/l	370	53	8.7	31	EPA 8020
	02/06/96	ug/l	400	61	<15	<30	EPA 8020
	05/19/96	ug/l	290	56	11	39	EPA 8020
	08/17/96	ug/l	11 J	13 J	3.8 J	23 J	EPA 8020
	11/14/96	ug/l	360	60	13	44	EPA 8020
	02/25/97	ug/l	360	71	<6.0	32	EPA 8020
	05/18/97	ug/l	230	47	<15	39 J	EPA 8020
	11/26/97	ug/l	18 J	8.0 J	4.1 J	24 J	EPA 8020
	11/26/97	ug/l	11	8.2	<2.0	7.6	EPA 8240
	05/15/98	ug/l	205	53.3	<3.0	24.7	EPA 8020
	11/28/98	ug/l	224 J	58 J	14 J	41 J	EPA 8020
	11/28/98	ug/l	183	63	<10	29 J	EPA 8260
	06/01/99	ug/l	20.2 J	<0.3	2.2 J	18.6 J	EPA 8021B
	01/07/00	ug/l	88	95	85	220	EPA 8021B
	06/04/00	ug/l	16 J	8.7 J	4.8 J	13 J	EPA 8021B
	11/17/00	ug/l	63 J	33 J	5.9 J	25 J	EPA 8021B
	05/27/01	ug/l	<600	<600	<600	NA	EPA 8021B
	05/27/01	ug/l	12	2.0	9.8	9.7	EPA 8260B
	11/27/01	ug/l	16	10	8.9 J	20 J	EPA 8021B
	05/24/02	ug/l	96	37	9.2	28	EPA 8021B
	12/08/02	ug/l	20	42	36	42	EPA 8021B
	05/21/03	ug/l	9.2 J	3.3 J	<1.5	9.8 J	EPA 8021B
	11/24/03	ug/l	16	16	<15	<30	EPA 8021B
	05/20/04	ug/l	15 J	12 J	8.2 J	14 J	EPA 8021B
	11/21/04	ug/l	31 J	21 J	4.1 J	87 J	EPA 8021B
	05/24/07	ug/l	16	12	16	38	EPA 8021B
	11/15/07	ug/l	30	12	<12	<24	EPA 8021B
MW-41S	11/15/93	ug/l	330	26	<13	34	EPA 8020
	11/15/93	ug/l	310	25	<5.0	6.0	EPA 8240
	02/10/94	ug/l	440	42 J	13 J	40	EPA 8020
	05/12/94	ug/l	270	12	<6.0	12	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-41S	08/11/94	ug/l	330	22	<3.0	18	EPA 8020
	11/10/94	ug/l	230 J	15 J	5.2 J	21 J	EPA 8020
	02/09/95	ug/l	240 J	13 J	6.3 J	18 J	EPA 8020
	05/11/95	ug/l	160	90	<6.0	12	EPA 8020
	08/10/95	ug/l	180 J	8.0 J	7.2 J	19 J	EPA 8020
	11/11/95	ug/l	110 J	13 J	5.1 J	17 J	EPA 8020
	02/08/96	ug/l	56 J	4.9 J	6.0 J	15 J	EPA 8020
	05/22/96	ug/l	100 J	14 J	8.2 J	22 J	EPA 8020
	08/16/96	ug/l	65	14	9.6	19	EPA 8020
	11/14/96	ug/l	87 J	9.7 J	<3.0	20 J	EPA 8020
	02/20/97	ug/l	51	7.3	<6.0	15	EPA 8020
	05/16/97	ug/l	42 J	10 J	5.2 J	13 J	EPA 8020
	11/29/97	ug/l	31 J	25 J	5.6 J	11 J	EPA 8020
	05/14/98	ug/l	28.2	3.6	4.1	<3.0	EPA 8020
	11/27/98	ug/l	34.8	7.1	4.1	13.9	EPA 8020
	06/03/99	ug/l	48.7 J	12 J	2.6 J	18.4 J	EPA 8021B
	11/28/99	ug/l	28 J	8.1 J	4.7 J	14 J	EPA 8021B
	06/04/00	ug/l	37 J	12 J	4.6 J	12 J	EPA 8021B
	11/17/00	ug/l	11 J	4.5 J	2.3 J	13 J	EPA 8021B
	05/25/01	ug/l	10	6.6	1.1	5.9	EPA 8021B
	11/27/01	ug/l	32 J	9.1 J	7.1 J	20 J	EPA 8021B
	05/27/02	ug/l	35	9.9	6.7 J	20	EPA 8021B
	12/05/02	ug/l	19 J	34 J	8.4 J	59 J	EPA 8021B
	03/04/03	ug/l	12	<1.5	<1.5	9.8	EPA 8021B
	04/01/03	ug/l	8.9	2.4	4.7	24	EPA 8021B
	05/21/03	ug/l	11	2.7	4.7	9.1	EPA 8021B
	06/18/03	ug/l	16 J	3.3 J	5.0 J	11 J	EPA 8021B
	07/12/03	ug/l	15	3.0	4.6	9.3	EPA 8021B
	08/25/03	ug/l	16	4.1	5.2	7.2 J	EPA 8021B
	09/27/03	ug/l	16 J	5.1 J	3.3 J	6.7 J	EPA 8021B
	10/26/03	ug/l	<3.0	16 J	14 J	34 J	EPA 8021B
	11/23/03	ug/l	10 J	7.1 J	5.7 J	12 J	EPA 8021B
	12/20/03	ug/l	19 J	5.7 J	5.6 J	11 J	EPA 8021B
	01/17/04	ug/l	41	5.3	3.6	27	EPA 8021B
	02/28/04	ug/l	20 J	19 J	4.0 J	9.3 J	EPA 8021B
	03/20/04	ug/l	19 J	11 J	3.4 J	9.3 J	EPA 8021B
	04/23/04	ug/l	28 J	6.3 J	4.4 J	8.0 J	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-41S	05/19/04	ug/l	15 J	7.6 J	5.1 J	9.7 J	EPA 8021B
	06/12/04	ug/l	17 J	8.3 J	5.1 J	10 J	EPA 8021B
	08/21/04	ug/l	19	8.4	5.1	13	EPA 8021B
	11/20/04	ug/l	17 J	3.2 J	2.3 J	7.9 J	EPA 8021B
	03/10/05	ug/l	2.6 J	0.74 J	0.92 J	2.5 J	EPA 8021B
	05/12/05	ug/l	4.2	0.83	1.0	2.6	EPA 8021B
	08/16/05	ug/l	16	2.5	2.1	7.0	EPA 8021B
	11/18/05	ug/l	21	5.3	3.1	11	EPA 8021B
	02/15/06	ug/l	310	300	330	950	EPA 8021B
	05/18/06	ug/l	22	5.7	2.9	8.3	EPA 8021B
	08/16/06	ug/l	79	<30	<30	<60	EPA 8021B
	11/20/06	ug/l	25	7.6	4.3	14	EPA 8021B
	02/21/07	ug/l	54	45	9.3	30	EPA 8021B
	05/23/07	ug/l	22	11	6.4	28	EPA 8021B
	08/22/07	ug/l	25	6.2	<6.0	13	EPA 8021B
	11/14/07	ug/l	36	7.0	5.8	19	EPA 8021B
	02/08/08	ug/l	29	8.6	4.8	24	8015B/8021
	05/09/08	ug/l	31	7.6	4.5	9.7	8015B/8021
	08/06/08	ug/l	24	7.7	4.9	11	8015B/8021
	11/10/08	ug/l	24	26	<6.0	<12	8015B/8021
	02/05/09	ug/l	21	7.7	5.1	9.4	8015B/8021
	05/12/09	ug/l	22	24	<6.0	<12	8015B/8021
	08/06/09	ug/l	41	31	4.1	9.9	8015B/8021
	11/06/09	ug/l	26	5.7	6.7	27	8015B/8021
	02/04/10	ug/l	10	11	3.9	5.5	EPA 8021B
	05/11/10	ug/l	17	24	3.8	13	EPA 8021B
	08/12/10	ug/l	12	18	2.5	7.9	EPA 8021B
	11/11/10	ug/l	13	<1.5	1.6	3.4	8015B/8021
	02/10/11	ug/l	11	13	2.1	7.1	8015B/8021
	05/12/11	ug/l	12	12	1.4	3.1	8021B
	08/18/11	ug/l	13	21	1.9	5.5	8021B
	11/14/11	ug/l	14	16	<3.0	<6.0	8021B
	02/03/12	ug/l	18	<3.0	<3.0	11	8021B
	05/16/12	ug/l	22	6.4	8.0	22	8021B
	08/16/12	ug/l	19	4.9	5.4	17	8021B
	10/16/12	ug/l	18	4.4	7.0	20	8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-42S	11/12/93	ug/l	110	60	24	9.3	EPA 8020
