



April 2, 2003

Alameda County
APR 08 2003
Environmental Health

Mr. Paul Supple
Atlantic Richfield Company
P.O. Box 6549
Moraga, California 94570

**Subject: Results of a Dual Phase Extraction Test
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California
URS Project #38486037**

Dear Mr. Supple:

On behalf of Atlantic Richfield Company (ARCO – an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting this report to document the results of a dual phase extraction (DPE) pilot test at ARCO Service Station #5387, located at 20200 Hesperian Boulevard in Hayward, California (the Site, Figure 1). The DPE pilot test was conducted on November 4 through November 9, 2002. The purpose of the pilot test was primarily to mitigate soil and groundwater impacted by hydrocarbons and methyl tertiary butyl ether (MTBE) at the site and secondarily to evaluate the applicability and effectiveness of DPE technology as a long term mitigation process if needed. A summary of previous investigations and the pilot test set-up and results are described below. test

SITE HYDROGEOLOGY AND PREVIOUS INVESTIGATIONS

The dominant site lithology is a sequence of dark clays grading into sands and gravels at depth greater than 20 ft bgs. Groundwater flow is generally to the west, and groundwater depth is typically approximately 12 feet bgs (Groundwater Technology, 1986). The site is located 0.2 miles north of Sulphur Creek in San Lorenzo and approximately 2.5 miles east of San Francisco Bay.

An aquifer pumping and recovery test was performed at the site by GeoStrategies, Inc. on October 13 and 14, 1992 utilizing recovery well AR-1. GeoStrategies evaluation of the step-drawdown test suggested that a pumping rate of 3 gallons per minute (gpm) would be the optimal discharge rate for the constant rate test. Maximum observed drawdown in the pumping well was

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12.06 feet. Calculated transmissivity values from the field data plots ranged between 4,147 gallons per day per foot (gpd/ft) to 11,000 gpd/ft. Storativity ranged between 1.09×10^{-4} and 9.92×10^{-2} . Storativity values appear to represent an aquifer that is unconfined to semi-confined. The maximum drawdown was seen in well A-7 at 0.55 feet below initial water-levels. Well A-7 is approximately 80 feet downgradient from the pumping well AR-1. Finally, the well efficiency was calculated to be 16.5% at a constant discharge rate of 3 gpm. Low well efficiency of well AR-1 may be a function of the fine grained nature of the aquifer in the area around the well (GeoStrategies, 1993).

GeoStrategies performed two vapor extraction tests (VET) and one vapor extraction/air sparging test (VEAT) at the site on March 24, 1993. A fourth VET was performed on August 13, 1993 at the site. These tests were performed on four distinct groups of wells. The effective radius of influence was estimated to be 20 feet. The calculated hydrocarbon removal rates for these tests ranged from 11 lbs/day to 60.7 lbs/day.

SYSTEM SET-UP

The DPE pilot test was conducted using a trailer mounted Solleco 400 ACFM Liquid Ring Thermal Oxidizer connected to extraction wells MW-2 and AR-2, and extraction pipe EP-1 (Figure 2). The DPE system is capable of generating flow rates up to 200 cubic feet per minute (cfm) and vacuums up to 27 inches of mercury (inHg). The thermal oxidizer was used to abate extracted soil vapors in accordance with permit conditions established by the Bay Area Air Quality Management District (BAAQMD).

Extracted groundwater was temporarily stored onsite in a 6,900 gallon Baker tank and later disposed of at Romac Environmental (groundwater waste manifests are located in Attachment E).

DPE PILOT TEST

The DPE pilot test was performed by extracting soil vapors and total fluids with a one inch hose placed inside of monitoring wells MW-2, AR-2 and extraction pipe EP-1 (Figure 2). Well MW-2 is a 2-inch diameter well installed 12 feet southwest of the northern dispenser island (dispenser one). Well MW-2 is screened from approximately 5 to 30 feet bsg. Well AR-2 is a 6-inch diameter well installed ten feet north of MW-2. Well AR-2 is screened from approximately 5 to 35 feet bsg. Soil boring and well construction logs are located in Attachment A. Extraction pipe EP-1 is 2 inch diameter T-shaped PVC pipe located to the southwest of dispenser one. EP-1 extends vertically 7 feet below ground surface and then connects to the screened horizontal T-section that is 5 feet long. EP-1 was installed in February 2002 during the over-excavation of 40 cubic yards of soil to the southwest of dispenser one.

The DPE test was conducted between November 4 and November 9, 2002 for approximately 120 hours (the system was shut down for 17.8 hours on November 6 and 7, 2002). On November 4, the system was delivered to the site and hooked up to the three extraction points described above: MW-2, AR-2, and EP-1. On November 6, 2003 a URS technician shut the system down due to a high level of accumulated water in the holding tank. The system was started up again on

November 7, 2002 with all three extraction points operating after another Baker Tank was delivered.

Field data was collected from the extraction unit and from selected wells to assess influence from the system (see bullet items below). Vacuum data could not be collected for any of the extraction wells because well caps fitted with a magnehelic gauge did not fit inside the well boxes. Prior to the start of the pilot test, depth-to-groundwater measurements were collected in monitoring wells AR-2 and MW-2. No groundwater measurements were collected from extraction pipe EP-1 because the pipe runs horizontally above the groundwater table.

The following data were recorded periodically on field activity sheets (Attachment B) during the pilot test:

- Total system groundwater recovery rates in gallons.
- Total system operation in hours.
- Total influent system vacuums in inches of mercury (inHg).
- System influent hydrocarbon vapor concentrations in parts per million by volume (ppmv).
- Photo Ionization Detector (PID) readings on vapor from extraction points MW-2, AR-2, and EP-1.

Soil vapor influent samples were collected at the initial startup of the system and at the end of the test. Samples were not collected at the mid-point of the test because the system was not running. Samples were submitted to a California State Certified laboratory, Sequoia Analytical Laboratory in Morgan Hill, California for analysis. Vapor samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015B, benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tert-butyl ether (MTBE) by EPA Method 8020. A summary of the air analytical results are tabulated in Table 1. Laboratory analytical reports and chain-of-custody documentation are presented in Attachment B.

Groundwater analytical results from third and fourth quarters 2002 were used in an effort to provide a representative estimate of the hydrocarbon mass (including MTBE) removed from extracting groundwater. These results are tabulated in Table 2. Laboratory analytical reports and chain-of-custody documentation are presented in Attachment D.

Dillard Environmental removed a total of 12,300 gallons of water from the site and transported it to Romic Environmental Technologies Corporation in East Palo Alto, California for disposal. Copies of the waste manifests are located in Attachment E.

RESULTS AND DISCUSSION FOR DPE PILOT TEST

Based on a pump performance curve (Attachment F), the vapor flow rate was approximately 300 ACFM during the test. The total vacuum for the system ranged from 20 inHg to 22 inHg with an average system vacuum of 20.75 inHg. Based on the laboratory results, the influent TPHg vapor concentrations during the test ranged from 2.9 to 20 ppmv for well AR-2 and remained below the

detection limit of 2.5 ppmv for well MW-2 (Table 1). A vapor sample collected from EP-1 the end of the test reported 200 ppmv. Assuming the molecular weight for gasoline to be 100 grams during the pilot test a total of 9.3 pounds of TPHg and 0.05 pounds of MTBE were removed as vapor.

During the pilot test, approximately 12,300 gallons of groundwater was extracted at an average rate of 1.71 gpm. Approximately 0.06 pounds of TPHg and 0.01 pounds of MTBE were removed from groundwater during the pilot test (Table 2). MTBE detections at AR-2 decreased from 4.43 µg/L to below the detection limit of 5.0 µg/L from third to fourth quarter (after the DPE test). Well MW-2 showed an increase in MTBE from 228 µg/L to 529 µg/L from third to fourth quarter 2002. The results from the pilot test are summarized below:

**EP-1, MW-2 and AR-2
PILOT TEST RESULTS SUMMARY**

Approximate Total Hours Operated (hours)	Total Water Discharge (gallons)	Average Water Flowrate (gpm)	Total TPHg Extracted in Groundwater (lbs)	Total MTBE Extracted in Groundwater (lbs)	Total TPHg Extracted as Vapor (lbs)	Total MTBE Extracted as Vapor (lbs)
120	12,300	1.71	0.07	0.01	9.36	0.060

CONCLUSIONS

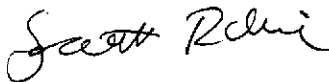
In conclusion, the test results indicate limited success using DPE on wells MW-2 and AR-1 to mitigate soil and groundwater impacted by hydrocarbons and MTBE. The recent increase in concentrations of MTBE at AR-1, MW-1, and MW-2 may be the result of constituents from the vadose zone being flushed into the groundwater by increased infiltration of precipitation. Approximately 20 to 25 percent of the ground surface at the site is now dirt rather than asphalt and concrete allowing for increased infiltration. The dirt areas were left after the removal of four underground storage tanks, product lines, and dispensers in February 2002.

Possible future corrective action activities for this site could include 1) interim groundwater extraction by a vacuum truck, 2) Soil Vapor Extraction (SVE) or 3) the addition of a chemical oxidant to increase dissolved oxygen (DO) concentrations beneath the site and thus increase the biological degradation of contaminants. Wells to be considered in future corrective action activities are MW-1, MW-2, AR-1, and AR-2. Continued quarterly groundwater sampling is recommended to monitor MTBE and hydrocarbon concentration trends. Analysis of bioremediation parameters (DO, alkalinity, nitrate, sulfate and ferrous iron) could be added to the next quarterly groundwater monitoring event to better evaluate the affects of natural attenuation at the site.

If you have any questions regarding this submission, please call (510) 874-3280.

Sincerely,

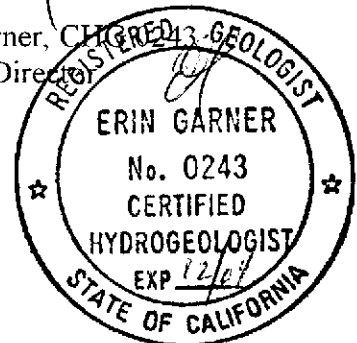
URS Corporation



Scott Robinson
Project Manager

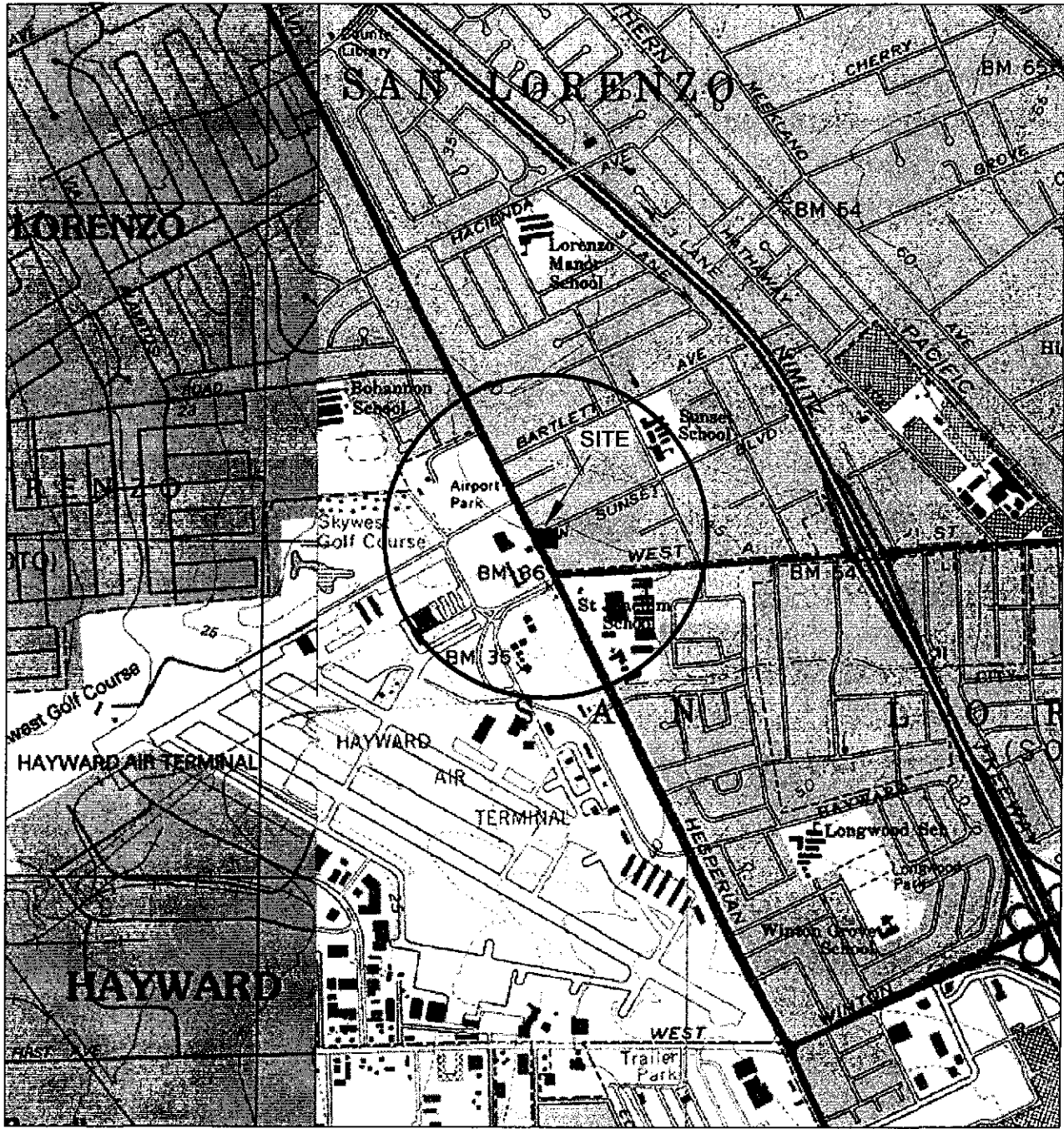


Erin Garner, CHG
Project Director



- Attachments:
- Figure 1 - Site Location Map
 - Figure 2 - Well Location Map
 - Table 1 - Pilot Test Air Analytical Data
 - Table 2 - Groundwater Analytical Data
 - Attachment A - Soil Boring/Well Construction Logs
 - Attachment B - Field Data Sheets
 - Attachment C - Air Sampling Certified Analytical Reports and Chain-of-Custody Records
 - Attachment D - Third & Fourth Quarter Certified Analytical Reports and Chain-of-Custody Records
 - Attachment E - Groundwater Waste Manifests
 - Attachment F - Pump Performance Curve

cc: Mr. Amir Gholami, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, 2nd Floor, Alameda, CA 94502

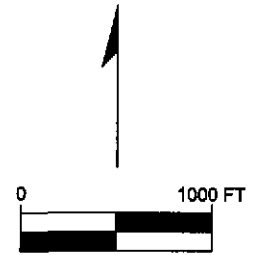


REFERENCE:
 BASE MAP FROM TOPO MAP
 NORTH REGION 7

7.5 MINUTE TOPOGRAPHIC
 PHOTOREVISED 1998



QUADRANGLE LOCATION



APPROXIMATE SCALE

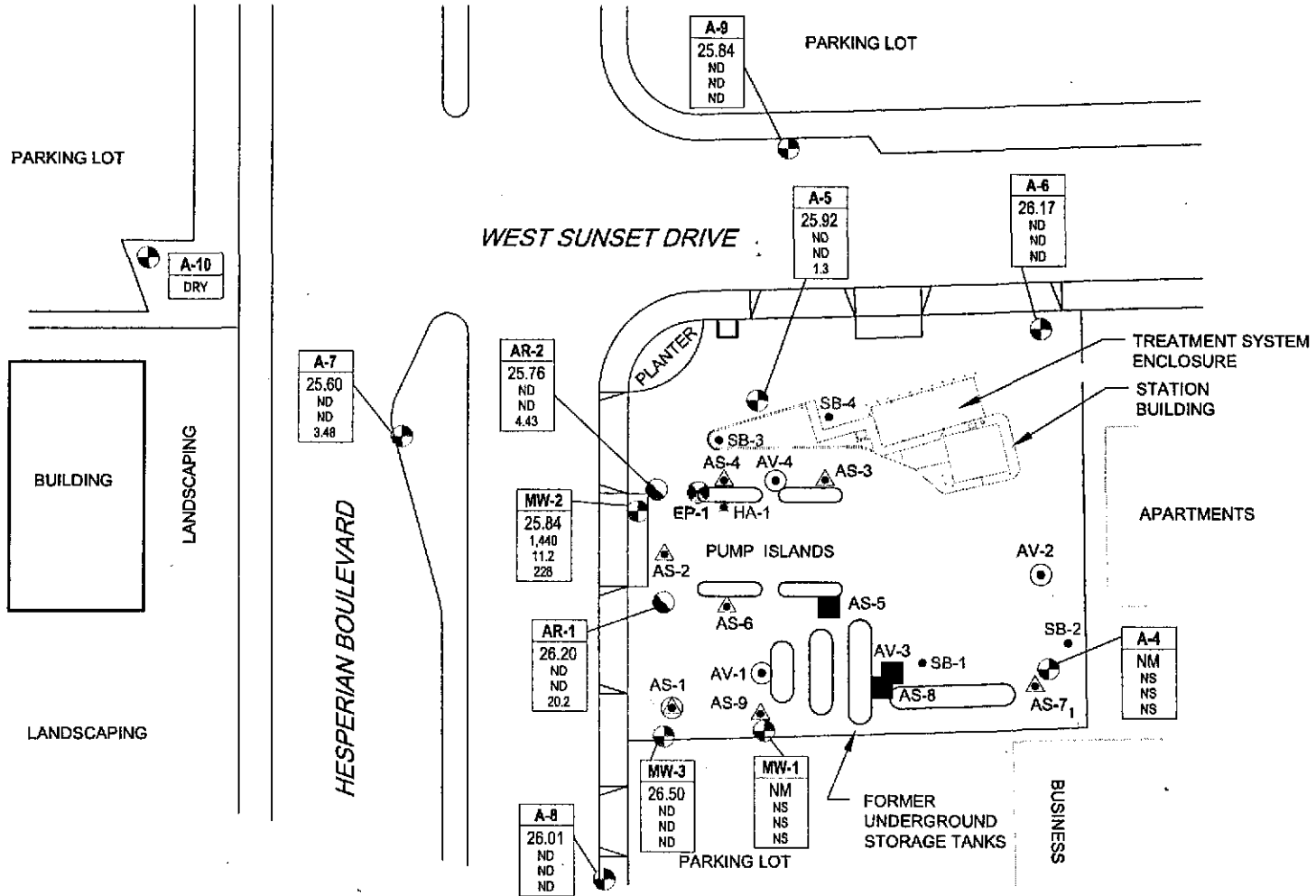


Project No. 38486033
 Arco Richmond Station #5387
 20200 Hesperian Boulevard
 Hayward, California

SITE LOCATION MAP

FIGURE
1

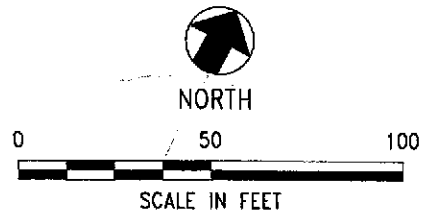
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LEGEND:

- A-4 ABANDONED MONITORING WELL LOCATION
- A-4 MONITORING WELL LOCATION
- AR-1 GROUNDWATER EXTRACTION WELL LOCATION
- AV-1 SOIL VAPOR EXTRACTION WELL LOCATION
- ▲ AS-2 AIR SPARGE WELL LOCATION
- AS-1 DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL LOCATION
- ✱ HA-1 AIR SPARGE WELL LOCATION
- SB-3 DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL LOCATION
- EP-1 EXTRACTION POINT

Well	WELL DESIGNATION
ELEV	GROUNDWATER ELEVATION
TPH-g Benzene MTBE	CONCENTRATIONS OF TPH-g, BENZENE AND MTBE IN MICROGRAMS PER LITER (µg/L)
*	NO GROUNDWATER ELEVATION DATA AVAILABLE
NA	NOT AVAILABLE
ND	NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS
NS	NOT SAMPLED



NOTE: SITE MAP ADAPTED FROM IT CORPORATION FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

URS	Project No. 38486033	WELL LOCATION MAP	FIGURE 2
	Arco Service Station 5387 20200 Hesperian Boulevard Hayward, California		

**Table 1
Pilot Test Air Analytical Data**

ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

Well Number	Date Sampled	Time	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Total Xylenes (ppmv)	Gasoline Range Organics* (ppmv)	MTBE (ppmv)
MW-2	11/04/02	14:25	ND<0.031	ND<0.027	ND<0.023	0.11	ND<2.4	ND<0.14
	11/09/02	13:15	ND<0.031	ND<0.027	ND<0.023	0.069	ND<2.4	ND<0.14
AR-2	11/04/02	14:20	ND<0.031	ND<0.027	ND<0.023	0.17	2.9 ¹	0.26
	11/09/02	13:20	ND<0.031	ND<0.027	ND<0.023	0.13	20 ²	0.28
EP-1	11/04/02	--	NA	NA	NA	NA	NA	NA
	11/09/02	13:25	0.59	1.4	0.48	2.0	200 ²	1.0

**Total Estimated TPHg Removal 9.36 lbs
Total Estimated MTBE Removal 0.060 lbs**

* = Gasoline Range Organics (C6-C10)

1 = Chromatogram Pattern: Gasoline C6-C10

2 = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted

µg/L = Micrograms per liter

NA = Not analyzed

ND = Not Detected at or above the reporting limit

Note: It was assumed that the molecular weight for TPHg is 100 grams. It was assumed that the average concentrations for each well contributed one third to the system influent concentration. The capacity for the system (300 ACFM) was extrapolated from the system vacuum curve.

**Table 2
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Estimated Groundwater Extracted (gallons)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Gasoline (µg/L)	MTBE (µg/L)
AR-2	07/08/98		<0.3	<0.3	<0.3	<0.5	<50	<5
	10/22/98		<0.3	<0.3	<0.3	<0.5	<50	<5
	01/13/99		<0.3	0.40	<0.3	0.53	<50	<20
	04/29/99		<0.3	<0.3	<0.3	0.82	<50	<5
	01/15/02		<0.5	<0.5	<0.5	<0.5	<50	17
	04/24/02		ND<0.50	ND<0.50	ND<0.50	ND<0.50	<50	39*
	09/23/02	6,150	<0.5	<0.5	<0.5	<1.5	<50	4.43
	12/09/02		<0.5	<0.5	<0.5	<1.0	<50	<5.0
Estimated Source Removal							0.0 lbs.	0.0002 lbs.
MW-2	07/08/98		<0.3	<0.3	<0.3	<0.5	78	97
	10/22/98		0.37	2.0	0.91	0.73	270	26
	01/13/99		5.8	1.0	1.4	1.1	650	<20
	04/29/99		<0.3	<0.3	<0.3	<0.5	<50	23
	01/15/02		15	4.5	<0.5	<0.5	1,200	190
	04/24/02		18	ND<10	ND<10	ND<10	1,300	170*
	09/23/02	6,150	11.2	0.730	<0.5	<1.5	1,440	228
	12/09/02		8.08	0.694	2.47	3.79	1,770	529
Estimated Source Removal							0.07 lbs.	0.01 lbs.
Total Estimated Source Removal							0.07 lbs	0.01 lbs.

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted

µg/L = Micrograms per liter

Note: The amount of groundwater extracted from each well was calculated by dividing the systems total groundwater extracted by the number of groundwater wells being extracted.



GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

Drilling Log

Well Number MW 2

Project Arco/Hesperian Owner Arco Petroleum

Location Hayward, Calif. Project Number 20-8127

Date Drilled 8/8/86 Total Depth of Hole 25 ft. Diameter .020 in.

Surface Elevation - Water Level, Initial 12.0 ft 24-hrs. -

Screen: Dia. 2 in. Length 25 ft. Slot Size .020 in.

Casing: Dia. 2 in. Length 5 ft. Type P.V.C.

Drilling Company Sierra Pacific Drilling Method h.s. auger

Driller L. Pera Log by S. Gable

Sketch Map

Notes

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)	
0				SM	Brown, sandy silt, very loose, dry, no odor	
2				CL	Black, silty clay, stiff, dry, no odor	
4		o PID 12	A 6	CL	Brown, fine sandy clay, firm, damp, slight odor	
6		o PID 3	8		Green-gray, clay, soft, damp, moderate odor	
8						
10		o PID 15	B 3	ML		
12				4		
14		o PID 12	C 4	ML		Mottled green brown, silty clay, stiff, wet, moderate odor
16				8		
18						
20		o PID 5			ML	Gray brown, silty clay, stiff, wet, moderate odor
22						
24		o PID			SM	Light brown, silty sand, loose, wet, moderate odor

8/8/86



GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

Drilling Log

Well Number MW 2

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
26 28 30		o PID 5			Brown, fine sandy clay, medium dense, firm, wet, moderate odor bottom of hole

Field location of boring (See Plate 2)	Project No:	792608	Date:	3/16/93	Boring No:	AR-2	
	Client:	ARCO Products Company SS#5387				Sheet:	1
	Location:	20200 Hesperian Boulevard				of	2
	City:	San Lorenzo					
	Logged by:	RCM	Driller:	W. Hazmat			
Casing installation data							

Drilling method:	Hollow Stem Auger	Top of Box Elevation:	38.39	Datum:	MSL
hole diameter:	12 inches				

PTC (blows)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Wall Detail	Soil Change Symbol (USCS)	Water Level	Time	Date	Description
				1				13.5	14.9	3/16/93	PAVEMENT SECTION - 0.5 ft.
				2				14.35	16.48	3/16/93	SILTY CLAY (CU/ML) - black (10YR 2/1); medium stiff, damp, medium plasticity; 55% clay, 45% silt.
				3							SILT (ML) - dark brown (10YR 4/3); medium stiff, damp, medium plasticity; 70% silt, 15% clay, 15% fine sand.
		S&H	AR-2	4							Color change to dark olive gray (5Y 3/2) at 3.5 ft. 1
0	36		5.0	5							1-inch medium sand lens at 4.0 ft
				6							
				7							
				8							
		S&H	AR-2	9							Greenish gray (5G 4/1); discoloration in rootholes, moist at 8.5 ft.
62	10		10.0	10							
				11							
				12							
				13							
		S&H	AR-2	14							Saturated at 13.5 ft.
1167	18		15.0	15							
				16							
				17							
				18							
		S&H	AR-2	19							Color change to yellowish brown (10YR 5/6) with greenish gray (5G 4/1); discoloration at 18.5 ft, decrease in sand to 5%
121	10		20.0	20							

Remarks: * Converted to equivalent standard penetration blows/ft.

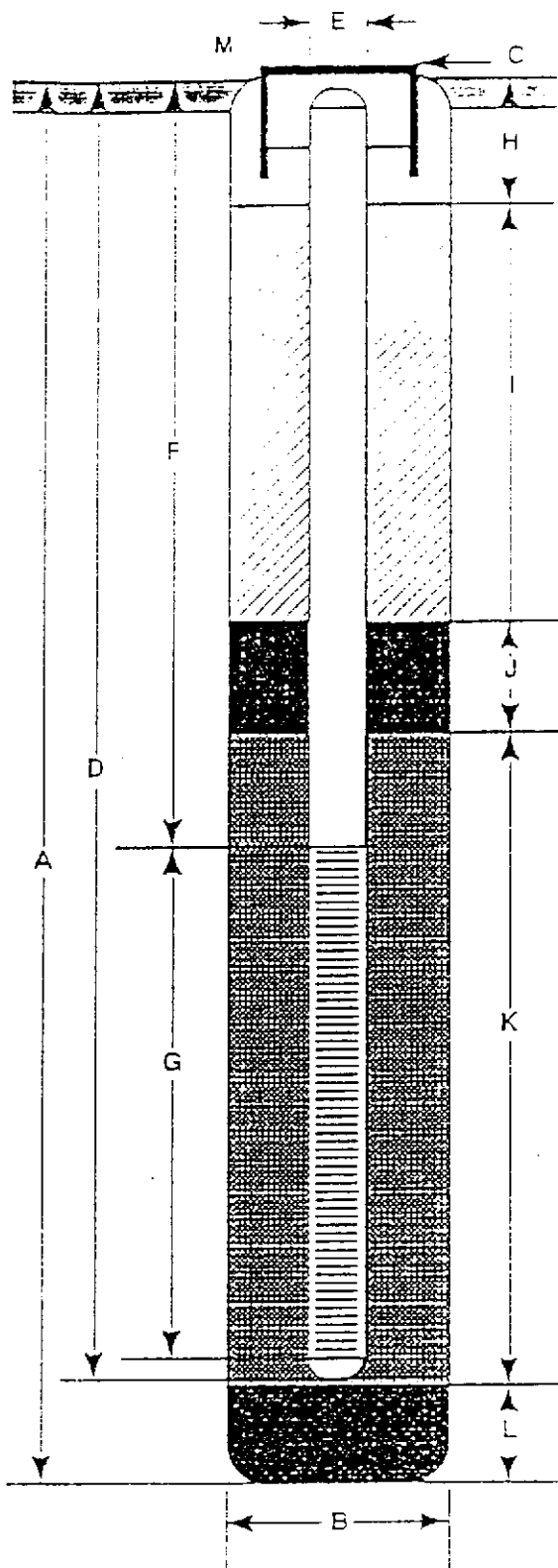
Field location of boring (See Plate 2)	Project No	792608	Date	3/16/93	Boring No	AR-2	
	Client	ARCO Products Company SS#5367					
	Location	20200 Hesperian Boulevard					
	City	San Lorenzo				Sheet	2
	Logged by	RCM	Driller	W. Hazmat	of 2		
Casing installation date							

Drilling method	Hollow Stem Auger	Top of Box Elevation	Datum
hole diameter	12 inches		

ID (ft)	Blows (ft) or Pressure (psf)	Type of Sample	Sample Number	Depth (ft)	Sample	Well Depth	SPT Count Symbol (ft)	Water Level		Description
								Time	Date	
				21						
				22						
				23						
		S&H		24						
107	19		AR-2	25						SILTY SAND (SM) - dark yellowish brown (10YR 4/4); medium dense, saturated; 75% fine sand, 25% silt.
			25.0	25						
				26						
				27						Lens of fine to coarse sand at 28.5 ft.
				28						
		S&H		29						
			AR-2	30						SILT (ML) - olive brown (2.5Y 4/4); very stiff, very moist, medium plasticity; 70% silt, 25% clay, 5% fine sand
83	29		30.0	30						
				31						
				32						
				33						
		S&H		34						
			AR-2	35						SILTY SAND (SM) - olive brown (2.5Y 4/4); medium dense, very moist; 65% fine to coarse sand, 30% silt, 5% clay.
51	25		35.0	35						
				36						
				37						Bottom of boring at 35.0 ft. 3/16/93
				38						
				39						
				40						

Remarks: * Converted to equivalent standard penetration blows/r.

WELL CONSTRUCTION DETAIL



- A Total Depth of Boring _____ 35.0 ft.
- B Diameter of Boring _____ 12 in.
Drilling Method _____ Hollow Stem Auger
- C Top of Box Elevation _____ 38.39 ft.
 Referenced to Mean Sea Level
 Referenced to Project Datum
- D Casing Length _____ 35.0 ft.
Material _____ 3/4" 40 PVC. Stls. Stl. Cbn Stl.
- E Casing Diameter _____ 6 in.
- F Depth to Top Perforations _____ 5.0 ft.
- G Perforated Length _____ 30.0 ft.
Perforated Interval from _____ 5.0 to _____ 35.0 ft.
Perforation Type _____ Continuous Wrap
Perforation Size _____ 0.020 in.
- H Surface Seal from _____ 0 to _____ 1.0 ft.
Seal Material _____ Concrete
- I Backfill from _____ 1.0 to _____ 4.0 ft.
Backfill Material _____ Neat Cement
- J Seal from _____ 4.0 to _____ 4.5 ft.
Seal Material _____ Bentonite
- K Gravel Pack from _____ 4.5 to _____ 35.0 ft.
Pack Material _____ Lonestar #2/12 Graded Sand
- L Bottom Seal _____ ft.
Seal Material _____
- M _____ Waterproof vault box with locking cap and lock.

Note: Depths measured from initial ground surface.

Field Report

Field Office:		Date: 11/4/02	
		Job No.:	Task No.:
		Project: BPARCO DPE test #5387	
Prepared By: Mike Gomes B. Gaskel		Location: 20200 Heavens Blvd.	
To:		Weather:	Temp.:
		Client:	
		Contractor:	
Attn:			

Page ___ of ___

0700 Mikey calls from site. Thermal test unit arriving

0720 BGG calls Dillard about Baker Tank

0730 BGG departs for site

0800 Arrive on-site. Delta Propan onsite starting generator miles
415.1

check depth to water. EP-1 is 6.09 ft deep and is 2" diameter PVC
DTW in MW-2 is 12.41. AR-2 12.57

0845 Delta Propan departs. He will fuel up on Wednesday, he left w/ Mikey
Baker Tank out here, expect it to arrive in afternoon. Steve will call me when he knows what time

0900 Hook up to MW-2 - begin water extraction

0925 Hook up to EP-1 (2" pipe) to extract vapors

0950 Collect sample of EP-1 soil vapor for PID reading, max 160 ppm, 154

1000 5 ppm from MW-2

1130 Back to office. Call Delta about Baker Tank 443

Equipment Used:		
Contractor Hours:	Staff Hours:	Mileage:
Copies To:		Project Manager:
		Reviewed By:

Field Report

Field Office: <i>OSW/land</i>	Date: <i>11 04 02</i>	
	Job No.:	Task No.:
	Project: <i>5387</i>	
Prepared By: <i>Mike Gomes</i>	Location:	
To: <i>Barb Jakubs</i>	Weather:	Temp.:
	Client:	
	Contractor:	
Attn:		

Page ___ of ___

0600 - Arrived on site - surveyed area to locate wells for DPE event.

0715 - Solicitor Rob arrived and we started setting up DPE unit.

0835 - Barb Jakubs arrived.

System setup was required to pull vac from 3 wells. Used clear spiral hose. Made fittings for connections. Started unit up about 1100. Made adjustments to temp control. Baker K arrived approx 1400 and propane K was filled to 86° @ 1530. Took two air samples for Sequoia Lab @ 1425. 1600 Left site. Went to Sequoia Lab that evening.