	11/12/93	ug/l	71	11	<4.0	9.0	EPA 8240
	02/10/94	ug/l	72	67 J	25 J	<15	EPA 8020
	05/12/94	ug/l	360	150	44	<6.0	EPA 8020
	08/11/94	ug/l	300	23	<6.0	52	EPA 8020
	11/10/94	ug/l	240 J	24 J	<3.0	52 J	EPA 8020
	02/09/95	ug/l	410 J	32 J	<6.0	56 J	EPA 8020
	05/11/95	ug/l	25 J	2.5 J	<0.30	7.0 J	EPA 8020
	08/10/95	ug/l	150	15	<6.0	41	EPA 8020
	11/11/95	ug/l	140	16	<3.0	44	EPA 8020
	11/11/95	ug/l	110 J	16 J	2.0 J	7.7 J	EPA 8240
	02/08/96	ug/l	140 J	24 J	2.2 J	46 J	EPA 8020
	05/20/96	ug/l	210	30	<3.0	76	EPA 8020
	08/16/96	ug/l	250 J	37 J	28 J	71 J	EPA 8020
	11/14/96	ug/l	350 J	50 J	<6.0	98 J	EPA 8020
	02/24/97	ug/l	380 J	60 J	4.5 J	84 J	EPA 8020
	05/16/97	ug/l	310 J	45 J	3.3 J	59 J	EPA 8020
	11/29/97	ug/l	170 J	25 J	2.4 J	35 J	EPA 8020
	05/14/98	ug/l	208	17.8	3.3	<6.0	EPA 8020
	11/30/98	ug/l	94.5	11.6	1.7	23.9	EPA 8020
	06/03/99	ug/l	239 J	34.6 J	20.2 J	38.6 J	EPA 8021B
	11/27/99	ug/l	210 J	34 J	4.9 J	56 J	EPA 8021B
	11/27/99	ug/l	280	48	7.2	40.3	EPA 8260
	06/03/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/17/00	ug/l	270 J	50 J	7.1 J	76 J	EPA 8021B
	05/27/01	ug/l	140 J	27 J	4.8	44 J	EPA 8021B
	11/30/01	ug/l	220	40	6.6	60	EPA 8021B
	11/30/01	ug/l	240	48	7.4	44.2	EPA 8260B
	05/25/02	ug/l	15	3.6	<0.6	12	EPA 8021B
	12/05/02	ug/l	140	32	5.5	53	EPA 8021B
	12/05/02	ug/l	200	48	7.8	49	EPA 8260B
	03/04/03	ug/l	220	44	9.1	63	EPA 8021B
	03/19/03	ug/l	200	130	8.7	74	EPA 8021B
	03/31/03	ug/l	180	46	7.8	69	EPA 8021B
	04/22/03	ug/l	210	44	7.5	70	EPA 8021B
	05/23/03	ug/l	160 J	36 J	6.1	61 J	EPA 8021B
	06/18/03	ug/l	210 J	43 J	8.1 J	73 J	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-42S	07/11/03	ug/l	180	36	7.0	61	EPA 8021B
	08/25/03	ug/l	140 J	90 J	24 J	46 J	EPA 8021B
	09/26/03	ug/l	47 J	29 J	8.0 J	10 J	EPA 8021B
	10/25/03	ug/l	210	140	39	42	EPA 8021B
	11/25/03	ug/l	220 J	45 J	6.8	90 J	EPA 8021B
	11/25/03	ug/l	140	39	7.8	43.8	EPA 8260B
	12/19/03	ug/l	240 J	50 J	8.4 J	100 J	EPA 8021B
	01/17/04	ug/l	170	110	31	34	EPA 8021B
	02/28/04	ug/l	190 J	130 J	36 J	38 J	EPA 8021B
	03/20/04	ug/l	66	14	<6.0	28	EPA 8021B
	04/24/04	ug/l	38 J	26 J	7.9 J	12 J	EPA 8021B
	05/21/04	ug/l	130 J	NA	25 J	35 J	EPA 8021B
	06/12/04	ug/l	45 J	32 J	9.8 J	15 J	EPA 8021B
	08/21/04	ug/l	120	91	30	45	EPA 8021B
	11/20/04	ug/l	18 J	5.9 J	1.3 J	10 J	EPA 8021B
	11/20/04	ug/l	23	8	<2.0	5.3	EPA 8260B
	03/09/05	ug/l	140 J	160 J	59 J	81 J	EPA 8021B
	05/11/05	ug/l	7.2	5.0	3.8	<6.0	EPA 8021B
	05/11/05	ug/l	6.7	2.3	<2.0	5.5	EPA 8260B
	08/17/05	ug/l	16	12	3.9	4.2	EPA 8021B
	11/18/05	ug/l	33	28	11	12	EPA 8021B
	11/18/05	ug/l	30	8.7	<2.0	7.1	EPA 8260B
	02/14/06	ug/l	100	81	28	34	EPA 8021B
	05/18/06	ug/l	210	140	46	60	EPA 8021B
	08/15/06	ug/l	80	50	16	<30	EPA 8021B
	12/15/06	ug/l	91	74	32	45	EPA 8021B
	12/15/06	ug/l	60	29	4.8	28	EPA 8260B
	02/21/07	ug/l	76	33	4.4	66	EPA 8021B
	05/15/07	ug/l	69	100	41	77	EPA 8021B
	08/22/07	ug/l	49	71	28	44	EPA 8021B
	11/13/07	ug/l	70	37	4.5	69	EPA 8021B
	11/13/07	ug/l	76	48	7.0	45	EPA 8260B
	02/07/08	ug/l	140	58	31	120	8015B/8021
	05/09/08	ug/l	71	37	4.1	53	8015B/8021
	08/06/08	ug/l	44	74	24	33	8015B/8021
	11/10/08	ug/l	43	32	<6.0	60	8015B/8021
	11/10/08	ug/l	45	35	4.6	30	EPA 8260B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-42S	02/05/09	ug/l	66	20	54	56	8015B/8021
	05/08/09	ug/l	37	21	<3.0	50	8015B/8021
	08/05/09	ug/l	1.6	0.88	<0.30	2.3	8015B/8021
	11/06/09	ug/l	22	28	9.9	26	8015B/8021
	11/06/09	ug/l	52	40	5.2	35	EPA 8260B
	02/04/10	ug/l	35	22	<0.60	46	EPA 8021B
	05/11/10	ug/l	17	12	<3.0	31	EPA 8021B
	08/12/10	ug/l	12	9.2	<0.30	19	EPA 8021B
	11/09/10	ug/l	18	14	<0.30	15	8015B/8021
	11/09/10	ug/l	25	24	2.5	16	8260B
	02/10/11	ug/l	19	17	<0.30	38	8015B/8021
	05/10/11	ug/l	20	19	<0.30	35	8021B
	08/18/11	ug/l	32	27	<3.0	57	8021B
	11/07/11	ug/l	21	19	<0.30	35	8021B
	11/07/11	ug/l	27	28	3.0	16	8260B
	02/03/12	ug/l	54	84	26	27	8021B
	05/16/12	ug/l	22	24	6.1	18	8021B
	08/16/12	ug/l	26	23	11	23	8021B
	10/15/12	ug/l	36	34	15	37	8021B
	10/15/12	ug/l	20	22	2.2	15	8260B
MW-43S	05/25/94	ug/l	150	12	1.8	17	EPA 8020
	05/25/94	ug/l	110	9.2	<2.0	8.4	EPA 8240
	08/11/94	ug/l	200	14	<3.0	25	EPA 8020
	11/10/94	ug/l	71	4.7	<1.5	12	EPA 8020
	02/10/95	ug/l	32	<1.4	<0.99	5.2	EPA 8020
	05/11/95	ug/l	100 J	6.8 J	<1.5	16 J	EPA 8020
	08/10/95	ug/l	46	3.8	<0.99	7.9	EPA 8020
	11/11/95	ug/l	54	2.2 J	2.3 J	7.0 J	EPA 8020
	11/11/95	ug/l	51 J	<4.0	<4.0	<4.0	EPA 8240
	02/07/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/22/96	ug/l	44	4.1	0.64	7.2	EPA 8020
	08/16/96	ug/l	33	4.9	1.5	10	EPA 8020
	11/13/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/25/97	ug/l	12	0.84	<0.60	1.8	EPA 8020
	05/16/97	ug/l	46 J	3.5 J	0.77 J	5.7 J	EPA 8020