Equipment Used:		
Contractor Hours:	Staff Hours:	Mileage:
Copies To:	Project Manager:	
	Reviewed By:	

Field Report

Field Office: <u>OAKLAND</u>		Date: <u>110502</u>	
		Job No.:	Task No.:
		Project: <u>5387</u>	
Prepared By: <u>Mike Gomes</u>		Location:	
To: <u>Barb Jakub</u>		Weather:	Temp.:
		Client:	
		Contractor: <u>URS</u>	
Attn:			
Page <u>1</u> of 3 <u>3</u>			
<u>0542 - Arrived on site.</u>			
Totalizer - <u>2981.5</u>		<u>System Status</u>	
Propane - <u>50%</u>		Temp - <u>1449°F</u>	
Hum meter - <u>23.1</u>		Dilution air	
		Valve <u>100% closed</u>	
Receiver R - <u>50%</u>		<u>High Limit Temp</u>	
Level.		(Stack) <u>946°F</u>	
<u>Vac system</u>		Notes: <u>Baker R is still leaking @</u>	
Pump vac - <u>20 in hg</u>		valve. System OK @ this time	
Separator - <u>17 in hg</u>		<u>Generator Status</u>	
Pump outlet temp - <u>168°F</u>		oil press - <u>59 psi</u> Alternator - <u>14.6 VDC</u>	
oil level - <u>OK</u>		Temp - <u>179°F</u>	
Filter press - <u>< 5 psi</u>		Volts - <u>236</u>	
Equipment Used:		<u>Comp - GC</u>	
Contractor Hours:	Staff Hours:	Mileage:	
Copies To:		Project Manager:	
		Reviewed By:	

Field Report

Field Office: <i>Oakland</i>	Date: <i>11/05/02</i>	
	Job No.:	Task No.:
	Project: <i>5387</i>	
Prepared By: <i>Mike Gomes</i>	Location:	
To:	Weather:	Temp.:
	Client:	
	Contractor:	
Attn:		
Page <u>2</u> of 3 <u>3</u>		
<i>Checked Baker K level and it is approx 50% full.</i>		
<i>System is operating in a normal manner.</i>		
<i>No problems to report.</i>		
<i>The propane K will need to be refilled probably before the evening.</i>		
<i>06/2- Left site for next job.</i>		
Equipment Used:		
Contractor Hours:	Staff Hours:	Mileage:
Copies To:		Project Manager:
		Reviewed By:

Field Report

Field Office: <u>OAKLAND.</u>		Date: <u>110502</u>	
		Job No.:	Task No.:
		Project: <u>5387</u>	
Prepared By: <u>Mike Gomes</u>		Location: <u>San Lorenzo</u>	
To: <u>Barb Jakub</u>		Weather:	Temp.:
		Client: <u>BP/ARCO</u>	
		Contractor: <u>MRS</u>	
Attn:			
Page <u>3</u> of 3 <u>3</u>			
<u>1445 - Arrived on site.</u>			
<u>Control Temp - 1446°F</u>		<u>Propane - 35%</u>	
<u>Dilution Control - 100% closed</u>		<u>Hour Meter - 32.2</u>	
<u>Exhaust Temp - 748°F</u>		<u>Totalizer - 4695.0</u>	
<u>PPM P.I.D.</u>		<u>Vac Pump</u>	
<u>AR-2 - 59 ppm</u>		<u>oil level - below normal level</u>	
<u>MW-2 - 22 ppm</u>		<u>Vac - 21" hg</u>	
<u>6' pipe - 40 ppm EP-1</u>		<u>Receiver - 19" hg, Level 50%</u>	
		<u>8.5 G.P.H.</u>	
		<u>Get under 5% to remove.</u>	
<u>1540 - Left site</u>			
Equipment Used:			
Contractor Hours:		Staff Hours:	Mileage:
Copies To:		Project Manager:	
		Reviewed By:	

Field Report

Field Office:	Date: 110502 110509 110602	
	Job No.:	Task No.:
	Project: 5387	
Prepared By: Mike Gomes	Location: San Lorenzo	
To: Barb Jakub	Weather:	Temp.:
	Client:	
	Contractor: WRS	
Attn:		
Page <u>4</u> of <u>4</u> / of 1		
0930 - Arrived on site - System operating OK. Running on one well only. Baker R full and R is leaking under bottom. Took PID reading on upper well - 0 PPM		
Propane R - 5%	1640 - Hour meter 58.0	
Totalizer - 6700 gal. Valve closed	Temp - 1470°F Limit - 964°F Vac - 20" hg	
1129 - Left site per next job.	Temp - 172°F Oil level - OK	
1600 - Came back for new Baker R install. Talked w/ Barb about getting water pumped off site. Ron for Rent is transferring remaining water from leaking R to new R.		
1715 - Completed water transfer to Baker R. There is no room for further GWE. Propane R was topped @ 85%		
Equipment Used:		
Contractor Hours:	Staff Hours:	Mileage:
Copies To:		Project Manager:
		Reviewed By:

Field Report

Field Office:		Date: 110702	
		Job No.:	Task No.:
		Project: 5387	
Prepared By: Mike Gomes		Location: Haywards	
To:	Weather: Rain	Temp.:	
		Client:	
		Contractor:	
Attn:			
Page ____ of ____			
1600 - Arrived on site w/ Rose to hook up new R.			
Opened up NP-2 and MW-2 for further SVE/GWE.			
1730 - Left site for home			
Equipment Used:			
Contractor Hours:	Staff Hours:	Mileage:	
Copies To:		Project Manager:	
		Reviewed By:	

Field Report

Field Office:		Date: <i>110802</i>	
		Job No.:	Task No.:
		Project: <i>5387</i>	
Prepared By: <i>Mike Gomes</i>		Location: <i>Hagwood</i>	
To: <i>Barb Jakub</i>		Weather:	Temp.:
		Client:	
		Contractor:	
Attn:			
Page ___ of ___			
<i>1228 Arrived on site.</i>			
<i>Thermal unit Status - Running</i>			
<i>Temp 1554°F</i>		<i>Flow Meter - 102.2</i>	
<i>High limit 882°F</i>		<i>Totalizer - 10,740 gal.</i>	
<i>Vac - 22" hg</i>		<i>Propane - 10% level.</i>	
<i>EV-1 = 0 ppm</i>			
<i>AR-2 = 0 ppm</i>			
<i>MW-2 = 0 ppm</i>			
<i>1325 - Left site.</i>			
Equipment Used:			
Contractor Hours:		Staff Hours:	Mileage:
Copies To:		Project Manager:	
		Reviewed By:	

Field Report

Field Office:	Date: 110902	
	Job No.:	Task No.:
	Project: 5387	
Prepared By: Mike Gomes	Location: Hayward	
To:	Weather:	Temp.:
	Client:	
	Contractor:	
Attn:		

Page ___ of ___

0815 - Arrived on site. System is down, ran out of propane. This was OK, the Baker R was almost to overflowing, about a foot from top of manway. Called anserigas to have about 5 gal full in order to get final samples and to clear lines and receiver R of water. There is enough room in Baker for this.

Also a car is parked in driveway and I called the Sheriff's office for assistance.

0900 - Sheriff arrived we can have car towed if needed. Propane arrived put in fuel. Started system. Gassed samples for lab.

1415 - Left site for day.

Equipment Used:		
Contractor Hours:	Staff Hours:	Mileage:
Copies To:		Project Manager:
		Reviewed By:



**Sequoia
Analytical**

885 Jarvis Dr
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www.sequoialabs.com

22 November, 2002

Barbara Jacob
URS Corporation
500 12th Street, Suite 100
Oakland, CA 94607

RE: ARCO #5387, Hayward, Ca
Sequoia Work Order: MLK0081

Enclosed are the results of analyses for samples received by the laboratory on 11/04/02
19:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt
Project Manager
CA ELAP Certificate #1210



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Barbara Jacub

MLK0081
Reported:
11/22/02 12:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	MLK0081-01	Air	11/04/02 14:25	11/04/02 19:40
AR-2	MLK0081-02	Air	11/04/02 14:20	11/04/02 19:40

There were no custody seals that were received with this project.



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URS Corporation 500 12th Street, Suite 100 Oakland CA, 94607	Project: ARCO #5387, Hayward, Ca Project Number: ARCO #5387, Hayward, CA Project Manager: Barbara Jacob	MLK0081 Reported: 11/22/02 12:52
--	---	--

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (MLK0081-01) Air Sampled: 11/04/02 14:25 Received: 11/04/02 19:40									
Gasoline Range Organics (C6-C10)	ND	2.4	ppmv	1	2K05002	11/05/02	11/05/02	8015Bm/8021B	
Benzene	ND	0.031	"	"	"	"	"	"	
Toluene	ND	0.027	"	"	"	"	"	"	
Ethylbenzene	ND	0.023	"	"	"	"	"	"	
Xylenes (total)	0.11	0.023	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.14	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		107 %	56-134	"	"	"	"	"	
AR-2 (MLK0081-02) Air Sampled: 11/04/02 14:20 Received: 11/04/02 19:40									
Gasoline Range Organics (C6-C10)	2.9	2.4	ppmv	1	2K05002	11/05/02	11/05/02	8015Bm/8021B	HC-21
Benzene	ND	0.031	"	"	"	"	"	"	
Toluene	ND	0.027	"	"	"	"	"	"	
Ethylbenzene	ND	0.023	"	"	"	"	"	"	
Xylenes (total)	0.17	0.023	"	"	"	"	"	"	
Methyl tert-butyl ether	0.26	0.14	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		115 %	56-134	"	"	"	"	"	



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Barbara Jacob

MLK0081
Reported:
11/22/02 12:52

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (MLK0081-01) Air Sampled: 11/04/02 14:25 Received: 11/04/02 19:40									
Gasoline Range Organics (C6-C10)	ND	10	mg/m ³ Air	1	2K05002	11/05/02	11/05/02	8015Bm/8021B	
Benzene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.10	"	"	"	"	"	"	
Xylenes (total)	0.48	0.10	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		107 %	56-134		"	"	"	"	
AR-2 (MLK0081-02) Air Sampled: 11/04/02 14:20 Received: 11/04/02 19:40									
Gasoline Range Organics (C6-C10)	10	10	mg/m ³ Air	1	2K05002	11/05/02	11/05/02	8015Bm/8021B	HC-21
Benzene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.10	"	"	"	"	"	"	
Xylenes (total)	0.75	0.10	"	"	"	"	"	"	
Methyl tert-butyl ether	0.92	0.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		114 %	56-134		"	"	"	"	



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URS Corporation
 500 12th Street, Suite 100
 Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
 Project Number: ARCO #5387, Hayward, CA
 Project Manager: Barbara Jacob

MLK0081
 Reported:
 11/22/02 12:52

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B - Quality Control
 Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2K05002 - EPA 5030B [P/T]

Blank (2K05002-BLK1)

Prepared & Analyzed: 11/05/02

Gasoline Range Organics (C6-C10)	ND	12	ppmv							
Benzene	ND	0.16	"							
Toluene	ND	0.13	"							
Ethylbenzene	ND	0.12	"							
Xylenes (total)	ND	0.12	"							
Methyl tert-butyl ether	ND	0.69	"							

Surrogate: <i>a,a,a</i> -Trifluorotoluene	1.81		"	1.68		108	56-134			
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Laboratory Control Sample (2K05002-BS1)

Prepared & Analyzed: 11/05/02

Benzene	3.49	0.16	ppmv	3.14		111	62-125			
Toluene	2.98	0.13	"	2.66		112	68-121			
Ethylbenzene	2.68	0.12	"	2.31		116	75-125			
Xylenes (total)	7.77	0.12	"	6.92		112	76-121			

Surrogate: <i>a,a,a</i> -Trifluorotoluene	1.94		"	1.68		115	56-134			
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Laboratory Control Sample (2K05002-BS2)

Prepared & Analyzed: 11/05/02

Gasoline Range Organics (C6-C10)	80.3	12	ppmv	70.9		113	65-142			
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Surrogate: <i>a,a,a</i> -Trifluorotoluene	1.74		"	1.68		104	56-134			
---	------	--	---	------	--	-----	--------	--	--	--

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



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URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Barbara Jacob

MLK0081
Reported:
11/22/02 12:52

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2K05002 - EPA 5030B [P/T]										
Blank (2K05002-BLK1) Prepared & Analyzed: 11/05/02										
Gasoline Range Organics (C6-C10)	ND	50	mg/m ³ Air							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.8		"	10.0		108	56-134			
Laboratory Control Sample (2K05002-BS1) Prepared & Analyzed: 11/05/02										
Benzene	11.1	0.50	mg/m ³ Air	10.0		111	62-125			
Toluene	11.2	0.50	"	10.0		112	68-121			
Ethylbenzene	11.6	0.50	"	10.0		116	75-125			
Xylenes (total)	33.7	0.50	"	30.0		112	76-121			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	11.6		"	10.0		116	56-134			
Laboratory Control Sample (2K05002-BS2) Prepared & Analyzed: 11/05/02										
Gasoline Range Organics (C6-C10)	283	50	mg/m ³ Air	250		113	65-142			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.4		"	10.0		104	56-134			
Matrix Spike (2K05002-MS1) Source: MLJ0862-01 Prepared & Analyzed: 11/05/02										
Gasoline Range Organics (C6-C10)	595	50	mg/m ³ Air	550	ND	105	65-142			
Benzene	13.9	0.50	"	6.60	ND	210	62-125			QM-07
Toluene	49.7	0.50	"	39.7	ND	125	68-121			QM-07
Ethylbenzene	11.8	0.50	"	9.20	ND	128	75-125			QM-07
Xylenes (total)	57.3	0.50	"	46.1	ND	124	76-121			QM-07
<i>Surrogate: a,a,a-Trifluorotoluene</i>	11.1		"	10.0		111	56-134			
Matrix Spike Dup (2K05002-MSD1) Source: MLJ0862-01 Prepared: 11/05/02 Analyzed: 11/06/02										
Gasoline Range Organics (C6-C10)	523	50	mg/m ³ Air	550	ND	91.8	65-142	12.9	50	
Benzene	11.7	0.50	"	6.60	ND	177	62-125	17.2	31	QM-07

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Barbara Jacob

MLK0081
Reported:
11/22/02 12:52

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2K05002 - EPA 5030B [P/T]										
Matrix Spike Dup (2K05002-MSD1)		Source: MLJ0862-01			Prepared: 11/05/02		Analyzed: 11/06/02			
Toluene	43.7	0.50	mg/m ³ Air	39.7	ND	110	68-121	12.8	29	
Ethylbenzene	10.4	0.50	"	9.20	ND	113	75-125	12.6	32	
Xylenes (total)	49.7	0.50	"	46.1	ND	107	76-121	14.2	29	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>10.8</i>		<i>"</i>	<i>10.0</i>		<i>108</i>	<i>56-134</i>			



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Barbara Jacob

MLK0081
Reported:
11/22/02 12:52

Notes and Definitions

HC-21 Chromatogram Pattern: Gasoline C6-C10

QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Chain of Custody Record

Project Name 5387
BP BU/GEM CO Portfolio:
BP Laboratory Contract Number:

MLK081

Date: 110402

Requested Due Date (mm/dd/yy) 10 days

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

Send To:	BP/GEM Facility No.: <u>5387</u>	Consultant/Contractor: <u>URS</u>
Lab Name: <u>Sequoia Lab</u>	BP/GEM Facility Address: <u>20200 Hesperian Blvd.</u>	Address: <u>600 12th St</u>
Lab Address: <u>585 Jaxen's Ave</u>	Site ID No. <u>5387</u>	<u>Oakland, CA</u>
<u>Morgan Hill</u>	Site Lat/Long:	e-mail EDD: <u>Brian.Jakub@URS.com</u>
	California Global ID #:	Consultant/Contractor Project No.:
Lab PM: <u>Latonja Rabb</u>	BP/GEM PM Contact: <u>Paul Sumpter</u>	Consultant/Contractor Tele/Fax: <u>510 873 9600/579 3264</u>
Tele/Fax: <u>408 722-8154/408 392 6304</u>	Address: <u>P.O. Box 1452 Alamo CA</u>	Consultant/Contractor PM: <u>Brian Jakub</u>
Report Type & QC Level:		Invoice to: Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Account No.:	Tele/Fax: <u>925 746 1088 925/996 1084</u>	BP/GEM Work Release No.:

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives				Requested Analysis				Sample Point Lat/Long and Comments	
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	BTEX 8021	BTEX TPH	HPA 8260	HPA 8270		MTBE 8021B
1	MW-2	1125																
2	AR-2	1120																
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Sampler's Name: <u>Mik Gomez</u>	Relinquished By / Affiliation: <u>Mik Gomez URS</u>	Date: <u>110402</u>	Time: <u>1140</u>	Accepted By / Affiliation: <u>[Signature] (SEQUOIA/MW)</u>	Date: <u>110402</u>	Time: <u>1940</u>
Shipment Date: <u>110402</u>						
Shipment Method: <u>Hand Delivery</u>						
Shipment Tracking No.:						

Special Instructions:

Seals In Place Yes No Temperature Blank Yes No Cooler Temperature on Receipt °F/C Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
 REC. BY (PRINT): RH
 WORKORDER: MLK0081

DATE Received at Lab: 11/4/02
 TIME Received at Lab: 1940
 LOG IN DATE: 11-5-02

Drinking water for regulatory purposes: YES/NO (NO)
 Wastewater for regulatory purposes: YES/NO (NO)

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	#	CLIENT ID	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / <u>Absent</u> Intact / Broken*			MW-2	Tedlar	Air	11/04/02	
2. Chain-of-Custody	<u>Present</u> / Absent*			AR-2	↓	↓	↓	
3. Traffic Reports or Packing List:	Present / <u>Absent</u>							
4. Airbill:	Airbill / <u>Stickers</u> Present / Absent							
5. Airbill #:								
6. Sample Labels:	<u>Present</u> / Absent							
7. Sample IDs:	<u>Listed</u> / Not Listed on Chain-of-Custody							
8. Sample Condition:	<u>Intact</u> / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample labels agree?	<u>Yes</u> / No*							
10. Sample received within hold time:	<u>Yes</u> / No*							
11. Proper Preservatives used:	<u>Yes</u> / No*							
12. Temp Rec. at Lab: (Acceptance range for samples requiring thermal pres.: 4+/-2°C)	<u>Yes</u> / No**							
**Exception (if any):	<u>Air</u>							

***If Circled, contact Project Manager and attach record of resolution.**



**Sequoia
Analytical**

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4 December, 2002

Barbara Jacob
URS Corporation
500 12th Street, Suite 100
Oakland, CA 94607

RE: ARCO #5387, Hayward, Ca
Sequoia Work Order: MLK0292

Enclosed are the results of analyses for samples received by the laboratory on 11/09/02
15:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt
Project Manager
CA ELAP Certificate #1210



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Barbara Jacob

MLK0292
Reported:
12/04/02 18:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	MLK0292-01	Air	11/09/02 13:15	11/09/02 15:05
AR-2	MLK0292-02	Air	11/09/02 13:20	11/09/02 15:05
EP-1	MLK0292-03	Air	11/09/02 13:25	11/09/02 15:05

There were no custody seals that were received with this project.