	11/26/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-43S	05/14/98	ug/l	<0.3	<0.3	<0.3	<6.0	EPA 8020
	11/29/98	ug/l	4.5	1.1	<0.3	3.3	EPA 8020
	06/03/99	ug/l	12.9	21	0.9	5.4	EPA 8021B
	11/27/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	06/03/00	ug/l	1.2	<0.30	<0.30	<0.60	EPA 8021B
	11/17/00	ug/l	1.1	<0.30	<0.30	<0.60	EPA 8021B
	11/17/00	ug/l	1.9	<1	<1	<2	EPA 8260B
	05/26/01	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/28/01	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	05/26/02	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/08/02	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	05/21/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	11/23/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/19/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/19/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/12/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/16/05	ug/l	2.0	<1.5	<1.5	5.4	EPA 8021B
	05/17/06	ug/l	0.37	<0.30	<0.30	<0.60	EPA 8021B
	11/15/06	ug/l	3.5	2.0	1.4	3.1	EPA 8021B
	05/18/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/09/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/07/08	ug/l	2.6	4.0	0.31	2.1	8015B/8021
	11/05/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/06/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/04/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/05/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/03/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/06/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/10/11	ug/l	<0.30	0.36	<0.30	0.71	8021B
	05/10/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/10/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-44S	05/25/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/25/94	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8240
	08/10/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/09/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/08/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-44S	05/09/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/09/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/10/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/07/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/21/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/16/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/13/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/25/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/16/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/26/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/15/98	ug/l	<0.3	<0.3	<0.3	<6.0	EPA 8020
	11/29/98	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8020
	06/03/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	11/30/99	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	06/04/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/17/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/27/01	ug/l	<0.30	<0.30	<0.30	1.3	EPA 8021B
	11/28/01	ug/l	<0.3	0.33	<0.3	<0.6	EPA 8021B
	05/27/02	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/08/02	ug/l	0.72 J	2.7 J	<0.30	2.7 J	EPA 8021B
	03/05/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	04/01/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	05/21/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	06/18/03	ug/l	0.59	<0.30	<0.30	<0.30	EPA 8021B
	07/11/03	ug/l	<0.30	<0.30	<0.30	1.5	EPA 8021B
	08/26/03	ug/l	<0.30	<0.30	<0.30	1.3 J	EPA 8021B
	09/26/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	10/25/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/23/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	12/19/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	01/16/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	02/27/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	03/19/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	04/24/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/19/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	06/13/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/21/04	ug/l	1.3	<0.30	<0.30	1.2	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-44S	09/11/04	ug/l	<2.0	<2.0	<2.0	<4.0	EPA 8260B
	11/19/04	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	03/08/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/13/05	ug/l	0.48	<0.30	<0.30	<0.60	EPA 8021B