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Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Barbara Jacob

MLK0292
Reported:
12/04/02 18:10

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (MLK0292-01) Air Sampled: 11/09/02 13:15 Received: 11/09/02 15:05									
Gasoline Range Organics (C6-C10)	ND	2.4	ppmv	1	2K11003	11/11/02	11/11/02	8015Bm/8021B	
Benzene	ND	0.031	"	"	"	"	"	"	
Toluene	ND	0.027	"	"	"	"	"	"	
Ethylbenzene	ND	0.023	"	"	"	"	"	"	
Xylenes (total)	0.069	0.023	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.14	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		74.9 %	56-134	"	"	"	"	"	
AR-2 (MLK0292-02) Air Sampled: 11/09/02 13:20 Received: 11/09/02 15:05									
Gasoline Range Organics (C6-C10)	20	2.4	ppmv	1	2K11003	11/11/02	11/11/02	8015Bm/8021B	HC-12
Benzene	ND	0.031	"	"	"	"	"	"	
Toluene	ND	0.027	"	"	"	"	"	"	
Ethylbenzene	ND	0.023	"	"	"	"	"	"	
Xylenes (total)	0.13	0.023	"	"	"	"	"	"	
Methyl tert-butyl ether	0.28	0.14	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		94.3 %	56-134	"	"	"	"	"	
EP-1 (MLK0292-03) Air Sampled: 11/09/02 13:25 Received: 11/09/02 15:05									
Gasoline Range Organics (C6-C10)	200	12	ppmv	5	2K11003	11/11/02	11/11/02	8015Bm/8021B	HC-12
Benzene	0.59	0.16	"	"	"	"	"	"	
Toluene	1.4	0.13	"	"	"	"	"	"	
Ethylbenzene	0.48	0.12	"	"	"	"	"	"	
Xylenes (total)	2.0	0.12	"	"	"	"	"	"	
Methyl tert-butyl ether	1.0	0.69	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		103 %	56-134	"	"	"	"	"	



885 Jarvis Dr
 Morgan Hill, CA 95037
 (408) 776-9600
 FAX (408) 782-6308
 www.sequoialabs.com

URS Corporation
 500 12th Street, Suite 100
 Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
 Project Number: ARCO #5387, Hayward, CA
 Project Manager: Barbara Jacob

MLK0292
 Reported:
 12/04/02 18:10

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (MLK0292-01) Air Sampled: 11/09/02 13:15 Received: 11/09/02 15:05									
Gasoline Range Organics (C6-C10)	ND	10	ug/l	1	2K11003	11/11/02	11/11/02	8015Bm/8021B	
Benzene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.10	"	"	"	"	"	"	
Xylenes (total)	0.30	0.10	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		75.0 %	56-134		"	"	"	"	
AR-2 (MLK0292-02) Air Sampled: 11/09/02 13:20 Received: 11/09/02 15:05									
Gasoline Range Organics (C6-C10)	71	10	ug/l	1	2K11003	11/11/02	11/11/02	8015Bm/8021B	HC-12
Benzene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.10	"	"	"	"	"	"	
Xylenes (total)	0.56	0.10	"	"	"	"	"	"	
Methyl tert-butyl ether	1.0	0.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		94.0 %	56-134		"	"	"	"	HC-12
EP-1 (MLK0292-03) Air Sampled: 11/09/02 13:25 Received: 11/09/02 15:05									
Gasoline Range Organics (C6-C10)	710	50	ug/l	5	2K11003	11/11/02	11/11/02	8015Bm/8021B	HC-12
Benzene	1.9	0.50	"	"	"	"	"	"	
Toluene	5.2	0.50	"	"	"	"	"	"	
Ethylbenzene	2.1	0.50	"	"	"	"	"	"	
Xylenes (total)	8.7	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	3.8	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		103 %	56-134		"	"	"	"	

Sequoia Analytical - Morgan Hill

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URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Barbara Jacob

MLK0292
Reported:
12/04/02 18:10

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2K11003 - EPA 5030B [P/T]										
Blank (2K11003-BLK1) Prepared & Analyzed: 11/11/02										
Gasoline Range Organics (C6-C10)	ND	2.4	ppmv							
Benzene	ND	0.031	"							
Toluene	ND	0.027	"							
Ethylbenzene	ND	0.023	"							
Xylenes (total)	ND	0.023	"							
Methyl tert-butyl ether	ND	0.14	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.303		"	0.335		90.4	56-134			
Laboratory Control Sample (2K11003-BS1) Prepared & Analyzed: 11/11/02										
Benzene	0.553	0.031	ppmv	0.627		88.2	62-125			
Toluene	0.478	0.027	"	0.532		89.8	68-121			
Ethylbenzene	0.417	0.023	"	0.462		90.3	75-125			
Xylenes (total)	1.24	0.023	"	1.38		89.9	76-121			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.308		"	0.335		91.9	56-134			
Laboratory Control Sample (2K11003-BS2) Prepared & Analyzed: 11/11/02										
Gasoline Range Organics (C6-C10)	14.1	2.4	ppmv	14.2		99.3	65-142			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.374		"	0.335		112	56-134			
Laboratory Control Sample Dup (2K11003-BSD1) Prepared & Analyzed: 11/11/02										
Benzene	0.536	0.031	ppmv	0.627		85.5	62-125	3.12	31	
Toluene	0.459	0.027	"	0.532		86.3	68-121	4.06	29	
Ethylbenzene	0.401	0.023	"	0.462		86.8	75-125	3.91	32	
Xylenes (total)	1.17	0.023	"	1.38		84.8	76-121	5.81	29	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.308		"	0.335		91.9	56-134			
Laboratory Control Sample Dup (2K11003-BSD2) Prepared & Analyzed: 11/11/02										
Gasoline Range Organics (C6-C10)	9.92	2.4	ppmv	14.2		69.9	65-142	34.8	50	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	0.342		"	0.335		102	56-134			

Sequoia Analytical - Morgan Hill

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Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Barbara Jacob

MLK0292
Reported:
12/04/02 18:10

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 2K11003 - EPA 5030B [P/T]

Laboratory Control Sample Dup (2K11003-BSD2)

Prepared & Analyzed: 11/11/02



URS Corporation
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Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
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Project Manager: Barbara Jacob

MLK0292
Reported:
12/04/02 18:10

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2K11003 - EPA 5030B [P/T]										
Blank (2K11003-BLK1)										
Prepared & Analyzed: 11/11/02										
Gasoline Range Organics (C6-C10)	ND	10	ug/l							
Benzene	ND	0.10	"							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
Xylenes (total)	ND	0.10	"							
Methyl tert-butyl ether	ND	0.50	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	1.81		"	2.00		90.5	56-134			
Laboratory Control Sample (2K11003-BS1)										
Prepared & Analyzed: 11/11/02										
Benzene	1.76	0.10	ug/l	2.00		88.0	62-125			
Toluene	1.80	0.10	"	2.00		90.0	68-121			
Ethylbenzene	* 1.81	0.10	"	2.00		90.5	75-125			
Xylenes (total)	5.37	0.10	"	6.00		89.5	76-121			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	1.84		"	2.00		92.0	56-134			
Laboratory Control Sample (2K11003-BS2)										
Prepared & Analyzed: 11/11/02										
Gasoline Range Organics (C6-C10)	49.7	10	ug/l	50.0		99.4	65-142			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	2.23		"	2.00		112	56-134			
Laboratory Control Sample Dup (2K11003-BSD1)										
Prepared & Analyzed: 11/11/02										
Benzene	1.71	0.10	ug/l	2.00		85.5	62-125	2.88	31	
Toluene	1.73	0.10	"	2.00		86.5	68-121	3.97	29	
Ethylbenzene	1.74	0.10	"	2.00		87.0	75-125	3.94	32	
Xylenes (total)	5.07	0.10	"	6.00		84.5	76-121	5.75	29	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	1.84		"	2.00		92.0	56-134			
Laboratory Control Sample Dup (2K11003-BSD2)										
Prepared & Analyzed: 11/11/02										
Gasoline Range Organics (C6-C10)	35.0	10	ug/l	50.0		70.0	65-142	34.7	50	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	2.04		"	2.00		102	56-134			

Sequoia Analytical - Morgan Hill

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MLK0292
Reported:
12/04/02 18:10

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2K11003 - EPA 5030B [P/T]



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
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MLK0292
Reported:
12/04/02 18:10

Notes and Definitions

HC-I2 Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Chain of Custody Record

Project Name 5387
 BP BU/GEM CO Portfolio:
 BP Laboratory Contract Number:

MLK 0292

Date: 11/09/02

Requested Due Date (mm/dd/yy) 10 days

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

Send To:	BP/GEM Facility No.: <u>5387</u>	Consultant/Contractor: <u>URS</u>
Lab Name: <u>Seymour Lab</u>	BP/GEM Facility Address: <u>20200 Hesperian Blvd.</u>	Address: <u>500 12th St. Suite 200</u>
Lab Address: <u>888 Garraway Ave</u> <u>Morgan Hill</u>	Site ID No.	<u>Oakland, CA</u>
	Site Lat/Long:	e-mail EDD: <u>Debra@URS Corp.com</u>
Lab PM: <u>Latoria Bell</u>	California Global ID #: <u>Paul Sipek - 100</u>	Consultant/Contractor Project No.:
Tele/Fax: <u>408-787-8154 / 408-762-4304</u>	BP/GEM PM Contact: <u>Paul Sipek</u>	Consultant/Contractor Tele/Fax: <u>910-874-3226 / 874-</u>
Report Type & QC Level:	Address: <u>P.O. Box 1457, Alamo, CA 94502</u>	Consultant/Contractor PM:
BP/GEM Account No.:	Tele/Fax: <u>925-946-1085 925-946-1084</u>	Invoice to: <u>Consultant/Contractor</u> or BP/GEM (Circle one)
Lab Bottle Order No.:		BP/GEM Work Release No.:

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives				Requested Analysis				Sample Point Lat/Long and Comments	
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	ISTX 8021	BIEX/TH	HPA 8260	HPA 8270		MPF 80210
1	MW-2	1315				X	01						X					PID readings 0 ppm 3 ppm 18 ppm
2	AR-2	1320				X	02						X					
3	EP-1	1325				X	03						X					
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Sampler's Name: <u>Barb Takahira-Gomes</u>	Relinquished By / Affiliation:	Date:	Time:	Accepted By / Affiliation:	Date:	Time:
Sampler's Company: <u>URS Corp</u>	<u>Debra Sipek</u>	<u>11/09/02</u>	<u>1505</u>	<u>[Signature]</u>	<u>11/9/02</u>	<u>1505</u>
Shipment Date: <u>11/09/02</u>						
Shipment Method: <u>Hand delivery</u>						
Shipment Tracking No.:						

Special Instructions:

Body Seals In Place Yes No Temperature Blank Yes No Cooler Temperature on Receipt °F/C Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS:
 REC. BY (PRINT) TL
 WORKORDER: MLK0292

DATE Received at Lab: 11/9/02
 TIME Received at Lab: 1505
 LOG IN DATE: 11-9-02

Drinking water for regulatory purposes: YES/NO NO
 Wastewater for regulatory purposes: YES/NO NO

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	#	CLIENT ID	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / <u>Absent</u> Intact / Broken*	1		MW-2	(1) Tedlar bag	A	11/09/02	
2. Chain-of-Custody	<u>Present</u> / Absent*	2		AR-2				
3. Traffic Reports or Packing List:	Present / <u>Absent</u>	3		EP-1				
4. Airbill:	Airbill / Sticker Present / <u>Absent</u>							
5. Airbill #:								
6. Sample Labels:	<u>Present</u> / Absent							
7. Sample IDs:	<u>Listed</u> / Not Listed on Chain-of-Custody							
8. Sample Condition:	<u>Intact</u> / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample labels agree?	<u>Yes</u> / No*							
10. Sample received within hold time:	<u>Yes</u> / No*							
11. Proper Preservatives used:	<u>Yes</u> / No*							
12. Temp Rec. at Lab: (Acceptance range for samples requiring thermal pres.: 4+/-2°C)	<u>N/A</u> <u>30°C</u> <u>not on file</u> Yes / No**							
**Exception (if any):	<u>Tedlar</u>							

***If Circled, contact Project Manager and attach record of resolution.**

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as					
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
AR-1	09/14/92	38.11	15.21	22.90	820	67	<1.0	8.8	6.7	---
	11/12/92		15.36	22.75	140	66	<0.5	4.3	3.7	---
	02/11/93		12.81	25.30	360	190	<2.5	8.6	<2.5	---
	04/14/93		11.77	26.34	420	240	5.2	30	8.7	---
	08/12/93		13.55	24.56	370	150	<2	11	<2	---
	10/26/93		13.98	24.13	240	98	<2	11	<2	---
	02/17/94	37.46	12.15	25.31	4,700	1,100	<10	140	26	---
	05/03/94		12.03	25.43	620	130	1.3	48	4.3	---
	08/17/94	37.33	12.92	24.41	3,600	630	<5	200	12	---
	11/18/94		12.41	24.92	12,100	720	6.1	337	15	---
	09/26/95	37.46	11.34	26.12	ND	8.3	ND	ND	ND	---
	12/06/95		11.87	25.59	120	20	ND	20	0.6	---
	02/14/96		10.48	26.98	ND	ND	ND	ND	0.52	---
	10/29/96		11.80	25.66	ND	ND	0.99	ND	ND	---
	01/29/97		11.25	26.21	<50	0.41	<0.3	<0.3	<0.3	<20
	04/30/97		12.24	25.22	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97		10.80	26.66	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97		11.90	25.56	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98		11.20	26.26	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98		12.20	25.26	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98		9.10	28.36	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98		9.80	27.66	270	2.1	<0.3	3.6	<0.5	190
	01/13/99		10.10	27.36	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99		11.35	26.11	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02		---	---	<50	<0.5	<0.5	<0.5	1.1	2.9
	04/24/02		---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.6*
	09/23/02	P		11.26	26.20	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50
12/09/02	P		11.35	26.11	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	26.6

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH			Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)			
AR-2	03/30/93	38.39	11.53	26.86	390	4.1	1.6	<0.5	47	---
	04/14/93		11.87	26.52	310	18	<0.5	0.67	36	---
	08/12/93		13.59	24.80	130	16	<0.5	1.7	0.57	---
	10/26/93		14.25	24.14	110	15	<0.5	1.8	<0.5	---
	02/17/94		12.76	25.22	130	2.9	<0.5	15	0.8	---
	05/03/94		12.60	25.38	<50	<0.5	<0.5	<0.5	<0.5	---
	08/17/94	38.18	13.86	24.32	3,000	140	140	220	91	---
	11/18/94		13.33	24.85	623	10.5	10.5	27.9	8.0	---
	09/26/95	37.98	11.67	26.31	ND	ND	ND	ND	ND	---
	12/06/95		12.32	25.66	320	12	12	23	2.1	---
	02/14/96		10.74	27.24	ND	ND	ND	ND	0.76	---
	10/29/96		11.95	26.03	ND	ND	ND	ND	ND	---
	01/29/97		11.35	26.63	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97		12.15	25.83	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97		11.20	26.78	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97		12.14	25.84	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98		10.05	27.93	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98		12.10	25.88	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98		9.50	28.48	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98		10.45	27.53	<50	<0.3	<0.3	<0.3	<0.5	<5
01/13/99		10.50	27.48	<50	<0.3	0.40	<0.3	0.53	<20	
04/29/99		11.48	26.50	<50	<0.3	<0.3	<0.3	0.82	<5	
01/15/02		---	---	---	<50	<0.5	<0.5	<0.5	<0.5	17
04/24/02		---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	39*
09/23/02	P		12.22	25.76	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	4.43
12/09/02	P		12.30	25.68	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	ND<5.00

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as						
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	
MW-1	08/08/86	38.36	11.25	27.11	7,040	132	8.7	439	230	---	
	12/24/91		16.12	22.24	2,200	190	8.5	6.9	2.6	---	
	03/10/92		13.34	25.02	2,800	270	29	56	39	---	
	06/09/92		14.12	24.24	2,900	960	27	99	63	---	
	09/14/92		15.34	23.02	2,600	450	<5.0	45	21	---	
	11/12/92		15.46	22.90	1,600	310	7.2	22	8.9	---	
	02/11/93		11.95	26.41	4,000	510	47	200	91	---	
	04/14/93		11.65	26.71	1,700	260	20	100	70	---	
	08/12/93		12.93	25.43	830	60	3.8	39	3.6	---	
	10/26/93		14.13	24.23	8,800	140	<10	41	<10	---	
	02/17/94		37.26	11.86	25.40	1,200	130	12	54	58	---
	05/03/94			11.58	25.68	---	---	---	---	---	---
	08/17/94		37.33	12.78	24.55	3,900	86	5.1	78	9.4	---
	11/18/94			12.31	25.02	6,350	112	8.4	107	35	---
	09/26/95		37.26	11.26	26.00	ND	ND	ND	ND	ND	---
	12/06/95			12.16	25.10	4,100	0.86	0.46	0.38	0.92	---
	02/14/96			8.53	28.73	ND	ND	0.56	ND	0.82	---
	10/29/96			10.23	27.03	130	ND	ND	ND	ND	---
	01/29/97			8.15	29.11	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			8.05	29.21	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			10.50	26.76	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			11.15	26.11	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			4.95	32.31	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			8.10	29.16	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			8.02	29.24	<50	<0.3	<0.3	<0.3	<0.5	40
	10/22/98			9.70	27.56	230	0.43	1.9	0.99	0.99	33
	01/13/99			9.60	27.66	<50	0.43	<0.3	<0.3	<0.5	<20
	04/29/99			8.05	29.21	<50	<0.3	<0.3	<0.3	<0.5	^31/17
	01/15/02			---	---	<50	<0.05	<0.5	<0.5	<0.5	21
	04/24/02			---	---	160	1.5	ND<0.50	ND<0.50	ND<0.50	770*
	09/23/02	(a)		NM	NM	NS	NS	NS	NS	NS	NS
12/09/02	P		11.22	26.04	998	ND<0.50	ND<0.50	ND<0.50	1.37 (b)	1310	

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
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Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as						
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	
MW-2	08/08/86	38.58	11.62	26.96	1,910	20.1	2.8	1.8	---	---	
	12/24/91		16.50	22.08	23,000	1,500	1,100	480	1,400	---	
	03/10/92		13.50	25.08	210,000	44,000	3,900	1,700	5,800	---	
	06/09/92		14.52	24.06	33,000	2,300	370	780	2,600	---	
	09/14/92		15.78	22.80	16,000	3,700	10	470	1,000	---	
	11/12/92		15.98	22.60	16,000	3,800	86	470	910	---	
	02/11/93		12.27	26.31	27,000	3,500	720	1,600	380	---	
	04/14/93		12.01	26.57	27,000	3,500	220	2,200	5,100	---	
	08/12/93		13.81	24.77	16,000	1,600	27	1,300	1,200	---	
	10/26/93		14.53	24.05	12,000	1,200	<25	510	330	---	
	02/17/94		12.81	25.77	15,000	1,800	21	850	540	---	
	05/03/94			12.63	25.95	---	---	---	---	---	
	08/17/94		37.99	13.69	24.30	14,000	850	13	640	270	---
	11/18/94		38.06	13.18	24.88	14,900	640	3.4	532	156	---
	09/26/95		37.99	12.23	25.76	5,100	40	25	2.5	18	---
	12/06/95			12.82	25.17	810	34	23	11	11	---
	02/14/96			10.87	27.12	420	0.75	0.54	0.64	0.53	---
	10/29/96			12.95	25.04	670	1.7	1.3	0.6	0.8	---
	01/29/97			11.15	26.84	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			11.09	26.90	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			11.70	26.29	330	<0.3	0.58	0.53	<0.5	<20
	10/22/97			11.05	26.94	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			9.50	28.49	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			11.15	26.84	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			10.20	27.79	78	<0.3	<0.3	<0.3	<0.5	97
	10/22/98			11.10	26.89	270	0.37	2.0	0.91	0.73	26
	01/13/99			11.10	26.89	650	5.8	1.0	1.4	1.1	<20
	04/29/99			11.05	26.94	<50	<0.3	<0.3	<0.3	<0.5	^23/16
	01/15/02			---	---	1,200	15	4.5	<0.5	<0.5	190
	04/24/02			---	---	1,300	18	ND<10	ND<10	ND<10	170*
	09/23/02	P		12.15	25.84	1,440	11.2	0.730	ND<0.500	ND<1.50	228
	12/09/02	P		12.20	25.79	1,770	8.08	0.694	2.47	3.79 (b)	529