	08/16/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/05	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	02/14/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/16/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/15/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/06	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	02/20/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/18/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/22/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/09/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	02/08/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/07/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	08/05/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/05/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	02/03/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/06/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	08/04/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/04/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	02/03/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/05/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/11/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/03/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	02/09/11	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/06/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	08/16/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/09/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	02/01/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	05/10/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	08/15/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/10/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-45S	05/25/94	ug/l	160 J	38 J	7.9 J	15 J	EPA 8020
	05/25/94	ug/l	120	27	<2.0	6.8	EPA 8240

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-45S	08/11/94	ug/l	170 J	28	6.0 J	40 J	EPA 8020
	11/09/94	ug/l	130	22	3.8 J	13	EPA 8020
	02/10/95	ug/l	20 J	<3.0	<3.0	<6.0	EPA 8020
	05/09/95	ug/l	8.4	62	59	86	EPA 8020
	08/10/95	ug/l	94	12	5.4	10	EPA 8020
	11/10/95	ug/l	140 J	21 J	14 J	16 J	EPA 8020
	02/08/96	ug/l	110 J	16	7.5	13	EPA 8020
	05/21/96	ug/l	140	15	6.4	14	EPA 8020
	08/16/96	ug/l	120 J	18 J	5.9 J	13 J	EPA 8020
	11/13/96	ug/l	120 J	14 J	3.9 J	10 J	EPA 8020
	02/25/97	ug/l	<0.30	<0.30	0.67	<0.60	EPA 8020
	05/16/97	ug/l	140 J	15 J	3.5 J	8.6 J	EPA 8020
	11/26/97	ug/l	50 J	5.6 J	2.1 J	3.0 J	EPA 8020
	05/14/98	ug/l	<0.3	<0.3	<0.3	<6.0	EPA 8020
	11/27/98	ug/l	23.9	2.0	<0.3	2.1	EPA 8020
	06/03/99	ug/l	26	0.7	0.5	1.7	EPA 8021B
	11/28/99	ug/l	110	12	2.9	6.3	EPA 8021B
	11/28/99	ug/l	150	19	<10	<20	EPA 8260
	06/04/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/17/00	ug/l	42	5.7	1.6	3.7	EPA 8021B
	05/26/01	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/28/01	ug/l	0.51	<0.3	<0.3	<0.6	EPA 8021B
	05/26/02	ug/l	<0.3	<0.3	<0.3	<0.6	EPA 8021B
	12/05/02	ug/l	<0.30	0.78 J	<0.30	<0.30	EPA 8021B
	12/05/02	ug/l	<0.5	<1	<1	<2	EPA 8260B
	03/04/03	ug/l	11	4.3	<0.30	3.5	EPA 8021B
	03/31/03	ug/l	7.6	3.7	0.87	3.9	EPA 8021B
	05/20/03	ug/l	11 J	1.2 J	<0.30	<0.30	EPA 8021B
	06/18/03	ug/l	37	5.5	2.4	4.0	EPA 8021B
	07/12/03	ug/l	63	13	2.8	7.3	EPA 8021B
	08/26/03	ug/l	69 J	18 J	2.7 J	6.3 J	EPA 8021B
	09/27/03	ug/l	91	32	4.3	9.9	EPA 8021B
	10/25/03	ug/l	20	5.0	0.61	2.3	EPA 8021B
	11/24/03	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/24/03	ug/l	<2.0	<2.0	<2.0	<4.0	EPA 8260B
	12/20/03	ug/l	4.7	0.92	0.42	0.96	EPA 8021B
	01/17/04	ug/l	55 J	9.7 J	1.5 J	6.3 J	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-45S	02/28/04	ug/l	14	9.6	<1.5	<3.0	EPA 8021B
	03/20/04	ug/l	1.2	0.31	0.43	<0.60	EPA 8021B
	04/24/04	ug/l	2.2	0.58	0.37	1.5	EPA 8021B
	05/21/04	ug/l	0.59	<0.30	<0.30	<0.60	EPA 8021B
	06/12/04	ug/l	100	29	5.2	11 J	EPA 8021B
	08/21/04	ug/l	100	33	7.0	16	EPA 8021B
	10/05/04	ug/l	72	25	<4.0	11	EPA 8260B
	11/19/04	ug/l	3.8	2.0	<0.30	<0.60	EPA 8021B
	11/19/04	ug/l	4.6	2.3	<2.0	<4.0	EPA 8260B
	03/08/05	ug/l	<0.30	0.36	<0.30	0.70	EPA 8021B
	05/10/05	ug/l	10	1.7	0.85	1.7	EPA 8021B
	05/10/05	ug/l	8.8	<2.0	<2.0	<2.0	EPA 8260B
	08/16/05	ug/l	34	10	<3.0	7.8	EPA 8021B
	11/15/05	ug/l	20	6.8	2.2	5.1	EPA 8021B
	11/15/05	ug/l	32	12	<2.0	4.5	EPA 8260B
	02/14/06	ug/l	58	20	6.2	13	EPA 8021B
	05/16/06	ug/l	10	<3.0	<3.0	<6.0	EPA 8021B
	08/15/06	ug/l	88	38	30	<60	EPA 8021B
	11/14/06	ug/l	110	15	<6.0	<12	EPA 8021B
	11/14/06	ug/l	41	17	<2.0	7.3	EPA 8260B
	02/20/07	ug/l	48	18	<3.0	17	EPA 8021B
	05/16/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/21/07	ug/l	50	18	5.6	13	EPA 8021B
	11/13/07	ug/l	25	9.5	2.0	11	EPA 8021B
	11/13/07	ug/l	24	10	<2.0	4.9	EPA 8260B
	02/06/08	ug/l	6.8	9.0	1.4	4.9	8015B/8021
	05/07/08	ug/l	32	11	3.9	8.3	8015B/8021