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as						
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	
MW-3	08/08/86	37.77	10.61	27.16	7,450	510	549	409	1,380	---	
	12/24/91		15.60	22.17	6,800	450	10	610	45	---	
	03/10/92		12.90	24.87	11,000	2,500	75	400	560	---	
	06/09/92		13.60	24.17	16,000	2,000	69	1,300	2,600	---	
	09/14/92		14.78	22.99	14,000	630	<50	1,500	2,400	---	
	11/12/92		14.92	22.85	7,400	400	<25	860	330	---	
	02/11/93		11.65	26.12	8,600	580	<20	710	300	---	
	04/14/93		11.16	26.61	6,900	300	8.8	580	99	---	
	08/12/93		12.82	24.95	3,400	56	<5	190	<5	---	
	10/26/93			13.60	24.17	2,900	42	<10	76	<10	---
	02/17/94		36.80	11.53	25.27	3,100	160	<10	36	8.6	---
	05/03/94			11.36	25.44	2,300	44	<2.5	8.0	<2.5	---
	08/17/94		36.87	12.38	24.49	1,900	7.0	<9.5	4.4	<5	---
	11/18/94			11.93	24.94	909	1.1	<0.5	0.9	4.0	---
	09/26/95		36.80	10.96	25.84	410	1.3	1.9	2.3	3.3	---
	12/06/95			11.56	25.24	---	0.9	4.6	3.0	4.3	---
	02/14/96			7.47	29.33	99	ND	0.49	0.46	ND	---
	10/29/96			9.80	27.00	250	0.7	0.6	ND	ND	---
	01/29/97			7.50	29.30	170	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			12.10	24.70	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			9.90	26.90	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			12.10	24.70	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			7.50	29.30	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			12.30	24.50	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			8.30	28.50	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			9.10	27.70	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			9.50	27.30	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			5.93	30.87	<50	<0.3	0.35	<0.3	<0.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	7.9
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
09/23/02	P		10.30	26.50	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	ND<0.500	
12/09/02	P		10.38	26.42	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	ND<5.00	

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as						
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	
A-4	03/06/91	39.46	13.22	26.24	34,000	11,000	870	2,500	2,100	---	
	12/24/91	39.86	17.60	22.26	1,900	29	1.9	25	29	---	
	03/10/92		14.76	25.10	7,400	37	<0.60	11	73	---	
	06/09/92		15.63	24.23	4,500	3.2	1.5	37	16	---	
	09/14/92		16.83	23.03	1,300	<2.5	2.5	61	6.8	---	
	11/12/92		16.97	22.89	610	7.2	0.98	34	0.97	---	
	02/11/93		13.43	26.43	740	2.4	<0.5	5.0	3.5	---	
	04/14/93		13.06	26.80	380	<0.5	<0.5	10	1.6	---	
	08/12/93		14.94	24.92	1,200	0.93	<0.5	0.91	<0.5	---	
	10/26/93			15.52	24.34	160	<0.5	<0.5	1.0	<0.5	---
	02/17/94		39.46	14.02	25.44	320	0.5	<0.5	28	0.9	---
	05/03/94			13.85	25.61	130	<0.5	<0.5	1.1	<0.5	---
	08/17/94		39.53	14.95	39.53	62	34.58	<0.5	<0.5	<0.5	---
	11/18/94			14.46	25.07	98	1.3	0.6	<0.5	<0.5	---
	12/06/95			13.82	25.71	ND	0.6	ND	ND	ND	---
	02/14/96			11.24	28.29	ND	ND	2.3	ND	0.71	---
	10/29/96			13.50	26.03	140	ND	ND	ND	ND	---
	01/29/97			12.65	26.88	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97			13.97	25.56	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97			12.70	26.83	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97			13.95	25.58	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98			11.90	27.63	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98			13.92	25.61	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98			10.80	28.73	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98			12.60	26.93	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99			12.60	26.93	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99			12.61	26.92	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02			---	---	<50	<0.5	<0.5	<0.5	<0.5	6.2
	04/24/02			---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
	09/23/02	(a)		NM	NM	NS	NS	NS	NS	NS	NS
12/09/02	P		13.36	26.17	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	ND<5.00	

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH					
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-5	12/24/91	38.94	16.85	22.09	1,600	21	<0.30	32	52	---
	03/10/92		13.83	25.11	1,000	1.6	<0.30	43	100	---
	06/09/92		14.91	24.03	680	34	<1.5	14	16	---
	09/14/92		16.14	22.80	770	12	<0.30	51	65	---
	11/12/92		16.35	22.59	520	3.0	<2.5	29	36	---
	02/11/93		13.21	25.73	150	1.6	0.96	5.1	1.5	---
	04/14/93		12.97	25.97	190	5.4	<0.5	1.5	0.97	---
	08/12/93		14.12	24.82	230	1.7	<0.5	5.3	0.94	---
	10/26/93		14.72	24.22	190	2.8	<0.5	5.5	2.0	---
	02/17/94	38.47	13.20	25.27	340	<0.5	<0.5	13	2.9	---
	05/03/94		13.08	25.39	170	1.4	<0.5	4.0	1.9	---
	08/17/94	38.54	14.18	24.36	270	0.6	<0.5	7.3	1.1	---
	11/18/94		13.73	24.81	338	---	<0.5	4.6	<0.5	---
	09/26/95	38.47	12.44	26.03	ND	0.63	1.1	ND	1.2	---
	12/06/95		12.92	25.55	ND	ND	ND	ND	ND	---
	02/14/96		10.76	27.71	ND	ND	2.0	ND	1.1	---
	10/29/96		12.35	26.12	ND	ND	ND	ND	ND	---
	01/29/97		10.85	27.62	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97		13.56	24.91	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97		11.80	26.67	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97		12.20	26.27	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98		10.12	28.35	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98		13.50	24.97	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98		10.20	28.27	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98		11.50	26.97	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99		10.15	28.32	<50	0.32	0.38	<0.3	<0.5	<20
	04/29/99		11.50	26.97	<50	<0.3	<0.3	<0.3	0.58	<5
	01/15/02		---	---	<50	<0.5	<0.5	<0.5	<0.5	5.0
	04/24/02		---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.2*
	09/23/02	P		12.55	25.92	ND<50.0	ND<0.500	ND<0.500	ND<0.500	1.30
	12/09/02	P		12.60	25.87	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<5.00

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as					
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-6	12/24/91	39.07	16.88	22.19	<30	<0.3	<0.3	<0.3	<0.3	---
	03/10/92		13.73	25.34	<30	<0.3	<0.3	<0.3	<0.3	---
	06/09/92		14.95	24.12	<30	<0.3	<0.3	<0.3	<0.3	---
	09/14/92		16.20	22.87	<50	<0.5	<0.5	<0.5	<0.5	---
	11/12/92		16.35	22.72	<50	<0.5	<0.5	<0.5	<0.5	---
	02/11/93		13.04	26.03	<50	<0.5	<0.5	<0.5	<0.5	---
	04/14/93		12.23	26.84	<50	<0.5	<0.5	<0.5	<0.5	---
	08/12/93		14.18	24.89	<50	<0.5	<0.5	<0.5	<0.5	---
	10/26/93		14.85	24.22	<50	<0.5	<0.5	<0.5	<0.5	---
	05/03/94		13.66	25.41	<50	<0.5	<0.5	<0.5	<0.5	---
	08/17/94	38.78	14.34	24.44	<50	<0.5	<0.5	<0.5	<0.5	---
	11/18/94		13.76	25.02	<50	<0.5	<0.5	<0.5	<0.5	---
	09/26/95		12.56	26.22	ND	ND	ND	ND	ND	---
	12/06/95		13.18	25.60	ND	ND	ND	ND	ND	---
	02/14/96		12.46	26.32	ND	ND	ND	ND	ND	---
	10/29/96		12.40	26.38	50	ND	ND	ND	ND	---
	01/29/97		13.85	24.93	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97		12.49	26.29	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97		12.10	26.68	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97		15.20	23.58	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98		13.80	24.98	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98		12.45	26.33	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98		10.30	28.48	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98		11.10	27.68	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99		10.40	28.38	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99		13.80	24.98	<50	<0.3	<0.3	<0.3	<0.5	<5
01/15/02		---	---	---	<50	<0.5	<0.5	<0.5	<0.5	5.7
04/24/02		---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
09/23/02	P		12.61	26.17	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	ND<0.500
12/09/02	P		12.67	26.11	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	ND<5.00

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH						
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	
A-7	12/24/91	39.95	18.11	21.84	10,000	88	16	170	610	---	
	03/10/92		15.30	24.65	320	9.3	0.54	8.8	34	---	
	06/09/92		16.12	23.83	340	11	1.1	8.9	26	---	
	09/14/92		17.35	22.60	510	12	<2.0	30	51	---	
	11/12/92		17.47	22.48	760	17	0.83	50	73	---	
	02/11/93		13.80	26.15	260	20	1.0	11	21	---	
	04/14/93		13.60	26.35	1,300	89	2.1	48	87	---	
	08/12/93		15.54	24.41	360	9.0	<0.50	13	9.0	---	
	10/26/93		16.28	23.67	99	1.7	<0.50	4.0	3.0	---	
	02/17/94	39.38	14.44	24.94	1,300	38	<1	35	25	---	
	05/03/94		14.34	25.04	330	8.1	<0.5	7.8	3.7	---	
	08/17/94	39.45	15.40	24.05	350	2.2	<0.5	9.6	3.6	---	
	11/18/94		14.95	24.50	412	1.3	<0.5	6.2	2	---	
	09/26/95	39.38	13.92	25.46	ND	ND	ND	ND	ND	---	
	12/06/95		14.42	24.96	ND	ND	ND	ND	ND	---	
	02/14/96		12.38	27.00	ND	ND	1.1	ND	0.59	---	
	10/29/96		12.33	27.05	ND	ND	ND	ND	ND	---	
	01/29/97		13.10	26.28	<50	<0.3	<0.3	<0.3	<0.5	<20	
	04/30/97		11.70	27.68	<20	<0.3	<0.3	<0.3	<0.5	<50	
	07/31/97		13.25	26.13	<50	<0.3	<0.3	<0.3	<0.5	<20	
	10/22/97		14.42	24.96	<50	<0.3	<0.3	<0.3	<0.5	<20	
	01/28/98		13.00	26.38	<50	<0.3	<0.3	<0.3	<0.5	<20	
	04/22/98		11.65	27.73	<50	<0.3	<0.3	<0.3	<0.5	<20	
	07/08/98		11.20	28.18	<50	<0.3	<0.3	<0.3	<0.5	<5	
	10/22/98		13.75	25.63	51	<0.3	<0.3	<0.3	<0.5	<5	
	01/13/99		14.45	24.93	<50	<0.3	<0.3	<0.3	<0.5	<20	
	04/29/99		13.74	25.64	<50	<0.3	<0.3	<0.3	<0.5	<5	
	01/15/02		---	---	<50	<0.5	<0.5	<0.5	<0.5	4.8	
	04/24/02		---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.2*	
	09/23/02	P		13.78	25.60	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	3.48
	12/09/02	P		13.97	25.41	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	ND<5.00

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as						
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	
A-8	09/14/92	37.23	14.19	23.04	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
	11/12/92		14.35	22.88	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
	02/11/93		11.25	25.98	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
	04/14/93		12.33	24.90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
	08/12/93		12.41	24.82	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
	10/26/93		13.02	24.21	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
	02/17/94	36.76	11.47	25.29	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
	05/03/94		11.35	25.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---
	08/17/94	36.84	12.34	24.50	<50	<0.5	1.7	<0.5	1.4	---	
	11/18/94		11.90	24.94	<50	1.0	<0.5	<0.5	<0.5	---	
	09/26/95	36.76	10.94	25.82	ND	ND	ND	ND	ND	---	
	12/06/95		11.42	25.34	ND	ND	ND	ND	ND	---	
	02/14/96		8.80	27.96	ND	ND	0.48	ND	ND	---	
	10/29/96		11.30	25.46	200	ND	ND	ND	ND	---	
	01/29/97		7.60	29.16	<50	<0.3	<0.3	<0.3	<0.5	<20	
	04/30/97		10.54	26.22	<20	<0.3	<0.3	<0.3	<0.5	<50	
	07/31/97		11.20	25.56	<50	<0.3	<0.3	<0.3	<0.5	<20	
	10/22/97		12.14	24.62	<50	<0.3	<0.3	<0.3	<0.5	<20	
	01/28/98		4.43	32.33	<50	<0.3	<0.3	<0.3	<0.5	<20	
	04/22/98		10.55	26.21	<50	<0.3	<0.3	<0.3	<0.5	<20	
	07/08/98		9.07	27.69	<50	<0.3	<0.3	<0.3	<0.5	<5	
	10/22/98		12.12	24.64	<50	<0.3	<0.3	<0.3	<0.5	<5	
	01/13/99		9.60	27.16	<50	<0.3	<0.3	<0.3	<0.5	<20	
	04/29/99		9.08	27.68	<50	<0.3	<0.3	<0.3	1.5	<5	
	01/15/02		---	---	<50	<0.5	<0.5	<0.5	<0.5	<0.5	5.6
	04/24/02		---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
	09/23/02	P		10.75	26.01	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	ND<0.500
12/09/02	P		10.81	25.95	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	ND<5.00	

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH			Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)			
A-9	09/14/92	38.71	16.12	22.59	<50	<0.5	<0.5	<0.5	<0.5	---
	11/12/92		16.29	22.42	<50	<0.5	<0.5	<0.5	<0.5	---
	02/11/93		12.31	26.40	<50	<0.5	<0.5	<0.5	<0.5	---
	04/14/93		12.01	26.70	<50	<0.5	<0.5	<0.5	<0.5	---
	08/12/93		13.90	24.81	<50	<0.5	<0.5	<0.5	<0.5	---
	10/26/93		14.86	23.85	<50	<0.5	<0.5	<0.5	<0.5	---
	02/17/94	38.19	12.99	25.20	<50	<0.5	<0.5	<0.5	<0.5	---
	08/17/94		14.03	24.16	<50	<0.5	<0.5	<0.5	<0.5	---
	11/18/94	37.24	13.44	23.80	<50	<0.5	<0.5	<0.5	<0.5	---
	09/26/95		12.43	25.81	ND	<0.5	ND	ND	ND	---
	12/06/95	38.19	13.14	25.05	ND	<0.5	ND	ND	ND	---
	02/14/96		9.05	29.14	ND	ND	1.8	0.49	0.82	---
	10/29/96		12.85	25.34	ND	ND	ND	ND	ND	---
	01/29/97		9.02	29.17	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/30/97		12.05	26.14	<20	<0.3	<0.3	<0.3	<0.5	<50
	07/31/97		12.18	26.01	<50	<0.3	<0.3	<0.3	<0.5	<20
	10/22/97		7.45	30.74	<50	<0.3	<0.3	<0.3	<0.5	<20
	01/28/98		21.25	16.94	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98		12.10	26.09	<50	<0.3	<0.3	<0.3	<0.5	<20
	07/08/98		10.40	27.79	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98		1.55	24.64	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99		12.05	26.14	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99		7.43	30.76	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02		---	---	<50	<0.5	<0.5	<0.5	<0.5	4.3
	04/24/02		---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50*
	09/23/02	P	12.35	25.84	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.50	ND<0.500
	12/09/02	P	12.37	25.82	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<1.00	ND<5.00

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
A-10	12/07/92	38.94	16.81	22.13	660	30	<2.5	<2.5	<2.5	---
	02/11/93		13.15	25.79	210	<0.5	0.97	<0.5	<0.5	---
	04/14/93		12.19	26.75	770	<0.5	3.0	0.76	1.9	---
	08/12/93		14.87	24.07	390	<0.5	<0.5	<0.5	0.84	---
	10/26/93		15.65	23.29	290	<0.5	<0.5	<0.5	<0.5	---
	02/17/94	38.66	14.16	24.50	52	<0.5	<0.5	<0.5	<0.5	---
	05/03/94		14.00	24.66	<50	<0.5	<0.5	<0.5	<0.5	---
	08/17/94	38.72	15.08	23.64	<50	<0.5	<0.5	<0.5	<0.5	---
	11/18/94		14.68	24.04	<50	<0.5	<0.5	<0.5	<0.5	---
	09/26/95	38.66	13.58	25.08	ND	ND	ND	ND	ND	---
	12/06/95		14.24	24.42	ND	ND	ND	ND	ND	---
	02/14/96		6.70	31.96	ND	ND	ND	ND	ND	---
	10/29/96		14.10	24.56	ND	ND	ND	ND	1.1	---
	01/29/97		11.20	24.46	<50	0.41	4.8	0.6	4.4	37
	04/30/97		12.66	26.00	<20	0.40	4.2	0.5	3.8	50
	07/31/97		13.20	25.46	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/22/98		12.60	26.06	<50	<0.3	<0.3	<0.3	<0.5	<5
	07/08/98		8.08	30.58	<50	<0.3	<0.3	<0.3	<0.5	<5
	10/22/98		11.15	27.51	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/13/99		9.60	29.06	<50	<0.3	<0.3	<0.3	<0.5	<20
	04/29/99		11.15	27.51	<50	<0.3	<0.3	<0.3	<0.5	<5
	01/15/02		---	---	<50	<0.5	<0.5	<0.5	<0.5	17
	04/24/02			NM	NM	NS	NS	NS	NS	NS
09/23/02			DRY	DRY	NS	NS	NS	NS	NS	
12/19/02	P		12.75	25.91	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5 (c)

**Table D-1
Groundwater Analytical Data**

ARCO Service Station #5387
20200 Hesperian Blvd.
Hayward, California

Well Number	Date Sampled	Casing Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
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- TPH = Total Petroleum Hydrocarbons analyzed using EPA Method 8015B Modified
- MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted
- ND = Not Detected
- NM = Not Measured
- NS = Not Sampled
- P = Purge
- NP = No Purge
- * --- * = Not analyzed/Not available
- µg/L = Micrograms per liter
- * = Analyzed by EPA Method 8260B.
- ^ = Analytical results as measured by EPA Methods 8020 / 8260.
- (a) = well inaccessible
- (b) = The analyte concentration may be artificially elevated due to coeluting compounds or components.
- (c) = The closing calibration was outside acceptance limits by 2%. This should be considered in evaluating the results. The average % difference for all analytes met the 15% requirement and the QC suggests that the calibration linearity is not a factor.

Source The data in this table prior to September 2002 was provided to URS by Group Environmental Management Company and its previous consultants. URS has not verified the accuracy of this data



**Sequoia
Analytical**

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
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9 October, 2002

Scott Robinson
URS Corporation
500 12th Street, Suite 100
Oakland, CA 94607

RE: ARCO #5387, Hayward, Ca
Sequoia Report: MLI0633

Enclosed are the results of analyses for samples received by the laboratory on 09/24/02 10:02. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt
Project Manager

CA ELAP Certificate #1210



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

Reported:
10/09/02 14:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	MLI0633-01	Water	09/23/02 14:50	09/24/02 10:02
MW-3	MLI0633-02	Water	09/23/02 13:55	09/24/02 10:02
A-5	MLI0633-03	Water	09/23/02 15:15	09/24/02 10:02
A-6	MLI0633-04	Water	09/23/02 13:35	09/24/02 10:02
A-7	MLI0633-05	Water	09/23/02 12:35	09/24/02 10:02
A-8	MLI0633-06	Water	09/23/02 13:12	09/24/02 10:02
A-9	MLI0633-07	Water	09/23/02 15:42	09/24/02 10:02
AR-1	MLI0633-08	Water	09/23/02 14:20	09/24/02 10:02
AR-2	MLI0633-09	Water	09/23/02 14:45	09/24/02 10:02

Sequoia Analytical - Morgan Hill

Latonya Pelt, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

Reported:
10/09/02 14:49

**Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B
Star Analytical, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (MLI0633-01) Water Sampled: 09/23/02 14:50 Received: 09/24/02 10:02									
Gasoline Range Hydrocarbons	1440	50.0	ug/L	1	V2J0420	10/04/02	10/05/02	EPA 8015M/8020	
Benzene	11.2	0.500	"	"	"	"	"	"	
Toluene	0.730	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.50	"	"	"	"	"	"	
Methyl tert-butyl ether	228	0.500	"	"	"	"	"	"	
Surrogate: a,a,a-TFT (PID)		91.3 %	70-130		"	"	"	"	
Surrogate: 1,4-Difluorobenzene		353 %	70-130		"	"	"	"	S-04
MW-3 (MLI0633-02) Water Sampled: 09/23/02 13:55 Received: 09/24/02 10:02									
Gasoline Range Hydrocarbons	ND	50.0	ug/L	1	V2J0420	10/04/02	10/05/02	EPA 8015M/8020	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.500	"	"	"	"	"	"	
Surrogate: a,a,a-TFT (PID)		109 %	70-130		"	"	"	"	
Surrogate: 1,4-Difluorobenzene		105 %	70-130		"	"	"	"	
A-5 (MLI0633-03) Water Sampled: 09/23/02 15:15 Received: 09/24/02 10:02									
Gasoline Range Hydrocarbons	ND	50.0	ug/L	1	V2J0420	10/04/02	10/05/02	EPA 8015M/8020	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.50	"	"	"	"	"	"	
Methyl tert-butyl ether	1.30	0.500	"	"	"	"	"	"	
Surrogate: a,a,a-TFT (PID)		110 %	70-130		"	"	"	"	
Surrogate: 1,4-Difluorobenzene		107 %	70-130		"	"	"	"	



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

Reported:
10/09/02 14:49

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B

Star Analytical, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-6 (MLI0633-04) Water Sampled: 09/23/02 13:35 Received: 09/24/02 10:02									
Gasoline Range Hydrocarbons	ND	50.0	ug/L	1	V2J0420	10/04/02	10/05/02	EPA 8015M/8020	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.500	"	"	"	"	"	"	
Surrogate: a,a,a-TFT (PID)		109 %	70-130		"	"	"	"	
Surrogate: 1,4-Difluorobenzene		106 %	70-130		"	"	"	"	
A-7 (MLI0633-05) Water Sampled: 09/23/02 12:35 Received: 09/24/02 10:02									
Gasoline Range Hydrocarbons	ND	50.0	ug/L	1	V2J0420	10/04/02	10/05/02	EPA 8015M/8020	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.50	"	"	"	"	"	"	
Methyl tert-butyl ether	3.48	0.500	"	"	"	"	"	"	
Surrogate: a,a,a-TFT (PID)		110 %	70-130		"	"	"	"	
Surrogate: 1,4-Difluorobenzene		111 %	70-130		"	"	"	"	
A-8 (MLI0633-06) Water Sampled: 09/23/02 13:12 Received: 09/24/02 10:02									
Gasoline Range Hydrocarbons	ND	50.0	ug/L	1	V2J0420	10/04/02	10/05/02	EPA 8015M/8020	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.500	"	"	"	"	"	"	
Surrogate: a,a,a-TFT (PID)		111 %	70-130		"	"	"	"	
Surrogate: 1,4-Difluorobenzene		107 %	70-130		"	"	"	"	



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

Reported:
10/09/02 14:49

**Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B
Star Analytical, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-9 (MLI0633-07) Water Sampled: 09/23/02 15:42 Received: 09/24/02 10:02									
Gasoline Range Hydrocarbons	ND	50.0	ug/L	1	V2J0420	10/04/02	10/05/02	EPA 8015M/8020	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: a,a,a-TFT (PID)</i>		110 %	70-130		"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene</i>		107 %	70-130		"	"	"	"	
AR-1 (MLI0633-08) Water Sampled: 09/23/02 14:20 Received: 09/24/02 10:02									
Gasoline Range Hydrocarbons	ND	50.0	ug/L	1	V2J0420	10/04/02	10/05/02	EPA 8015M/8020	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.50	"	"	"	"	"	"	
Methyl tert-butyl ether	20.2	0.500	"	"	"	"	"	"	
<i>Surrogate: a,a,a-TFT (PID)</i>		110 %	70-130		"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene</i>		111 %	70-130		"	"	"	"	
AR-2 (MLI0633-09) Water Sampled: 09/23/02 14:45 Received: 09/24/02 10:02									
Gasoline Range Hydrocarbons	ND	50.0	ug/L	1	V2J0420	10/04/02	10/05/02	EPA 8015M/8020	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.50	"	"	"	"	"	"	
Methyl tert-butyl ether	4.43	0.500	"	"	"	"	"	"	
<i>Surrogate: a,a,a-TFT (PID)</i>		110 %	70-130		"	"	"	"	
<i>Surrogate: 1,4-Difluorobenzene</i>		112 %	70-130		"	"	"	"	



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

Reported:
10/09/02 14:49

**Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B - Quality Control
Star Analytical, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch V2J0420 - EPA 5030

Blank (V2J0420-BLK1)

Prepared: 10/04/02 Analyzed: 10/05/02

Gasoline Range Hydrocarbons	ND	50.0	ug/L							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.50	"							
Methyl tert-butyl ether	ND	0.500	"							
<i>Surrogate: a,a,a-TFT (PID)</i>	32.3		"	30.0		108	70-130			
<i>Surrogate: 1,4-Difluorobenzene</i>	32.0		"	30.0		107	70-130			

LCS (V2J0420-BS1)

Prepared: 10/04/02 Analyzed: 10/05/02

Benzene	18.4	0.500	ug/L	20.0		92.0	80-120			
Toluene	19.2	0.500	"	20.0		96.0	80-120			
Ethylbenzene	19.1	0.500	"	20.0		95.5	80-120			
Xylenes (total)	58.6	1.50	"	60.0		97.7	80-120			
Methyl tert-butyl ether	22.7	0.500	"	20.0		114	80-120			
<i>Surrogate: a,a,a-TFT (PID)</i>	31.0		"	30.0		103	70-130			
<i>Surrogate: 1,4-Difluorobenzene</i>	31.4		"	30.0		105	70-130			

LCS (V2J0420-BS2)

Prepared: 10/04/02 Analyzed: 10/05/02

Gasoline Range Hydrocarbons	500	50.0	ug/L	500		100	70-130			
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LCS Dup (V2J0420-BSD1)

Prepared: 10/04/02 Analyzed: 10/05/02

Benzene	18.8	0.500	ug/L	20.0		94.0	80-120	2.15	30	
Toluene	19.5	0.500	"	20.0		97.5	80-120	1.55	30	
Ethylbenzene	19.3	0.500	"	20.0		96.5	80-120	1.04	30	
Xylenes (total)	59.8	1.50	"	60.0		99.7	80-120	2.03	30	
Methyl tert-butyl ether	23.1	0.500	"	20.0		116	80-120	1.75	30	
<i>Surrogate: a,a,a-TFT (PID)</i>	30.6		"	30.0		102	70-130			
<i>Surrogate: 1,4-Difluorobenzene</i>	31.0		"	30.0		103	70-130			



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

Reported:
10/09/02 14:49

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B - Quality Control
Star Analytical, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch V2J0420 - EPA 5030										
LCS Dup (V2J0420-BSD2)				Prepared: 10/04/02		Analyzed: 10/05/02				
Gasoline Range Hydrocarbons	530	50.0	ug/L	500		106	70-130	5.83	30	
Duplicate (V2J0420-DUPI)				Source: V210017-06		Prepared: 10/04/02		Analyzed: 10/05/02		
Gasoline Range Hydrocarbons	23000	2500	ug/L		22600			1.75	30	
Benzene	2660	25.0	"		2690			1.12	30	
Toluene	36.0	25.0	"		36.0			0.00	30	
Ethylbenzene	644	25.0	"		648			0.619	30	
Xylenes (total)	870	75.0	"		880			1.14	30	
Methyl tert-butyl ether	46.5	25.0	"		64.0			31.7	30	Q-03
Surrogate: <i>a,a,a</i> -TFT (PID)	31.0		"	30.0		103	70-130			
Surrogate: <i>1,4</i> -Difluorobenzene	34.2		"	30.0		114	70-130			
Matrix Spike (V2J0420-MS1)				Source: V210017-06		Prepared: 10/04/02		Analyzed: 10/05/02		
Gasoline Range Hydrocarbons	45400	2500	ug/L		22600		0-200			
Benzene	3600	25.0	"	1000	2690	91.0	70-130			
Toluene	939	25.0	"	1000	36.0	90.3	70-130			
Ethylbenzene	1590	25.0	"	1000	648	94.2	70-130			
Xylenes (total)	3740	75.0	"	3000	880	95.3	70-130			
Methyl tert-butyl ether	1140	25.0	"	1000	64.0	108	70-130			
Surrogate: <i>a,a,a</i> -TFT (PID)	1530		"	1500		102	70-130			
Surrogate: <i>1,4</i> -Difluorobenzene	1750		"	1500		117	70-130			



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Project: ARCO #5387, Hayward, Ca
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Reported:
10/09/02 14:49

Notes and Definitions

- Q-03 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte already present in the sample.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



Chain of Custody Record

Project Name ARCO # 5387
 BP BU/GEM CO Portfolio: _____
 BP Laboratory Contract Number: _____

Date: 9/23/02

Requested Due Date (mm/dd/yy): _____

1410633

On-site Time: _____ Temp: _____
 Off-site Time: _____ Temp: _____
 Sky Conditions: _____
 Meteorological Events: _____
 Wind Speed: _____ Direction: _____

Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 20200 Hesperian Blvd, HAYWARD, CA	Address: 500 12th St., Ste. 200
Lab Address: 885 Jarvis Dr. Morgan Hill, CA 95037	Site ID No. ARCO 5387	Oakland, CA 94609-4014
	Site Lat/Long:	e-mail PDD: syed_rehan@urscorp.com
	California Global ID #: <u>020923-SS1</u>	Consultant/Contractor Project No.: JS-00005387.01 00-127
Lab PM: Latonya Pelt	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-874-1735/510-874-3268
Tele/Fax: 408-776-8600 / 408-782-6308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send EDF Reports	Tele/Fax:	Invoice to: Consultant/Contractor or (BP/GEM) (check one)
BP/GEM Account No.:		BP/GEM Work Release No: INTRIM-50591

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives				Requested Analysis						Sample Point Lat/Long and Comments
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	TPH-G/BTEX (8015/8021)	TPH-D (8015)	MTBE (8021)	MTBE, TAME, ETBE, DIBP, TBA (8260)	1,2-DCA & EDB (8260)		
X 1	MW-2	1450	X				01	3					X	X					
X 2	MW-3	1355	X				02	3					X	X					
X 3	A-5	1515	X				03	3					X	X					
X 4	A-6	1335	X				04	3					X	X					
X 5	A-7	1235	X				05	3					X	X					
X 6	A-8	1312	X				06	3					X	X					
X 7	A-9	1542	X				07	3					X	X					
X 8	AR-1	1430	X				08	3					X	X					
X 9	AR-2	1445	X				09	3					X	X					
10																			

Sampler's Name: <u>SUCHEN SUNG</u>	Relinquished By / Affiliation: _____	Date: <u>9/23/02</u>	Time: <u>0908</u>	Accepted By / Affiliation: <u>Judith Jensen</u>	Date: <u>9/24/02</u>	Time: <u>908</u>
Sampler's Company: <u>BLAKE TECH</u>						
Shipment Date: _____						
Shipment Method: _____						
Shipment Tracking No: _____						
Special Instructions: Address Invoice to BP/GEM but send to URS for approval						

Custody Seals in Place Yes No Temperature Blank Yes No Cooler Temperature on Receipt Y/C Trip Blank Yes No



10 January, 2003

Scott Robinson
URS Corporation
500 12th Street, Suite 100
Oakland, CA 94607

RE: ARCO #5387, Hayward, Ca
Sequoia Work Order: MLL0350

Enclosed are the results of analyses for samples received by the laboratory on 12/10/02 20:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt
Project Manager

CA ELAP Certificate #1210



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

MLL0350
Reported:
01/10/03 11:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MLL0350-01	Water	12/09/02 13:50	12/10/02 20:10
MW-2	MLL0350-02	Water	12/09/02 12:00	12/10/02 20:10
MW-3	MLL0350-03	Water	12/09/02 14:20	12/10/02 20:10
A-4	MLL0350-04	Water	12/09/02 13:35	12/10/02 20:10
A-5	MLL0350-05	Water	12/09/02 12:30	12/10/02 20:10
A-6	MLL0350-06	Water	12/09/02 13:00	12/10/02 20:10
A-7	MLL0350-07	Water	12/09/02 09:45	12/10/02 20:10
A-8	MLL0350-08	Water	12/09/02 09:10	12/10/02 20:10
A-9	MLL0350-09	Water	12/09/02 10:10	12/10/02 20:10
AR-1	MLL0350-10	Water	12/09/02 10:45	12/10/02 20:10
AR-2	MLL0350-11	Water	12/09/02 11:25	12/10/02 20:10

There were no custody seals that were received with this project.