	08/05/08	ug/l	35	15	3.5	13	8015B/8021
	11/05/08	ug/l	7.8	3.0	0.85	4.0	8015B/8021
	11/05/08	ug/l	6.0	3.5	<2.0	<2.0	EPA 8260B
	02/03/09	ug/l	20	7.1	1.6	8.3	8015B/8021
	05/06/09	ug/l	31	27	<1.5	5.2	8015B/8021
	08/04/09	ug/l	30	24	2.8	13	8015B/8021
	11/04/09	ug/l	2.9	1.5	<0.30	1.4	8015B/8021
	11/04/09	ug/l	6.0	4.8	<2.0	2.0	EPA 8260B
	02/03/10	ug/l	8.2	17	3.5	6.3	EPA 8021B
	05/05/10	ug/l	19	20	2.1	9.9	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-45S	08/11/10	ug/l	21	24	2.2	11	EPA 8021B
	11/08/10	ug/l	8.0	7.3	0.41	2.1	8015B/8021
	11/08/10	ug/l	9.6	4.1	<2.0	2.9	8260B
	02/09/11	ug/l	2.5	2.6	<0.30	<0.60	8015B/8021
	05/10/11	ug/l	3.6	4.1	0.80	<0.60	8021B
	08/16/11	ug/l	18	17	<1.2	3.7	8021B
	11/07/11	ug/l	9.2	10	<0.30	2.0	8021B
	11/07/11	ug/l	13	5.8	0.59	3.0	8260B
	02/01/12	ug/l	22	24	0.89	6.5	8021B
	05/10/12	ug/l	16	5.1	3.0	8.5	8021B
	08/14/12	ug/l	49	14	7.2	20	8021B
	10/10/12	ug/l	7.6	2.3	1.0	5.6	8021B
	10/10/12	ug/l	6.1	3.3	0.57	2.8	8260B
MW-46S	05/25/94	ug/l	0.47	<0.30	<0.30	<0.60	EPA 8020
	05/25/94	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8240
	08/10/94	ug/l	2.4	0.58	0.45	2.3	EPA 8020
	11/09/94	ug/l	1.1	<0.30	1.4	2.6	EPA 8020
	02/08/95	ug/l	<0.30	<0.45	1.5	1.5	EPA 8020
	05/09/95	ug/l	1.2	<0.30	38	<0.60	EPA 8020
	08/10/95	ug/l	0.36	<0.30	<0.30	1.9	EPA 8020
	11/10/95	ug/l	0.91	0.82	1.8	2.6	EPA 8020
	02/07/96	ug/l	0.47	0.40	0.96	0.69	EPA 8020
	05/21/96	ug/l	<0.30	<0.30	<0.30	1.9	EPA 8020
	08/16/96	ug/l	<0.30	0.42	0.40	2.7	EPA 8020
	11/13/96	ug/l	<0.30	3.4	<0.30	1.9	EPA 8020
	02/25/97	ug/l	<0.30	0.35	<0.30	2.6	EPA 8020
	05/16/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/25/97	ug/l	<0.30	<0.30	2.5	<0.60	EPA 8020
	05/15/98	ug/l	<0.3	<0.3	<0.3	<6.0	EPA 8020
MW-47D	05/25/94	ug/l	1.1	3.7	2.5	9.5	EPA 8020
	05/25/94	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8240
	08/10/94	ug/l	<0.30	<0.30	<0.30	0.91	EPA 8020
	11/11/94	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/08/95	ug/l	14	<2.6	2.8	8.7	EPA 8020
	05/10/95	ug/l	58 J	10 J	10 J	22 J	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-47D	05/10/95	ug/l	44	<10	10	20	EPA 8240
	08/11/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/08/95	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/09/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	05/16/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	08/14/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	11/05/96	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
	02/18/97	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8020
MW-48S	11/29/98	ug/l	0.6	0.3	<0.3	9.0	EPA 8020
	11/29/98	ug/l	<0.5	<1.0	<1.0	<2.0	EPA 8260
	06/03/99	ug/l	<0.3	0.6	<0.3	1.1	EPA 8021B
	11/27/99	ug/l	<0.3	<0.3	<0.3	9.5	EPA 8021B
	06/04/00	ug/l	0.52	<0.30	<0.30	<0.60	EPA 8021B
	11/17/00	ug/l	<0.30	<0.30	<0.30	2.8	EPA 8021B
	05/26/01	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/28/01	ug/l	0.57	0.55	<0.3	7.8	EPA 8021B
	05/27/02	ug/l	<0.3	<0.3	<0.3	0.66	EPA 8021B
	12/08/02	ug/l	0.41 J	2.5 J	0.42 J	8.1 J	EPA 8021B
	03/05/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	03/31/03	ug/l	<0.30	<0.30	<0.30	6.5	EPA 8021B
	05/22/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	06/18/03	ug/l	<0.30	0.45	<0.30	8.9	EPA 8021B
	07/12/03	ug/l	0.67	0.42	<0.30	5.4	EPA 8021B
	08/25/03	ug/l	0.73 J	<0.30	<0.30	3.4 J	EPA 8021B
	09/27/03	ug/l	1.5	<0.30	<0.30	4.8	EPA 8021B
	10/26/03	ug/l	1.2	<0.30	<0.30	2.9	EPA 8021B
	11/23/03	ug/l	0.67	<0.30	<0.30	1.6	EPA 8021B
	12/19/03	ug/l	1.1	<0.30	<0.30	2.2	EPA 8021B
	01/17/04	ug/l	0.79 J	1.8 J	3.9 J	2.2 J	EPA 8021B
	02/27/04	ug/l	0.82	2.2	1.1	5.1	EPA 8021B
	03/19/04	ug/l	<0.30	<0.30	<0.30	5.6	EPA 8021B
	04/24/04	ug/l	0.75	2.1	2.4	1.6	EPA 8021B
	05/21/04	ug/l	0.63	2.0	3.8	2.0	EPA 8021B
	06/13/04	ug/l	1.3	<0.30	<0.30	6.6	EPA 8021B
	08/21/04	ug/l	0.61	<0.30	3.2	1.8	EPA 8021B
	11/19/04	ug/l	<0.30	<0.30	<0.30	4	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-48S	03/09/05	ug/l	0.69 J	0.51 J	4.2 J	2.4 J	EPA 8021B
	05/10/05	ug/l	0.71	0.35	2.5	1.7	EPA 8021B
	08/16/05	ug/l	0.52	<0.30	1.1	0.86	EPA 8021B
	11/17/05	ug/l	<0.30	<0.30	1.9	<0.60	EPA 8021B
	02/14/06	ug/l	29	7.0	2.1	4.5	EPA 8021B
	05/18/06	ug/l	0.40	<0.30	1.4	1.3	EPA 8021B
	08/15/06	ug/l	<0.30	<0.30	1.5	1.2	EPA 8021B
	12/15/06	ug/l	0.46	<0.30	1.5	1.3	EPA 8021B
	02/20/07	ug/l	<0.30	<0.30	<0.30	2.5	EPA 8021B
	05/23/07	ug/l	1.3	<0.30	<0.30	1.0	EPA 8021B
	08/22/07	ug/l	0.76	<0.30	<0.30	0.66	EPA 8021B
	11/13/07	ug/l	<0.30	<0.30	<0.30	0.95	EPA 8021B
	11/13/07	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8260B
	02/06/08	ug/l	<0.30	<0.30	<0.30	2.3	8015B/8021
	05/09/08	ug/l	<0.30	<0.30	<0.30	1.2	8015B/8021
	08/06/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/07/08	ug/l	1.2	0.51	<0.30	1.2	8015B/8021
	02/05/09	ug/l	0.96	<0.30	<0.30	2.8	8015B/8021
	05/08/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	08/05/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/06/09	ug/l	0.71	0.62	<0.30	2.4	8015B/8021
	02/04/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	05/11/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/12/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/09/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	02/10/11	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/12/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	08/24/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/14/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	02/02/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	05/16/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	08/16/12	ug/l	1.1	<0.30	<0.30	<0.60	8021B
	10/15/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
MW-49S	11/29/98	ug/l	<0.3	<0.3	<0.3	4.1	EPA 8020
	11/29/98	ug/l	<0.5	<1.0	<1.0	<2.0	EPA 8260
	06/03/99	ug/l	0.6	<0.3	<0.3	1.9	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-49S	11/30/99	ug/l	<0.3	<0.3	<0.3	<2.9	EPA 8021B
	06/05/00	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/15/00	ug/l	1.7	<0.30	<0.30	<6.1	EPA 8021B
	05/27/01	ug/l	1.6	<0.30	<0.30	<0.60	EPA 8021B
	11/26/01	ug/l	0.37	<0.36	<0.3	<0.6	EPA 8021B
	05/25/02	ug/l	2	<0.3	<0.3	<0.6	EPA 8021B
	12/07/02	ug/l	<0.30	0.42 J	<0.30	<0.30	EPA 8021B
	03/04/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	03/31/03	ug/l	<0.30	0.54	<0.30	3.3	EPA 8021B
	05/22/03	ug/l	<0.30	<0.30	<0.30	<0.30	EPA 8021B
	06/18/03	ug/l	5.5	<0.30	<0.30	5.0	EPA 8021B
	07/11/03	ug/l	4.3	<0.30	<0.30	3.8	EPA 8021B
	08/25/03	ug/l	0.57 J	<0.30	<0.30	3.0 J	EPA 8021B
	09/26/03	ug/l	0.94	<0.30	<0.30	3.2	EPA 8021B
	10/25/03	ug/l	0.43	0.81	1.6	1.1	EPA 8021B
	11/24/03	ug/l	0.42	<0.30	<0.30	1.8	EPA 8021B
	12/19/03	ug/l	0.6	1.1	<0.30	2.0	EPA 8021B
	01/17/04	ug/l	0.49	1.1	1.5	1.5	EPA 8021B
	02/29/04	ug/l	0.64	<0.30	<0.30	1.2	EPA 8021B
	03/21/04	ug/l	<0.30	<0.30	<0.30	2.0	EPA 8021B
	04/24/04	ug/l	0.67	1.3	<0.30	1.7	EPA 8021B
	05/21/04	ug/l	0.55	0.96	<0.30	1.5	EPA 8021B
	06/12/04	ug/l	<0.30	<0.30	<0.30	2.3 J	EPA 8021B
	08/21/04	ug/l	0.46	<0.30	1.1	2.1	EPA 8021B
	11/19/04	ug/l	<0.30	<0.30	<0.30	1.5 J	EPA 8021B
	03/08/05	ug/l	0.53 J	<0.30	2.5 J	1.2 J	EPA 8021B
	05/10/05	ug/l	0.75	<0.30	1.8	0.97	EPA 8021B
	08/16/05	ug/l	0.50	<0.30	1.1	<0.60	EPA 8021B
	11/16/05	ug/l	1.1	<0.30	2.8	0.79	EPA 8021B
	02/14/06	ug/l	0.92	<0.30	3.0	1.1	EPA 8021B
	05/17/06	ug/l	1.2	<0.30	2.0	0.70	EPA 8021B
	08/15/06	ug/l	0.55	<0.30	1.3	<0.60	EPA 8021B
	11/15/06	ug/l	<0.30	<0.30	2.4	<0.60	EPA 8021B
	02/20/07	ug/l	<0.30	<0.30	<0.30	2.2	EPA 8021B
	05/18/07	ug/l	1.6	<0.30	<0.30	3.1	EPA 8021B
	08/22/07	ug/l	1.5	<0.30	2.9	0.96	EPA 8021B
	11/09/07	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-49S	02/08/08	ug/l	<0.30	<0.30	<0.30	3.2	8015B/8021
	05/07/08	ug/l	<0.30	<0.30	<0.30	2.6	8015B/8021
	08/05/08	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/06/08	ug/l	1.1	<0.30	<0.30	3.1	8015B/8021
	02/04/09	ug/l	1.2	2.1	<0.30	3.3	8015B/8021
	05/07/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	08/05/09	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	11/04/09	ug/l	0.43	1.1	<0.30	2.8	8015B/8021
	02/04/10	ug/l	<0.30	<0.30	<0.30	0.66	EPA 8021B
	05/06/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	08/11/10	ug/l	<0.30	<0.30	<0.30	<0.60	EPA 8021B
	11/03/10	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	02/09/11	ug/l	<0.30	<0.30	<0.30	<0.60	8015B/8021
	05/06/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	08/16/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	11/10/11	ug/l	<0.30	<0.30	<0.30	0.69	8021B
	02/01/12	ug/l	<0.30	<0.30	<0.30	1.5	8021B
	05/11/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	08/15/12	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
	10/11/12	ug/l	0.82	<0.30	<0.30	3.0	8021B
MW-50S	12/04/02	ug/l	510	130	24	62	EPA 8260B
	03/04/03	ug/l	450	89	15	57	EPA 8021B
	03/19/03	ug/l	450	36	21	67	EPA 8021B
	03/31/03	ug/l	440	57	21	63	EPA 8021B
	04/22/03	ug/l	570	120	26	75	EPA 8021B
	04/22/03	ug/l	450	120	15	48	EPA 8260B
	05/20/03	ug/l	420 J	84 J	16 J	41 J	EPA 8021B
	06/17/03	ug/l	650	130	29	<6.0	EPA 8021B
	07/12/03	ug/l	510	100	23	64	EPA 8021B
	08/26/03	ug/l	230 J	79 J	16 J	55 J	EPA 8021B
	09/26/03	ug/l	430 J	130 J	29 J	56 J	EPA 8021B
	10/25/03	ug/l	490 J	130 J	24 J	59 J	EPA 8021B