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

MLL0350
Reported:
01/10/03 11:41

**Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B
North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MLL0350-01) Water Sampled: 12/09/02 13:50 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	998	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	1.37	1.00	"	"	"	"	"	"	I-06
Methyl tert-butyl ether	855	5.00	"	"	"	"	"	"	E
Surrogate: 4-BFB (FID)		86.7 %	57-125		"	"	"	"	
Surrogate: 4-BFB (PID)		80.4 %	62-120		"	"	"	"	
MW-2 (MLL0350-02) Water Sampled: 12/09/02 12:00 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	1770	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	8.08	0.500	"	"	"	"	"	"	
Toluene	0.694	0.500	"	"	"	"	"	"	
Ethylbenzene	2.47	0.500	"	"	"	"	"	"	
Xylenes (total)	3.79	1.00	"	"	"	"	"	"	I-06
Methyl tert-butyl ether	529	5.00	"	"	"	"	"	"	E
Surrogate: 4-BFB (FID)		114 %	57-125		"	"	"	"	
Surrogate: 4-BFB (PID)		79.0 %	62-120		"	"	"	"	
MW-3 (MLL0350-03) Water Sampled: 12/09/02 14:20 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		80.0 %	57-125		"	"	"	"	
Surrogate: 4-BFB (PID)		85.8 %	62-120		"	"	"	"	

URS Corporation
 500 12th Street, Suite 100
 Oakland CA, 94607

 Project: ARCO #5387, Hayward, Ca
 Project Number: ARCO #5387, Hayward, CA
 Project Manager: Scott Robinson

 MLL0350
 Reported:
 01/10/03 11:41

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-4 (MLL0350-04) Water Sampled: 12/09/02 13:35 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		86.7 %	57-125		"	"	"	"	
Surrogate: 4-BFB (PID)		87.5 %	62-120		"	"	"	"	
A-5 (MLL0350-05) Water Sampled: 12/09/02 12:30 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		87.9 %	57-125		"	"	"	"	
Surrogate: 4-BFB (PID)		87.5 %	62-120		"	"	"	"	
A-6 (MLL0350-06) Water Sampled: 12/09/02 13:00 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		86.9 %	57-125		"	"	"	"	
Surrogate: 4-BFB (PID)		85.4 %	62-120		"	"	"	"	



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

MLL0350
Reported:
01/10/03 11:41

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-7 (MLL0350-07) Water Sampled: 12/09/02 09:45 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		85.2 %	57-125		"	"	"	"	
Surrogate: 4-BFB (PID)		86.2 %	62-120		"	"	"	"	
A-8 (MLL0350-08) Water Sampled: 12/09/02 09:10 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		80.8 %	57-125		"	"	"	"	
Surrogate: 4-BFB (PID)		84.6 %	62-120		"	"	"	"	
A-9 (MLL0350-09) Water Sampled: 12/09/02 10:10 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		86.9 %	57-125		"	"	"	"	
Surrogate: 4-BFB (PID)		85.0 %	62-120		"	"	"	"	



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

MLL0350
Reported:
01/10/03 11:41

Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AR-1 (MLL0350-10) Water Sampled: 12/09/02 10:45 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	26.6	5.00	"	"	"	"	"	"	
<i>Surrogate: 4-BFB (FID)</i>		85.6 %	57-125		"	"	"	"	
<i>Surrogate: 4-BFB (PID)</i>		86.5 %	62-120		"	"	"	"	
AR-2 (MLL0350-11) Water Sampled: 12/09/02 11:25 Received: 12/10/02 20:10									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L20055	12/20/02	12/21/02	EPA 8015M/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: 4-BFB (FID)</i>		85.8 %	57-125		"	"	"	"	
<i>Surrogate: 4-BFB (PID)</i>		86.9 %	62-120		"	"	"	"	

URS Corporation
 500 12th Street, Suite 100
 Oakland CA, 94607

 Project: ARCO #5387, Hayward, Ca
 Project Number: ARCO #5387, Hayward, CA
 Project Manager: Scott Robinson

 MLL0350
Reported:
 01/10/03 11:41

**Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MLL0350-01) Water Sampled: 12/09/02 13:50 Received: 12/10/02 20:10									
Methyl tert-butyl ether	1310	500	ug/l	100	2L20048	12/20/02	12/20/02	EPA 8260B	
<i>Surrogate: 1,2-DCA-d4</i>		120 %		77-122	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		104 %		75-124	"	"	"	"	
<i>Surrogate: 4-BFB</i>		98.5 %		77-120	"	"	"	"	
MW-2 (MLL0350-02) Water Sampled: 12/09/02 12:00 Received: 12/10/02 20:10									
Methyl tert-butyl ether	902	500	ug/l	100	2L20048	12/20/02	12/20/02	EPA 8260B	
<i>Surrogate: 1,2-DCA-d4</i>		125 %		77-122	"	"	"	"	S-03
<i>Surrogate: Toluene-d8</i>		102 %		75-124	"	"	"	"	
<i>Surrogate: 4-BFB</i>		99.0 %		77-120	"	"	"	"	



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

MLL0350
Reported:
01/10/03 11:41

**Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B - Quality Control
North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2L20055 - EPA 5030B (P/T)

Blank (2L20055-BLK1)

Prepared: 12/20/02 Analyzed: 12/21/02

Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Methyl tert-butyl ether	ND	5.00	"							
<i>Surrogate: 4-BFB (FID)</i>	40.2		"	48.0		83.8	57-125			
<i>Surrogate: 4-BFB (PID)</i>	40.9		"	48.0		85.2	62-120			

Laboratory Control Sample (2L20055-BS1)

Prepared: 12/20/02 Analyzed: 12/21/02

Gasoline Range Hydrocarbons	563	50.0	ug/l	502		112	80-120			
Benzene	6.47	0.500	"	6.21		104	80-120			
Toluene	34.5	0.500	"	38.1		90.6	80-120			
Ethylbenzene	8.87	0.500	"	8.94		99.2	80-120			
Xylenes (total)	42.0	1.00	"	44.0		95.5	80-120			
Methyl tert-butyl ether	11.9	5.00	"	10.2		117	74-123			
<i>Surrogate: 4-BFB (FID)</i>	44.8		"	48.0		93.3	57-125			
<i>Surrogate: 4-BFB (PID)</i>	38.8		"	48.0		80.8	62-120			

Laboratory Control Sample Dup (2L20055-BSD1)

Prepared: 12/20/02 Analyzed: 12/21/02

Gasoline Range Hydrocarbons	553	50.0	ug/l	502		110	80-120	1.79	25	
Benzene	6.19	0.500	"	6.21		99.7	80-120	4.42	40	
Toluene	33.1	0.500	"	38.1		86.9	80-120	4.14	40	
Ethylbenzene	8.43	0.500	"	8.94		94.3	80-120	5.09	40	
Xylenes (total)	40.1	1.00	"	44.0		91.1	80-120	4.63	40	
Methyl tert-butyl ether	11.3	5.00	"	10.2		111	74-123	5.17	40	
<i>Surrogate: 4-BFB (FID)</i>	46.4		"	48.0		96.7	57-125			
<i>Surrogate: 4-BFB (PID)</i>	38.7		"	48.0		80.6	62-120			



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

MLL0350
Reported:
01/10/03 11:41

**Gasoline Hydrocarbons (C6-C12), BTEX and MTBE by EPA 8015M and 8021B - Quality Control
North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2L20055 - EPA 5030B (P/T)

Matrix Spike (2L20055-MS1)	Source: MLL0350-03			Prepared: 12/20/02		Analyzed: 12/21/02				
Gasoline Range Hydrocarbons	587	50.0	ug/l	502	14.4	114	70-130			
Benzene	7.45	0.500	"	6.21	ND	120	80-134			
Toluene	39.6	0.500	"	38.1	0.241	103	68-114			
Ethylbenzene	10.0	0.500	"	8.94	0.0522	111	72-128			
Xylenes (total)	48.0	1.00	"	44.0	0.228	109	67-125			
Methyl tert-butyl ether	14.6	5.00	"	10.2	1.24	131	69-130			Q-01
<i>Surrogate: 4-BFB (FID)</i>	<i>41.6</i>		<i>"</i>	<i>48.0</i>		<i>86.7</i>	<i>57-125</i>			
<i>Surrogate: 4-BFB (PID)</i>	<i>38.4</i>		<i>"</i>	<i>48.0</i>		<i>80.0</i>	<i>62-120</i>			

Matrix Spike Dup (2L20055-MSD1)	Source: MLL0350-03			Prepared: 12/20/02		Analyzed: 12/21/02				
Gasoline Range Hydrocarbons	559	50.0	ug/l	502	14.4	108	70-130	4.89	25	
Benzene	6.71	0.500	"	6.21	ND	108	80-134	10.5	40	
Toluene	35.7	0.500	"	38.1	0.241	93.1	68-114	10.4	40	
Ethylbenzene	8.98	0.500	"	8.94	0.0522	99.9	72-128	10.7	40	
Xylenes (total)	42.8	1.00	"	44.0	0.228	96.8	67-125	11.5	40	
Methyl tert-butyl ether	13.2	5.00	"	10.2	1.24	117	69-130	10.1	40	
<i>Surrogate: 4-BFB (FID)</i>	<i>44.8</i>		<i>"</i>	<i>48.0</i>		<i>93.3</i>	<i>57-125</i>			
<i>Surrogate: 4-BFB (PID)</i>	<i>39.0</i>		<i>"</i>	<i>48.0</i>		<i>81.2</i>	<i>62-120</i>			



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

MLL0350
Reported:
01/10/03 11:41

**Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2L20048 - EPA 5030B

Blank (2L20048-BLK1)

Prepared & Analyzed: 12/20/02

Methyl tert-butyl ether	ND	1.00	ug/l							
<i>Surrogate: 1,2-DCA-d4</i>	23.1		"	20.0		116	77-122			
<i>Surrogate: Toluene-d8</i>	20.6		"	20.0		103	75-124			
<i>Surrogate: 4-BFB</i>	20.7		"	20.0		104	77-120			

Laboratory Control Sample (2L20048-BS1)

Prepared & Analyzed: 12/20/02

Methyl tert-butyl ether	11.5	1.00	ug/l	10.0		115	70-130			
<i>Surrogate: 1,2-DCA-d4</i>	24.1		"	20.0		120	77-122			
<i>Surrogate: Toluene-d8</i>	20.6		"	20.0		103	75-124			
<i>Surrogate: 4-BFB</i>	21.1		"	20.0		106	77-120			

Laboratory Control Sample Dup (2L20048-BSD1)

Prepared & Analyzed: 12/20/02

Methyl tert-butyl ether	11.4	1.00	ug/l	10.0		114	70-130	0.873	20	
<i>Surrogate: 1,2-DCA-d4</i>	23.8		"	20.0		119	77-122			
<i>Surrogate: Toluene-d8</i>	20.3		"	20.0		102	75-124			
<i>Surrogate: 4-BFB</i>	19.3		"	20.0		96.5	77-120			



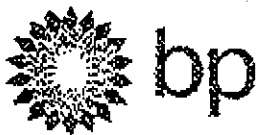
URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #5387, Hayward, Ca
Project Number: ARCO #5387, Hayward, CA
Project Manager: Scott Robinson

MLL0350
Reported:
01/10/03 11:41

Notes and Definitions

- E Estimated value. The reported value exceeds the calibration range of the analysis.
- I-06 The analyte concentration may be artificially elevated due to coeluting compounds or components.
- Q-01 The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
- S-03 The surrogate recovery for this sample is outside of established control limits. Review of associated QC indicates the recovery for this surrogate does not represent an out-of-control condition.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



Chain of Custody Record

MLL0350

Project Name: 021207-MCM 1
 BP BU/GEM CO Portfolio: _____
 BP Laboratory Contract Number: _____
 Date: 12/9/02 Requested Due Date (mm/dd/yy): _____

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

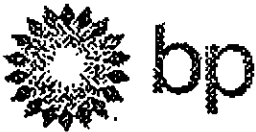
Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 20200 Hesperian Blvd. HAYWARD, CA	Address: 500 12th St., Ste. 200
Lab Address: 885 Jarvis Dr. Morgan Hill, CA 95037	Site ID No. ARCO 5387	Oakland, CA 94609-4014
	Site Lat/Long:	e-mail EDD: syed.rehan@urscorp.com
	California Global ID #:	Consultant/Contractor Project No.: JS-00005387.01 00427
Lab PM: Latonya Pelt	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tel/Fax: 510-874-1735/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-8308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send EDF Reports	Tele/Fax:	Invoice to: Consultant/Contractor or BP/GEM (circle one)
BP/GEM Account No.:		BP/GEM Work Release No: INTRIM -50591

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives			Requested Analysis						Sample Point Lat/Long and Comments
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	THO/DTEX (8015/8021)	TPH-D (8015)	MIBB (8021)	MIBB, TANK, ETBE (8015)	DIPE, TBA (8260)	
1	MW-1 ✓	1350		X			01	3					X	X				
2	MW-2 ✓	1200					02	1					X	X				
3	MW-3 ✓	1420					03	1					X	X				
4	A-4 ✓	1335					04	1					X	X				
5	A-5 ✓	1230					05	1					X	X				
6	A-6 ✓	1300					06	1					X	X				
7	A-7 ✓	945					07	1					X	X				
8	A-8 ✓	910					08	1					X	X				
9	A-9 ✓	1010					09	1					X	X				
10	A-10 ✓	1045					10	1					X	X				

Sampler's Name: <u>Matthew Miller</u>	Relinquished By / Affiliation: <u>Matthew Miller / BTS</u>	Date: <u>12/10</u>	Time: <u>1220</u>	Accepted By / Affiliation: <u>W.R. Houtka</u>	Date: <u>12/10</u>	Time: <u>1220</u>
Sampler's Company: <u>Blaine Tech Services</u>		Date: <u>12/10/2</u>	Time: <u>2:00</u>		Date: <u>12/10</u>	Time: <u>2:00</u>
Event Date:						
Event Method:						
Tracking No.:						

Instructions: Address Invoice to BP/GEM but send to URS for approval

in Place Yes No Temperature Blank Yes No Cooler Temperature on Receipt 3 0/10 Trip Blank Yes No



Chain of Custody Record

MLL0350

Project Name 021209-mm1
 BP BU/GEM CO Portfolio: _____
 BP Laboratory Contract Number: _____
 Requested Due Date (mm/dd/yy) _____

Date: 12/9/02

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 20200 Hesperian Blvd, HAYWARD, CA	Address: 500 12th St. Ste. 200
Lab Address: 885 Jarvis Dr. Morgan Hill, CA 95037	Site ID No. ARCO 5387	Oakland, CA 94609-4014
	Site Lat/Long:	e-mail EDD: syed_rehan@urscorp.com
	California Global ID #:	Consultant/Contractor Project No.: J5-00005387.01 00427
Lab PM: Latonya Pelt	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-874-1735/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-6308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send EDF Reports		Invoice to: Consultant/Contractor or (BP/GEM) (circle one)
BP/GEM Account No.:	Tele/Fax:	BP/GEM Work Release No: INTRIM -50591

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives				Requested Analysis					Sample Point Lat/Long and Comments	
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	TPH-G/TEX (8015/8021)	TPH-D (8015)	MTBE (8021)	MTBE, TAME, E15E, D15E, TDA (8260)	1,2-DCA & EDH (8260)		
1	AR-2 J	1125		X			11	3					X	X					
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Sampler's Name: <u>Matthew Miller</u>	Relinquished By / Affiliation: <u>Matthew Miller / BTS</u>	Date: <u>12/01</u>	Time: <u>1200</u>	Accepted By / Affiliation: <u>WAL</u>	Date: <u>12/02</u>	Time: <u>1200</u>
Sampler's Company: <u>Blaine Tech Services</u>	<u>WAL</u>	<u>12/01</u>	<u>9011</u>	<u>WAL</u>	<u>12/10</u>	<u>2010</u>
Instrument Date:						
Instrument Method:						
Instrument Tracking No.:						

Instructions: Address Invoice to BP/GEM but send to URS for approval

Is In Place Yes No Temperature Blank Yes No Cooler Temperature on Receipt 3°F/C Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
 REC. BY (PRINT) HT
 WORKORDER: MLL0350

DATE Received at Lab: 12/10/02
 TIME Received at Lab: 206
 LOGIN DATE: 12-11-02

Drinking water for regulatory purposes: YES NO
 Wastewater for regulatory purposes: YES NO

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	#	CLIENT ID	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>	01		MW1	3 Vac Hold	L	12/19	
	Intact / Broken*	02		2				
2. Chain-of-Custody	Present / Absent*	03		3				
		04		4				
3. Traffic Reports or Packing List	Present / Absent	05		5				
		06		6				
4. Airbill:	Airbill / Sticker	07		7				
	Present / Absent	08		8				
5. Airbill #:		09		9				
6. Sample Labels:	Present / Absent	10		AR1				
		11		AR2				
7. Sample IDs:	Listed / Not Listed on Chain-of-Custody							
8. Sample Condition:	Intact / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample labels agree?	Yes / No*							
10. Sample received within hold time:	Yes / No*							
11. Proper Preservatives used:	Yes / No*							
12. Temp Rec. at Lab:	<u>3°C</u>							
(Acceptance range for samples requiring thermal pres.: 4+/-2°C)	Yes / No**							
*Exception (if any):								

*If Circled, contact Project Manager and attach record of resolution.

J.C #167667
 EPA #CAD981692809
 Hazardous Waste Hauler #1715
 Date 11 / 7 / 19 2002
 TRUCK NO. 2701 TRAILER NO. _____
 SUB. HAULER ONYX

**Dillard Trucking, Inc. dba
 Dillard Environmental Services**

P.O. BOX 579
 BRYON, CA 94514
 (925) 634-6850

**SHIPPING ORDER
 and FREIGHT BILL**

71207

PRIME CARRIER <u>DILLARD</u>	JOB NO.	CONSIGNEE
SHIPPER <u>ARCO #5387</u>		DESTINATION <u>Rome</u>
POINT OF ORIGIN <u>20200 Hesperian BL</u>		CITY <u>Palo Alto</u>
CITY <u>Hayward</u>	BEGINNING MILEAGE	ENDING MILEAGE

NO	MAINFEST NO.	YARDS OR WEIGHT	LOADING		UNLOADING		FUEL - GALLONS		FUEL - VENDOR	
			TIME ARRIVE	TIME LEAVE	TIME ARRIVE	TIME LEAVE	#1	#2	#1	#2
1	<u>53071</u>	<u>1000g.</u>								
2										
3										
4										
6										
7										
8										
9										
10										
11										
12										
13										
14	COMMENTS:									
15										
16										
17										

OFFICE USE ONLY
 TRANS
 TNS / HRS / LBS / YDS
 RATE \$
 SUBTOTAL \$ 80
10-

START	STOP	DEDUCT TIME	NET TIME	TOTAL CHARGES \$
DRIVER				
RECEIVED	DATE	APPROVED BY	APPROVED (PAYROLL)	DATE

MAKE DELIVERIES INSIDE THE CURB LINE AND ON THE LOT AT THE CUSTOMER'S RISK ONLY AND ACCEPT NO RESPONSIBILITY FOR DAMAGES RESULTING FROM SUCH DELIVERIES.
 ALL BILLS DUE AND PAYABLE BY THE 10TH OF THE MONTH. A 1-1/2% PER MONTH CHARGED ON PAST DUE ACCOUNTS. THIS IS AN ANNUAL PERCENTAGE RATE OF 18%. CUSTOMER WILL BE RESPONSIBLE FOR ALL COURT AND ATTORNEY COSTS FOR COLLECTION

KATESMITH • PHONE: (800) 439-9666 • FAX: (408) 926-2472

0958 (9/00)



ENVIRONMENTAL TECHNOLOGIES CORP.

Weighed At: 2081 Bay Road • East Palo Alto, CA 94303-1316
Tel: (650) 324-1638 • Fax: (650) 462-2311

SHIPPER - CARRIER ONYX		
TRACTOR LIC. NO.	#1 TRAILER LIC. NO.	#2 TRAILER LIC. NO.

WEIGHED FOR: Arco	R 2088
	DATE
	TIME
	CUSTOMER NO. manifest NHWm 53871

INFORMATION: 52140 1b	52140 1b GR	LBS. GROSS
LOOP # 66	43080 1b TA	LBS. TARE
05:15 PM	9060 1b NT	NET
11-07-02	LOOP # 66	

COMMODITY:

CONTAINER TYPE:
(IF APPLICABLE)

CUSTOMER - DRIVER SIGNATURE

X

ROMIC ENVIRONMENTAL TECHNOLOGIES CORP.