	11/25/03	ug/l	560 J	140 J	19 J	57 J	EPA 8021B
	11/25/03	ug/l	550	140.0	<20	51	EPA 8260B
	12/20/03	ug/l	490 J	150 J	23	71 J	EPA 8021B
	01/17/04	ug/l	460	140	11	33	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-50S	02/28/04	ug/l	640	190	<30	<60	EPA 8021B
	03/20/04	ug/l	520	230 J	54	NA	EPA 8021B
	04/24/04	ug/l	350	100	20	55	EPA 8021B
	05/21/04	ug/l	320 J	84 J	21 J	49 J	EPA 8021B
	06/12/04	ug/l	550 J	140 J	21 J	58 J	EPA 8021B
	08/21/04	ug/l	670 J	190 J	37 J	190 J	EPA 8021B
	10/05/04	ug/l	440	150	20	58	EPA 8260B
	11/19/04	ug/l	380	130	12	40	EPA 8021B
	11/19/04	ug/l	440	150	20	77	EPA 8260B
	03/08/05	ug/l	410 J	110 J	<15	56 J	EPA 8021B
	05/11/05	ug/l	370	100	34	90	EPA 8021B
	05/11/05	ug/l	380	110	15	58	EPA 8260B
	08/17/05	ug/l	290	79	23	49	EPA 8021B
	11/18/05	ug/l	220	63	13	37	EPA 8021B
	11/18/05	ug/l	300	90	12	36	EPA 8260B
	02/15/06	ug/l	120	500	110	610	EPA 8021B
	05/19/06	ug/l	570	130	36	78	EPA 8021B
	08/16/06	ug/l	420	70	<30	<60	EPA 8021B
	11/21/06	ug/l	470	53	<15	<30	EPA 8021B
	11/21/06	ug/l	340	92	<10	33	EPA 8260B
	02/21/07	ug/l	530	190	30	86	EPA 8021B
	05/16/07	ug/l	390	95	19	89	EPA 8021B
	08/23/07	ug/l	370	120	19	56	EPA 8021B
	11/13/07	ug/l	440	140	12	39	EPA 8021B
	11/13/07	ug/l	420	120	<20	48	EPA 8260B
	02/07/08	ug/l	400	98	22	56	8015B/8021
	05/12/08	ug/l	440	110	<60	<120	8015B/8021
	08/06/08	ug/l	270	85	18	38	8015B/8021
	11/10/08	ug/l	330	89	<15	62	8015B/8021
	11/10/08	ug/l	440	130	16	67	EPA 8260B
	02/05/09	ug/l	360	98	21	54	8015B/8021
	05/12/09	ug/l	410	170	21	61	8015B/8021
	08/06/09	ug/l	350	120	19	53	8015B/8021
	11/09/09	ug/l	260	69	14	53	8015B/8021
	11/09/09	ug/l	370	110	13	58	EPA 8260B
	02/08/10	ug/l	490	200	17	53	EPA 8021B
	05/12/10	ug/l	330	140	20	53	EPA 8021B

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
MW-50S	08/12/10	ug/l	130	110	13	41	EPA 8021B
	11/11/10	ug/l	270	140	20	55	8015B/8021
	11/11/10	ug/l	280	110	12	51	8260B
	02/10/11	ug/l	380	190	12	48	8015B/8021
	05/10/11	ug/l	340	180	11	44	8021B
	08/24/11	ug/l	270	130	9.2	35	8021B
	11/08/11	ug/l	300	160	11	39	8021B
	11/08/11	ug/l	280	100	10	47	8260B
	02/03/12	ug/l	230	85	12	52	8021B
	05/17/12	ug/l	150	54	12	51	8021B
	08/16/12	ug/l	240	92	20	94	8021B
	10/16/12	ug/l	350	83	<30	<60	8021B
	10/16/12	ug/l	230	110	11	51	8260B
P2	05/19/93	ug/l	1100 J	64 J	220 J	130 J	EPA 8020
	08/18/93	ug/l	1500 J	130 J	330 J	210 J	EPA 8020
	11/16/93	ug/l	1500	340	400	110 J	EPA 8020
	02/11/94	ug/l	2200 J	470 J	570 J	190 J	EPA 8020
	05/12/94	ug/l	1500	220	430	320	EPA 8020
	08/12/94	ug/l	1800 J	130 J	<30	150	EPA 8020
	11/14/94	ug/l	870	200	320	210	EPA 8020
	02/10/95	ug/l	930	130	98	130	EPA 8020
	05/11/95	ug/l	2400 J	210	87 J	<60	EPA 8020
	08/11/95	ug/l	2700	450	530	320	EPA 8020
	11/16/95	ug/l	2600	480	490	320	EPA 8020
	02/10/96	ug/l	1900	450	500	350	EPA 8020
	05/20/96	ug/l	2200	510	570	420	EPA 8020
	08/07/96	ug/l	1800	510	520	350	EPA 8020
	08/13/96	ug/l	1600 J	510	540	580	EPA 8020
	09/10/96	ug/l	1400	460	480	350	EPA 8020
	11/12/96	ug/l	1400	460	590	580	EPA 8020
Private Well	05/23/11	ug/l	<0.30	<0.30	<0.30	<0.60	8021B
SBC-1	05/21/93	ug/l	19	12	5.0	16	EPA 8240
SBD-2	05/21/93	ug/l	350	110	18	50	EPA 8240

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
SBD-2	05/30/95	ug/l	700	170	48	100	EPA 8020
SBD-3	05/20/93	ug/l	240	160	71	69	EPA 8240
	05/30/95	ug/l	540 J	180 J	94 J	100 J	EPA 8020
SBE-1	05/20/93	ug/l	200	86	12	43	EPA 8240
	05/11/94	ug/l	170	58	<7.5	30	EPA 8020
	08/11/94	ug/l	160 J	95 J	55 J	100 J	EPA 8020
	11/15/94	ug/l	120	44	6.7	54	EPA 8020
	02/09/95	ug/l	180	61	<9.9	51	EPA 8020
	05/12/95	ug/l	200 J	90 J	18 J	70 J	EPA 8020
	08/11/95	ug/l	140	69	15	72	EPA 8020
	11/12/95	ug/l	91	27	10	38	EPA 8020
	02/10/96	ug/l	110	35	2.2	23	EPA 8020
	05/22/96	ug/l	84	35	<9.9	46	EPA 8020
	08/15/96	ug/l	110 J	41 J	7.5 J	39 J	EPA 8020
	02/20/97	ug/l	45	23	<1.5	12	EPA 8020
ULTM-MW-10	05/01/91	ug/l	54	28	5.0	13	EPA 8240
	08/14/91	ug/l	11	5.0 J	<10	3.0 J	EPA 8240
	11/20/91	ug/l	33	22	3.0 J	13	EPA 8240
	02/28/92	ug/l	12	<10	<10	<10	EPA 8240
	07/02/92	ug/l	3.0 J	<10	2.0 J	<10	EPA 8240
	09/29/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/16/92	ug/l	<0.50	<0.50	0.88	<1.0	EPA 8020
	11/16/92	ug/l	<1.0	<2.0	<1.0	<1.0	EPA 8240
	02/18/93	ug/l	0.87	<2.3	0.49 J	<2.7	EPA 8020
	05/14/93	ug/l	2.1 J	<0.50	2.2 J	1.7 J	EPA 8020
	08/12/93	ug/l	6.3 J	17 J	4.0 J	27 J	EPA 8020
	11/10/93	ug/l	5.2	3.3	2.1	6.1	EPA 8020
	11/10/93	ug/l	3.0	2.0	<2.0	7.0	EPA 8240
	02/08/94	ug/l	4.0	2.9	<0.30	8.5	EPA 8020
	05/10/94	ug/l	2.8	3.1	1.5	36	EPA 8020
	08/09/94	ug/l	1.3	0.83	2.1	2.3	EPA 8020
	11/08/94	ug/l	<0.60	<0.60	1.1 J	1.3	EPA 8020
	11/08/94	ug/l	<2.0	<2.0	<2.0	<2.0	EPA 8240
	02/07/95	ug/l	0.66	<0.30	1.6	2.1	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
ULTM-MW-11	08/14/91	ug/l	10 J	<100	<100	<100	EPA 8240
	07/02/92	ug/l	<10	1.0 J	<10	2.0 J	EPA 8240
	09/29/92	ug/l	1.0 J	<10	<10	2.0 J	EPA 8240
	11/16/92	ug/l	24 J	11 J	15 J	29 J	EPA 8020
	02/18/93	ug/l	8.5 J	7.1 J	19 J	12 J	EPA 8020
	05/14/93	ug/l	10	<7.5	<7.5	21	EPA 8020
	08/12/93	ug/l	21 J	31 J	15 J	44 J	EPA 8020
	11/10/93	ug/l	4.6	2.5	0.88	4.5	EPA 8020
	02/08/94	ug/l	2.2	3.2	6.6	7.6	EPA 8020
	05/10/94	ug/l	1.5	2.5	3.1	14	EPA 8020
	08/09/94	ug/l	2.4	1.2	7.1	33	EPA 8020
	11/08/94	ug/l	<3.0	4.0 J	3.9 J	9.8 J	EPA 8020
	02/07/95	ug/l	<3.0	<3.0	<3.0	<6.0	EPA 8020
ULTM-MW-13	11/20/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/28/92	ug/l	<10	<10	<10	<10	EPA 8240
	07/02/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/29/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/16/92	ug/l	<0.50	<0.50	<0.50	<1.6	EPA 8020
	11/10/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
ULTM-MW-14	11/20/91	ug/l	<10	<10	<10	<10	EPA 8240
	02/28/92	ug/l	<10	<10	<10	<10	EPA 8240
	07/02/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/29/92	ug/l	<10	<10	<10	<10	EPA 8240
	11/16/92	ug/l	<0.50	<0.50	<0.50	<1.0	EPA 8020
	11/10/93	ug/l	<0.30	<0.30	<0.50	<0.50	EPA 8020
ULTM-MW-2	09/29/92	ug/l	3.0 J	<10	<10	<10	EPA 8240
ULTM-MW-3	02/28/92	ug/l	<10	<10	<10	<10	EPA 8240
	07/02/92	ug/l	<10	<10	<10	<10	EPA 8240
	09/29/92	ug/l	<10	<10	<10	<10	EPA 8240
ULTM-MW-6	02/28/92	ug/l	21	7.0 J	6.0 J	17	EPA 8240
	07/02/92	ug/l	10	<10	3.0 J	3.0 J	EPA 8240

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
ULTM-MW-6	09/29/92	ug/l	30	9.0 J	11	31	EPA 8240
	11/16/92	ug/l	6.0	4.2	3.9	<6.0	EPA 8020
	02/18/93	ug/l	84	94	65	170	EPA 8020
	05/14/93	ug/l	110	37	65	80	EPA 8020
	08/12/93	ug/l	40 J	11 J	24 J	23 J	EPA 8020
	11/10/93	ug/l	22	11	8.0	24	EPA 8020
	02/08/94	ug/l	25	12	16	35	EPA 8020
	05/10/94	ug/l	7.5	3.7	1.6	4.1	EPA 8020
	08/09/94	ug/l	21	6.7	2.5	10	EPA 8020
	11/08/94	ug/l	12	3.9	1.3	3.6	EPA 8020
	02/07/95	ug/l	7.8	3.3	1.9	9.0	EPA 8020
ULTM-MW-7	02/28/92	ug/l	3.0 J	20	<10	27	EPA 8240
	07/02/92	ug/l	2.0 J	6.0 J	<10	4.0 J	EPA 8240
	09/29/92	ug/l	3.0 J	10	4.0 J	14	EPA 8240
	11/16/92	ug/l	<0.50	17 J	23 J	22 J	EPA 8020
	02/18/93	ug/l	5.4 J	25 J	14 J	39 J	EPA 8020
	05/14/93	ug/l	44	13	35	37	EPA 8020
	08/12/93	ug/l	40 J	27 J	15 J	33 J	EPA 8020
	11/10/93	ug/l	120	96	14	31	EPA 8020
	02/08/94	ug/l	96	13	15	53	EPA 8020
	05/10/94	ug/l	6.5	20	27	47	EPA 8020
	08/09/94	ug/l	<6.0	24	34	55	EPA 8020
	11/08/94	ug/l	77	12	26	37	EPA 8020
	02/07/95	ug/l	43	74	<3.0	22	EPA 8020
	05/09/95	ug/l	47 J	6.3 J	18 J	22 J	EPA 8020
	08/08/95	ug/l	64	21	25	39	EPA 8020
	11/07/95	ug/l	8.2	17	14	21	EPA 8020
	02/06/96	ug/l	51	17	18	<30	EPA 8020
ULTM-MW-8	08/14/91	ug/l	20 J	<50	<50	<50	EPA 8240
	11/20/91	ug/l	<10	<10	<10	1.0 J	EPA 8240
	02/28/92	ug/l	31	29	<10	6.0 J	EPA 8240
	07/02/92	ug/l	5.0 J	4.0 J	130	380	EPA 8240
	09/29/92	ug/l	3.0 J	3.0 J	3.0 J	7.0 J	EPA 8240
	11/16/92	ug/l	8.7 J	5.0 J	4.4 J	14 J	EPA 8020
	02/18/93	ug/l	8.1 J	<4.8	17 J	18 J	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.

Table F

Summary of BTEX Results
Fillmore Pacific Coast Pipeline Through Fourth Quarter 2012

Well	Date Sampled	Units	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	Method
ULTM-MW-8	05/14/93	ug/l	11 J	<5.0	18 J	15 J	EPA 8020
	08/12/93	ug/l	190 J	120 J	41 J	110 J	EPA 8020
	11/10/93	ug/l	24	24	5.2	7.1	EPA 8020
	02/08/94	ug/l	28	7.2	<0.75	16	EPA 8020
	05/10/94	ug/l	30	9.5	<1.5	15	EPA 8020
	08/09/94	ug/l	7.6	6.7	6.4	12	EPA 8020
	11/08/94	ug/l	25 J	4.8 J	2.5 J	7.8 J	EPA 8020
	02/07/95	ug/l	9.7	20	<3.0	6.9	EPA 8020
ULTM-MW-9	05/01/91	ug/l	280	82	26	23	EPA 8240
	08/14/91	ug/l	260	64 J	<200	27 J	EPA 8240
	11/20/91	ug/l	250	78	15 J	28	EPA 8240
	02/28/92	ug/l	110	40	7.0 J	13	EPA 8240
	07/02/92	ug/l	200	70	10 J	22	EPA 8240
	09/29/92	ug/l	270	94	NA	27	EPA 8240
	11/16/92	ug/l	190 J	61 J	28 J	49 J	EPA 8020
	11/16/92	ug/l	90	22 J	5.0 J	9.0	EPA 8240
	02/18/93	ug/l	90 J	27 J	8.1 J	17 J	EPA 8020
	05/14/93	ug/l	80	20	11	23	EPA 8020
	08/12/93	ug/l	170 J	91 J	39 J	76 J	EPA 8020
	11/10/93	ug/l	95	51	7.5	15	EPA 8020
	11/10/93	ug/l	78	28	<2.0	11	EPA 8240
	02/08/94	ug/l	99	13	28	17	EPA 8020
	05/10/94	ug/l	130	10	26	14	EPA 8020
	08/09/94	ug/l	70	12	17	13	EPA 8020
	11/08/94	ug/l	120	11	20	13	EPA 8020
	02/07/95	ug/l	89	7.6	18	13	EPA 8020
	05/09/95	ug/l	130	15	19	<12	EPA 8020
	08/08/95	ug/l	88	8.0	16	12	EPA 8020
	11/07/95	ug/l	67	12	11	6.6	EPA 8020
	02/06/96	ug/l	69	14	11	<12	EPA 8020

J - Estimated
U - Analyte Not Detected Above Elevated Reporting Limit.