BY: *T. O.*

DEPUTY

OFFICE COPY - RETAINED

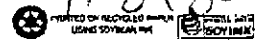
NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No. 53071	2. Page 1 of 1
3. Generator's Name and Mailing Address ARND #5387 30200 HESPERIAN BLVD HAYWARD, CA		4. Generator's Phone () -		5. Transporter 1 Company Name OUPC INDUSTRIAL SERVICES	
6. Designated Facility Name and Site Address HARCO ENVIRONMENTAL TECHNOLOGIES 2031 BAY ROAD EAST PALO ALTO, CA 94303		7. Transporter 2 Company Name		8. Facility's Phone (650) 324-1630	
9. Waste Description A. NON HAZ WASTE, (p&: SOLIDS)		10. US EPA ID Number 0 8 0 0 9 2 5 2 6 9 7		11. Containers No. 001 Type TT	
12. Containers		13. Total Quantity 615 1000		14. Unit G G	
15. Special Handling Instructions and Additional Information Emergency Contact (925) 634-6850 BILLYARD JUNE 1004-009		16. Generator's Certification: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.		17. Transporter 1 Acknowledgement of Receipt of Materials	
18. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in Item 18.		19. Discrepancy Indication Space		20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in Item 18.	

NON-HAZARDOUS WASTE GENERATOR

TRANSPORTER FACILITY



U.C #167667
 EPA #CAD981692809
 Hazardous Waste Hauler #1715
 Date 11 17 1982
 TRUCK NO. 2717 TRAILER NO. -----
 SUB. HAULER ONYX

**Dillard Trucking, Inc. dba
 Dillard Environmental Services**

P.O. BOX 579
 BRYON, CA 94514
 (925) 634-6850

**SHIPPING ORDER
 and FREIGHT BILL**
71206

PRIME CARRIER DILLARD JOB NO. 1004/009 CONSIGNEE Ronnie
 SHIPPER ARCO # 5387 DESTINATION _____
 POINT OF ORIGIN 20200 Hesperian Blvd CITY Palo Alto
 CITY HAYWARD BEGINNING MILEAGE _____ ENDING MILEAGE _____

MATERIALS			LOADING		UNLOADING		FUEL - GALLONS		FUEL - VENDOR	
NO	MANIFEST NO.	YARDS OR WEIGHT	TIME ARRIVE	TIME LEAVE	TIME ARRIVE	TIME LEAVE	#1	#2	#1	#2
1	<u>53870</u>	<u>4800g</u>								
2							OFFICE USE ONLY			
3							TRANS		<u>8 @ 70-</u>	
4						TNS / HRS / LDS / YDS				
							RATE \$			
6							SUBTOTAL \$			
7										
8							DISPOSAL			
9							UNITS:			
10							RATE:			
11										
12										
13										
14	COMMENTS:									
15										
16										
17										

START STOP DEDUCT TIME NET TIME TOTAL CHARGES \$
 DRIVER
 RECEIVED DATE APPROVED BY APPROVED (PAYROLL) DATE

MAKE DELIVERIES INSIDE THE CURB LINE AND ON THE LOT AT THE CUSTOMER'S RISK ONLY AND ACCEPT NO RESPONSIBILITY FOR DAMAGES RESULTING FROM SUCH DELIVERIES.
 ALL BILLS DUE AND PAYABLE BY THE 10TH OF THE MONTH. A 1-1/2% PER MONTH CHARGED ON PAST DUE ACCOUNTS. THIS IS AN ANNUAL PERCENTAGE RATE OF 18%. CUSTOMER WILL BE RESPONSIBLE FOR ALL COURT AND ATTORNEY COSTS FOR COLLECTION

09/08 19/001
KAYESMITH • PHONE: (800) 839-8666 • FAX: (707) 748-4372
120518



ENVIRONMENTAL TECHNOLOGIES CORP.

Weighed At: 2081 Bay Road • East Palo Alto, CA 94303-1316
Tel: (650) 324-1638 • Fax: (650) 462-2311

R 2086
DATE
TIME
CUSTOMER NO. man. cert KHW 5387a

SHIPPER - CARRIER: **ONYX**

TRACTOR LIC. NO. INBOLIND	#1 TRAILER LIC. NO. 77420 1b.	#2 TRAILER LIC. NO.
LOOP #	62	

WEIGHED FOR: **ARCO # 5387**

05:00 PM	79420 1b GR	LBS. GROSS
11-07-02	38960 1b TA	LBS. TARE
	40460 1b NT	NET
	LOOP # 62	

COMMODITY:

CONTAINER TYPE:
(IF APPLICABLE)

CUSTOMER - DRIVER SIGNATURE

X *Charles Mend*

ROMIC ENVIRONMENTAL TECHNOLOGIES CORP.

BY: *T.O.* DEPUTY

OFFICE COPY - RETAINED

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on 8 1/2" (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1

33870

of 1

3. Generator's Name and Mailing Address

ARCO #5387
20200 HESPERIAN BLVD
HAYWARD, CA

MAIL: ATLANTIC RICHFIELD
PO BOX 9007
LOS ANGELES, CA 90009

4. Generator's Phone () -

ATTN:

5. Transporter 1 Company Name

ONYX INDUSTRIAL

9. US EPA ID Number

BAR00000505

A. State Transporter's ID

B. Transporter 1 Phone

707 748 0501

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

ROMIC ENVIRONMENTAL TECHNOLOGIES
2081 BAY ROAD
EAST PALO ALTO, CA 94303

10. US EPA ID Number

CAD009452657

E. State Facility's ID

F. Facility's Phone

(650) 324-1638

11. WASTE DESCRIPTION

a. NON HAZ WATER, (pf: 361715)

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt./Vol.

001

TI

4800

5

G. Additional Descriptions for Materials Listed Above

IIa. 361715
IIb.
IIc.
IId.

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Emergency Contact (925) 634-6850 DILLARD
JOB# 1004-009

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described, and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name

P. DILLARD PER ARCO

Signature

Date

Month Day Year
11 7 02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Charles Heard

Signature

Date

Month Day Year
11 7 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in Item 19.

Printed/Typed Name

DAVID JURENA

Signature

Date

Month Day Year
11 7 02

NON-HAZARDOUS WASTE

GENERATOR

RECEIVED BY

DATE

C #167667
 EPA #CAD981692809
 Hazardous Waste Hauler #1715

**Dillard Trucking, Inc. dba
 Dillard Environmental Services**

**SHIPPING ORDER
 and FREIGHT BILL
 71208**

Date 11/11/02

TRUCK NO. 5387 TRAILER NO. _____

SUB. HAULER ONYY

P.O. BOX 579
 BRYON, CA 94514
 (925) 634-6850

PRIME CARRIER DILLARD JOB NO. 1004/009 CONSIGNEE RONIC

SHIPPER ARCO*5387 DESTINATION 2081 Bay Road

POINT OF ORIGIN 20200 Hesperian Blvd CITY PALO ALTO

CITY Hayward, CA BEGINNING MILEAGE _____ ENDING MILEAGE _____

NO	MANIFEST NO.	YARDS OR WEIGHT	LOADING		UNLOADING		FUEL - GALLONS		FUEL - VENDOR	
			TIME ARRIVE	TIME LEAVE	TIME ARRIVE	TIME LEAVE	#1	#2	#1	#2
1	<u>53870</u>	<u>3400 gallons</u>								
2										

OFFICE USE ONLY

TRANS 8 @ 70

TNS / HRS / LDS / YDS 2 1/2 @ 78

RATE \$ _____

SUBTOTAL \$ _____

DISPOSAL _____

UNITS: _____

RATE: _____

14 COMMENTS: _____

15 _____

16 _____

17 _____

START STOP DEDUCT TIME NET TIME TOTAL CHARGES \$ _____

DRIVER _____

RECEIVED DATE APPROVED BY APPROVED (PAYROLL) DATE

MAKE DELIVERIES INSIDE THE CURB LINE AND ON THE LOT AT THE CUSTOMER'S RISK ONLY AND ACCEPT NO RESPONSIBILITY FOR DAMAGES RESULTING FROM SUCH DELIVERIES.
 ALL BILLS DUE AND PAYABLE BY THE 10TH OF THE MONTH. A 1-1/2% PER MONTH CHARGED ON PAST DUE ACCOUNTS. THIS IS AN ANNUAL PERCENTAGE RATE OF 18%. CUSTOMER WILL BE RESPONSIBLE FOR ALL COURT AND ATTORNEY COSTS FOR COLLECTION



ROMIC

ENVIRONMENTAL
TECHNOLOGIES CORP.

#2

R 1603

Weighed At: 2081 Bay Road • East Palo Alto, CA 94303-1316
Tel: (650) 324-1638 • Fax: (650) 462-2311

WEIGHED FOR: **ARCO**

DATE

11/11/02

TIME

SHIPPER - CARRIER

ONYX

CUSTOMER NO.

11111

TRACTOR LIC. NO.

#1 TRAILER LIC. NO.

#2 TRAILER LIC. NO.

INBOUND	68700 lb	68700 lb	GR	LBS. GROSS
LOOP #	84	38220 lb	TA	LBS. TARE
10:34 AM		30480 lb	NT	LBS. NET
11-11-02		LOOP #	84	

COMMODITY:

CONTAINER TYPE:
(IF APPLICABLE)

CUSTOMER - DRIVER SIGNATURE

x *Charles Brown*

ROMIC ENVIRONMENTAL TECHNOLOGIES CORP.

BY:

TEO

DEPUTY

OFFICE COPY - RETAINED

09618 • PHONE: (800) 439-9666 • FAX: (800) 926-2472

096B (9/00)

NON-HAZARDOUS WASTE MANIFEST

Form designed for use on site (18 point type)

Manifest Document No. **53870** Page 1 of 1

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **ARC05387**
MAIL: ATLANTIC RICHFIELD
PO BOX 2687
LOS ANGELES, CA 90009

2. Generator's Name and Mailing Address
ARC05387
20200 HESPERIAN BLVD
MANFRED, CA

3. Transporter 1 Company Name
ONYX Industrial

4. US EPA ID Number
CA000000505

A. State Transporter's ID
B. Transporter 1 Phone
C. State Transporter's ID
D. Transporter 2 Phone
E. State Facility's ID

5. Designated Facility Name and Site Address
ROMIC ENVIRONMENTAL TECHNOLOGIES
2021 54Y ROAD
EAST FALD AUTO, CA 94303

6. US EPA ID Number
CA0009452837
F. Facility's Phone
(830) 324-1638

11. WASTE DESCRIPTION

a. **FOR HAZ WASTE, (ref: 361715)**

12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
001	II	3500	#

G. Additional Descriptions for Materials Listed Above

- 11a. 361715
- 11b.
- 11c.
- 11d.

H. Handling Codes for Wastes Listed Above

14. Special Handling Instructions and Additional Information
Emergency Contact (925) 634-6850 **DILLARD**
JDB# 1004-009

15. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name
P. DILLARD PER ARCO

Signature _____ Date _____

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name
Charles Heard

Signature **Charles Heard** Date **11/11/02**

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name _____

Signature _____ Date _____

19. Facility Owner or Operator, Certification of receipt of the waste materials covered by this manifest, as noted in item 11.

Printed/Typed Name
WENRY Landy

Signature **Wenry Landy** Date **11/11/02**

NON-HAZARDOUS WASTE

RECEIVED FACILITY

Dillard Trucking, Inc. dba.

SHIPPING ORDER

Dillard Environmental Services

FREIGHT BILL

PO Box 579

Byron, CA 94514

Telephone No. (925) 634-6850

Facsimile No. (925) 634-0569

07099

ENTERED

Date <u>11 / 13 / 02</u>	JOB NUMBERS(S)	JOB NUMBERS(S)	JOB NUMBERS(S)	JOB NUMBERS(S)
TRUCK NO. <u>193</u> TRAILER NO. <u>&</u>	# <u>1004-009</u>	#	#	#
SUB. HAULER	#	#	#	#

PRIME CARRIER <u>Dillard Environmental</u>	CONSIGNEE
GENERATOR(S) <u>Arco # 05387</u>	DESTINATION <u>Romic Technologies</u>
<u>20200 Hesperian Blvd.</u>	CITY <u>East Palo Alto CA.</u>
CITY <u>Hayward CA.</u>	BEGINNING MILEAGE <u>93928</u> ENDING MILEAGE <u>94061</u>

NO.	MATERIALS MANIFEST NO.	YARDS OR WEIGHT	LOADING		UNLOADING		FUEL - GALLONS		FUEL - VENDOR	
			TIME ARRIVE	TIME LEAVE	TIME ARRIVE	TIME LEAVE	#1	#2	#1	#2
1	<u>5387-1113</u>	<u>3,000 gals</u>	<u>6:30am</u>	<u>9:30am</u>	<u>10:05</u>	<u>12:40</u>				
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										

OFFICE USE ONLY	
TNS / HRS / LDS / YDS	
TRANSPORTATION UNITS:	<u>8 / 2</u>
TRANSPORTATION RATE:	<u>70.⁰⁰ / 78.⁰⁰</u>
SUBTOTAL:	\$
DISPOSAL UNITS:	
DISPOSAL RATE:	
SUBTOTAL:	\$
BRIDGE-TOLL:	
MATERIALS:	

START <u>5 Am</u>	STOP <u>3:00pm</u>	DEDUCT TIME <u>&</u>	NET TIME <u>10 HRS</u>
-------------------	--------------------	--------------------------	------------------------

DRIVER Steve M. Turner

RECEIVED _____ DATE _____ APPROVED BY _____

TOTAL CHARGES: \$

TERMS and CONDITIONS

Payment terms are net thirty (30) days subject to a charge of 1.5% per month on all past due balances. In the event the account becomes delinquent and it is necessary to institute legal proceedings, CUSTOMER agrees to pay DES' attorney's fees incurred in such proceeding, action or suit or in any appeal thereon. The parties agree that actions or proceedings arising in connection with this agreement shall be tried and litigated exclusively in the courts located in Contra Costa County, California.

1805 18
KAYSMITH • PHONE: (800) 439-6666 • FAX: (408) 926-2472



ROMIC

ENVIRONMENTAL
TECHNOLOGIES CORP.

Weighed At: 2081 Bay Road • East Palo Alto, CA 94303-1316
Tel: (650) 324-1638 • Fax: (650) 462-2311

WEIGHED FOR:

R 1617
DATE 11/13/02
TIME 7A
CUSTOMER NO. NHwm 5387

SHIPPER - CARRIER

Dillard

ARCO # 5387

TRACTOR LIC. NO.

#1 TRAILER LIC. NO.

#2 TRAILER LIC. NO.

INBOUND 47820 1b

LOGF # 11

11:18 AM

11-13-02

47820 1b GR

24240 1b TA

23580 1b NT

LOGF # 11

LBS. GROSS

LBS. TARE

LBS. NET

COMMODITY:

CONTAINER TYPE:
(IF APPLICABLE)

CUSTOMER - DRIVER SIGNATURE

X

ROMIC ENVIRONMENTAL TECHNOLOGIES CORP.

BY:

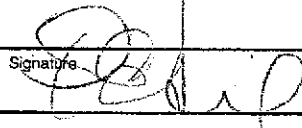
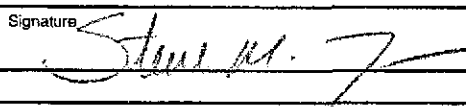
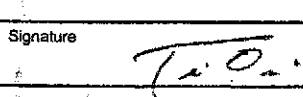
DEPUTY

OFFICE COPY - RETAINED

096B (9/00)

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No. 2387-1113	2. Page 1 of 1
3. Generator's Name and Mailing Address ARCO # 5387 20200 HESPERIAN BLVD. HAYWARD, CA		MAIL: ATLANTIC AICHFIELD PO BOX 9087 LOS ANGELES, CA			
4. Generator's Phone ()		ATTN: 910009			
5. Transporter 1 Company Name Dillard Environmental		6. US EPA ID Number CAD982523423		A. State Transporter's ID	
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone	
9. Designated Facility Name and Site Address ROMIC ENVIRONMENTAL TECH. 2081 Bay Road EAST PALO ALTO, CA 94303		10. US EPA ID Number CAD009452657		C. State Transporter's ID	
				D. Transporter 2 Phone	
				E. State Facility's ID	
				F. Facility's Phone (650) 324-1638	
11. WASTE DESCRIPTION			12. Containers	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZ WATER, (PF: 361715)			No. 001	Type TT	03000 G
b.					
c.					
d.					
G. Additional Descriptions for Materials Listed Above 11a. 361715			H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information EMERGENCY CONTACT: (925) 634-6850 DILLARD JOB # 1004-009					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name P. DILLARD PER ARCO		Signature 		Date 11/12/02	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve M. Turner		Signature 		Date 11/13/02	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Date	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name Tim Omi		Signature 		Date 11/13/02	

NON-HAZARDOUS WASTE GENERATOR SITE

TRAVAINI PUMPS USA, INC.

"Dynaseal" Vacuum Pump System
"The Workhorse of the Industry"

TECHNICAL DATA SHEET

SYSTEM MODEL:	TRO 300V
ROTATIONAL SPEED:	1750 RPM
NOMINAL CAPACITY:	300 ACFM
MAX. VACUUM CAPABILITY:	29.5" HG
MOTOR SIZE:	20 HP
NOISE LEVEL @ 3-FT.:	78 dBA
SHIPPING WEIGHT:	1350 #

FEATURES & BENEFITS:

- ✓ This vacuum pump system performs where others fail (designed for heavy duty operation)
- ✓ Impeller runs freely in isolated pumping chamber which allows handling of soft solids
- ✓ Reliability: simplicity and dependability of the Travaini liquidring design.
- ✓ Continuous operation over the full vacuum range without overheating.
- ✓ Heavy duty grease lubricated external bearings are isolated from pumping chamber.
- ✓ Minimal installation cost, system is tested at the factory and ready for operation.
- ✓ Air cooled design standard, optional water cooling available.
- ✓ Equipped with exclusive highly efficient long life discharge separator
- ✓ Low noise level and vibration.
- ✓ Direct drive means no gears or V-belts.
- ✓ Low maintenance
- ✓ Supplied with long life seal fluid (10,000 hr service life).
- ✓ Equipped with automatic temperature control valve and high temperature switch
- ✓ Equipped with electrical control panel assembled and wired on system.
- ✓ Full range of optional accessories available.

REFER TO BACK PAGE FOR LISTING OF COMPONENTS

